



Infor LN User Guide for Sales

Copyright © 2019 Infor

Important Notices

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

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

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

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

Trademark Acknowledgements

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

Publication Information

Document code salesug (U8615)

Release 10.3 (10.3)

Publication date January 28, 2020

Table of Contents

About this document

Chapter 1 Sales.....	11
Sales.....	11
Chapter 2 Sales Master Data.....	13
Sales item data.....	13
Sales item data.....	13
Inventory shortage handling.....	14
Time-phased inventory check.....	19
Item replacement.....	20
Alternative items.....	21
Selling items from list groups.....	22
Product variants in Sales.....	23
Sales organization.....	30
Sales organizational data.....	30
Customer approval.....	31
Flexible sales order processing.....	34
Multisite invoice between a purchase office and a sales office.....	39
Rate determiners in Sales.....	39
Product catalog.....	42
Product catalogs.....	42
List items in the product catalog.....	44
General sales data.....	44
General sales data.....	44
Changing/acknowledging orders.....	53
Sales order templates.....	56
Chapter 3 Sales Quotations.....	61
Sales quotations.....	61
Master data.....	61

Sales quotation procedure.....	62
Sales quotation procedure.....	62
Chapter 4 Sales Orders.....	65
Sales orders.....	65
Overview of sales order handling.....	65
Sales order procedure.....	66
Sales orders - additional processes.....	68
Cross-docking and splitting deliveries.....	75
Sales and Freight.....	81
Rush orders.....	88
Sales return orders.....	89
Customer furnished materials.....	91
Sales order/schedule history.....	92
Sales order tracking.....	94
Changing sales data after release to Invoicing.....	94
Backorders.....	97
Backorder handling for sales orders.....	97
Installments.....	101
Installments.....	101
Sales order blocking.....	105
Order blocking.....	105
Sales order priorities.....	108
Order priority (simulations).....	108
Copy sales orders.....	109
Copy templates.....	109
Chapter 5 Sales Contracts.....	113
Sales contract procedure.....	113
Sales contracts - overview.....	113
Specifying sales contracts.....	114
Retrieving sales contracts.....	116

Scheduled deliveries based on a sales contract.....	118
Scheduled requirements for a sales contract.....	118
Defining contract deliveries by means of delivery schemes.....	118
Defining contract deliveries by means of sales schedules.....	120
Copying sales contracts.....	122
Evaluating sales contracts.....	123
Chapter 6 Margin Control.....	125
Overview of margin control.....	125
Setting up margin control.....	125
Types of margin control.....	125
Using margin control.....	126
Types of margin control.....	126
(Price) margin control.....	126
Gross margin control at detail level.....	126
Gross margin control at header level.....	127
Using margin control.....	127
Chapter 7 Consumption Handling.....	131
Inventory consumption handling.....	131
Consumption master data.....	131
Consumptions.....	132
Processing consumptions.....	133
Prices and discounts.....	136
Pay on Use sales order/schedule lines.....	137
Consignment in Sales and Procurement.....	137
Extended consignment.....	138
Chapter 8 Retrobilling.....	141
Retrobilling.....	141
Retrobilling master data.....	141
Retrobilling process.....	141

Chapter 9 Commissions and Rebates.....	143
Master data.....	143
Overview of commissions and rebates.....	143
Agreements.....	144
Commissions and rebates agreement selection.....	144
Calculating commissions and rebates.....	146
Calculating commissions and rebates.....	146
Reserving commissions and rebates.....	148
Reserving commissions and rebates.....	148
Paying commissions to employees.....	150
Paying commissions to employees.....	150
Commissions and rebates calculation examples.....	152
Commissions and rebates history.....	161
Chapter 10 Statistics.....	163
Statistics.....	163
Procedure for statistics.....	163
Appendix A Glossary.....	169
Index	

About this document

This document aims to explain the sales functionality and the processes that relate to Sales

Objectives

This document aims to explain the sales functionality and the processes that relate to Sales.

Intended audience

This guide is especially written for key users and users that want to be familiar with the overall LN sales functionality.

Assumed knowledge

You need no detailed knowledge of the LN software to read this document. However, you are more likely to understand the contents if you are familiar with:

- The overall structure of packages, modules and sessions in LN.
- The general business procedures used in every day business practice.
- The basic concepts of enterprise resource planning.

Document summary

This document contains the following chapters:

- **Sales**
Provides an introduction to the main processes that a user can carry out in Sales.
- **Sales Master Data**
Provides instructions on the sales master data that must be set before you can use the various sales procedures.
- **Sales Quotations**
Provides information on the sales quotation procedure.
- **Sales Orders**
Provides information on the sales order procedure.
- **Sales Contracts**
Provides information on the sales contract procedure.
- **Margin Control**
Provides instructions on how to set up and use margin control.
- **Consumption Handling**
Provides information on consumption handling and consigned inventory.
- **Retrobilling**
Provides instructions on how to set up and use retrobilling.
- **Commissions and Rebates**
Provides information on the use of commissions and rebates.

- **Statistics**
Provides information on the statistics procedure.
- **Glossary**
Provides definitions of the terms and concepts used in this document, in alphabetical order.

Related user's guides

The following sales (related) topics are handled in separate user's guides:

- **Demand pegging**
User's Guide for Demand Pegging U9500 US
- **Components**
User's Guide for Kit Handling U9540 US
- **Customer relations management**
User's Guide for CRM U9653 US
- **Sales schedules**
User's Guide for Purchase and Sales Schedules U9541 US
- **Sales terms and conditions**
User's Guide for Terms and Conditions U9499 US
- **Subcontracting orders**
User's Guide for Subcontracting U9361 US
- **Vendor managed inventory**
User's Guide for Vendor Managed Inventory U9501 US

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 *Sales*. 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, you can click the underlined term to go to the glossary definition at the end of the document .

Comments?

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

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

Contacting Infor

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

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

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

Sales

You use Sales to manage sales activities and maintain the data that is the result of these activities.

The main procedures in Sales are the sales order and sales schedule procedures, which cover the complete administrative procedure for selling items. Usually, the sales order/schedule procedure is preceded and followed by other procedures.

These procedures (can) precede the sales order/schedule procedure:

- Sales quotation procedure
- Sales contract procedure

Sales includes this main data:

- Sales master data
- Sales quotations
- Sales orders
- Sales contracts
- Sales schedules
- Margin control
- Consumption handling
- Retrobilling
- Commissions and rebates
- Statistics
- Sales parameters

Chapter 2

Sales Master Data

2

Sales item data

Sales item data

In Item Base Data, you can specify items and item data on a general level. Before you can complete sales procedures, you must also specify sales-related item data in Sales Item Data.

To specify item sales data and default sales data for an item group

Before order transactions can be used in Sales Control, sales-specific item data must be specified in the Item - Sales (tdisa0501m000) session. You must make sure that the item already exists in the Item - General (tcibd0101s000) session. To enter a sales item, you must specify a large amount of information. If you generate default values, you can drastically reduce the amount of data entry required when you enter a new sales item. The item group is used in combination with the item type to set up item defaults. You can enter defaults for sales items that belong to an item group in the Item - Sales Defaults (tdisa0102s000) session.

The usual procedure for entering item sales defaults and then sales items is as follows:

1. Enter an item group in the Item Groups (tcmc0123m000) session.
2. Define item - general defaults in the Item - General Defaults (tcibd0102s000) session, in which you must enter the **Item Group** that you previously defined in the Item Groups (tcmc0123m000) session.
3. Click **Sales Data** in the Item - General Defaults (tcibd0102s000) session. As a result, the Item - Sales Defaults (tdisa0102s000) session starts in which you can enter item - sales defaults for the combination of **Item Type** and **Item Group**.
4. Enter an item in the Item - General (tcibd0101s000) session for the combination of **Item Type** and **Item Group** that you previously defined in the Item - General Defaults (tcibd0102s000) session. As a result, the default values from the Item - General Defaults (tcibd0102s000) session are inserted in the Item - General (tcibd0101s000) session.
5. Click **Sales Data** in the Item - General (tcibd0101s000) session. As a result, the Item - Sales (tdisa0501m000) session starts in which you can enter the sales data for the item that you

created in the Item - General (tcibd0101s000) session. LN inserts the default values from the Item - Sales Defaults (tdisa0102s000) session in the Item - Sales (tdisa0501m000) session.

You can maintain the following sales related item data in the Item - Sales (tdisa0501m000) session:

- Ordering data
- Pricing data
- Data regarding over-deliveries

Note

To generate transactions for the sales item, ordering-related item data must be specified in the Item - Ordering (tcibd2100s000) session and costing-related item data must be calculated in the Items - Costing (ticpr0107m000) session.

To specify item - sales business partner data

Use the Item - Sales Business Partner (tdisa0510m000) session to define sales business partner-specific information by item. This information is used to determine how a sales order is sold and delivered to the specific sold-to business partner. This information overrides the item sales data and item warehousing data for the item and it is used to determine how the order is supplied and charged for the specified sold-to business partner.

Tip

You can use the Relation Management Dashboard (tdsmi1500m000) session to view, maintain, and create sold-to business partner-related data. You can use this session to display all business partners that are relevant for a specific account manager. The Account Manager Dashboard (tdsmi1500m000) session gives a quick overview of sold-to business partner information and easy access to sold-to business partner-related data, as a result of which account managers are supported in their daily tasks of handling business partner requests and proposals in a flexible and correct way.

Note

You can also use the Item - Sales (tdisa0601m000) session to enter item sales data and item - sales business partner data. This session enables you to quickly enter the most important sales information for an item.

Inventory shortage handling

You can check available inventory and resolve inventory shortages for sales quotation lines, sales order lines, and sales order component lines.

To check available inventory

The following parameters determine if and when available inventory for a line is checked:

Sales order (component) lines	Sales quotation lines
Time-Phased Inventory Check	Inv Check during Quotation Line Entry
Extended Inventory Check	Inventory Check during Confirmation
Inv Check during Processing	
Extended Inventory Check	Processing in Case of Inv Shortage
Inventory Check Moment	Extended Inventory Check

Inventory checks

When inserting or updating a line, an inventory check is executed.

The applicable inventory check is determined based on the following priority sequence for searching:

1. External OPS (Order Promising Server) check by SCM (Supply Chain Management) Order Promiser.
2. ATP (Available to Promise)/CTP (Capable to Promise) check by Enterprise Planning.
3. Inventory check by Warehousing.

External OPS check

This inventory check can only be executed if all of the following are applicable:

- The **Order Promising Server** check box is selected in the Implemented Software Components (tccom0100s000) session.
- The item is a plan item.
- The **Extended Inventory Check** check box is selected.
- The **Inventory Check Moment** is set to **Batch**.

Note

- If an external OPS check is applicable, inventory is checked and inventory shortages are resolved externally by SCM Order Promising.
- Inventory handling by OPS can lead to an update of the following sales order (component) line fields: **Planned Delivery Date**, **Warehouse**, and **Order Promising Status**. It can also lead to a split sales order line with delivery lines.

ATP/CTP check

This inventory check can only be executed if the following are applicable:

- No OPS inventory check can be executed.
- The item is a plan item and the **CTP Check for Sales** check box is selected in the EP Parameters (cprpd0100m000) session.

Inventory check by Warehousing

This inventory check can only be executed by Warehousing if one of the following is applicable:

- The item is not a plan item.
- The item is a plan item and the **CTP Check for Sales** check box is cleared in the EP Parameters (cprpd0100m000) session.

Note

Alternative lines on sales quotations are not checked on available inventory before their status becomes **Confirmed** or **Processed**. The alternative line with the highest success percentage is checked on inventory.

To carry out inventory shortage options

After the inventory for a line is checked and a shortage discovered, several options help you solve the inventory shortage.

Whether LN automatically tries to solve the inventory shortage, or whether your interaction is required through the Inventory Shortage Menu (tdsIs4830s000) session depends on:

- The **Automatic Inventory Shortage Handling** check box in the User Profiles (tdsIs0139m000) session.
- The **Automatic Inventory Shortage Handling** fields in the Sales Order Types (tdsIs0594m000) session.

Note

If the automatic inventory shortage handling option that is defined for the order type is not applicable for a sales order or quotation, the Inventory Shortage Menu (tdsIs4830s000) pops up from which you can select the action to take.

To assign a promising status

If, in the Sales Quotation Parameters (tdsIs0100s100) and Sales Order Parameters (tdsIs0100s400) sessions, the **Extended Inventory Check** check box is selected, sales quotation lines, sales order lines, and sales order component lines receive a promising status in the inventory shortage handling process.

The following statuses exist:

- **Accepted**
The inventory check comes up with sufficient inventory to deliver the line on time.
- **Not Accepted**
The inventory check comes up with insufficient inventory to deliver the line on time.
- **Pending**
The line is waiting to be checked on available inventory.
- **Exception**
An error occurred during the inventory check, which must be manually solved.

For the following lines, you can view and maintain their promising status in the following promising lines sessions:

Type of line	Promising lines session	Satellite of session
Sales order line	Sales Order Promising Lines (td-sls4101m400)	<ul style="list-style-type: none"> ■ Sales Order - Lines (td-sls4100m900) ■ Sales Order Line - Deliveries (tdsls4101m900)
Sales order component line	Sales Order Promising Line Components (tdls4563m200)	Sales Order Lines - Components (tdls4601m000)
Sales quotation line	Sales Quotation Promising Lines (tdsls1501m200)	Sales Quotation - Lines (td-sls1600m000)

Note

- Sales order lines and sales order component lines with the statuses **Not Accepted**, **Pending**, and **Exception** must have their shortage manually solved to change the status to **Accepted**. Otherwise the linked sales order cannot be approved.
- If the **Processing in Case of Invy Shortage** check box is selected in the Sales Quotation Parameters (tdsls0100s100) session, when sales quotation lines are converted to sales order lines, the sales quotation line's promising status can be **Not Accepted**, **Pending**, or **Exception**. If the **Processing in Case of Invy Shortage** check box is cleared, the sales quotation line's promising status must be **Accepted** to convert sales quotation lines.

Accepted

A line obtains this status if:

- Sufficient inventory is available or the inventory shortage is solved.

- The line does not need to be checked on available inventory, such as in a direct delivery situation.
- The **Extended Inventory Check** functionality is not implemented.

Sales orders for which all (component) lines are **Accepted**, can be approved and continued to be processed. For more information, refer to *Sales order procedure* (p. 66).

Not Accepted

A line obtains this status if:

- Insufficient inventory is available or a shortage could not be solved.
- A line with the **Exception** status is manually set to **Not Accepted** in the Sales Order Promising Lines (tdsIs4101m400), Sales Order Promising Line Components (tdsIs4563m200), or Sales Quotation Promising Lines (tdsIs1501m200) session.

In the promising lines sessions, you can solve the inventory shortage as follows:

- On the appropriate menu, carry out one of the shortage options.
- For sales order (component) lines, on the appropriate menu, click **Check Inventory Sales Orders**. The Check Inventory Sales Orders (tdsIs4217m000) session is started, which searches for an automatic inventory shortage handling option for the order type.
- Manually update the order (component) line or quotation line in the relevant session.

Pending

A line obtains this status if, in the Sales Order Types (tdsIs0594m000) session, the **Inventory Check Moment** is set to **Batch** and:

- Available inventory must still be checked.
- **Accepted**, **Not Accepted**, or **Exception** lines are manually changed and must be re-checked on available inventory.

Note

A line receives the **Pending** status until it is checked on inventory in the Check Inventory Sales Orders (tdsIs4217m000) session or in SCM Order Promiser. After the check, the line is set to **Accepted**, **Not Accepted**, or **Exception**.

Exception

A line obtains this status if LN cannot determine the status. If possible, an error message is logged in the Message Log (tcstl1500m000) session. You must manually solve the error.

Note

Sales order (component) lines with the **Exception** promising status cannot be checked on inventory in the Check Inventory Sales Orders (tdsIs4217m000) session. To check the inventory for these lines, in one of the promising lines sessions, click an **Exception** line and, on the appropriate menu, choose **Set to Not Accepted**. The line's status changes to **Not Accepted** and can now be included in the inventory

check in the Check Inventory Sales Orders (tdsIs4217m000) session. After this check, it receives the Accepted, Not Accepted, or Exception status.

To register planned inventory transactions

If, for planned items, the **CTP Check for Sales** check box is selected in the EP Parameters (cprpd0100m000) session, the following are applicable:

- **Sales order (component) lines**

Planned inventory transactions are created when the order promising status becomes Accepted. If the Accepted status changes to another status for the line, the planned inventory transactions are reversed.

- **Sales quotation lines**

Planned inventory transactions are created when the quotation promising status becomes Accepted and the expected success percentage is equal or higher than the **Minimum Success Percentage for Consideration in Time Phased Inventory** in the Sales Quotation Parameters (tdsIs0100s100) session. If the Accepted status changes to another status for the line, the planned inventory transactions are reversed.

Note

For non-plan items on sales quotation lines, planned inventory transactions are only written if the expected success percentage is equal to or higher than the **Minimum Probability Percentage for Consideration in Time Phased Inv**. Therefore, for these items, planned inventory transactions are registered irrespective of the sales quotation line's promising status.

Important!

If the **Infor SCM Promising Server** check box is selected in the Implemented Software Components (tccom0100s000) session, planned inventory transactions are always written for sales order lines with plan items. The reason for this is that SCM Order Promiser uses the PIT data as input for its functionality.

Time-phased inventory check

With a time-phased inventory check, the availability of sufficient inventory during the item's order lead time can be checked for sales order lines or sales quotation lines. This means that the difference between the inventory on hand and the allocations at that particular moment are ignored. Instead, LN considers the difference between the inventory on hand and all planned inventory transactions during the entire order lead time

LN performs a time-phased inventory check only if:

- The delivery date falls within the order lead time.
- For sales orders, the **Time-Phased Inventory Check** check box is selected in the Sales Order Parameters (tdsIs0100s400) session.
- For sales quotations, the **Inv Check during Quotation Line Entry**, **Inventory Check during Confirmation**, or **Inv Check during Processing** parameters are set to **Time-Phased** in the Sales Quotation Parameters (tdsIs0100s100) session.

Example

Current date	01-10	-
Current inventory on hand	100	-
Planned purchase receipt on	01-11	25 units
Planned sales order on	10-11	100 units
Planned sales order on	01-12	1000 units
Order lead time	2 months	-

A time-phased inventory check registers the following available inventory:

01-11	125 units
10-11	25 units
01-12	-975 units

If you enter a sales order for 100 units on 10-10 with 15-11 as the delivery date, a time-phased inventory check is performed. The delivery date falls within the order lead-time (before 01-12). The available inventory on 15-11 is 25 units. Because the allocation of 100 units exceeds the available inventory, LN automatically takes the correct action, or starts the Inventory Shortage Menu (tdsIs4830s000) session in which you can select the required action.

Item replacement

If an item is no longer sold, you can replace it with a different item.

In the Alternative Items (tcibd0505m000) session, you can specify which item replaces an item that you do not sell anymore. If you enter a replaced item on a sales order line or a sales quotation line, LN asks you whether you want to use the replacement item instead.

Alternative items

If an inventory shortage occurs for an item, you can offer the sold-to business partner an alternative item. Optionally, you can use the available inventory of the original item and then fill the remaining shortage with an alternative.

Setting up alternative items

To set up alternative items, take the following steps:

1. Enter the original item in the Alternative Items (tcibd0505m000) session.
2. Enter the original item's alternative item or items in the Alternative Items (tcibd0105s000) session. If several alternative items can substitute an original item, you must assign a priority to the alternative item in the **Priority** field.
3. If the sold-to business partner accepts a combined shipment of the available quantity of the original item as well as alternative items, select the **Allow Shipment of Multiple Alternative Items** check box in the Sold-to Business Partners (tccom4110s000) session.
If the sold-to business partner only wants to receive a single alternative item, clear that check box.

Using alternative items

If you enter an order quantity on a sales order line or quotation line that cannot be covered by the inventory on hand, LN displays a warning and opens a list of options. One of the options you can choose is to start the Alternative Items (tcibd0505m000) session, from which you can select an alternative item.

If the **Allow Shipment of Multiple Alternative Items** check box is selected in the Sold-to Business Partners (tccom4110s000) session and some quantity of the originally requested item is available, LN splits the sales order line in two sales order lines:

- A sales order line with the available quantity of the original item.
- A second sales order line with the alternative item you selected.

Automatically starting the Alternative Items (tcibd0505m000) session

To automatically start the Alternative Items (tcibd0505m000) session in case of an inventory shortage, use the following setting:

- In the User Profiles (tdsIs0139m000) session, select the **Automatic Inventory Shortage Handling** check box.
- In the Sales Order Types (tdsIs0594m000) session, select the applicable sales order type and in the details session, under **Automatic Inventory Shortage Handling**, set the applicable fields to **Alternative Items**.

If you enter an item and order quantity on a sales order line for which LN identifies an inventory shortage, LN bypasses the list of options, and immediately starts the Alternative Items (tcibd0505m000) session.

Selling items from list groups

You can specify the list group(s) used to find list items when you sell a list item to a sold-to business partner. You can indicate whether the business partner can buy from multiple list groups or only from a default list group.

Setting up list item data

1. Specify a list item in the Item - General (tcibd0101s000) session.
In this session, you must:
 - Set the **Item Type** field to **List**.
 - Specify whether the item is a kit, an option, or a menu in the **Item Type Spec.** field.
2. Specify a list group in the List Groups (tcibd3101m000) session.
3. Add one or more list item(s) and components to the list group in the List Components (tcibd3100m000) session.
4. Specify list group data for the sold-to business partner in the Sold-to Business Partners (tccom4110s000) session.
In this session, you can:
 - Link a default list group to the business partner in the **List Group** field.
 - Select the **Allow Alternative List Groups** check box if the business partner is allowed to buy from multiple list groups and not only from the default list group.

Note

If you do not link a default list group to the sold-to-business partner in the Sold-to Business Partners (tccom4110s000) session, LN retrieves the default list group from the **List Group** field in the Sales Parameters (tdsIs0100s000) session.

Business partner allows alternative list groups

If you want a business partner to choose items from multiple list groups, select the **Allow Alternative List Groups** check box in the Sold-to Business Partners (tccom4110s000) session. When you enter a list item in the **Item** field of the Sales Order - Lines (tdsIs4100m900) session or Sales Quotation Lines (tdsIs1501m000) session, a browser starts with a tree structure of the list item and linked list groups and components. To copy the required item to the sales order line or sales quotation line, select an item component and click **Copy to Sales Order Line** from the appropriate menu of the browser.

Business partner does not allow alternative list groups

If you want a business partner to choose items from only one list group, clear the **Allow Alternative List Groups** check box in the Sold-to Business Partners (tccom4110s000) session. As a result, the business partner can only choose from the default list group as entered in the **List Group** field of the Sold-to Business Partners (tccom4110s000) session, or, if this field is empty, from the **List Group** field in the Sales Parameters (tdsIs0100s000) session. When you enter a list item in the **Item** field of the Sales Order - Lines (tdsIs4100m900) session or Sales Quotation Lines (tdsIs1501m000) session that occurs in the default list group that is linked to the business partner, the Items by List (tcibd3500m000)

session starts. To copy the required item to the sales order line or sales quotation line, select an item component and click OK.

Note

- If you copy a list item of the type **kit** to the sales order line, you can view the kit's items in the Sales Order Bills of Material (tds1s4532m000) session. You can start this session by selecting an order line in the Sales Order - Lines (tds1s4100m900) session and clicking **Sales Order Line - BOM Components** on the appropriate menu of the **Lines** tab.
- If you copy a list item of the type **Kit** to the sales quotation line, you can view the kit's items in the Sales Quotation Bills of Material (tds1s1532s000) session. You can start this session by selecting a quotation line in the Sales Quotation Lines (tds1s1501m000) session and clicking **Sales Quotation Bills of Material** on the appropriate menu.

Product variants in Sales

In Sales, you can generate product variants for configurable items, which are items that have the **Configurable** check box selected in the Item - General (tcibd0101s000) session.

In the Item - General (tcibd0101s000) session, **Manufactured** items with the **Default Supply Source** set to **Assembly** and **Generic** items, are always configurable.

Note

For items with the default supply source set to **Assembly** in the Item - General (tcibd0101s000) 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 specification. These items are also called assembly items. For more information, refer to To sell multiples of product variants for assembly and Assembly items.
- The **Configure by PCF** 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 & Configuration (tiapl3600m000) session.

To link 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 (tds1s4101m000) and Sales Quotation Lines (tds1s1501m000) sessions. If you want to configure the product variant after the sales line is saved, on the appropriate menu, click **Configurator** to configure the product variant from the Configure product variant (tds1s4119s000) session.

You can also choose to link an existing product variant in the **Product Variant** field of the Sales Order Lines (tds1s4101m000) and Sales Quotation Lines (tds1s1501m000) 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 & Configuration (tiapl3600m000)
Assembly	Generic	Cleared	Not applicable	Product Variants - Inventory & Configuration (tiapl3600m000)
Assembly	Manufactured	Selected	Product Configurator (tipcf5120m000)	Product Variants - Inventory & Configuration (tiapl3600m000)
Assembly	Manufactured	Cleared	Not applicable	Product Variants - Inventory & Configuration (tiapl3600m000)

Note

If LN is integrated with the BuyDesign advanced configurator, the product variant is configured in [BuyDesign](#) and not in the Product Configurator (tipcf5120m000) session. For more information, refer to Advanced Configurator.

To reuse 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 with Sales Order** check box is selected when generating a project structure for the configured item in the Generate (Project) Structure for Sales Orders (tds1s4244m000) 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) Structure for Sales Orders (tdsIs4244m000) 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 Item - General (tcibd0101s000) session, the **Product Variant** for item 123/100-1-A is 10.

Important

The Generic Item - Settings for Data Generation (tipcf3101m000) session has an impact on 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 defined in the Generic Item - Settings for Data Generation (tipcf3101m000) session, the customized item code is based on order number – item code, so 123-100. In this case, position 15 would have ended in an error message: the customized item code is the same as position 10 but the options are not the same.

To update sales order/quotation lines

When you insert an existing product variant on the sales order/quotation line, the following 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: <ul style="list-style-type: none"> ■ Click Calculate Cost Prices in the Product Variants (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 lot and serial set, which you can view by clicking the **Lot and Serial Set...** button in the Sales Order Actual Delivery Lines (tds1s4106m000) session. By means of this set, multiple serials are linked to the delivery line.

To update 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	<ul style="list-style-type: none"> ■ Product variant status is Open. ■ No assembly orders exist.
Planned Delivery Date	Product Configuration Date	<ul style="list-style-type: none"> ■ Product variant status is Open. ■ No assembly orders exist. ■ The Configuration Date (PCS) is set to Delivery Date in the Sales Parameters (tdsIs0100s000) session. ■ The product variant is not configured by Product Configuration.
Order Date/ Quotation Date	Product Configuration Date	<ul style="list-style-type: none"> ■ Product variant status is Open. ■ No assembly orders exist. ■ The Configuration Date (PCS) is set to Order Date in the Sales Parameters (tdsIs0100s000) 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.

To unlink 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

(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 **Cancelled**. 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.

Sales organization

Sales organizational data

Before you can complete sales procedures, you must specify sales organizational data, such as sales order types that define the mandatory steps in the sales order procedure, sales offices that you can use to create sales contracts, sales orders, sales schedules, and user profiles with user-specific default data.

Specifying sales order types

The sales order type determines the activities that are included in the order procedure, and how and in which sequence the order procedure is carried out. When a sales order type is linked to a sales order, the sales order is processed according to the activities and the type of order defined for the sales order type.

To specify sales order types and their activities, take the following steps:

1. Enter a sales order type in the Sales Order Types (tdsIs0594m000) or the Sales Order Type - Activities (tdsIs0694m000) session. You can specify normal and special order types. The order procedure of special orders usually differs from normal sales orders.
2. On the Activities tab of the Sales Order Types - Activities (tdsIs0694m000) session, you must specify the following for the sales order type:
 - The activities (tasks) to be carried out.
 - The sequence in which these activities must be carried out.
 - Whether the activity must be carried out automatically or manually. As a result, you can automate the processing of sales orders. For more information, refer to *Flexible sales order processing* (p. 34).

Tip

You must make sure that the list of activities that is linked to an order type is extensive in order to cover all processes that can apply during execution of the order procedure. If an activity is not applicable to the order type, LN automatically skips this activity. You can view the actual activities that are linked to the sales order (delivery) line and the status of the activities in the Sales Order Activities (tdsIs4113m000) session.

Specifying sales offices

The sales office determines the location from which sales orders, contracts, schedules, and sales quotations are processed. A sales office is needed to complete transactions with sold-to business partners. Various sales offices can be set up for one company. Once you set up the sales office, you can define user profiles.

To specify a sales office, you must complete the following steps:

1. Define the sales office as a department in the Departments (tcmcs0565m000) session.
2. Specify sales-office-specific data in the Sales Offices (tdsIs0512m000) session. The enterprise unit to which the department is linked informs you about the financial company to which financial transactions for the sales office are posted. If you want to use sales offices in combination with sales orders, sales schedules, sales contracts, or sales quotations, you must fill the applicable series fields.

Specifying user profiles

User profiles are used to set up default information for sales employees, so documents can be processed faster. In the User Profiles (tdsIs0139m000) session, you can link a user to a sales office, order type, and warehouse for each login code. When the user creates a sales order, sales contract, sales schedule, or sales quotation, the user profile determines the defaults. This accelerates the sales-related transaction entry processes.

Customer approval

You can set up customer approval if sold-to business partners must approve the goods that are delivered on a sales order before the goods can be invoiced. The ownership of the goods changes from the supplier to the sold-to business partner when the goods are approved by the sold-to business partner.

If customer approval is implemented, you must maintain and send invoices based on the quantity that is approved by the sold-to business partner and you can automatically generate a sales return order for the rejected quantity.

If customer approval is not implemented, the ownership of the goods changes from supplier to sold-to business partner when the shipment is confirmed in Warehousing. LN automatically generates an invoice for the sold-to business partner based on the delivered quantity.

Setting up customer approval

If you want to use the customer approval functionality, complete the following steps:

Step 1: Implemented Software Components (tccom0100s000)

Select the **Customer Approval** check box in the Implemented Software Components (tccom0100s000) session if you want customer approval to be implemented. You can only select this check box if the **Order Management (TD)** check box is also selected in this session.

Step 2: Ship-to Business Partners (tccom4111s000)

In the Ship-to Business Partners (tccom4111s000) session, you can indicate for the ship-to business partner whether:

- The delivered goods must be approved for a sales order. If yes, select the **Customer Approval** check box.
- A sales return order must be generated for the rejected quantity of the delivered goods. If yes, select the **Return Rejected Quantity** check box.

Step 3: Item - Sales Business Partner (tdisa0510m000)

Similar to the fields in step 2, you can define the following fields for an item - business partner combination in the Item - Sales Business Partner (tdisa0510m000) session:

- **Customer Approval**
- **Return Rejected Quantity**

You cannot define these fields if the item is a cost item, service item, subcontracting item, or an equipment item.

Step 4: Sales Order Types (tdsIs0594m000)

If you want a sales return order to be generated for the rejected quantity of the delivered goods, and as a result the **Return Rejected Quantity** check box is selected in the Ship-to Business Partners (tccom4111s000) and Item - Sales Business Partner (tdisa0510m000) sessions, you must specify a sales return order type of the type **Return Rejects** in the Sales Order Types (tdsIs0594m000) session.

Sales orders of the **Return Rejects** order type are always generated automatically.

Step 5: Sales Order Type - Activities (tdsIs0560m000)

If the **Customer Approval** check box is selected in the Implemented Software Components (tccom0100s000) session, the activity Sales Order Invoice Lines (tdsIs4106m100) must be linked to the order type in the Sales Order Type - Activities (tdsIs0560m000) session.

The Sales Order Invoice Lines (tdsIs4106m100) activity must be executed:

- After the activities Release Sales Orders to Warehousing (tdsIs4246m000) or Maintain Deliveries Sales Order Lines (tdsIs4101m200).

- Before the activity Release Sales Orders/Schedules to Invoicing (tdsIs4247m000).
- Manually. As a result, you cannot select the **Automatic** check box for this activity.

The activity Sales Order Invoice Lines (tdsIs4106m100) can be executed during the order procedure only if:

- **Customer Approval** is applicable for the item and business partner on the sales order. Else, the Sales Order Invoice Lines (tdsIs4106m100) activity is skipped/removed during execution of the order procedure.
- The order type is not a return order, collect order, cost order, retro-billed order, consignment replenishment order, or consignment invoicing order.
- The item is not a cost item, service item, subcontracting item, or equipment item.
- The item's inventory handling status is not set to **By Component** in the **Inventory Handling** field of the Sales Order Lines (tdsIs4101m000) session.

Step 6: Sales Order Parameters (tdsIs0100s400)

Enter a sales return order type of the type **Return Rejects** in the **Return Rejection Order Type** field of the Sales Order Parameters (tdsIs0100s400) session. This order type is defaulted to the **Rejection Order Type** field of the Sales Order Invoice Lines (tdsIs4106m100) session when you reject goods in this session and a return order must be generated for the rejected goods.

Approving the delivered goods

When an actual delivery line is inserted in the Sales Order Actual Delivery Lines (tdsIs4106m000) session, an invoice line is created for the actual delivery line in the Sales Order Invoice Lines (tdsIs4106m100) session with an invoice quantity that is equal to the delivered quantity.

How invoice lines are handled in the Sales Order Invoice Lines (tdsIs4106m100) session, depends on the setting of the **Customer Approval** check box in the Implemented Software Components (tccom0100s000) session.

Customer approval is not implemented:

- Only one invoice line can be created for one actual delivery line.
- You cannot maintain the invoice line.
- You need not approve the generated invoice line. The invoice line is automatically approved.
- If the Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) is not an automatic activity in the order procedure, you can release the invoice line to Invoicing from the **Release to Invoicing** tab in the Sales Order - Lines (tdsIs4100m900) and Sales Order Line - Deliveries (tdsIs4101m900) sessions.

Customer approval is implemented:

- You must specify which part of the delivered quantity can be approved (invoiced) and which part is rejected, if applicable.

As a result, you can maintain the following fields:

- **Invoice Quantity**
- **Rejected Quantity**
- **Delivery Type**
- **Rejection Order Type**
- **Rejection Reason**
- **Approval Date**
- If a return order must be generated for the rejected goods and the return order fields are specified, LN generates the return order when you approve the invoice line.
- If a part of the delivered quantity is approved or rejected and you approve the invoice line, LN accumulates the approved quantity and rejected quantity for the actual delivery line. If this accumulated quantity is lower than the delivered quantity, a new invoice line is generated for the remaining quantity. Therefore, multiple invoice lines can be created for one actual delivery line.
- You must release the approved invoice line(s) to Invoicing by clicking **Release Selected Sales Order Line(s)**, or **Release to Invoicing (batch)...** on the appropriate menu.

Note

- To approve a sales order invoice line, select the line and click **Approve** on the appropriate menu of the Sales Order Invoice Lines (tdsIs4106m100) session. As a result, the invoice line status changes from **Free** to **Approved**.
- You must maintain the deliveries for cost and service items in the Maintain Deliveries Sales Order Lines (tdsIs4101m200) session. As a result, the status of the invoice line is immediately set to **Approved** in the Sales Order Invoice Lines (tdsIs4106m100) session.

You can perform all described actions also on the **Invoice Lines** tab in the Sales Order - Lines (tdsIs4100m900) and Sales Order Line - Deliveries (tdsIs4101m900) sessions.

Flexible sales order processing

You can automate the processing of sales orders. For each activity that is linked to an order type, you can specify its execution mode: automatic or manual.

The execution of the order procedure activities can start when a user approves the order. After approval of an order, all automatic activities are executed successively until an activity is defined as nonautomatic. After you manually executed the nonautomatic activity, LN executes the next automatic activity, and so on.

To enable flexible order processing, you must first specify the following data:

1. Sales order type and sales order type activities.
2. Default devices to which (error) reports for a user are printed.

Sales order types and activities

Specify sales order types and link activities to these order types in the Sales Order Type - Activities (tdsIs0694m000) session. By selecting or clearing the **Automatic** check box for an activity, you can specify its execution mode.

Mandatory activities

When you create an order type in the Sales Order Type - Activities (tdsIs0694m000) session, LN automatically links the following mandatory activities to the order type in the **Activity** field of the Sales Order Type - Activities (tdsIs0560m000) session:

- Release Sales Orders to Warehousing (tdsIs4246m000)
- Sales Deliveries (tdsIs4101m200)
- Release Sales Orders/Schedules to Invoicing (tdsIs4247m000)
- Process Delivered Sales Orders (tdsIs4223m000)

Note

For the consignment replenishment order type, the activity Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) is not linked. For the retro-billed order type, the activity Release Sales Orders to Warehousing (tdsIs4246m000) is not linked.

Optional activities

The following optional activities, which you can remove again, are also automatically linked to the Sales Order Type - Activities (tdsIs0560m000) session:

- Print Sales Order Acknowledgements/RMAs (tdsIs4401m000)
- Generate (Project) Structure for Sales Orders (tdsIs4244m000)
- Calculate Cost Prices by Project (tipcs3250m000)
- Generate Freight Orders (tdsIs4222m000)
- Generate Purchase Order Advice for Sales Order (tdsIs4240m000)
- Generate Purchase Orders (tdsIs4241m000)
- Generate Production Orders (tdsIs4243m000)
- Generate Inventory Commitment (whinp2200m000)
- Change Prices and Discounts of Sales Invoice Lines (tdsIs4132m000)
- Sales Order Invoice Lines (tdsIs4106m100)

Note

The following exceptions are applicable:

- For the return order type, collect order type, cost order type, retro-billed order type, and the consignment order types, the activity Sales Order Invoice Lines (tdsIs4106m100) cannot be linked.
- You cannot define the Sales Order Invoice Lines (tdsIs4106m100) and Change Prices and Discounts of Sales Invoice Lines (tdsIs4132m000) activities as automatic activities. These

activities must always be executed manually, because in these sessions, you must first maintain, approve, or confirm invoice quantities.

- For the retro-billed order type, the collect order type, and the cost order type, the activity Generate Freight Orders (tdsIs4222m000) cannot be linked. This also applies if the **Consignment Invoicing** check box is selected in the Sales Order Types (tdsIs0594m000) session.

Execution of activities

Execution of activities

If the following activities are linked to the order type, the actual addition of these activities to the order procedure is determined by LN during the order procedure:

- Release Sales Orders to Warehousing (tdsIs4246m000) and Maintain Deliveries Sales Order Lines (tdsIs4101m200)**
Although the activities Release Sales Orders to Warehousing (tdsIs4246m000) and Maintain Deliveries Sales Order Lines (tdsIs4101m200) can both be linked as a mandatory activity to the order type, either the Release Sales Orders to Warehousing (tdsIs4246m000) activity or the Maintain Deliveries Sales Order Lines (tdsIs4101m200) activity is executed during the order procedure. You cannot execute both activities for the sales order. This applies to sales orders with a cost or service item. A sales order is released to Warehousing if it contains an item whose **Item Type** is set to **Cost or Service** in the Item - General (tcibd0101s000) session and for which the **Release to Warehouse** check box is selected in the Item - Sales (tdisa0501m000) session. If the **Release to Warehouse** check box is cleared, you must manually maintain the deliveries for the sales order in the Maintain Deliveries Sales Order Lines (tdsIs4101m200) session.
- Sales Order Invoice Lines (tdsIs4106m100)**
This activity is only activated/ must only be executed if the **Customer Approval** check box is selected in the Implemented Software Components (tccom0100s000) session. For more information, refer to *Customer approval* (p. 31).
- Generate Purchase Order Advice for Sales Order (tdsIs4240m000) and Generate Purchase Orders (tdsIs4241m000)**
Either the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) or the Generate Purchase Orders (tdsIs4241m000) activity can be linked to the order type. In this way, you can determine whether or not purchase order advices must first be generated before cross-docking orders and direct delivery orders can be created.
- Generate Production Orders (tdsIs4243m000)**
This activity is only activated/ must only be executed when the **Delivery Type** field is **Production** in the Sales Order Lines (tdsIs4101m000) session or the Delivery Lines (tdsIs4101m100) session.
- Generate Freight Orders (tdsIs4222m000)**
If you link Generate Freight Orders (tdsIs4222m000) as an activity to the order type, execution of this activity is actually controlled on the sales order line, or the sales order delivery line. For more information, refer to *Integration freight order control and sales control*.

- **Generate (Project) Structure for Sales Orders (tdsIs4244m000)**
For more information, refer to Generate (Project) Structure for Sales Orders (tdsIs4244m000) session.
- **Calculate Cost Prices by Project (tipcs3250m000)**
If you link Calculate Cost Prices by Project (tipcs3250m000) as an activity to the order type, this activity is added to the sales order procedure when you enter a sales order line with a customized item. The Calculate Cost Prices by Project (tipcs3250m000) session updates the sales order line with the calculated cost price of the customized item. If you use lower cost or market value (LCMV), the sales order line is updated with the calculated cost price of the customized item only if the **Backdate Valuation Price Allowed** check box is also selected in the Cost Price Calculation Parameters (ticpr0100m000) session.
- **Generate Inventory Commitment (whinp2200m000)**
For more information, refer to Generate Inventory Commitment (whinp2200m000) session.

Important!

Make sure that the list of activities linked to an order type is extensive enough to cover all processes that can apply during execution of the order procedure. If an activity is not applicable for the order type, LN automatically skips/removes this activity.

You can view the actual activities that are linked to the sales order (delivery) line and the status of the activities in the following sessions:

- Sales Order Activities (tdsIs4113m000)
- Sales Order Line Status (tdsIs4534s000). From this session, you can execute the next manual activity.

Default devices

Specify a default device to which reports are printed for the user in the User Profiles (tdsIs0139m000) session.

When you insert a user profile in the User Profiles (tdsIs0139m000) session, the following printing sessions are automatically inserted in the Default Devices by User (tdsIs0140m000) session:

- Print Sales Quotations (tdsIs1401m000)
- Print Sales Contract Acknowledgements (tdsIs3405m000)
- Print Sales Contract Reminders (tdsIs3406m000)
- Print Sales Order Acknowledgements/RMAs (tdsIs4401m000)

For each printing session, you can define the device that is used for printing in the Default Devices by User (tdsIs0140m000) session. You can start this session by choosing **Default Devices by User** from the appropriate menu of the User Profiles (tdsIs0139m000) session. The **Device** in the Default Devices by User (tdsIs0140m000) session is defaulted from the **Device** in the User Profiles (tdsIs0139m000) session but can be overwritten in the Default Devices by User (tdsIs0140m000) session.

The device search path for printing external documents is as follows:

1. From the Default Devices by User (tdsIs0140m000) session.
2. From the Sales Order Type - Activities (tdsIs0560m000) session.

3. If no device can be found, you must select a device.

The device search path for printing internal documents is as follows:

1. From the User Profiles (tdsIs0139m000) session.
2. From the Sales Order Type - Activities (tdsIs0560m000) session.
3. If no device can be found, you must select a device.

Note

- If an error report is printed, LN always uses the device specified in the **Device** field of the User Profiles (tdsIs0139m000) session. If no device is specified, you must select a device.
- For automatically executed activities, no process reports are printed.

Sales order status and flexible sales order processing

Flexible sales order processing starts when a sales order receives the **Approved** status.

You can approve sales orders by:

- Running the Approve Sales Orders (tdsIs4211m000) session, in which you can approve a range of sales orders.
- Selecting a sales order and clicking **Approve** on the appropriate menu of the Sales Orders (tdsIs4100m000) or Sales Order - Lines (tdsIs4100m900) sessions.

When a (delivery) line of an approved sales order is modified, the order header status changes to **Modified**. The modified sales order line is now excluded from the automatic execution of order activities. You must re-approve the sales order.

Note

If you specified an order as a rush order, the order cannot be rushed before it receives the **Approved** status. Once the rush order is released to Warehousing, it has priority over normal sales orders.

Example

Order type sequence	Activity	Automatic
1	Print Sales Order Acknowledgements/RMAs (tdsIs4401m000)	Yes
2	Release Sales Orders to Warehousing (tdsIs4246m000)	Yes
4	Process Delivered Sales Orders (tdsIs4223m000)	No

Because Print Sales Order Acknowledgements/RMAs (tdsIs4401m000) is an automatic activity, the sales order is printed when it is approved. Next, LN automatically executes the activity Release Sales Orders to Warehousing (tdsIs4246m000). However, you must manually process the delivered sales order in the Process Delivered Sales Orders (tdsIs4223m000) session.

Multisite invoice between a purchase office and a sales office

For a direct delivery, the sales office receives money from the customer and the purchase office pays the supplier for the goods. As a result, the account books of both financial companies show discrepancies. With triangular invoicing, you can automatically generate settlements between a purchase office and a sales office that belong to different financial companies and update the account books.

To automatically generate settlements between a purchase office and a sales office, take the following steps:

1. Specify the parameters that apply to goods transfer transactions between specific entities in the Internal Trade Details (tcemm2151m000) session.
2. Specify a goods transfer relationship between a purchase office and a sales office that belong to different enterprise units in the Entity - Entity Relationships (tcemm2110m000) session. This relationship indicates that internal invoicing is required. In case of a direct delivery and an existing relationship, LN sends an internal invoice from the purchase office to the sales office.

Note

The parameters for goods transfer transactions that you specified in the Internal Trade Details (tcemm2151m000) session, can be linked to the goods transfer relationship in the **Relationship Detail** field of the Entity - Entity Relationships (tcemm2110m000) session.

Rate determiners in Sales

You can specify rate determiners to decide which date is used to determine the exchange rates. Amounts in foreign currencies are converted to the home currency, based on the valid exchange rate.

A company's currency system, which you can define in the **Currency Type** field of the Companies (tcemm1170m000) session, defines how amounts are calculated and registered.

These currency systems are available:

- [Single currency](#)
- [Independent currency](#)
- [Dependent currency](#)

Based on the currency system, you can specify the following [rate determiners](#) in Sales:

Currency System: Single Currency

Rate Determiners: Document Date

Expected Cash Date

Manually Entered

Fixed

Delivery Date

Currency System: Independent currency

Rate Determiners: Document Date

Expected Cash Date

Manually Entered

Fixed Hard

Fixed Local

Fixed Local and Hard

Delivery Date

Currency System: Dependent Currency

Rate Determiners: Document Date

Expected Cash Date

Manually Entered

Fixed

Delivery Date

Note

For more information on the function of each rate determiner, refer to [Currency Rate Determiner](#).

Product catalog

Product catalogs

You can specify [product catalogs](#) to group items into logical product [categories](#). Catalogs can be structured hierarchically and contain, at the lowest levels, items that can be sold or purchased.

Catalogs can be used to search for and locate items during sales order, sales quotation, and purchase requisition entry. Based on the user-defined structure, searches can be performed by category, item description, or manufacturer information. When searching by category or item description, LN searches the product catalog(s), level by level. At the lowest level of the catalog, you can view specific information on item, pricing, and availability. You can specify effectiveness and expiration dates to restrict the use of the catalog to a specific time period.

Product catalogs can be specified for sales and purchase transactions. They can be created for general use or for a specific sold-to business partner.

These items cannot be included in product catalogs:

- List items (except for kits)
- Generic items and product variants
- Subcontracting items
- Equipment items

Specifying product catalogs

To create a product catalog:

1. Specify a new category in the Category (tdpct0501m000) session and select the **Catalog** check box for the category. This is the highest category level.
2. Specify the subcategories that you want to include in the catalog in the Category (tdpct0501m000) session. These are the categories for which the **Catalog** check box is cleared. If you link items directly to the catalog, you can skip this step.
3. If the catalog is defined as **Specific** in the **General/Specific** field of the Category (tdpct0101s000) session, you must link the catalog to (a) sold-to business partner(s) in the Catalog - Business Partners (tdpct0103m000) session.
4. Structure the product categories hierarchically by linking subcategories or items to the category that is defined as a catalog. For this purpose, select the relevant catalog and click **Category Structure** on the [appropriate](#) menu of the Category (tdpct0501m000) session. Consequently, the Category Structure (tdpct0502m000) session starts in which you can link the subcategories/items.

5. If subcategories are linked to a catalog, you must also link items to the subcategory. For this purpose, select the relevant category and click **Category Structure** on the appropriate menu of the Category (tdpct0501m000) session. Consequently, the Category Structure (tdpct0502m000) session starts in which you can link the items.
6. Generate a catalog based on the category that is defined as a catalog. For this purpose, select the relevant catalog and click **Create Product Catalog** on the appropriate menu of the Category (tdpct0501m000) session. Consequently, the Create Product Catalog (tdpct0204m000) session starts, which you must run with the **Save Catalog** check box selected.

Note

- When the catalog is created, you can view the catalog in the Catalogs (tdpct0510m000) session.
- To have a tree structure of the generated catalog structure, select **Tree Structure** from the appropriate menu in the Catalogs (tdpct0510m000) session, or select **Tree Structure** from the appropriate menu in the Category Structure (tdpct0502m000) session.
- You can insert product catalogs into:
 - Sales orders in the Sales Order - Lines (tdsIs4100m900) session.
 - Sales quotations in the Sales Quotation - Lines (tdsIs1600m000) session.
 - Purchase requisitions in the Purchase Requisition - Lines (tdpur2600m000) session.

Copying category structures

You can copy category structures in the Copy Category Structure (tdpct0201m000) session.

When copying from one category structure to another, the following rules apply for the following fields in the Copy Category Structure (tdpct0201m000) session:

Copy type	From and to values	For fields
Create New Structure	Must match	General/Specific Identifier
Append Structure	Can differ	General/Specific Identifier
Replace Structure	Can differ	General/Specific Identifier

Note

If, in the Copy Category Structure (tdpct0201m000) session, the **Type of Copy** is **Append Structure**, the **Source** is **General**, and the **Destination** is **Specific**, links that are specified in the Catalog - Business Partners (tdpct0103m000) session, are not copied.

List items in the product catalog

After the catalog is created, and an item is of the list type, the original list item will no longer be visible in the catalog. Only the components of the list item become part of the catalog. Because the list item is exploded when the catalog is created, the list component's quantity cannot be used when creating the item line in your list. If the list item's components change after the catalog is created, the current catalog is not updated. However, each time the catalog structure with the list item as a member is used to create a new catalog, the changes in the list item's components are updated during the creation process.

General sales data

General sales data

Before you can complete sales procedures, you must specify general sales data, such as data to track order changes and to determine the reason for the changes, the conditions and reasons for automatically blocking a sales order, and order priority simulations.

Specifying data to track order changes and to determine the reason for the changes

Sales orders can be dynamic documents, as a sold-to business partner's requirements can change during the life cycle of the order process. In the sales master data, you can specify information to track these adjustments and the reasons why changes were made. Change codes and acknowledgement codes are used to track various changes in an order. Although this functionality was designed to work specifically with EDI, a company without EDI functionality can also use these codes for recording changes.

You can use change codes to maintain information regarding order changes that are tracked for historical purposes. You can use acknowledgement codes to manually add change information to the order document, after which these changes are communicated to the sold-to business partner by means of a sales order acknowledgement.

To be able to maintain and track changes, take the following steps:

1. Use the Change Reasons (tdsIs0197m000) session to maintain codes that represent the change reasons, which can be assigned to a changed order or an order acknowledgement to clarify why a change is made. This information can be tracked for historical reporting.
2. Use the Change Types (tdsIs0198m000) session to define change types that indicate the kind of change of a changed sales order or order acknowledgement. Possible types of change are, for instance, change order line, add order line, change header data, and so on. The change types are assigned to the sales order after the change is made to the order.
3. Use the Sales Order Parameters (tdsIs0100s400) session to define various default change codes and change types, which are defaulted to the sales order line in case of changes.
4. Use the Sales Order - Change Order Sequence Numbers (tdsIs0153m000) session to define optional numbers that are used to assign the occurrence of changes to an order or order acknowledgment. The sequence numbers defined here are used to group an occurrence of

changes to an order. This session is usually accessed from the sales order screen, as the actual order number must be specified.

5. Use the Sales Acknowledgments (tdsIs0154m000) session to define sales order acknowledgements and the destination of the codes, which can be **Header**, **Line**, or **Any**. The acknowledgement code contains a group of information, which appears on the sales acknowledgement document. This code can represent the reasons for a change of a sales order.
6. Use the Sales Acknowledgment Assignments (tdsIs0155m000) session to define the information to be included in the sales order acknowledgement document as indicated by the acknowledgement code. You can assign acknowledgement codes to specific fields on a sales order line, which are the default codes when a change occurs to a specific field. You must also define the action (Add line, Change line) and the source (EDI, Manual, or Any) that result in the acknowledgement code assignment. For example, if you manually add an order line to an existing sales order and the order quantity is changed, LN assigns the specified acknowledgement code to the sales order line.

Specifying reasons for order blocking

On occasion, it may become necessary to block sales order entry for a business partner, or to stop the processing of a business partner's sales order. You can define the conditions for automatically blocking a sales order and define hold reasons stating why the order was blocked. This gives you time to review the order and to take appropriate action. Many reasons can exist for placing a hold on a sold-to business partner's order. For instance, sold-to business partners can have exceeded their credit limit, have overdue invoices, or can be disputing an invoice, and so on.

If you want to use the order blocking functionality, you must specify the following master data:

1. To enable blocking review and to take appropriate action, use the Hold Reasons (tdsIs0190m000) session to define and track this information.
2. In the Hold Reasons by Business Partner Type (tdsIs0593m000) session, specify the action to take when a sales order line is blocked for a particular reason, which depends on the business partner type and hold reason.
3. In the Sales Order Parameters (tdsIs0100s400) session, specify when orders must be automatically blocked. On the **Blocking** tab, define standard blocking situations. On the **Reasons** tab, attach a reason for a blocking situation.
4. Define the step at which the sales order procedure is interrupted automatically in the **Block As of Activity** field of the Sales Order Type - Activities (tdsIs0694m000) session. When an order (line) is blocked, the procedure for this order can only be partially carried out. If a blocking step is not defined in this session, the order procedure is not interrupted.

Specifying order priority simulations

If you want to use order priority simulations, you must specify the following master data:

1. Set the method that is used to determine the order priority to **Simulation** in the **Order Priority Method** field of the Sales Order Parameters (tdsIs0100s400) session. As a result, the order priority is calculated based on the values of the fields defined in the simulation code.
2. Use the Priority Simulations (tdsIs4524m000) session to define the codes that are used to create priority simulations. A priority simulation consists of an identifying code and description, a sort sequence and a sort mode. The sort sequence and the sort mode are criteria by which sales orders are sorted. The way the orders are sorted determines the priority. To create a simulation, the sorting criteria defined in the simulation code are applied for a group of sales orders selected by the user. You can select six fields for each simulation code to sort sales orders. LN takes the default fields from the sales order lines table, but you can also use fields from sales orders and business partners.

INCLUDE: Additional costs - overview [baanerp_td_onlinemanual_000413]

Additional costs – setup

Additional costs setup - procedure

To use and set up additional costs, the following master data must be specified:

Step 1: Parameters

Order based additional costs	Shipment based additional costs
Sales Order Parameters (tdsIs0100s400)	Sales Order Parameters (tdsIs0100s400)
<hr/>	
Calculate Additional Costs	Calculate Additional Costs
<hr/>	
First Position Number for Additional Costs Sets Recalculation of Additional Costs	
<hr/>	
Recalculation of Additional Costs	Release Additional Cost Lines Automatically to Invoicing upon
<hr/>	
Release Additional Cost Lines Automatically to Invoicing upon	Automatic Approve Shipment based Cost Orders
<hr/>	
Release Additional Cost Lines Automatically to Invoicing upon	Include Additional Costs in Installments
<hr/>	
-	Shipment Cost Order Type
<hr/>	

**Inventory Handling Parameters
(whinh0100m000)**

Calculate Additional Costs for Shipments

Step 2: Sold-to Business Partners (tccom4510m000)

On the **Pricing** tab of the details session, specify these fields:

- **Calculate Additional Costs**
- **Calculate Additional Costs For**
- **Method of Additional Cost Calculation**

Step 3: Sales Additional Cost Set (tdsIs0624m000)

■ **Header**

The header refers to the Additional Cost Sets (tdsIs0124m000) session in which you must group additional costs into additional cost sets.

■ **Lines**

The lines tab in the Sales Additional Cost Set (tdsIs0624m000) session refers to the Sales Additional Cost Set Lines (tdsIs0528m000) session in which you must specify the cost items that belong to a cost set. On the additional cost line, you specify when the additional costs are applicable and how these additional costs must be retrieved or calculated.

■ **Scenarios**

The scenarios tab in the Sales Additional Cost Set (tdsIs0624m000) session refers to the Sales Additional Cost Set Scenarios (tdsIs0527m000) session in which you must specify the additional cost scenarios. An additional cost set can be found through an additional cost set scenario.

Shipment based additional costs can be shipment-dependent or item-dependent.

■ **Shipment-dependent costs**

These additional costs are assigned to business partners and are based on a complete shipment to that business partner. Use the Sales Additional Cost Set Scenarios (tdsIs0527m000) session to link a default additional cost set to a price list or a sold-to business partner and/or ship-to business partner.

■ **Item-dependent costs**

These additional costs are assigned to specific items and are only applied to sales schedule shipments. These costs are based on shipment lines and can be applied on top of the shipment dependent additional costs. You can use the Sales Contract Lines (tdsIs3501m000) and Sales Additional Cost Set Scenarios (tdsIs0527m000) sessions to link a default additional cost set to an *item*. The Sales Contract Lines (tdsIs3501m000) session has the highest priority.

Step 4: Price Books (tdpcg0131m000)

For the cost items that are specified in the additional cost set, a price must be set up in a price book. Use the Price Book Lines (tdpcg0131m000) session to define charges for additional cost items.

Complete the following steps in the Price Books (tdpcg0131m000) session:

1. Select the price book that is defined in the **Default Sales Price Book** field of the Pricing Parameters (tdpcg0100m000) session.
2. Select the required cost item.
3. Define the price breaks.

Once an additional cost set is retrieved from the Sales Additional Cost Set Scenarios (tdsIs0527m000) session for a sales order or shipment (line), the fields in the **Determining** group box of the Sales Additional Cost Set Lines (tdsIs0528m000) session determine whether the cost line is applicable for the sales order or shipment (line) and, therefore, a price must be retrieved from the price book for the item.

If yes, based on the fields in the **Costs** group box of the Sales Additional Cost Set Lines (tdsIs0528m000) session, a quantity is calculated that is used to retrieve the correct price from the price book.

Additional costs - order based

Order based additional costs are calculated for sales orders or sales order lines. After sales order approval, additional costs are placed on an order as extra cost (items) after the last item recorded.

Order based additional costs - procedure

These steps are completed in the order based additional costs procedure:

Step 1: Generating sales order lines with additional costs

If an additional cost set with valid additional cost lines is found for an order (line), after sales order approval, these cost lines are added to the order as extra cost (items) in the Sales Order Lines (tdsIs4101m000) session.

The following apply to these sales order lines:

- The **Additional Cost Line** check box is selected.
- The additional cost amount is displayed in the **Amount** field and the **Price** field is empty.
- If the sold-to business partner's **Method of Additional Cost Calculation** is **Header Based**, the position number is retrieved from the **First Position Number for Additional Costs Sets** field in the Sales Order Parameters (tdsIs0100s400) session. Sales order lines with **Line Based** additional costs have regular position numbers.
- For sales order lines with **Line Based** additional costs, you can view the additional cost lines that are linked to the sales order line in the Additional Cost Lines per Sales Order Line (tdsIs4527m000) session.

Step 2: Issuing the additional cost line items

Based on the value of the **Release to Warehouse** check box in the Items - Sales (tdisa0501m000) session, issuing the cost item is carried out in Warehousing or in Sales.

Therefore, either the Release Sales Orders to Warehousing (tdsIs4246m000) or the Maintain Deliveries Sales Order Lines (tdsIs4101m200) activity must be executed for the sales order line.

If Maintain Deliveries Sales Order Lines (tdsIs4101m200) is not executed before Release Sales Orders/Schedules to Invoicing (tdsIs4247m000), the activity is set to **Executed** during execution of the Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) session. Therefore, it is not mandatory to execute Maintain Deliveries Sales Order Lines (tdsIs4101m200).

Step 3: Releasing the additional cost lines to Invoicing

The **Release Additional Cost Lines Automatically to Invoicing upon** field in the Sales Order Parameters (tdsIs0100s400) session determines how the additional cost lines must be released to Invoicing.

Step 4: Processing the additional cost lines

Process the delivered sales order together with the additional cost lines in the Process Delivered Sales Orders (tdsIs4223m000) session.

Notes

- Because **Line Based** additional cost lines are linked to a specific sales order line, they can be released or processed only together with the original sales order line. You cannot process the sales order line if not all linked additional cost lines are ready to be processed.
- If you copy a sales order (line), the linked additional cost lines are not copied to the new order (line). If you manually copy an additional cost line, a normal sales order line with a cost item will be generated.
- If a sales order line is deleted or canceled, the linked additional cost lines are also deleted or canceled. You can also manually delete or cancel an additional cost line.
- If a sales order line is split before delivery, additional cost lines are linked to each created sales order delivery line. These additional cost lines obtain a new position number, but the sequence number remains zero. Therefore, additional cost lines are not created at sequence level.
- Sales backorder lines can have linked additional cost lines. However, because the additional costs are calculated based on the ordered quantity and not based on the actual shipped quantity, the costs will be too high. A credit note is required to settle this.
- If the **Release Additional Cost Lines Automatically to Invoicing upon** check box is selected in the Sales Order Parameters (tdsIs0100s400) session, installments can include additional costs.
- If customer approval is implemented, you cannot use the additional costs functionality.

Additional costs - shipment based

Shipment based additional costs are calculated for sales shipments or shipment lines. After confirmation of a shipment (line), a sales cost order is generated based on the shipment (line). A sales cost order with the **Shipment** origin includes all additional costs for one shipment (line).

Note

- Multiple sales order lines and sales schedule lines can be linked to one shipment.
- The sales shipment cost order and the order/schedule lines that are linked to a shipment, receive a common shipment ID. Based on this ID, a complete shipment can be invoiced to the customer. The relevant order/schedule lines and the sales shipment cost order can be released to invoicing together.

Shipment based additional costs - procedure

These steps are completed in the shipment based additional costs procedure:

Step 1: Generating a sales shipment cost order

If an additional cost set with valid additional cost lines is found for a shipment (line), the shipment-dependent and item-dependent additional costs are added to the shipments as separate shipment lines in the Shipment Lines (whinh4131m000) session. The additional shipment cost lines are generated in Warehousing. When the shipment is confirmed, a sales order with the **Shipment** origin is generated in the Sales Orders (tdsIs4100m000) session.

The following apply to these sales orders:

- The sales order type and order series are retrieved from the **Shipment Cost Order Type** and **Shipment Cost Order Series** fields in the Sales Order Parameters (tdsIs0100s400) session.
- The **Shipment** field is automatically filled for these orders in the Sales Orders (tdsIs4100m000) session.
- Only cost and service items can appear on this sales order.
- The **Additional Cost Line** check box is selected for the generated sales order lines.
- The additional cost amount is displayed in the **Amount** field and the **Price** field is empty on the sales order line. The **Amount** can be changed until the activity Maintain Deliveries Sales Order Lines (tdsIs4101m200) is executed. After this, the delivered amount can be changed in the Change Prices and Discounts after Delivery (tdsIs4122m000) or Change Prices and Discounts of Sales Invoice Lines (tdsIs4132m000) sessions.

Step 2: Approving the sales shipment cost order

The **Automatic Approve Shipment based Cost Orders** check box in the Sales Order Parameters (tdsIs0100s400) session determines how the sales shipment cost order must be approved.

Step 3: Issuing the additional cost line items

Based on the value of the **Release to Warehouse** check box in the Items - Sales (tdisa0501m000) session, issuing the cost item is carried out in Warehousing or in Sales.

Therefore, either the Release Sales Orders to Warehousing (tdsIs4246m000) or the Maintain Deliveries Sales Order Lines (tdsIs4101m200) activity must be executed for the sales order line.

If Maintain Deliveries Sales Order Lines (tdsIs4101m200) is not executed before Release Sales Orders/Schedules to Invoicing (tdsIs4247m000), the activity is set to **Executed** during execution of the Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) session. Therefore, it is not mandatory to execute Maintain Deliveries Sales Order Lines (tdsIs4101m200).

Step 4: Releasing the sales shipment cost order to Invoicing

The sales shipment cost order and the order/schedule lines that are linked to a shipment have a common shipment ID. Based on this ID, you can invoice a complete shipment to the customer. If you select the **Shipment** check box in the Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) session, the sales shipment cost order and the order/schedule lines that are linked to the shipment, are released to Invoicing together.

The **Release Additional Cost Lines Automatically to Invoicing upon** field in the Sales Order Parameters (tdsIs0100s400) session determines how the sales shipment cost order must be released to Invoicing.

You can view the shipment IDs in these sessions:

- **Sales shipment cost order**
Sales Orders (tdsIs4100m000)
- **Sales shipment cost order lines**
Linked Order Line Data (tdsIs4102s200)
- **Sales order lines**
Sales Order Actual Delivery Lines (tdsIs4106m000)
- **Sales schedule lines**
Sales Schedule Actual Delivery Lines (tdsIs3140m000)

Step 5: Processing the additional cost lines

Process the sales orders and sales schedules together with the additional cost lines in the Process Delivered Sales Orders (tdsIs4223m000) and Process Delivered Sales Schedules (tdsIs3223m000) sessions.

Additional cost calculation for shipments/shipment lines

The calculation of additional costs for shipments/shipment lines is based on the value of the **Method of Additional Cost Calculation** field in the Sold-to Business Partner (tccom4110s000) session. For the shipments, the **Method of Additional Cost Calculation** must be **Header Based**; for the shipment lines, it must be **Line Based**.

The additional costs are calculated for sales orders and sales schedules if the **Calculate Additional Costs for Shipments** check box is selected in the Inventory Handling Parameters (whinh0100m000) session.

- **Sales orders**

The additional costs are calculated with the cost set of the business partner (and/or item).

- If the **Method of Additional Cost Calculation** is **Header Based** in the Sold-to Business Partner (tccom4110s000) session, the additional cost lines are based on totals per shipment and the link to the originating shipment line is not saved.

- If the **Method of Additional Cost Calculation** is **Line Based**, the additional costs are calculated for every originating order line and the link to the originating shipment line is saved.

- **Sales schedules**

The **Header Based** additional costs are calculated with the cost set of the business partner (and/or item). The additional cost lines are based on the totals per shipment and the link to the originating shipment is not saved.

- The **Line Based** additional costs are calculated for the cost set of the contract. This calculation is always independent of the **Method of Additional Cost Calculation**. The generated additional cost lines are linked to the originating order line. The quantities of all the shipment lines can be added before the costs are calculated. This is applicable for serials in inventory that have multiple shipment lines per order line.

Confirm shipment

For confirmed shipment lines, the additional costs are recalculated if the status of the additional cost line is **Not Calculated**. If the status is **Modified**, LN checks if you want to recalculate additional costs or skip the recalculation. After the additional costs are recalculated, the **Additional Costs** field in the Shipments (whinh4130m000) session is set to **Calculated**.

Compose shipment

The related additional cost lines must be processed for the selected options in the Compose Shipment (whinh4231m000) session.

If, on the appropriate menu, you click:

- **Split Line**, the status of the originating shipment line is reset to **Modified** and the additional cost lines are removed. While confirming the originating line, the additional costs are recalculated.
- **Move to Shipment**, the additional costs of the originating shipment line are moved to the new shipment line.

Print packing slips and delivery notes

In the Print Packing Slips (whinh4475m000) and Print Delivery Notes (whinh4477m000) sessions, the header based additional costs are printed as first lines. The line based additional costs are printed below the linked shipment line.

Changing/acknowledging orders

A purchase order of one company is linked to a sales order of another company. Therefore, a change in a purchase order can influence the corresponding sales order, and vice versa. You can specify the handling of change order information.

Change order parameters

The following parameters determine the handling of change order information:

Sales Order Parameters (tdsIs0100s400)	Purchase Order Parameters (tdpur0100m400)
Prompt for Change Codes	Prompt for Change Codes
Change Codes Mandatory	Change Codes Mandatory
Automatic Assignment of Change Order Sequence Numbers	Automatic Assignment of Change Order Sequence Numbers
Default Change Reason Code for Add Order Line	Default Change Reason Code for Add Order Line
Default Change Type for Add Order Line	Default Change Type for Add Order Line
Default Change Reason Code for Change Order Line	Default Change Reason Code for Change Order Line
Default Change Type for Change Order Line	Default Change Type for Change Order Line
Default Change Reason Code for Cancel Order Line	Default Change Reason Code for Cancel Order Line
Default Change Type for Cancel Order Line	Default Change Type for Cancel Order Line

Changing/acknowledging orders

Step 1: To change a purchase order (line)

When a sold-to business partner changes a purchase order, the following fields can be filled in the Purchase Orders (tdpur4100m000) session:

- **Change Reason**
- **Change Type**

- **Change Order Sequence**

When a sold-to business partner changes a purchase order line, the following fields can be filled in the Purchase Order Lines (tdpur4101m000) session:

- **Change Reason Lines**
- **Change Type Lines**
- **Change Order Sequence**

Step 2: To communicate the changes

The sold-to business partner must inform the buy-from business partner about the changes on the purchase order (line). The sold-to business partner can, for example, inform the buy-from business partner by telephone, EDI message, mail, or another way.

Step 3: To implement the changes

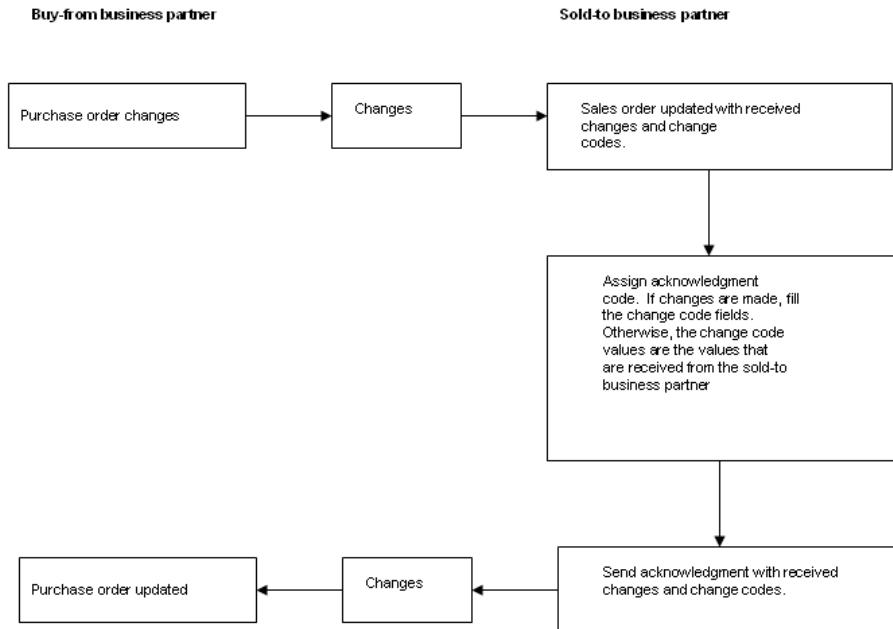
If the buy-from business partner agrees with the changes, the same changes must be made to the corresponding sales order (line). To acknowledge the changes, the buy-from business partner must fill in:

- The **Sales Acknowledgment** field in the Sales Orders (tdsIs4100m000) session in case of an order change.
- The **Sales Acknowledgment** field in the Sales Order Lines (tdsIs4101m000) session in case of an order line change.

The buy-from business partner can also make changes to the requested changes. In this case, the buy-from business partner can overwrite the changes. After the sales order(line) is updated by the buy-from business partner, this partner will send the sold-to business partner the acknowledgment (of the changes).

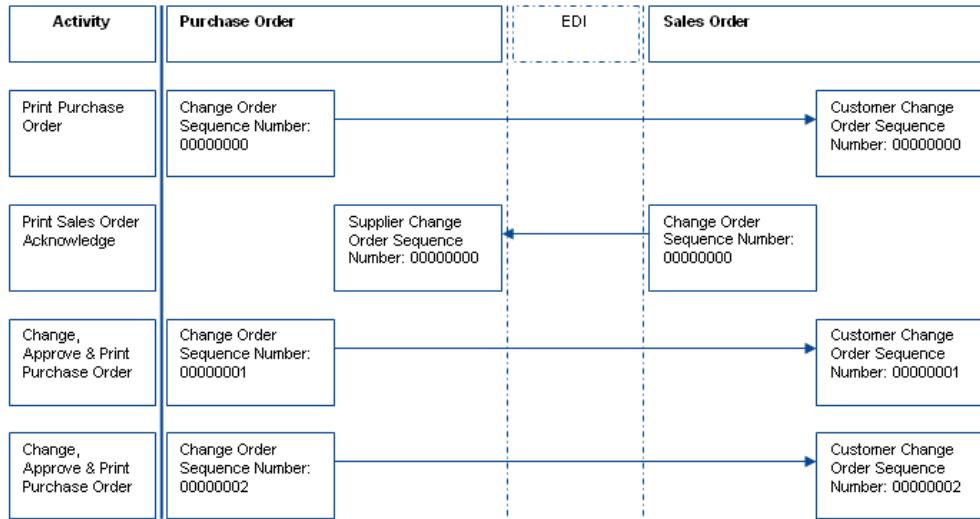
When a buy-from business partner changes sales order (line), you can read the procedure above with the sold-to business partner changed into the buy-from business partner and the Purchase Orders (tdpur4100m000) and Purchase Order Lines (tdpur4101m000) sessions substituted with the Sales Orders (tdsIs4100m000) and Sales Order Lines (tdsIs4101m000) sessions, and vice versa.

Example



If you use [electronic data interchange \(EDI\)](#) to communicate changes, you can view the latest [change order sequence number](#) received from the buy-from business partner in the **Supplier Change Order Sequence** of the Purchase Orders (tdpur4100m000) session and from the sold-to business partner in the **Customer Change Order Sequence** field of the Sales Orders (tdsIs4100m000) session.

Example



Printing changes

You can reprint a changed purchase order. You can also print only the changes. The **Print Purchase Order by Exception** check box in the Buy-from Business Partners (tccom4120s000) session determines which changes are printed.

You can also reprint a changed sales order and print only the changes. The **Acknowledge by Exception** check box of the Sold-to Business Partners (tccom4110s000) session determines which changes are printed.

EDI and printing new lines and/or changes

If you use EDI and have already printed an order, the following restriction is valid: you can only print new order lines and/or order(line) changes if the **Change Type** field is filled in the order or order line sessions.

Note

You can check if an order is already printed in the Purchase Order Line Status (tdpur4534m000) session or Sales Order Line Status (tdsls4534s000) session. You can always go back to the order or order line sessions to fill the **Change Type** field if you want to print the new order lines and/or changes.

Sales order templates

Sales order templates

You can specify sales order templates for recurring sales orders from the same (group of) business partner(s). You can generate sales orders or sales order lines from an order template.

To specify an order template, take the following steps:

1. Specify a template group in the Template Groups (tds1s2125m000) session.
2. Optionally, link one or more sold-to business partners to the template group in the Sold-to BP by Template Group (tds1s2126m000) session.
3. In the Sales Order Template - Lines (tds1s2605m000) session:
 - Specify an order template that identifies the template group, sold-to business partner, and effectivity.
 - Add lines to the order template, which contain the item and the ordered quantity.

Note

- You can create a new template by copying information from an existing template in the Copy Sales Order Templates (tds1s2205m000) session.
- From the Sales Order Template - Lines (tds1s2605m000), the Templates (tds1s2505m000), and the Sales Order Template Lines (tds1s2506m000) sessions you can start the Copy Sales Order To Template (tds1s2204s000) session in which you can copy existing sales order lines, either from history or from current sales orders, to the order template.
- From the Sales Order Template Lines (tds1s2506m000) session, you can import items from catalogs or from item sales data to the order template.
- You can insert order templates into sales orders in the Sales Order - Lines (tds1s4100m900) session.
- If you start the Sales Order Template - Lines (tds1s2605m000) session from the Relation Management Dashboard (tdsmi1500m000) session, you can directly generate a sales order based on a template for the selected business partner.

To use templates and catalogs in sales orders and quotations

You can use sales order templates for recurring sales orders from the same (group of) business partner(s) and you can use catalogs for the shopping list type of order and quotation entry.

In the Sales Order - Lines (tds1s4100m900) session, in which you can enter both header and lines on one single screen, you can manually enter sales orders, but you can also use templates if orders reoccur, or you can use catalogs. In the Sales Quotation - Lines (tds1s1600m000) session, you can enter sales quotation lines based on a catalog.

In the Account Manager Dashboard (tdsmi1500m000) session, you can use templates to directly generate a sales order for the selected business partner.

To enter sales order lines based on a template

To enter sales order lines based on a template, take the following steps:

1. Define (a) sales order template(s).
2. In the Sales Order - Lines (tds1s4100m900) session, click the **Add a New Sales Order** button to enter header data.

3. On the appropriate menu of the **Lines** tab in the Sales Order - Lines (tdsIs4100m900) session, click **Sales Order Templates**.
4. LN checks how many templates are available for the business partner. If only one template is available, the Sales Order Template - Lines (tdsIs2605m000) session is started. If more templates are available, the Sales Order Templates (tdsIs2505m000) session is started.
5. If the:
 - Sales Order Template - Lines (tdsIs2605m000) session is started, you can copy all item lines, or a selection of item lines to the sales order by clicking **Copy All Item Lines** or **Copy Selected Lines**.
 - Sales Order Templates (tdsIs2505m000) session is started, you can select a template and click **Copy All Item Lines** to copy all item lines to the sales order. If you want to select specific item lines, double-click a template. As a result, the Sales Order Template - Lines (tdsIs2605m000) session is started in which you can select the lines.

To generate a sales order based on a template

To generate a sales order based on a template, take the following steps:

1. Define (a) sales order template(s).
2. Click **Sales Order Templates** in the CRM Dashboard (tdsmi1500m000) session.
3. LN checks how many templates are available for the business partner. If only one template is available, the Sales Order Template - Lines (tdsIs2605m000) session is started. If more templates are available, the Sales Order Templates (tdsIs2505m000) session is started.
4. Click **Generate Sales Order** on the appropriate menu of one of these sessions. As a result, a sales order is generated based on the template for the selected business partner.

Note

If you start the Sales Order Template - Lines (tdsIs2605m000) session or the Sales Order Templates (tdsIs2505m000) session stand-alone, and a sold-to business partner is entered, you can also generate a sales order from the template.

To enter sales order/quotation lines based on a catalog

To insert items from a catalog, you must perform the following actions:

1. Create a product catalog. For more information, refer to *Product catalogs* (p. 42).
2. In the Sales Order - Lines (tdsIs4100m900) session or the Sales Quotation - Lines (tdsIs1600m000) session, enter sales order/quotation header data.
3. On the appropriate menu of the **Lines** tab, click **Insert from Catalog** to start the Catalogs (tdpct0510m000) session.
4. On the appropriate menu of the Catalogs (tdpct0510m000) session, select the appropriate catalog and click **Tree Structure**. As a result, either the Catalog Structure (tdpct0510m100) session or Catalogs with Item Data (tdpct0601m000) session starts in which the defined category structure is displayed.

5. To add items to the sales order/quotation, select an item from the catalog structure and do one of the following:
 - **Catalog Structure (tdpct0510m100)**
On the appropriate menu, click **Item Information**. As a result, the Item Information (tdpct0212s000) session starts in which you can first enter an **Order Quantity** and then click **Order Item** to order the item.
 - **Catalogs with Item Data (tdpct0601m000)**
In the Item Information group box, first enter an **Order Quantity** and then click **Order Item** to order the item.

Chapter 3

Sales Quotations

3

Sales quotations

Sales quotations are used to supply a sold-to business partner with the details required to make a purchasing decision.

You can create a sales quotation in response to a request-for-quotation (RFQ) from a business partner, or as a sales tool for initiating the sales process with potential business partners. A quotation includes the dates, terms, items or item descriptions to be sold, and a success percentage, which reflects the level of certainty that the quotation will be accepted. Sales quotations are included in the planning modules on the basis of their success percentages. Quotations with a high success percentage are considered as sold.

You can print and send quotations to business partners. You can specify the results of the returned quotations in Sales. If the quotation is not accepted, you can specify the reason for failure and the competitor who won the quote. If the business partner accepts the quotation, you can transfer the quotation to a sales order and specify the reason for success.

Note

You cannot convert sales quotation lines with an empty item code to a sales order.

Master data

Before you can complete the sales quotation procedure, you must specify the following sales quotation master data and parameters:

- Use the Competitors (tds1s1106m000) session to define and track competitors through the sales quotation procedure. If a quotation line is not successful, you can indicate the competitor who won the order.
- To improve quotation success percentages, it is essential to record the reasons for acceptance or rejection of quotations. The reasons for success or failure, as recorded in the Reasons (tcmcs0105m000) session, enable you to gain insight into the strengths and weaknesses of quotations. For each quotation line, you can indicate the reason for success or failure.
- Set the various sales quotation parameters in the Sales Quotation Parameters (tds1s0100s100) session.

Sales quotation procedure

Sales quotation procedure

Specifying and processing sales quotations

To specify and process sales quotations, complete the following steps:

Step 1: Sales Quotation - Lines (tdsIs1600m000)

You can enter a sales quotation header and sales quotation lines on one screen in the Sales Quotation - Lines (tdsIs1600m000) session. This session enables you to quickly enter the most important information for a sales quotation and to process the quotation.

Step 2: Print Sales Quotations (tdsIs1401m000)

After the sales quotation is created, you can print it in the Print Sales Quotations (tdsIs1401m000) session and send it to the business partner for review. This document contains the price and conditions for delivering the required goods. Additional copies can be printed for filing, as required.

Step 3: Sales Quotation Results (tdsIs1101s100)

The business partner's response to the quotation can be recorded in the Sales Quotation Results (tdsIs1101s100) session. The business partner can either accept or reject the submitted quotation line. The reason for success or failure and the competitor who lost or obtained the quotation line can also be indicated in this session. This information can be important for future quotations.

You can use the Global Update of Sales Quotations (tdsIs1205s000) session to enter results for the entire quotation, or for a group of quotations.

Step 4: Process Sales Quotations (tdsIs1200m000)

If the business partner accepts a quotation line, it can be copied to a sales order. You can generate a sales order from the submitted quotation line in the Process Sales Quotations (tdsIs1200m000) session.

Step 5: Sales Orders (tdsIs4100m000)

You can maintain sales orders that are created from a quotation in the Sales Orders (tdsIs4100m000) session.

Note

You can:

- Configure a product variant for a generic item from the quotation line. For more information, refer to *Product variants in Sales* (p. 23).

- Carry out an available-to-promise (ATP) and capable-to-promise (CTP) check for the quotation. This is executed automatically if, in the EP Parameters (cprpd0100m000) session, the **CTP Check for Sales** check box is selected and, in the Sales Quotation Parameters (tds1s0100s100) session, one of the **Inv Check during Quotation Line Entry**, **Inventory Check during Confirmation**, or **Inv Check during Processing** parameters are set to **Yes** or **Time-Phased**. If the free available inventory (ATP) and additional critical components and capacities (CTP) are insufficient to fulfill the quotation line, you can, for instance, handle the shortage by means of a delivery schedule, which you can set up in the ATP Handling (cprrp4800m000) session. If you want to use the delivery schedule, you must manually update the schedule line. You can start the ATP Handling (cprrp4800m000) session as follows:
 - Manually, if you want to carry out offline ATP/CTP checks.
 - Automatically, if it is defined as an automatic inventory shortage handling option for the order type.
 - Manually, from the Inventory Shortage Menu (tds1s4830s000) that pops up during quotation line entry, confirmation, or processing. For more information, refer to *Inventory shortage handling* (p. 14).
- Offer a sold-to business partner more than one choice for a particular quotation. If you click **Create Alternative** on the appropriate menu of the Sales Quotation Lines (tds1s1501m000) session, you can create an alternative line. This line holds the same position number as the primary quotation line, but the sequence number increases by one.
- Delete (processed) sales quotations in the Delete Sales Quotations (tds1s1210m000) session.
- Create a new sales quotation based on a catalog. For details, refer to *To use templates and catalogs in sales orders and quotations* (p. 57).
- Use the Copy BOM Components to Sales Quotation (tds1s1812s000) session to copy bill of material components to a sales quotation. You must enter a manufactured item and the number of BOM levels to copy to the quotation. A sales quotation line is added for each position in the bill of material that does not contain another level of components.
- Also print and review sales quotations in the Preview Sales Quotation (tds1s1401m200), Print Sales Quotations Overview (tds1s1419m000), and Print Sales Quotation Lines (tds1s1420m000) sessions.

Working with sales quotation (line) statuses

These statuses are used in the sales quotation procedure:

- Sales quotation statuses
- Sales quotation line statuses

Sales quotation statuses

You can use the status to keep track of a quotation and determine which steps can be carried out. A quotation can have the following statuses:

The status changes of a quotation

From status	To status	Session
-	Created	Sales Quotations (tds1s1500m000)
Created	Printed	Print Sales Quotations (tds1s1401m000)
Printed	Modified	Sales Quotations (tds1s1500m000)
Created, Printed, Modified	Processed	Process Sales Quotations (tds1s1200m000)

Sales quotation line statuses

The order of statuses for a sales quotation line is regulated. The status of a quotation line is checked before a step is carried out. After each step, the status is automatically updated. The following table shows the status changes of sales quotation lines.

The status changes of a quotation line

From status	To status	Session
-	Created	Sales Quotation Lines (tds1s1501m000)
Created	Confirmed	Sales Quotation Results (tds1s1101s100)
Created	Canceled	Sales Quotation Results (tds1s1101s100)
Created	Lost	Sales Quotation Results (tds1s1101s100)
Confirmed	Processed	Process Sales Quotations (tds1s1200m000)

Sales orders

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 order master data

Before you can carry out the sales order procedure, you must define the sales order parameters in the Sales Order Parameters (tdsIs0100s400) session and specify the sales order master data.

For more information, refer to:

- *Sales item data (p. 13)*
- *Sales organizational data (p. 30)*
- *General sales data (p. 44)*

Sales order procedure

The sales order procedure includes these steps:

1. The creation and communication of the sales order
2. The delivery of the sold goods
3. The invoicing of the sold goods
4. The transfer of the delivered sales order to the history database

For more information, refer to *Sales order procedure (p. 66)*.

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 *Sales orders - additional processes (p. 68)*.

Sales order procedure

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

The procedure includes these steps:

Step 1: To create sales orders

Sales orders can be created as follows in the Sales Order - Lines (tdsIs4100m900) 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 (tdsIs4201s000) session
- Manually

Step 2: To approve 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 (tdsIs4211m000) session, or by clicking **Approve** on the appropriate menu of the Sales Orders (tdsIs4100m000) session/ Sales Order - Lines (tdsIs4100m900) session.

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

Step 3: To print 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 order acknowledgment. The Print Sales Order Acknowledgements/RMAs (tdsIs4401m000) session is not a mandatory, but an optional session in the sales order procedure. After the sales order is printed, you can still modify the sales order.

Step 4: To release sales orders to Warehousing

After the sold-to business partner is informed about the sales order and the sales order is approved, you can release the sales order to Warehousing in the Release Sales Orders to Warehousing (tdsIs4246m000) 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 the Warehouse Orders module of Warehousing, starting with warehouse order creation in the Warehousing Orders (whinh2100m000) session. The activities in the Warehouse Orders module depend on the warehouse order type that is linked to the sales order type. You must first link activities to a warehousing procedure in the Activities by Procedure (whinh0106m000) session. You can link a warehousing procedure to a warehousing order type in the Warehousing Order Type (whinh0110m000) session, after which you can link the warehousing order type to a sales order type in the Sales Order Types (tdsIs0594m000) session.

It is not mandatory to release sales orders for cost items and service items to Warehousing. This depends on the setting of the **Release to Warehouse** check box in the Item - Sales (tdsIs0501m000) session. Direct deliveries are never released to warehousing.

Step 5: To deliver the sold goods

You can record the deliveries of sold items:

- In Warehousing if the sales order is released to Warehousing. The delivery procedure is covered by the outbound procedure and the shipment procedure in the Inventory Handling (INH) module. For details, refer to The outbound procedure and The shipment procedure. When shipments are confirmed in Warehousing, the delivery/shipment data is reported back to Sales Control. You can view this data in the following sessions:
 - Sales Order Lines Monitor (tdsIs4510m000)
 - Sales Order Actual Delivery Lines (tdsIs4106m000)
- In the Sales Control module for non-inventory items that are not released to Warehousing. You can record the deliveries in the Sales Deliveries (tdsIs4101m200) session.

You can indicate whether the goods must be customer approved 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 (tdsIs4122m000) session to maintain prices and discounts.

Step 6: To invoice 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 (tdsIs4106m100) session.
2. If you want to check the invoice data before it is sent to the invoice-to business partner/ released to Invoicing, you can print a draft invoice in the Print Sales Draft Invoices (tdsIs4447m000) 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 (tdsIs4247m000) 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 (tdsIs4122m000) 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: To process sales orders

At the end of the sales order procedure, all sales orders must be processed in the Process Delivered Sales Orders (tdsIs4223m000) session. The processed sales orders are transferred from the regular database to the history database.

Sales orders - additional processes

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

These are the following processes:

- Adding additional costs to a sales order
- Blocking and unblocking sales orders
- Changing sales data after release to Central Invoicing
- Creating cross-docking orders and splitting deliveries
- Creating direct delivery orders
- Creating freight orders from sales orders
- Creating product variants
- Creating rush orders
- Demand pegging
- Handling ATP/CTP
- Handling backorders
- Handling components
- Handling installment orders
- Handling promotions
- Handling return orders
- Project pegging
- Setting up and using alternative items
- Using consigned inventory
- Using copy templates
- Using customer furnished materials
- Using priority simulations

Adding additional costs to a sales order

Cost items are used to define surcharges such as freight, handling, administrative fees, and so on. These costs can be put on a sales order so the order accurately reflects charges billed to a customer. Several cost items with additional costs can be assigned to an order by bringing them together in a cost set.

Additional costs can be order based or shipment based.

- **Order based**

Additional costs are calculated for a sales order. After sales order approval, additional costs are placed on an order as extra cost (items) after the last item recorded.

- **Shipment based**

Additional costs are calculated for a sales shipment. After confirmation of a shipment, a sales shipment cost order is generated containing all additional costs for one shipment.

For more information, refer to:

- *Additional costs - order based (p. 48)*
- *Additional costs - shipment based (p. 50)*

Blocking and unblocking sales orders

Several reasons can exist for blocking a sales order or a sales order line. An order can be held for more than one reason at any point in the sales order procedure.

For more information, refer to *Order blocking (p. 105)*.

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 (tdsIs4122m000) session.
- Installment data in the Sales Order Installments (tdsIs4110m000) session.
- Rebate data in the Rebates Calculated by Order (tdcms2550m000), or the Rebates Calculated by Relation (tdcms3550m000) sessions.

For more information, refer to *Changing sales data after release to Invoicing (p. 94)*.

Creating cross-docking orders and splitting deliveries

If you want to fulfill an existing sales order for which no inventory is available, you can take inbound goods immediately from the receipt location to the staging location for issue. To initiate this process, you must generate a cross-docking order.

Splitting deliveries is in fact splitting order lines. If order lines are generated, you can split up the order lines into several delivery lines. As a result, multiple deliveries take place on one order line. If a

cross-docking order exists and a split delivery is required, you can further split up a delivery line into several deliveries.

For more information, refer to *Cross-docking and splitting deliveries (p. 75)*.

Creating direct delivery orders

On a sales order or service order, you can indicate whether you want the sold goods to be directly delivered. 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.

For detailed information on generating and processing direct delivery orders, refer to the following topics:

- *Direct delivery sales orders (p. 78)*
- Direct delivery service orders

Creating freight orders from sales orders

Freight Management is the package that handles transportation requirements. Sales Control is linked with Freight. The purpose of the integration between Sales Control and Freight is to identify and choose the appropriate means of transportation during order entry.

The integration between Freight and Sales Control includes these topics:

- **Integration between freight order control and sales control**
In Freight Order Control, two types of planning exist:
 - 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 Sales Control is responsible for creating the freight order, the progress of the shipment and loads can be exchanged and information can be shared between Freight Order Control and Sales Control.
- **Integration between freight invoicing and sales invoicing**
The freight rate 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 order control and sales control
- *Integration freight invoicing and sales invoicing (p. 84)*

Creating product variants

If you enter a configurable item item on the sales order line, you can configure or link a product variant.

An item is configurable if the **Configurable** check box is selected in the Item - General (tcibd0101s000) session.

- **Manufactured** items with the **Default Supply Source** set to **Assembly** in the Item - General (tcibd0101s000) session and **Generic** items, are always configurable.
- **Purchased** items with the **Purchase Schedule in Use** check box selected in the Item - General (tcibd0101s000) session, can be configurable.

For more information, refer to *Product variants in Sales* (p. 23).

Items with Default Supply Source set to Shop Floor

You must decide whether you want to use a PCS project when producing product variants, or you want to use PCF without PCS. A PCS project is used to plan, produce, and control the manufacturing process. Consequently, the structure of the product variant is generated by project. The advantage of using PCS is that it provides an item with a detailed cost roll-up, and the possibility of pegging. However, in high volume environments, a detailed cost roll-up is often not necessary. Furthermore, using PCS requires extra time to calculate the project costs and to delete the project structure afterwards.

If you want to use Project Control for Product Configuration (PCF), the order policy in the Item - Ordering (tcibd2100s000) session must be **To Order**. If you want to use Product Configuration (PCF) without Project Control, the order policy must be set to **Anonymous**.

After the product variant is configured in the Product Configurator (tipcf5120m000) session, you must use the Generate (Project) Structure for Sales Orders (tds1s4244m000) session to generate the project structure and/or product structure for the product variant.

For more information, refer to How to use a product model in a sales order.

Creating rush orders

Every company deals with rush requests from customers. These requests usually require special payment and delivery terms. To determine whether a rush request is reasonable or not, and to be able to inform the business partner about the delivery date of an order, standard rush order conditions must be defined for a company.

The two possible rush situations are:

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

For more information, refer to *Rush orders* (p. 88).

Demand pegging

If the demand pegging functionality is used in a company, inventory is allocated when sales orders are created. In addition, a specification is linked to these orders.

For more information, refer to Demand pegging overview.

Handling ATP/CTP

The ATP functionality is part of a more extensive order promising technique, called capable-to-promise (CTP). The CTP functionality consists of the ATP component, which is a rather basic order-promising method, and the CTP component, which is a more extended version of the order-promising concept.

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

If you want LN to check an item's ATP/CTP when you enter a sales order, you must complete these steps:

1. Select the **CTP Check for Sales (for EP and OPS)** check box in the EP Parameters (cprpd0100m000) session. If this check box is selected, LN carries out a capable-to-promise (CTP) check 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 define 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, LN comes up with a number of possibilities to handle the shortage. One way to handle the shortage for a sales order is to propose a delivery schedule, which you can set up by means of 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](#).

Handling backorders

If only a part of the goods or none of the goods listed on a sales order are shipped, backorders can be created.

A backorder can be created in the following modules:

- **Sales Control**
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.
- **Inventory Handling**
The shipping quantity can be decreased at two points in the Warehouse Orders module of Warehousing:
 - Before confirmation of the outbound advice.
 - Before confirmation of the shipment.

For more information, refer to *Backorder handling for sales orders (p. 97)*.

Handling components

If you want to deliver components instead of main items, in the sales order procedure, you can define how components are handled.

For more information, refer to *Overview of kit handling in Sales*.

Handling installment orders

Invoicing business partners is a normal and necessary part of business. Invoicing can be performed in a number of ways. Invoicing by installments enables you to send invoices for partial amounts or percentages of the total net amount before or after the ordered goods are actually delivered. To establish the installments, you add a number of installment lines to the sales order. Installment invoicing enables payment schedules to be used, which are based on invoicing for percentages of the order amount at different time intervals.

For more information, refer to *Installments (p. 101)*.

Handling promotions

In Pricing under Common, promotions are defined for items and business partners. Promotions are used to offer extra discounts and/or free gifts (premiums) on sales orders or sales order lines.

To check whether a promotion is defined for the item and/or the business partner of a sales order, LN uses promotion matrices.

LN looks for valid promotions in the promotion matrices for which a matrix sequence number is defined. The retrieval of promotion matrices is controlled by the parameter settings in the Pricing Parameters (tdpcg0100m000) session.

To retrieve promotions from a promotion matrix, LN looks for promotion matrices with a matrix definition and matrix attributes that match the properties of the relevant sales order. Note that all of the matrix attributes must match the properties of the order. When found, the promotion linked to the promotion matrix is applied to the sales order.

Note

If you enter a sales order or a sales order line, you can display and select eligible and/or applied promotions in the Sales Order Promotion Data Link (tdsIs4536m000) session.

For details on setting up promotions, refer to *Setting up a promotion matrix*.

Handling return orders

If goods must be returned on a sales order, a return order can be created. A return order can only contain negative amounts. A number of steps are involved in the return order process.

For more information, refer to *Sales return orders (p. 89)*.

Project pegging

Project pegging in Sales includes the pegging of project costs for sales order lines and sales quotation lines. If project pegging is mandatory for the item on the sales order line or quotation line, a peg must be specified, which is a combination of project/budget, project element and/or project activity. For example, if demand is pegged for a sales order line, the goods are sold for and the costs are booked to the project, element, and activity on the sales order line.

For more information, refer to *Project pegging in Sales*.

Setting up and using alternative items

Whenever a stock shortage occurs for an item, you can offer the sold-to business partner an alternative item. To avoid the risk that an item becomes obsolete, you can first consume the available stock of the original item and then fill the remaining shortage with an alternative.

For more information, refer to *Alternative items (p. 21)*.

Using consigned inventory

If you want to use consigned inventory in the sales order procedure, you can define how consigned inventory is handled.

For more information, refer to *Consignment in Sales and Procurement (p. 137)*.

Using copy templates

In LN you can indicate whether copy templates are used in the copy sales order (line) process. With copy templates, you can specify how order (line) data is copied.

A copy template contains a standard set of copy exceptions with which you can complete the following:

- Copy existing orders to target orders in the Copy Sales Order (tdsIs4201s000) 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.

For more information, refer to *Copy templates (p. 109)*.

Using customer furnished materials

To enable customers or their suppliers to furnish the materials that are required to produce a specific customer item, you can implement **Customer Furnished Materials**. Furnishing of customer materials is initiated from a sales order line, which includes the item that contains customer furnished materials. The sales order line has a linked demand peg for the customer demand.

For more information, refer to *Customer furnished materials in Sales and Procurement (p. 91)*.

Using priority simulations

Order priority simulations help you determine the priority by which sales orders are handled in the warehouse for delivery. You can use a priority simulation to calculate the priority by which inventory is allocated to orders. To set actual priorities for sales orders, you must accept the results of the simulation. You can modify these results before accepting them.

For more information, refer to *Order priority (simulations)* (p. 108).

Cross-docking and splitting deliveries

Cross-docking orders

The following steps must be completed to generate cross-docking orders:

Step 1: To create a cross-docking sales order

To create a cross-docking order:

- The **Allow Purchase Orders** check box must be selected for the sales order type in the Sales Order Types (tdsIs0594m000) session.
- The **Delivery Type** field must be set to **Cross-docking** in the Sales Order Lines (tdsIs4101m000), Delivery Lines (tdsIs4101m100), or Sales Order Line Components (tdsIs4163m000) session.
The **Cross-docking** delivery type can be selected as follows in these sessions:
 - Manually, by selecting **Cross-docking**.
 - By selecting **Generate Cross-dock Order** from the Stock Shortage Menu (tdsIs4830s000) session that appears when an inventory shortage exists for the item.
 - After you run the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session with the **Warehouse** check box selected for sales order lines with the **Delivery Type** field set to **Warehouse**.

Step 2: To create a purchase order advice

After the sales order line is approved and the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session is linked as an activity to the order type in the Sales Order Type - Activities (tdsIs0694m000) session, a purchase order advice is or must be generated for the sales order line in the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session.

This step is not applicable if the Generate Purchase Orders (tdsIs4241m000) session is linked as an activity to the order type instead of the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session.

Step 3: To 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 or not 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 (tdsIs4241m000) session. Select the **Cross-docking** check box and fill 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 (tdsIs0100s400) 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: To 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 (tdsIs4246m000) session.

Note

- **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 (tdsIs4100m000) session + **Cross-dock Lead Time** in the Warehouse - Item (whwmd2110s000) session.

- **Dynamic cross-docking**

With dynamic cross-docking, you can do the following:

- 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. For more information, refer to Dynamic cross-docking.

Important!

If the warehouse is WMS controlled, and the **Cross-docking** check box is cleared for the warehouse in the WMS Integration Parameters (whwmd2105m000) session, you cannot generate cross-docking orders.

Splitting deliveries

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

To split deliveries, click:

- **Deliveries** on the appropriate menu of the Sales Order Lines (tdsIs4101m000) session. As a result, the Sales Order Line - Deliveries (tdsIs4101m900) session starts in which you can enter your data.
- **Order Line Details** on the appropriate menu of the Purchase Order Lines (tdpur4101m000) session. As a result, the Purchase Order Line Details (tdpur4101m200) session starts in which you can enter your data.

Relation between cross-docking and splitting deliveries

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

- **Split Delivery Line** in the Delivery Lines (tdsIs4101m100) session.
- **Split** in the Purchase Order Line Details (tdpur4101m200) session.

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

Important!

You must make a distinction between splitting a delivery line and adding a delivery line. If you add a delivery line in the Sales Order Line - Deliveries (tdsIs4101m900), or the Purchase Order Line Details (tdpur4101m200) session to increase the order quantity, the link between the sales order and the purchase order is not kept. If 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. As a result, 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 the following fields in the Sales Order Lines (tdsIs4101m000) or Delivery Lines (tdsIs4101m100) session:

- **Item**
- **E-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 you change one of the above mentioned fields of the first sales order delivery line, the link between the first sales order delivery line and the purchase order line is broken. However, the link between the second sales order delivery line and the purchase order line is still kept. When the second sales order delivery line is also disconnected from the purchase order line, LN removes the link between the sales order and the purchase order. As a result, in the Linked Order Line Data (tdsIs4102s200) session, the link with purchase is removed.

Note

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

INCLUDE: Direct delivery [baanerp_td_onlinemanual_000424]

Direct delivery sales orders

The following steps must be completed to generate and process directly delivery sales orders:

Step 1: To create a direct delivery sales order

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 (tdsIs0594m000) session.
- The **Delivery Type** field must be set to **Direct Delivery** in the Sales Order Lines (tdsIs4101m000) session or the Delivery Lines (tdsIs4101m100) 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 in the Item - Sales (tdIs0501m000) session.
 - Manually, by selecting **Direct Delivery**.
 - By selecting **Generate Direct Delivery Order** from the Stock Shortage Menu (tdsIs4830s000) session that appears when an inventory shortage exists for the item.

Step 2: To create a purchase order advice

After the sales order line is approved and the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session is linked as an activity to the order type in the Sales Order Type - Activities (tdsIs0694m000) session, a purchase order advice is or must be generated for the sales order line in the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session.

This step is not applicable if the Generate Purchase Orders (tdsIs4241m000) session is linked as an activity to the order type instead of the Generate Purchase Order Advice for Sales Order (tdsIs4240m000) session.

Step 3: To 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 or not 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 (tdsIs4241m000) session. Select the **Direct Delivery** check box and fill 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 (tdsIs0100s400) 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 the following 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 originating sales order line receives the status **Awaiting direct delivery** in the Sales Order Lines Monitor (tdsIs4510m100) session.

Step 4: To 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 enter 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: To communicate the deliveries to Sales Control

Run the Update Sales/Service Order with Delivery Information (tdpur4222m000) session to communicate the item, quantity, lot and serial information back to Sales Control 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 - Deliveries (tdsIs4101m900) session and the Sales Order Actual Delivery Lines (tdsIs4106m000) session.

Step 6: To send the sales invoice to the sold-to business partner

After receipts are booked in Purchase Control and communicated to Sales Control by means of the Update Sales Order with Delivery Information (tdpur4222m000) session, you can release the sales order data for invoicing in the Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) session.

Step 7: To process a direct delivery order

Like all order types, you must process the purchase order in the Process Purchase Orders (tdpur4223m000) session and the sales order in the Process Delivered Sales Orders (tdsIs4223m000) 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 - Lines (tdsIs4100m900) 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.

Direct delivery and backorders

After deliveries are communicated to Sales Control and less is received than ordered, a confirmed backorder is generated automatically in Purchase Control, 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 Control, depends on the setting of the **Confirm Back Orders Automatically** check box in the Sales Order Parameters (tdsIs0100s400) session.

Note

- You can change the backorder quantity in Sales Control until receipts are executed.
- You can also generate a freight order for a direct delivery backorder.
- You cannot cancel a direct delivery backorder in Purchase Control.
- You can only delete a direct delivery backorder in Purchase Control. However, the deletion is not communicated to Sales Control.

Sales and Freight

Integration sales and freight management

Freight is the package in LN that handles transportation requirements. Sales Control is linked with Freight. The purpose of the integration between Sales and Freight is to identify and choose the appropriate means of transportation during order entry.

The integration between Freight and Sales includes the following topics:

Integration between freight order control and sales control

In Freight Order Control, two types of planning exist:

- 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 Sales is responsible for creating the freight order, the progress of the shipment and loads can be exchanged and information can be shared between Freight Order Control and Sales.

Integration between freight invoicing and sales invoicing

Based on the **Rate and Carrier 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. Based on several factors, such as the invoicing method, item, freight class, service level, transport type, and transport means group, the freight invoice amount is then retrieved from Pricing. LN prints the calculated invoice amount 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**

INCLUDE: Integration Freight Order Control and Sales Control [baanerp_td_onlinemanual_000394]

To generate 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 directly delivered. 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 freight orders for direct deliveries, the following applies:

- The freight order must be generated from the purchase order and not from the sales order. As a result, if the **Delivery Type** field is set to **Direct Delivery** in the Sales Order Lines (tdsIs4101m000) session:
 - The activity Generate Freight Orders (tdsIs4222m000) 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** check box in the Item - Purchase Business Partner (tdipu0110m000) session.
- If, in the Sales Order Lines (tdsIs4101m000) 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 (tdsIs4101m000) session, or the **Invoice External BP** check box can be selected in the Purchase Orders (tdpur4100m000) session. You cannot select both check boxes.
- The sales order fields are leading. As a result, **Carrier**, **Route**, **Freight Service Level**, and so on, must be entered on the sales order and not on the purchase order. The purchase order data is disabled.
- To calculate the freight invoice amount for the direct delivery, you can click **Freight Amount** in the Sales Order Lines (tdsIs4101m000) 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 (tdsIs4101m000) 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, LN uses the ship-from business partner's ship-from address and the ship-to business partner's ship-to address. If the goods cannot be delivered in time, a signal is sent back to the order line after which you can change the **Planned Receipt Date**, or select another carrier.

If a freight order is linked to a direct delivery order, the date fields have different names in the various modules. See the table below for an explanation.

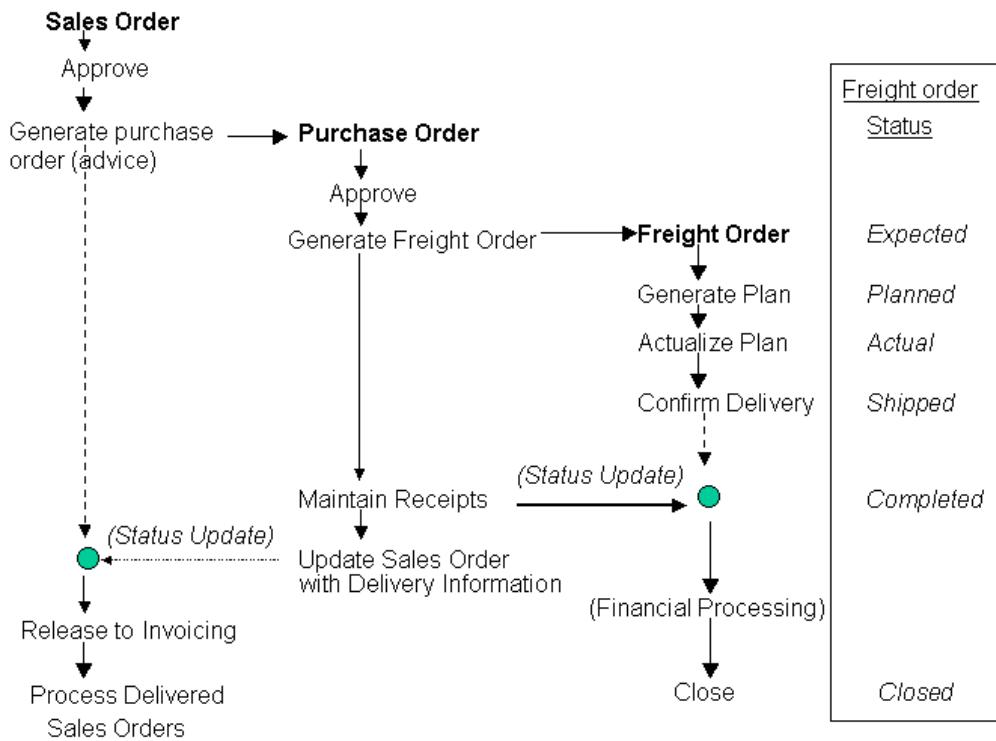
-	Sales	Purchase	Freight	ASN
Moment of shipment of the goods from the supplier.	planned delivery date	load date	load date	shipping date
Moment of receipt of the goods by the sold-to business partner.	planned receipt date	planned receipt date	unload date	planned delivery date

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. 78).
- 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 (tds1s4102s200) 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 entered in this session. For instance, if no carrier is known yet, you must enter a 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 Order with Delivery Information (tdpur4222m000) session.

Procedure

The following picture illustrates the procedure for direct delivery orders with linked freight orders.



Note

If the direct delivery purchase order is:

- Updated by Sales Control, the linked freight order is deleted. You must generate a new freight order, if required.
- Deleted in Purchase Control, the linked freight order is also deleted.
- Canceled by Sales Control, the linked freight order is deleted.

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, you must define the following data:

- **Item - 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 (tdsIs4101m000) session, Delivery Lines (tdsIs4101m100) session, and Sales Quotation Lines (tdsIs1501m000) session.
- **Sold-to Business Partners (tccom4110s000)**
Select the **Invoice BP 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 (tdsIs4100m000) session, or the **Invoice for Freight** check box in the Sales Quotations (tdsIs1500m000) session.
- **Invoice-to Business Partners (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 carrier rate book 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 client rate book 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 set to **Freight Costs** or **Freight Costs (Update Allowed)**, in the Invoice-to Business Partners (tccom4112s000) session, you can define the following fields if you want LN to add a cost plus amount or a cost plus percentage to the invoice:

- **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.

Note

- If no combination is present in Item - Sales Business Partner (tdisa0510m000) session, LN defaults the value from the **Freight Costs to be Invoiced** check box in the Sales Orders (tdsIs4100m000) session to the **Invoice for Freight** check box in the Sales Order Lines (tdsIs4101m000) session, or Delivery Lines (tdsIs4101m100) session. LN defaults the value from the **Invoice for Freight** check box in the Sales Quotations (tdsIs1500m000) session to the **Invoice for Freight** check box in the Sales Quotation Lines (tdsIs1501m000) session.
- The **Invoice for Freight Based On** field in the Invoice-to Business Partners (tccom4112s000) session is used as a default for the **Freight Costs Based On** field in the Sales Orders

(tds1s4100m000) session and the **Invoice Freight Costs Based On** field in the Sales Quotations (tds1s1500m000) session, but can be overwritten in these sessions.

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

LN calculates the freight invoice amount 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 every time a change is made to an order, shipment, or load. When Sales Control releases the sales invoice to Invoicing, with the calculated amount on the sales order (delivery) line, LN automatically releases the freight invoice to Invoicing as well. Invoicing then combines the order invoice with the freight invoice and sends an invoice. However, Freight can release the freight invoice to Invoicing even though the sales invoice is not yet released to Invoicing. As a result, Sales Control sends an invoice for goods sold and Freight sends an invoice for goods transported.

Freight Costs (Update Allowed)

Freight prorates the freight amount for the order (delivery) line, or quotation line 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 enter the actual costs. When Sales Control releases the sales invoice to Invoicing, with the prorated amount on the sales order (delivery) line, which are the freight costs, LN automatically releases the freight invoice to Invoicing as well. However, Freight can release the freight invoice to Invoicing, even though the sales invoice is not released yet to Invoicing. In this case, Sales Control sends an invoice for goods sold and Freight sends an invoice 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, LN can generate an additional invoice. The invoice is based on the data you enter in the **If amount greater than** or the **If greater than** field 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 Selection at Order Line** parameter in the Freight Rates and Costs Parameters (fmfrc0100m000) session.

Rate and Carrier/LSP Selection at Order Line set to 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 the invoicing method, item, freight class, service level, transport type and transport means group, the freight invoice amount is then retrieved from a rate book in Pricing.

To retrieve a carrier, in the Sales Quotation Lines (tds1s1501m000) session, the Sales Order Lines (tds1s4101m000) session, or the Delivery Lines (tds1s4101m100) session, take the following steps:

1. Select the **Invoice for Freight** 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 filled in the Sales Quotation Lines (tds1s1501m000), the Sales Order Lines (tds1s4101m000) session, or the Delivery Lines (tds1s4101m100) session:

- **Carrier**
- **Freight Service Level**
- **Freight Amount**

Rate and Carrier/LSP Selection at Order Line set to Cheapest or Prioritized

During sales order/quotation entry or update, the carrier with the lowest rates or with the highest priority is automatically selected. LN then automatically (re)calculates the freight invoice amount.

Note

- If the **Freight Amount Binding** check box is selected in the Sales Quotation Lines (tds1s1501m000), Sales Order Lines (tds1s4101m000), or Delivery Lines (tds1s4101m100) session, LN only recalculates the **Freight Amount** 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 non-final shipment, the freight amount is divided pro rata between 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 (tds1s1501m000), Sales Order Lines (tds1s4101m000), or Delivery Lines (tds1s4101m100) session, you can view how the freight amount is calculated in a freight amount calculation log.

Rush orders

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 or not, and to be able 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

Rush orders - master data

Before you specify a rush order, complete the following steps:

1. Define rush delivery terms and rush payment terms in the **Rush Terms of Delivery** and **Rush Terms of Payment** fields of the Sales Order Parameters (tdsIs0100s400) session. These parameters only serve as default terms and can be overwritten on the rush order header or rush order line.
2. Enter an availability type in the **Availability Type** field of the Sales Order Parameters (tdsIs0100s400) session, as the availability type also affects the lead time.
3. If the **Prompt for Change Codes** check box is selected in the Sales Order Parameters (tdsIs0100s400) session, define a change type for rush orders in the Change Types (tdsIs0198m000) session, and a change reason for rush orders in the Change Reasons (tdsIs0197m000) session to clarify why the sales order changed.

Rush orders - creation

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

- **Rush Order** in the Sales Orders (tdsIs4100m000), or Sales Order - Lines (tdsIs4100m900) session. 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 (tdsIs4101m000) session. As a result, LN selects the **Rush Order Line** check box in this session.
- **Rush Delivery Line** in the Delivery Lines (tdsIs4101m100) session. As a result, LN selects the **Rush Delivery Line** check box in this session.
- **Rush Component** in the Sales Order Line Components (tdsIs4163m000) 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 define automatic activities for the order type. For more information, refer to *Flexible sales order processing* (p. 34).
- You can convert an existing sales order into a rush order as long as you are allowed to 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.

When you created a rush order, or a rush order line:

- LN prompts you to enter the change reason code and the change type, if you rush an already existing order, or order line.
- And the sales order, or sales order (delivery) line is released to Warehousing, or Invoicing the payment and delivery terms are defaulted from the header or the line. As a result, if you changed the defaulted **Rush Terms of Delivery** and **Rush Terms of Payment** from the Sales Order Parameters (tdsIs0100s400) session on the header or the lines, these changed terms are communicated to Warehousing, or Invoicing.

Rush orders - 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, LN selects the **Rush Order** check box in the Outbound Order Lines (whinh2120m000) session. The outbound order lines with the **Rush Order** check box selected 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, LN generates a purchase order advice 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.

Sales return orders

If goods must be returned on a sales order, a return order can be created. A return order can contain negative amounts only.

Return order settings

Before you can use return orders, you must complete the following steps.

Step 1: Specify a sales order type for return orders

Specify a sales order type for return orders in the Sales Order Types (tdsIs0594m000) session.

You must select one of the following in the **Return Order** field:

- **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 only select this value 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. For more information on customer approval, refer to *Customer approval (p. 31)*.

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

Link a warehousing order type to the return order type in the **Warehousing Order Type** field of the Sales Order Types (tdsIs0594m000) session. You must select a warehousing order type for which the **Inventory Transaction Type** is **Receipt** in the Warehousing Order Type (whinh0110m000) session.

Step 3: Link activities to the return order type

You must link activities to the order type in the Sales Order Type - Activities (tdsIs0560m000) session.

LN automatically links the following mandatory activities to the return order type:

- Release Sales Orders to Warehousing (tdsIs4246m000)
- Maintain Deliveries Sales Order Lines (tdsIs4101m200)
- Release Sales Orders/Schedules to Invoicing (tdsIs4247m000), if the order type is a return order of the type **Return Inventory**.
- Process Delivered Sales Orders (tdsIs4223m000)

Return order procedure

Step 1: Sales Orders (tdsIs4100m000)

1. Create a sales order header with a sales order type for return orders.
2. Define the **Original Document Type** field.
3. Define the **Original Document No** field.
4. Define the return reason for the return order in the **Return Reason** field.
5. If you created a link between a return order and an original document number, you can click **Copy from Original Document** on the appropriate menu. As a result, 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 (tdsIs4246m000)

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 (tdsIs4247m000)

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 (tdsIs4534s000) session. You must release the sales return order to invoicing in the Release Sales Orders/Schedules to Invoicing (tdsIs4247m000) session.

Step 4: Process Delivered Sales Orders (tdsIs4223m000)

After the sales return order is invoiced, you must process the return order in the Process Delivered Sales Orders (tdsIs4223m000) session.

Note

- If the return order contains a serialized item, a **cluster** is automatically linked to the return order when the delivery information is updated on the order with the Warehouse Receipts (whinh3512m000) session, or the Update Sales / Service Order with Delivery Information (tdpur4222m000) session.
However, a cluster is not automatically linked if:
 - The serialized items on the sales return order line are linked to different clusters in Service.
 - The item is an anonymous item, or the items are serialized in Service only.
 If required, you can link an item to a cluster and/or link a cluster to the sales return order line in the Sales Order Lines (tdsIs4101m000) session.
- If goods are returned on a direct delivery order, the steps related to the direct delivery procedure apply. For more information, refer to Direct delivery.
- If a specification 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.

Customer furnished materials

Customer furnished materials in Sales and Procurement

To enable customers or their suppliers to furnish the materials that are required to produce a specific customer item, you can implement **Customer Furnished Materials**. This functionality must be used in combination with demand pegging.

Customer furnished materials - Sales

If you use customer furnished materials with demand pegging, you specify the customer furnished materials in the Bill of Material (tibom1110m000) session. Furnishing of customer materials is initiated

from a sales order line, which includes the item that contains customer furnished materials. The sales order line has a linked demand peg for the customer demand.

Note

If a sales order line contains customer furnished materials, the **Contains Customer Furnished Material** is selected in the Sales Order Lines (tdsIs4101m000) session.

Customer furnished materials - Procurement

Before customer furnished material (CFM) purchase orders can be generated, you must specify the following master data:

- In the Purchase Order Type - Activities (tdpur0694m000) session, select the **Customer Furnished Materials** check box for the order type and link activities to the order type.
- In the Purchase Order Parameters (tdpur0100m400) session, specify the default **Order Series for Customer Furnished Materials** and **Order Type for Customer Furnished Materials** fields to generate CFM orders from Enterprise Planning.

Based on the demand from a sales order, a purchase order of the **Customer Furnished Materials** type is generated by the order plan. This purchase order is used to call off the customer furnished materials that are needed by the production order to produce the customer item. The purchase order inherits the demand peg of the demand order.

The following are applicable to the lines of a customer furnished materials purchase order:

- The **Payment** field is **No Payment**
- Because the customer or its supplier furnishes the materials, the customer or supplier is specified in the **Buy-from Business Partner** field.
- Because the customer is the owner of the item, the customer is specified in the **Owner** field.
- The line contains a specification (demand peg).

Note

You cannot manually specify CFM purchase orders.

Sales order/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.

Orders/schedules are registered in history if the following applies:

- For sales orders, the **Log Order History**, **Log EDI Order History** and **Log Actual Order Delivery History** check boxes are selected in the Sales Order Parameters (tdsIs0100s400) session.
- For sales order installments, the **Log Order History** and/or **Log EDI Order History** check boxes are selected in the Sales Order Parameters (tdsIs0100s400) session.

- For sales schedules, the **Log Schedule History** and **Log Actual Schedule Delivery History** check boxes are selected in the Sales Contract Parameters (tdsIs0100s300) session.

The following record types are available in the history sessions:

- 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 (tdsIs4223m000) session, or the schedule line was processed in the Process Delivered Sales Schedules (tdsIs3223m000) session.

Contents of history files

The order/schedule history files contain:

- 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 following fields determine if, when, and how and the order/schedule history files are updated

Sales orders	
Field	Retrieved from session
Log Order History	Sales Orders (tdsIs4100m000)
Log EDI Order History	Sales Orders (tdsIs4100m000)
Start Logging History at	Sales Orders (tdsIs4100m000)
Level of Intake Logging	Sales Order Parameters (tdsIs0100s400)
Log Actual Order Delivery History	Sales Order Parameters (tdsIs0100s400)
Log Component History	Sales Order Parameters (tdsIs0100s400)
Sales order installments	
Field	Retrieved from session

Log Order History	Sales Order Parameters (tdsIs0100s400)
Log EDI Order History	Sales Order Parameters (tdsIs0100s400)
Start Logging History at	Sales Order Parameters (tdsIs0100s400)
Level of Intake Logging	Sales Order Parameters (tdsIs0100s400)
Sales schedules	
Field	Retrieved from session
Log Schedule History	Sales Schedules (tdsIs3111m000)
Level of Intake Logging	Sales Contract Parameters (tdsIs0100s300)
Log Actual Schedule Delivery History	Sales Contract Parameters (tdsIs0100s300)

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.

Clearing history files

You can restrict the total amount of history data with the Archive/Delete Sales Order/Schedule History (tdsIs5201m000) session.

History files are the basis for statistics. Before you clear the history files, determine whether the statistics are fully updated. If the history files are cleared before the update, you cannot fully update the statistics.

Note

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

Sales order tracking

Changing sales data after release to Invoicing

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

Dependent on the invoice status, you can change:

- Sales order data in the Change Prices and Discounts after Delivery (tdsIs4122m000) and Change Prices and Discounts of Sales Invoice Lines (tdsIs4132m000) sessions.
- Installment data in the Sales Order Installments (tdsIs4110m000) session.
- Rebate data in the Rebates Calculated by Order (tdcms2550m000) or the 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 set to **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 (tdsIs4122m000)**
For sales orders lines of the **Order Line** type, which are also known as total lines.
- **Change Prices and Discounts of Sales Invoice Lines (tdsIs4132m000)**
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 appears in the Sales Order Lines Monitor (tdsIs4510m100) session and the Sales Order Actual Delivery Lines (tdsIs4106m000) session. See the table below 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 the following fields in the Change Prices and Discounts after Delivery (tdsIs4122m000) and Change Prices and Discounts of Sales Invoice Lines (tdsIs4132m000) sessions:

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

Changing installment data

You can use the Sales Installment Orders (tdsIs4110m000) session to change data for installments that are released to Invoicing and for which the invoice status is **Confirmed**, or **On Hold**.

You can change the following fields in the Sales Installment Orders (tdsIs4110m000) 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 definitive 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 rebates 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, LN automatically changes the **Rebate %** and **Growing %** 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 (tdsIs4447m000) session.
- For rebates in the Print Draft Invoices for Rebates (tdcms2401m000) session.

Backorders

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, LN creates a backorder.

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 (tdsIs4101m000) and Delivery Lines (tdsIs4101m100) 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.

This hold back quantity enables you to:

- Prevent a part of the order (delivery) line's **Ordered Quantity** to be released to Warehousing. In this way, you can assign limited stock to several business partners instead of to only one business partner. As a result, the **Ordered Quantity** minus the **Hold Back Quantity** is released to Warehousing.
- Identify up front what the expected backorder will be.

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

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

When you enter a hold back quantity in the Sales Order Lines (tdsIs4101m000) or Delivery Lines (tdsIs4101m100) session and the sales order (delivery) line is released to Warehousing, the following steps are completed:

1. LN enters a backorder in the Maintain and Confirm Back Orders (tdsIs4125m000) 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 (tdsIs4125m000) session.
2. LN updates the **BackOrder Quantity** field with the remaining quantity in the Maintain and Confirm Back Orders (tdsIs4125m000) session and the Sales Order Lines (tdsIs4101m000) session or Delivery Lines (tdsIs4101m100) session. The remaining backorder quantity is calculated as follows: **Ordered Quantity - Delivered Quantity**.
3. You must confirm the backorder (sequence) line manually in the Maintain and Confirm Back Orders (tdsIs4125m000) session, or LN automatically confirms the backorder if the **Confirm BackOrders Automatically** check box is selected in the Sales Order Parameters (tdsIs0100s400) session.
4. After the backorder is confirmed, LN:
 - Generates a new (delivery) line with a new sequence number and the **Backorder** check box selected in the Sales Order Lines (tdsIs4101m000) or Delivery Lines (tdsIs4101m100)

session. These lines can be processed as regular sales order lines and also appear in the Maintain and Confirm Back Orders (tdsIs4125m000) session.

- Empties the **Hold Back Quantity** of the parent sales order line in the Sales Order Lines (tdsIs4101m000) session or the parent sales order delivery line in the Delivery Lines (tdsIs4101m100) session.

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

Note

- If you select the **Confirm Backorders Automatically** check box in the Sales Order Parameters (tdsIs0100s400) session, LN automatically confirms the backorder.
- If you select the **Release Backorders Automatically to Warehousing** check box in the Sales Order Parameters (tdsIs0100s400) session, LN automatically releases the confirmed backorder 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 applies:

1. LN fills the **Backorder Quantity** field in the Maintain and Confirm Back Orders (tdsIs4125m000) session and the Sales Order Lines (tdsIs4101m000) session or Delivery Lines (tdsIs4101m100) session. The backorder quantity is calculated as follows: **Ordered Quantity- Delivered Quantity**.
2. You must manually confirm the backorder (sequence) line in the Maintain and Confirm Back Orders (tdsIs4125m000) session, or LN automatically confirms the backorder if the **Confirm Backorders Automatically** check box is selected in the Sales Order Parameters (tdsIs0100s400) session. As a result, a new line is generated with a new sequence number and the **Backorder** check box selected in the Sales Order Lines (tdsIs4101m000) or Delivery Lines (tdsIs4101m100) session. This line also appears in the Maintain and Confirm Back Orders (tdsIs4125m000) session with the same position number and another sequence number.
3. LN automatically generates a confirmed backorder 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

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

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.

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

LN generates the backorder when the modified shipment receives the **Confirmed** status.

Note

After the shipment is confirmed, the backorder is displayed in the Maintain and Confirm Back Orders (tdsIs4125m000) session with the **Back Order Quantity** field filled.

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.

- Backorders can be manually confirmed in the Maintain and Confirm Back Orders (tdsIs4125m000) session or can be automatically confirmed if the **Confirm Backorders Automatically** check box is selected in the Sales Order Parameters (tdsIs0100s400) session.
- After the backorder is confirmed, LN generates a new line with a new sequence number and the **Backorder** check box selected in the Sales Order Lines (tdsIs4101m000) or Delivery Lines (tdsIs4101m100) session. These lines can be processed as regular sales order lines and also appear in the Maintain and Confirm Back Orders (tdsIs4125m000) session.
- Deliveries can be displayed in the Sales Order Lines - Monitor (tdsIs4510m000) session or the Sales Order Actual Delivery Lines / Sales Order Invoice Line (tdsIs4106m000) session.

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 - Lines (tdsIs4100m900) session or in the Maintain and Confirm Back Orders (tdsIs4125m000) session.

2. Delete the canceled backorder line in the Sales Order Line - Planned Deliveries (tdsIs4101m900) or from the Sales Order - Lines (tdsIs4100m900) 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.

Installments

Installments

Invoicing by installment enables you to send 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

It depends on the type of installment, when an installment line is placed on an invoice. The following installment types exist:

- **Advance**
Advance payments must be invoiced and paid for by the sold-to business partner before goods can be delivered.
- **Normal**
Normal installments are invoiced before or at the delivery of goods.
- **Guarantee**
Guarantee installments can only be invoiced after all goods are delivered and the non-guarantee installments are invoiced.

Installment settings

Take the following steps to define, maintain, and view installments:

1. Specify the installment parameters on the **Installments** tab of the Sales Order Parameters (tdsIs0100s400) session.
2. Enter a sales order and set the **Invoicing by Installments** field to **Direct Settlement** or **Indirect Settlement** in the Sales Order - Lines (tdsIs4100m900) session.
3. After sales order lines are added, click **Sales Order - Installments** on the appropriate menu of the Sales Order - Lines (tdsIs4100m900) session. As a result, the Sales Order - Installments (tdsIs4600m100) session starts in which you can enter an installment schedule for the sales order.
4. Close installments in the Sales Order - Installments (tdsIs4600m100) session. After all goods are delivered and all non-guarantee installments are invoiced, the installment can be closed. Next, invoices can be created for guarantee installments.

5. Process installments in the Process Delivered Sales Orders (tdsIs4223m000) session.

Note

- You can create default installment schedules in the Installment Schedule (tcmcs2640m000) session. After creation, you can use these schedules for copying them to sales order installments.
- The Update Paid Amounts on Advance Installments (tdsIs4200m000) session updates the paid amounts for **Advance** installments. When all advance installments for a sales order are fully paid for, the sales order procedure can continue.

Installment settlements and corrections

Invoiced installments are settled (subtracted from the goods amount) when the *goods* are delivered and the goods invoice is printed. Settled amounts, which indicate the amount of the goods invoice that is covered by the installment, form the basis for calculation of 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.

Note

- A correction installment is only created 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**, **Correction - Normal**, or **Correction - Guarantee** is created.
- **Correction - Advance** or **Correction - Normal** installments can only be entered after the original installments are composed or invoiced. In this way, Invoicing can always retrieve the correct currency information. **Correction - Guarantee** installments can be *entered* 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. However, 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 inserted correction installments are settled against the goods invoice.

The following types of settlement exist:

- **Direct Settlement**
Delivered goods can be invoiced when 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 (tdsIs4556m000) 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 only visible in Invoicing after the sales order installment is closed.
- Turnover of the goods is only logged in the Sales Order Actual Delivery Line History (tdsIs4556m000) session after the sales order installment is closed. If the sales order installment is not closed yet, in the Sales Order Line History (tdsIs4551m000) session, turnover is temporarily booked on the **Item for Advance Payment Installments**, **Item for Normal Installments**, or **Item for Guarantee Installments**, as defined in the Sales Order Parameters (tdsIs0100s400) session.

You can view the settlements for an installment in the Installment - Settlements (tdsIs4513s000) session. After the goods invoice is printed in Invoicing, this session displays the settlements for the invoiced installments.

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.

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.

Flow:

1. Installment line 1 is invoiced. Invoice amount = 200.
2. Installment line 2 is invoiced. Invoice amount = 400.
3. Sales order line 1 is invoiced. The goods amount of 150 is settled against the invoiced installment line 1.
 - Remaining goods amount to be settled = $150 - (150) = 0$.
 - Invoice amount = 0.
4. Installment line 3 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 5 is manually created for the guarantee installment. Correction amount = -300.
8. Correction installment line 6 is manually created and is of the normal installment type. Correction amount = 170.
9. Installment line 4 is invoiced. Invoice amount = 300.
10. Sales order line 2 is invoiced. The goods amount of 500 is settled against the invoiced installments as follows:
 - a. Against installment line 3 for an amount of -50. Remaining goods amount to be settled = $500 - (-50) = 550$.
 - b. Against installment line 5 for an amount of -300. Remaining goods amount to be settled = $550 - (-300) = 850$.
 - c. Against installment line 1 for an amount of 50. Remaining goods amount to be settled = $850 - (50) = 800$.
 - d. Against installment line 2 for an amount of 400. Remaining goods amount to be settled = $800 - (400) = 400$.
 - e. Against installment line 4 for an amount of 300. Remaining goods amount to be settled = $400 - (300) = 100$.
 - f. Against installment line 6 for an amount of 100. Remaining goods amount to be settled = $100 - (100) = 0$.

Invoice amount = 0.
11. Sales order line 3 is invoiced. The goods amount of 80 is settled against the manually inserted installment line 6.
 - Remaining goods amount to be settled = $80 - (70) = 10$.
 - Invoice amount = 10.
12. Sales order line 4 is invoiced. All installments are settled. Invoice amount = $-10 + 10 = 0$.

Sales order blocking

Order blocking

The Sales Control module enables you to 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. For example, the customer's overdue invoices during the order entry procedure may have been paid by the time the deliveries are entered into LN.

The procedure for order blocking

Step 1: Hold Reasons (tdsIs0190m000)

Define the reasons for blocking a sales order or sales order (component) line and the reason categories in the Hold Reasons (tdsIs0190m000) session.

Step 2: Sales Order Parameters (tdsIs0100s400)

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

Step 3: Sales Order Types (tdsIs0594m000)

Define 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 defined in this session, the order procedure is not interrupted.

Sales orders and sales order (component) lines can also be blocked manually in the following sessions:

- Sales Order - Lines (tdsIs4100m900)
- Sales Orders (tdsIs4100m000)
- Sales Order Lines (tdsIs4101m000)
- Sales Order Line Components (tdsIs4163m000)

Step 4: Blocked Sales Order (Lines) (tdsIs4520m000)

Blocked orders and (component) lines must be manually released in the Blocked Sales Order (Lines) (tdsIs4520m000) session.

In the User Profiles (tds1s0139m000) session, you can define whether a user is authorized to unblock orders based on the type of hold placed on the order. You can define 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 are still applicable 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

- LN can block sales order (component) lines for several reasons during order entry. However, if an order is blocked due to a credit check, you can define 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) (tds1s4520m000) session. The selection criteria for a range of blocked order (lines) is defined in the Select Blocked Sales Order (Lines) (tds1s4220m000) session.
- Use the Print Blocked Sales Order (Lines) (tds1s4420m000) session to print a range of blocked order (lines). Use the Print Released Sales Order (Lines) (tds1s0492m000) session to print a range of released order (lines).
- The Blocked Sales Order (Line) History (tds1s0592m000) session and the Order (Line) Blocking History (tds1s0192s000) session list a log file that contains information about sales orders and (component) lines that were previously blocked and/or released.

Credit rating

The continuation of a sales order can also depend on the credit checking of the business partner. For details, refer to Credit rating.

LN asks you whether you want to change the credit rating of the invoice-to business partner if:

- The **Hold Reason Category** is set to **Credit Check** in the Hold Reasons (tds1s0190m000) session.
- The credit rating of the invoice-to business partner differs from the **Pre-Defined Credit Rating Code** in the Sales Order Parameters (tds1s0100s400) session.

- The **Change Customer's Credit Rating** field is set to **Interactive** in the Sales Order Parameters (tdsIs0100s400) 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 (tdsIs0100s400) 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 (tdsIs0120m000) session. The target price is determined by the **Target Price for Margin Control** field in the Sales Order Parameters (tdsIs0100s400) session.

Note

For margin control, the allowed deviation from the target price by upper and lower margins can be defined in the Items - Sales (tdIsa0501m000) session.

For details, refer to *Overview of margin control (p. 125)*.

Sales order priorities

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.

The **Order Priority Method** field in the Sales Order Parameters (tdsIs0100s400) session determines how the order priority is defined.

- **Simulation**

Simulated order priorities are defined in simulation codes. The simulation code consists of a sort sequence and a sort mode. You can select six fields for each code to sort sales orders. LN takes the default fields from the sales order lines table, 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 (tdsIs4124s000) 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.

Defining and maintaining order priority (simulations)

Complete the following steps:

1. Specify priority simulation codes in the Priority Simulations (tdsIs4524m000) session.
2. Generate delivery priorities for sales orders in the Generate Sales Order Priority Simulations (tdsIs4229s000) session.
3. In the Sales Order Priority - Simulations (tdsIs4126m000) session, you can change priority simulations for sales orders within a simulation code and item combination.
4. Process the simulated order priorities to actual sales orders in the Process / Delete Sales Order Priority Simulations (tdsIs4226s000) session. You can also delete the generated simulations.
5. Optionally, change the order priority of actual deliveries in the Sales Order Priorities (tdsIs4129m000) session.

Copy sales orders

Copy templates

You can use copy templates when copying sales orders (lines). A copy template specifies how order (line) data is copied and contains 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 (tdsIs4201s000) 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 defined 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 the following copying actions:

- **Prompt**
The selected field can be manually filled in the Copy Sales Orders - Prompts (tdsIs4201s100) session. The default comes from the source order.
- **Retrieve Default**
Infor Baan retrieves a default value based on standard defaulting logic.
- **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**
Infor Baan retrieves a default value.
- **Copy From...**
Only for the **Ordered Quantity** field. Select which quantity must be copied to the target sales order line.

To use copy templates

Complete the following steps:

Step 1: Sales Order Parameters (tdsIs0100s400)

In the Sales Order Parameters (tdsIs0100s400) session, select the **Prompt for Copy Templates** check box.

Step 2: Sales Order Copy Template - Exceptions (tdsIs4690m000)

In the Sales Order Copy Template - Exceptions (tdsIs4690m000) session:

1. Define a template header. Enter the template code and the effectivity period for the copy template.
2. After you defined the template header, click **Save**. LN automatically links several sales order header and sales order line copy exceptions.
3. On the **Header Exceptions** tab, add, delete, or maintain the copy exceptions, which refer to the Sales Order Header Copy Exceptions (tdsIs4191m000) session.
4. On the **Line Exceptions** tab, add, delete, or maintain the copy exceptions, which refer to the Sales Order Line Copy Exceptions (tdsIs4192m000) session.

Step 3: User Profiles (tdsIs0139m000)/ Sales Order Parameters (tdsIs0100s400)

In the User Profiles (tdsIs0139m000) and/or the Sales Order Parameters (tdsIs0100s400) session, link a default copy template for sales (return) orders in the **Copy Template for Sales Orders** and the **Copy Template for Sales Return Orders** fields.

Step 4: Copy Sales Order (tdsIs4201s000)

In the Copy Sales Order (tdsIs4201s000) session, enter a **Copy Template**.

Step 5: Copy Sales Orders - Prompts (tdsIs4201s100)

After you click **Copy** in the Copy Sales Order (tdsIs4201s000) session, the Copy Sales Orders - Prompts (tdsIs4201s100) 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 (tdsIs4201s100) 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.

Note the values you enter in the fields, because the session does not run copying checks before you click **Copy**.

Important!

Even without using copy templates you can copy sales orders and their lines in the Copy Sales Order (tdsIs4201s000) session. LN then uses a standard set of copy exceptions based on which order data is copied. These are the default copy exceptions linked to a template header when you define 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 (tdsIs4490m000) session.

Sales contract procedure

Sales contracts - overview

Sales contracts are used to register agreements about the delivery of specific goods to a sold-to business partner.

These agreements can be registered at the following levels:

- **Sales contract lines**
In contract lines, the delivery agreements for an item or group of items for a specified period of time are registered. These agreements include the total quantities, prices, and discounts. You can specify an effective period and indicate whether the minimum quantity to be sold is binding.
- **Terms and conditions agreements**
In terms and conditions agreements, detailed terms and conditions regarding orders, schedules, planning, logistics, invoicing, and demand pegging are registered for the sale, purchase, or transfer of goods. To use a sales terms and conditions agreement, you must link it to a sales contract before you can use it.

You can create the following contract types:

- Normal contracts
- Special contracts

Special contracts are used to record agreements that relate to specific projects. A special contract can also be a promotional contract. For each sold-to business partner, you can close multiple special contracts in one period. In a specific period, you cannot specify more than one normal contract per item or price group for a sold-to business-partner.

Sales contracts are used as the basis of sales orders or sales schedules. The data specified in the sales contract serves as a parent of the data that you specify in the linked sales order or sales schedule. Sales schedules and terms and conditions agreements can be linked only to normal contracts and not to special contracts.

Specifying sales contracts

For more information, refer to *Specifying sales contracts (p. 114)*.

Retrieving sales contracts

For more information, refer to *Retrieving sales contracts (p. 116)*.

Additional processes

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

For example, you can do the following:

- Activate or deactivate a range of sales contracts in the Activate/Deactivate Contracts (tdsIs3205m000) session.
- Print contract acknowledgments to send to the sold-to business partner in the Print Sales Contract Acknowledgements (tdsIs3405m000) session.
- Copy one sales contract to another in the Copy Sales Contracts (tdsIs3801m000) session.
- Check whether the agreed quantities are met at the end of a contract's effective period in the Evaluate Sales Contracts (tdsIs3420m000) session. You can also monitor, by extrapolating, the contract's progress during the effective period. A report is printed that contains the deviations. An evaluation for the complete contract can be executed by not printing the separate contract lines. Small deviations are tolerated and are not printed.
- If certain sold-to business partners do not meet their commitments as stated in the contract, you can print and send out reminders in the Print Sales Contract Reminders (tdsIs3406m000) session to prevent a breach of contract. LN prints reminders for contracts that exceed the allowed **Negative Deviation**.
- Terminate or delete sales contracts that are no longer valid, or that have ended early in the Terminate and/or Delete Sales Contracts (tdsIs3203m000) session.

Specifying sales contracts

To record the agreements that you made with a sold-to business partner, complete the following steps:

Step 1: Sales Contract - Lines (tdsIs3600m000)

Use this session to define the following:

- **Sales contract header**
Define the general data for a sales contract header. The information to be defined is related mainly to the sold-to business partner to whom the contract relates. On the contract header, you can also link a terms and conditions agreement.

The terms and conditions agreement can be linked as follows in this session:

- Manually, by selecting an agreement in the Terms and Conditions (tctrm1100m000) session.
- By generating an agreement from a template, which is automatically linked to the contract header. Click **Generate Terms and Conditions from Template** from the appropriate menu to start the Generate Terms and Conditions from Template (tctrm2200m000) session. Contract header data refers to the Sales Contracts (tds1s3500m000) session.
- **Sales contract lines**
Define sales contract lines, which include the item's agreements with a sold-to business partner. If you do not use sales contract price revisions, sales contract lines also contain prices and discounts. Contract line data refers to the Sales Contract Lines (tds1s3501m000) session.

The following can be linked to a contract:

- Both a terms and conditions agreement and contract lines
- Only a terms and conditions agreement and no contract lines
- Only contract lines and no terms and conditions agreement.

For more information, refer to Overview of terms and conditions.

Step 2: Sales Contract Price Revisions (tds1s3103m000)

If the **Price Revisions in Use** check box is selected in the Sales Contract Lines (tds1s3501m000) session, define sales contract price revisions for the contract line. Sales contract price revision data refers to the Sales Contract Price Revisions (tds1s3103m000) session.

If no valid price and discount can be retrieved from the sales contract, LN will continue searching for a price and discounts in other sources.

For more information, refer to:

- Price retrieval
- Discount retrieval

Step 3: Sales Contract Line Logistic Data (tds1s3102m000)

If the **Use Contracts for Schedules** check box is selected in the Sales Contract Parameters (tds1s0100s300) session, specify logistic agreements for the contract line. Contract line logistic data refers to the Sales Contract Line Logistic Data (tds1s3102m000) session.

Step 4: Scheduled requirements for a sales contract

If you do not receive schedules from your sold-to business partners but you do want to set up a list of time-phased deliveries based on a sales contract, you can define scheduled requirements for a sales contract.

You can define scheduled requirements for a sales contract through the following:

- *Defining contract deliveries by means of delivery schemes (p. 118)*

- *Defining contract deliveries by means of sales schedules (p. 120)*

Retrieving sales contracts

The following origins search for sales contracts:

- Sales order line
- Sales schedule header
- Sales schedule line
- Manufacturing, when searching for prices for BOM components
- Project, when searching for prices
- Price Simulator (tdpcg0200m300)

When searching for an **Active** sales contract for these origins, only contracts are found for which the following fields match the original values:

- **Sold-to Business Partner**
- **Ship-to Business Partner**
- **Item**
- **Price Group**
- **Sales Office**
- **Effectivity Unit**
- **Effective Date**
- **Expiry Date**

Note

Contract validity is rechecked when entering or modifying contract *lines*.

Sales contracts and sales schedules

For sales schedules, the **Generation Date** from the Sales Releases (tdsIs3512m000) session is used to search for valid sales contracts.

A sales contract can be linked to a sales schedule when:

- Processing a sales release into a sales schedule
- Entering a sales schedule line
- Approving a sales schedule line

Note

- If the **Use Terms and Conditions for Schedules** check box is selected in the Sales Contract Parameters (tdsIs0100s300) session, the sales contract must have a linked terms and conditions agreement for the sales schedule.
- If the **Use Customer Order for Schedules** check box is selected in the Sales Contract Parameters (tdsIs0100s300) session, when searching for a sales contract for a sales schedule header, LN also takes into account the customer order number.

How contracts are linked, depends on the setting of the **Action on Deviating Customer Order** and **Action on Deviating Empty Customer Order** fields in the Sales Contracts (tdsIs3500m000) session.

- **Block**

Only contracts are linked for which the **Customer Order** in the Sales Contracts (tdsIs3500m000) session exactly matches the **Customer Order** in the Sales Schedules (tdsIs3111m000) session.

- **Continue with Sales Release**

Contracts can be linked with a different **Customer Order** than the sales schedule. In this case, the sales release's **Customer Order** is used on the sales schedule.

- **Continue with Sales Contract**

Contracts can be linked with a different **Customer Order** than the sales schedule. In this case, the sales contract's **Customer Order** is used on the sales schedule.

Sales contracts and sales orders

For sales orders, the date as specified in the **Price Date Type** field of the Pricing Parameters (tdpcg0100m000) session is used to search for valid sales contracts.

When a sales order is created, LN searches for the price and/or discounts on special contracts and then on normal contracts. If more special contracts are valid, a screen pops up from which you must make your selection. LN links the selected sales contract to the sales order and uses the sales contract prices and discounts for the sales order. If the item on the sales contract is unit effective, the sales order price is inclusive upgrade prices. If the item on the sales order is unit effective, but the contract item is not, the sales order price is the contract price increased by the upgrade prices.

Note

- If the **Use Customer Order for Schedules** check box is selected in the Sales Contract Parameters (tdsIs0100s300) session, for sales orders (and other origins), LN only retrieves contracts for which the **Customer Order** field is empty in the Sales Contracts (tdsIs3500m000) session. In this way, sales orders cannot be linked to sales contracts that are set up for sales schedules.
- To retrieve terms and conditions from an active contract for an order line, the contract need not be linked to the order line. As a result, the contract number is only filled on the order line if an active contract line is linked to the order line. For more information, refer to Retrieval of terms and conditions.

Scheduled deliveries based on a sales contract

Scheduled requirements for a sales contract

To use a simplified sales schedule, you can define scheduled deliveries based on a sales contract. You can use this process if you do not receive schedules from your sold-to business partners, and you want to set up a list of time-phased deliveries using a sales contract.

You can specify scheduled requirements for a sales contract using delivery schemes or sales schedules.

Scheduled requirements by means of delivery schemes

To define scheduled requirements for a sales contract using delivery schemes, you must define sales contract delivery lines that contain delivery dates and quantities. You can automatically generate sales orders from a delivery scheme.

For more information, refer to *Defining contract deliveries by means of delivery schemes (p. 118)*.

Scheduled requirements by means of sales schedules

To define scheduled requirements for a sales contract using sales schedules, you must generate a sales schedule on contract line level, after which the sales schedule process is automatically started.

For more information, refer to *Defining contract deliveries by means of sales schedules (p. 120)*.

Tip

The easiest way to set up and process scheduled requirements for a sales contract is to define a delivery scheme.

Defining contract deliveries by means of delivery schemes

A delivery scheme is a list of time-phased deliveries based on a sales contract. To specify the time-phased deliveries, you need sales contract delivery lines that are converted to sales orders. A delivery scheme is a simplified schedule to generate sales orders in time.

Example

Contract line	Sales contract delivery line	Quantity	Sales order line	Quantity
100 pieces (pcs)	01/12/2005	20 pcs	SOL1 01/12/2005	20 pcs
	08/12/2005	25 pcs	SOL2 08/02/2005	25 pcs
	15/12/2005	40 pcs	SOL3 15/12/2005	40 pcs
	22/12/2005	15 pcs	SOL4 22/12/2005	15 pcs

To define contract deliveries by means of a delivery scheme, you must complete these steps:

1. Create a sales contract in the Sales Contracts (tdsIs3500m000) session.
2. Create a sales contract line in the Sales Contract Lines (tdsIs3501m000) session.
3. Choose **Delivery Scheme** on the appropriate menu of the Sales Contract Lines (tdsIs3501m000) session. As a result, the Sales Contract Delivery Lines (tdsIs3104m000) session starts.
4. Specify the dates on which delivery must take place and the quantities to be delivered on the specified dates in the Sales Contract Delivery Lines (tdsIs3104m000) session.
5. Activate the contract line.
You cannot activate a contract line if:
 - The delivery scheme contains planned delivery dates that fall outside the contract line's effectiveness period.
 - The total delivery scheme quantity is more than the contract line's agreed quantity.
 If the contract line cannot be activated, you can click **Check Delivery Scheme** in the Sales Contract Delivery Lines (tdsIs3104m000) session to check the delivery scheme and adapt it, or change the contract line.
6. Choose **Generate Sales Order** on the appropriate menu of the Delivery Contract (tdpur3104m000) session to generate sales orders for the planned deliveries. This command directly generates a sales order (line) from a selected sales contract delivery line, or starts the Generate Sales Orders from Delivery Schemes (tdsIs3204m000) session in which you can generate sales order (lines) for a range of sales contract delivery lines. You can only generate sales orders for the planned deliveries if both the sales contract and the sales contract line have the **Active** status.

Defining contract deliveries by means of sales schedules

If you want to set up a list of time-phased deliveries based on a sales contract, you can define a sales schedule and sales schedule lines that are converted to sales orders. This simplified sales schedule solution enables you to generate sales orders in time.

Example

Contract line	Sales schedule line	Quantity	Sales order	Quantity
100 pieces (pcs)	01/12/2005	20 pcs	SO1 01/12/2005	20 pcs
	08/12/2005	25 pcs	SO2 08/02/2005	25 pcs
	15/12/2005	40 pcs	SO3 15/12/2005	40 pcs
	22/12/2005	15 pcs	SO4 22/12/2005	15 pcs

To define contract deliveries by means of sales schedules, you must:

1. Create a sales contract and a sales contract line.
2. Create a sales schedule and sales schedule lines.
3. Approve the sales schedule.
4. Release the sales schedule to a sales order.
5. Deal with the sales order.

Step 1: Create sales contract

You must first create a sales contract in the Sales Contracts (tdsIs3500m000) session and a sales contract line in the Sales Contract Lines (tdsIs3501m000) session. You must activate this sales contract line.

Step 2: Create sales schedule

To set up a list of time-phased deliveries, choose **Generate Sales Schedule...** in the Sales Contract Lines (tdsIs3501m000) session. As a result, the Sales Schedules (tdsIs3111m000) session is started in which you can create a new sales schedule. LN copies the sales contract data to the sales schedule when the Sales Schedules (tdsIs3111m000) session is started.

LN determines the values of the following fields as follows:

- The **Origin** is set to **Contracts**.

- The **Schedule Type** is set to **Shipping Schedule** if the value of the **EDI message** field in the Item - Sales Business Partner (tdisa0510m000) session is **Shipping Schedule only**. Otherwise, the **Schedule Type** is set to **Material Release**.
- The **Generation Date** is the system date.
- Whether the **Self Billed Invoice** check box is selected or cleared, depends on the **Self Billed Invoice** check box in the Item - Sales Business Partner (tdisa0510m000) session.

To specify the time-phased deliveries for the sales contract, choose **Lines** in the Sales Schedules (tdsIs3111m000) session.

As a result, the Sales Schedule - Lines (tdsIs3107m000) session is started in which you can specify:

- The date on which a shipment must take place.
- The quantity to be shipped.

Note

Sales schedules that are used to define contract deliveries cannot:

- Be referenced.
- Have revisions.
- Have cumulatives and authorizations.
- Be created through EDI.

Step 3: Approve sales schedule

The value of the **Requirement** field in the Sales Schedule - Lines (tdsIs3107m000) session determines the actions LN carries out when you approve a sales schedule.

If the **Requirement** is **Firm**, LN:

- Creates planned inventory transactions in the Planned Inventory Transactions (whinp1500m000) session.
- Updates the available-to-promise in the Item Master Plan (cprmp2101m000) session.
- Creates history for the sales schedule and sales schedule lines, which you can view in the Sales Order/Schedule History (tdsIs5505m000) session.
- Updates Quality on what is expected to be inspected.

If the **Requirement** is **Planned**, LN:

- Updates the available-to-promise in the Item Master Plan (cprmp2101m000) session.
- Updates the **Unconfirm. Cust.Ord.** quantity in the Item Master Plan (cprmp2101m000) session.

Step 4: Release sales schedule to sales order

If the sales schedule line is approved, you can release the sales schedule line to a sales order in the Release Sales Schedules to Order (tdsIs3207m000) session. You can view the sales order in the Sales Orders (tdsIs4100m000) session. You can then process the sales order following the sales order procedure.

If the sales order is generated based on the sales schedule line, LN updates the following data in the Sales Schedule - Lines (tdsIs3107m000) session:

- **Order**
- **Position**
- **Sequence**

If the sales order is processed, the sales schedule line is processed. If the sales schedule line has the **Processed** status, the sales order can be deleted.

Copying sales contracts

You can copy sales contracts to create sales contracts in the Copy Sales Contracts (tdsIs3801m000) session.

You can always copy a normal contract to a normal contract or a special contract to a special contract. You can copy a normal contract to a special contract, and vice versa, only if the following check boxes are selected in the Sales Contract Parameters (tdsIs0100s300) session:

- **Copy Special Contract to Normal Contract**
- **Copy Normal Contract to Special Contract**

If you copy to a new normal contract, to determine the contract period's default value, LN performs the following steps:

- Assigns an effective date directly after the expiry date of the old contract
- Sets up a contract period for one year

If you copy to a new normal contract, LN checks if a normal contract already exists:

- In the same period
- With the same price group or item
- For the same sold-to business partner

If a normal contract exists and its status is **Active**, you cannot copy contracts.

Contracts are copied with a new contract number, which is determined in the same way as when you enter a new contract in the Sales Contract - Lines (tdsIs3600m000) session, but with different effective and expiry dates.

If the **Price Revisions in Use** check box is selected on the source contract line, the sales contract price revisions that are linked to the source contract with effective dates that fall within the effectivity period of the new contract are copied to the new contract. If no valid price revision exists, and you have selected the **Copy Prices** check box in the Copy Sales Contracts (tdsIs3801m000) session, the last price revision of the old contract is copied to the new contract's price revision with the same effective date as the contract line's effective date.

Note

Discounts and discount schedules from the old contract are not automatically included if you copy prices to the new contract. To also copy discounts to the new contract, select the **Copy Discounts** check box in the Copy Sales Contracts (tdsIs3801m000) session.

If price books or discount schedules are not valid within the run time of the contract, they can be copied to new ones. You can also add new price/discount lines to existing price books/discount schedules.

You can copy the delivery scheme that is linked to the old contract to the new contract. To copy the delivery scheme, select the **Copy Delivery Contract** check box in the Copy Sales Contracts (tdsIs3801m000) session.

The currency of the invoice-to business partner must be the same as the contract currency. Business partners must have the status **Active** when a contract is agreed upon. A parent relation must exist between a sold-to business partner and the other business partner roles, which are defaulted if the sold-to business partner is entered.

Evaluating sales contracts

If a sales contract is used for a sales order or sales schedule, you can evaluate the sales contract during and after the sales order or schedule procedure. During the contract's effectiveness period, you can check if the deliveries were made as agreed in the contract. At the end of the contract's effectiveness period, you can check if the agreed quantities were delivered.

To evaluate contracts in the Evaluate Sales Contracts (tdsIs3420m000) session, the following conditions must be fulfilled:

- The contract status must be **Active**.
- Call orders must exist for the contract.
- The time elapsed (%) must be more than the specified percentage.

Note

The Evaluate Sales Contracts (tdsIs3420m000) session is mandatory if the **Evaluate Contract before Deleting** check box is selected in the Sales Contract Parameters (tdsIs0100s300) session.

How a contract line is evaluated depends on the value of the **Quantity Binding** check box in the Sales Contract Lines (tdsIs3501m000) session. This check box determines whether the **Agreed Quantity** that you agreed with your sold-to business partner is a mandatory quantity to sell.

If the **Quantity Binding** check box is selected in the Sales Contract Lines (tdsIs3501m000) session, the Evaluate Sales Contracts (tdsIs3420m000) session prints the differences between:

- The **Called Quantity** and the **Maximum Quantity** fields in the Sales Contract Lines (tdsIs3501m000) session.
- The **Called Quantity** and the **Minimum Quantity** fields in the Sales Contract Lines (tdsIs3501m000) session.

If the **Quantity Binding** check box is cleared in the Sales Contract Lines (tdsIs3501m000) session, the Evaluate Sales Contracts (tdsIs3420m000) session prints the lines that exceed the boundaries that you defined in the Evaluate Sales Contracts (tdsIs3420m000) session.

You can accept small negative or positive deviations in the call order with regard to the quantities. The deviations are calculated as follows in the Evaluate Sales Contracts (tdsIs3420m000) session:

$$\frac{((\text{Called Quantity} + \text{Invoiced Quantity}) - (\text{Agreed Quantity} * \text{Elapsed Time Factor}) \div \text{Agreed Quantity}) * 100}{\text{Agreed Quantity}} \times 100$$

Example

- Agreed Quantity = 100
- Called + invoiced = 40
- Contract duration = 10 days
- Time Elapsed = 6 days

Negative Deviation = $40 - 100 * 6/10 \div 100 = -20\%$

If this percentage is greater than the allowed percentage, the contract line is printed.

Note

- After a sales contract is evaluated, the **Evaluation** field is updated in the Sales Contract Lines (tdsIs3501m000) session.
- Extrapolating can produce a distorted picture if, for instance, the largest quantities are delivered at the end of the contract period. As a result, an interim evaluation will show a backlog that does not correspond with reality.

Overview of margin control

You use margin control to control margins for sales orders and quotations created for standard items. If the net price of the sales quotation or sales order exceeds the defined margins, the appropriate action is performed. For example, if the margin of an order is exceeded, the order is blocked.

Setting up margin control

The following master data must be defined to use margin control:

1. Use the **Gross Margin Control** check box in the Sales Order Types (tdsIs0594m000) session to define whether gross margin control must be executed for the order type.
2. Use the **Can Release Margin Held Orders** check box in the User Profiles (tdsIs0139m000) session to define whether a user can unblock sales orders/quotations that have been blocked because margins are exceeded.
3. Use the Sales Order Parameters (tdsIs0100s400) session to define various margin control related parameters.
4. Use the Margin Control Parameters (tdsIs0120m000) session to define the action that must be taken when a sales order or quotation falls outside the defined margins.
5. In the Item - Sales (tdisa0501m000) session and the Sold-to Business Partners (tccom4110s000) session, you can specify:
 - The upper margin (the percentage by which the target price can be exceeded).
 - The lower margin (the percentage by which the price can be lower than the target price).

Types of margin control

You can specify the following margin types:

- (Price) margin control
- Gross margin control at detail level
- Gross margin control at header level

For more information, refer to *Types of margin control (p. 126)*.

Using margin control

If margin control is implemented, when a sales order or quotation is entered, several checks are automatically executed and exceeded margins are logged.

For more information, refer to *Using margin control (p. 127)*.

Types of margin control

Before you can define the parameters for (price) margin control or gross margin control, you must select the **Margin Control** check box in the Sales Order Parameters (tdsIs0100s400) session. Next, you can decide which type of margin control you want to use.

(Price) margin control

For (price) margin control The target price and sales price are compared and evaluated against the margin limits, as registered in the Item - Sales (tdIsa0501m000) session.

Depending on the parameter **Target Price for Margin Control** field in the Sales Order Parameters (tdsIs0100s400) session, the target price is:

- The sales price recorded in the Item - Sales (tdIsa0501m000) session.
- The suggested retail price recorded in the Item - Sales (tdIsa0501m000) session.
- The cost price of the item recorded in the Items - Costing (ticpr0107m000) session.
- The selling price found after searching in Pricing.

Note

If the item is an effectivity unit, upgrade prices are included in the sales price, the suggested retail price, and the selling price. You can view the upgrade prices for a specific effectivity unit in the Effectivity Unit (tcuef0102m000) session.

Gross margin control at detail level

To control gross margins at detail level, in the Sales Order Parameters (tdsIs0100s400) session, you must:

- Select the **Gross Margin Check Lines** check box.
- Define the **Profit Calc Based on Cost/Sales Price** field to calculate the gross profit percentage.

For gross margin control, the target price always is the item's cost price, as recorded in the Items - Costing (ticpr0107m000) session, or if an effectivity unit is involved, as recorded in the Effectivity Unit (tcuef0102m000) session. The target price and the sales price are used to calculate the gross profit

percentage. This percentage is evaluated against the margin limits, as defined in the Item - Sales (tdisa0501m000) session.

Gross margin control at header level

To control gross margins at header level, in the Sales Order Parameters (tdsIs0100s400) session, you must:

- Select the **Gross Margin Check Headers** check box.
- Define the **Profit Calc Based on Cost/Sales Price** field to calculate the gross profit percentage.

For gross margin control, the target price always is the item's cost price, as recorded in the Items - Costing (ticpr0107m000) session, or if an effectiveness unit is involved, as recorded in the Effectivity Unit (tcuef0102m000) session. The target price and the sales price are used to calculate the gross profit percentage. This percentage is evaluated against the margin limits for a certain order or quotation, as defined in the Sold-to Business Partners (tccom4110s000) session.

Using margin control

If margin control is implemented, when a sales order or quotation is entered, several checks are performed and exceeded margins are logged.

The following steps are completed:

1. LN searches the margin control parameters for the login code of the user who is entering the sales order or quotation. For each login code, margin control parameters determine the action(s) that must be taken when the sales price falls outside the margin. If no margin control parameters exist for the login code of a particular user, margin control is not used for sales orders or quotations that are entered by that user.
2. LN checks the item sales data and the sold-to business partner data for the allowed margin variances, which are defined as a percentage and compared against a target price or cost price depending on the type of margin being checked.
3. LN determines any of the following:
 - For (price) margin control, the target price for an item. The target price can be the sales price, cost price, recommended retail price, or the price defined in the price structure. The target price is multiplied by the upper and lower margins, as defined in the item sales data to determine the margin range.
 - For gross margin control, the standard cost of the item from the item costing data. The cost price is multiplied by the upper and lower margins, as defined in the item sales data or sold to business partner data.
4. LN checks the net price defined for the sales order or quotation line. If this price falls within the margins, the order is processed. If the price falls outside the allowed margin, LN takes the action defined for the user in the Margin Control Parameters (tdsIs0120m000) session.

5. Sales orders or quotations whose margins are exceeded and that must be logged, can be viewed in the following sessions:
 - Sales Orders below/above Allowed Margin (tds1s4518m000)
 - Sales Quotations below/above Allowed Margin (tds1s1518m000)Sales orders whose margins are exceeded and that must be blocked, can be viewed in the following session:
 - Blocked Sales Order (Lines) (tds1s4520m000)
6. Logged instances of sales orders or quotations whose margins are exceeded can be deleted in the Delete Margin Log for Sales Orders below/above Allowed Margin (tds1s4218m000) session or the Delete Margin Log for Sales Quotations below/above Allowed Margin (tds1s1218m000) session if these margins are no longer required.

Note

- When a sales order or quotation falls outside the defined margins, more than one action can be taken at a time. For example, LN can signal, log, and block a quotation or an order.
- If an order is blocked due to margin guidelines, the block must be manually removed, even if the price is corrected to fall in margin guidelines.
- Blocking occurs at the step specified in the order type as the blocking step.

Example

For ITEM 1, the following is applicable:

- The target price, which is set to the sales price, is \$500.
- The upper margin is 25%.
- The lower margin is 10%.
- The standard cost is \$389.

In addition, the following data is available:

- For ITEM 2, the standard cost is \$317.
- For sold-to business partner NS Materieel, the upper margin is set at 20%, and the lower margin is set at -5%.
- NS Materieel places an order for 25 pieces of ITEM 1 at \$600, and 25 pieces of ITEM 2 at \$515.

As a result, the following margin checks are calculated:

- (Pice) margin check for ITEM 1.
The formulas for this check are as follows:
 - Upper margin = target price * (1 + upper margin percentage)
 - Lower margin = target price * (1 - lower margin percentage)
 - Gross margin check on line level for ITEM 1.
 - Gross margin check on header level.

(Pice) margin check for ITEM 1

Upper margin	$500 * (1.25) = \$625$
--------------	------------------------

Lower margin	$500 * (.9) = \$450$
--------------	----------------------

Because the net selling price is \$600, margins are not exceeded.

Gross margin check on line level for ITEM 1

Upper margin	$\$389 * (1.25) = \486.25
--------------	-----------------------------

Lower margin	$\$389 * (.9) = \350.10
--------------	---------------------------

Because the net selling price is \$600, the upper gross margin is exceeded.

Gross margin check on header level

Standard cost of both items	$\$389 + \$317 = \$706$
-----------------------------	-------------------------

Upper margin	$\$706 * (1.2) = \847.20
--------------	----------------------------

Lower margin	$\$706 * (1.05) = \741.30
--------------	-----------------------------

Net selling price for both items	$\$600 + \$515 = \$1115$
----------------------------------	--------------------------

Because the net selling price is \$1115, the upper gross margin is exceeded.

Inventory consumption handling

In vendor managed inventory (VMI) and subcontracting environments, consumptions are recorded to view and maintain consumption data in the supplier's or manufacturer's administrative warehouse. This warehouse mirrors the customer's or subcontractor's warehouse from which the customer/subcontractor consumes materials supplied by the supplier/manufacturer.

Handling inventory consumptions includes the creation and processing of these consumptions.

Note

In this topic, supplier refers to the supplier or the manufacturer; customer refers to the customer or the subcontractor, and VMI warehouse refers to the customer's or the subcontractor's warehouse from which the customer or the subcontractor consumes goods supplied by the supplier or manufacturer.

Consumption master data

To record inventory consumptions in the supplier's administrative warehouse and to update the inventory levels and start up invoicing:

1. In the Implemented Software Components (tccom0100s000) session, select:
 - The **VMI (supplier side)** check box to maintain consumptions in VMI environments.
 - The **Subcontracting with Material Flow (manufacturer)** check box to maintain consumptions in subcontracting environments.
2. In the Terms and Conditions (tctrm1100m000) session, define terms and conditions for the relevant business partners, warehouses, and items.
3. In the Schedule Terms and Conditions (tctrm1131m000) session, select the **External Packing Slip is Mandatory** check box if the consumption line must include an external packing slip for a schedule. Specify the **Duplicate External Packing Slip Allowed** check box to allow or prevent, for a combination of sold-to business partner, ship-to business partner, and item, using an external packing slip that was already used before.

4. In the **Method of Inventory Update** field of the Logistics Terms and Conditions (tctrm1140m000) session, to enable the creation of consumptions in the Inventory Consumption (tdsIs4140m000) session for subcontracting scenarios, select one of the following:
 - **Receipts and Consumption**
 - **Receipts, Consumption and Inventory Balance**
 - **Inventory Balance as Consumption**For VMI scenarios, selecting these options is not required, but if you do not select any of these options, received quantities are not shown in the Inventory Consumption (tdsIs4140m000) session.

For further information on how to set up the VMI functionality, see: VMI customer forecast - setup and VMI supplier forecast - setup. For information on subcontracting, see Overview of subcontracting.

Consumptions

Consumption records are generated or manually created. They show the received quantities provided by the supplier and the subsequent consumptions by the customer.

A consumption record consists of a header and one or more lines.

- **Consumption header**
When the VMI warehouse is replenished, LN generates a consumption header. Headers of consumption records contain the name of the customer, the VMI warehouse, and the aggregated received and consumed item quantities. They are viewed and maintained in the Inventory Consumptions (tdsIs4140m000) session.
- **Consumption line(s)**
When the customer consumes material, a consumption line is created. Details of individual consumptions are viewed and maintained in the Inventory Consumption Lines (tdsIs4141m000) session.
- Consumption lines are automatically entered after receiving the LoadInventoryConsumption Business Object Document (BOD), or manually, resulting from an e-mail or a phone call from the customer.

After the consumption is entered, it must be processed to:

- Invoice the customer for the consumed quantities, if invoicing is applicable.
- Decrease the inventory levels of the administrative warehouse.

Note

In the customer's LN system, consumptions are generated in the Consigned Consumptions (whwmd2551m000) and the Inventory Receipt Transaction Consumptions (whina1514m000) sessions. For more information, refer to Consumption records.

Processing consumptions

To determine whether invoicing is applicable and to start up invoicing for the relevant customer, and to lower the inventory levels in the administrative warehouse, you must process the inventory consumptions as follows:

- In the Inventory Consumption Lines (tdsIs4141m000) session, from the appropriate menu, select **Process Consumption Line** to process selected consumption lines.
- In the Inventory Consumption (tdsIs4140m000) session, from the appropriate menu, select **Process Inventory Consumption** to process the consumption lines of the selected item.
- Use the Process Inventory Consumption (tdsIs4290m000) session to process a range of consumptions.

After the consumptions are processed, the orders and schedules linked to the consumptions are shown in the Orders by Inventory Consumption Line (tdsIs4142m000) session.

Note

You can access all of these sessions from the Inventory Consumption - Lines (tdsIs4640m000) session.

How LN processes consumptions - outline

Step 1: Link consumption record to replenishment order/schedule

To determine whether invoicing is applicable and to start up invoicing for the relevant customer, LN links the consumption to the order/schedule with which the item was received in the VMI warehouse as follows:

1. Subcontracting reference present on consumption line?
If yes, the consumption is linked to the corresponding purchase material supply line. For more information, refer to Subcontracting order and Process returns.
If no:
2. Packing slip present? If yes, search for a matching sales schedule shipment and link the consumption to the schedule.
If no:
3. Customer order reference present? If yes, the consumption is linked to that order. For more information, refer to VMI order/schedule and Process returns.
If no:
4. Customer schedule reference present? If yes, the consumption is linked to that schedule.
If no:
5. Search for a **Pay on Use** sales order line to link the consumption to. If found, refer to VMI order/schedule.
If not found:
6. Search for a **Pay on Use** sales schedule line to link the consumption to. If found, refer to VMI order/schedule.

If not found:

7. Create a consignment invoicing sales order to settle the invoicing of the consumed quantity. For more information, refer to Sales consignment invoicing orders with origin **Consumption**.

If the **Invoicing Required** check box is cleared on the consumption line, LN automatically lowers the inventory level. For more information, refer to Adjust inventory level in administrative warehouse.

Step 2: Process returns

If the **Return** check box is selected on the consumption line, no invoicing is required.

If the sales order found is **Pay on Use**, an invoicing line is created, but on this invoicing line the returned consumption quantity is shown in the **Returned Consumption Quantity** field of the Sales Order Invoice Lines (tds1s4106m100) session, and no invoicing takes place.

If the subcontracting reference is filled or the returned item is a packaging item, the consumption line's **Processed** check box is selected, and no further action is taken.

To return quantities, you must manually create a sales return order and link it to the relevant order/schedule. For more information, refer to *Sales return orders (p. 89)*.

Note

The search order listed above is leading. If, for example, a consumption line contains a subcontracting reference and a customer order number, the customer order number will be ignored, even if a search on subcontracting reference fails.

To link consumptions to the replenishment order

The following can be applicable for a consumption record:

- It is linked to the replenishment subcontracting order
- It is linked to the replenishment VMI order/schedule
- It cannot be linked to a replenishment order/schedule

Subcontracting order

To link a consumption line to a subcontracting purchase order, LN first uses the subcontracting reference and then the consumed item to find the relevant material supply line matching the subcontracting purchase order. The material line whose item matches the inventory consumption line's item is selected.

For costing purposes, the used materials must be booked on the correct subcontracting purchase order. Therefore, the **Subcontracting Reference** field in the Inventory Consumption Lines (tds1s4141m000) session is mandatory.

Usually, the subcontractor is not invoiced for materials supplied by the manufacturer and consumed by the subcontractor to produce the items for the manufacturer.

For consumption lines linked to an **Operation Subcontracting** material supply line or an **Item Subcontracting** material supply line, the **Consumed Quantity** field in the Purchase Order Material

Supply Lines (tdpur4116m000) session is updated after receipt of a consumption message from the subcontractor, which in turn triggers the update of the inventory levels. For more information, refer to [Adjust inventory level in administrative warehouse](#)

For further information about the order flow between manufacturer and subcontractor, and operation and item subcontracting, see [To subcontract operations \(manufacturer's side\)](#) and [Item subcontracting - procedure](#).

Note

LN only searches for a subcontracting order if, in the Implemented Software Components (tccom0100s000) session, **Subcontracting with Material Flow (subcontractor)** is selected.

VMI order/schedule

To link a consumption line to a [vendor managed inventory \(VMI\)](#) order or schedule, LN first uses the packing slip to search for a matching sales schedule shipment and link the consumption to the schedule. If no packing slip is available, the customer order/schedule reference is used.

In VMI environments, the customer order/schedule reference is not mandatory. If an inventory consumption line contains a customer order/schedule reference, LN searches for a sales order/schedule line with a customer order/schedule, position, and sequence identical to the customer order/schedule reference, to determine the payment. For sales schedules, LN searches for the first sales schedule line with a matching customer schedule reference. Consumption lines are linked to this specific sales schedule, irrespective of whether or not consecutive schedule lines have a different customer schedule reference.

If the payment found is **Pay on Use**, inventory levels are updated and invoicing is triggered. For the order/schedule lines linked to the consumption line, LN creates invoicing lines in the Sales Order Invoice Lines (tdsIs4106m100) session or Sales Schedule Invoice Lines (tdsIs3140m200) session.

If the payment found is **Pay on Receipt** or **No Payment**, only the inventory levels are updated. For more information, refer to [Adjust inventory level in administrative warehouse](#).

If no packing slip or customer order/schedule reference is available and the **Invoicing Required** check box is selected, the following applies:

1. LN searches for the oldest sales order/schedule with payment type **Pay on Use** that is not yet fully consumed. If a matching sales order/schedule line is found, LN creates an invoice line linked to that sales order line or sales schedule.
2. If no matching line is found, LN creates a consignment Invoicing sales order based on the **Consignment Invoicing Order Type** field in the Sales Order Parameters (tdsIs0100s400) session.

If a **Pay on Use** sales order/schedule line is used and the total consumed quantity exceeds the ordered quantity, LN creates an invoicing line for the part that "fits". For the remainder, LN searches for other **Pay on Use** sales order/schedule lines to create invoicing lines. For the consumed quantities for which no sales order/schedule line is found, LN creates a consignment invoicing sales order.

For each invoice line created, LN updates the inventory levels with the invoiced quantities. For more information, refer to [Adjust inventory level in administrative warehouse](#).

Note

LN only searches for **Pay on Use** sales order/schedule lines if, in the Implemented Software Components (tccom0100s000) session, **Ownership External** is selected.

Sales consignment invoicing orders with origin Consumption

If a consumption cannot be linked to a replenishment order, a sales consignment invoicing order is generated to settle the invoicing of the consumed quantity. These orders receive the **Consumption** origin and their order type is retrieved from the **Consignment Invoicing Order Type** field in the Sales Order Parameters (tds1s0100s400) session.

Updating inventory levels for these orders is handled by Warehousing, because warehouse activities are part of the order procedure of a sales consignment invoicing order.

If a consignment invoicing order is released to Warehousing, processing the resulting outbound order lines handles inventory level adjustments. It is recommended to set the activities of the warehousing order type linked to the consignment invoicing order type to automatic. For more information, refer to [To define warehousing procedures](#).

Note

- The price for sales consignment invoicing orders is always based on the consumption date.
- You cannot cancel or delete sales orders with the **Consumption** origin, nor cancel, delete, or add corresponding lines or change item and quantity.

Adjust inventory level in administrative warehouse

LN automatically updates the inventory levels of the administrative warehouse without performing the outbound and shipment procedures. To register the inventory reduction, LN creates a sales order of type **Sales (Manual)** and a shipment.

You can view this sales order and shipment in the Item - Warehouse - Inventory Transactions (whinr1510m000) and the Inventory Receipt Transaction Consumptions (whina1514m000) session. The ownership of this sales order is **Customer Owned**, because invoicing and payment is performed based on the originating **Pay on Use** sales order/schedule, the consignment invoicing order, or the [subcontracting purchase order](#).

Prices and discounts

When LN creates an invoicing line, the following are applicable:

- **Sales order**
LN determines prices and discounts based on the values of the originating sales order line, using either the consumption or replenishment date, depending on the **Price Determination Based on** parameter setting in the Order Terms and Conditions (tctrm1130m000) session.
- **Sales schedule**
LN determines prices and discounts based on the values of the first schedule line linked to the originating sales schedule.

Note

- In the Sales Order Invoice Lines (tdsIs4106m100) session, consumption invoice lines are linked to a sales order line. In the Sales Schedule Invoice Lines (tdsIs3140m200) session, consumption invoice lines are linked to a sales schedule header. If you release such consumption invoice lines to Invoicing, required information on prices, tax, and so on is retrieved from the first schedule line linked to the sales schedule. Information from successive schedule lines is not taken into account.
- The price for sales consignment invoicing orders is always based on the consumption date.

Pay on Use sales order/schedule lines

For sales order/schedule lines with payment type **Pay on Use**, the activity **Release to Invoicing** is part of the order procedure. Those lines can:

- Register consumptions
- Be invoiced, that is, invoicing lines are created for the consumption lines they are linked to
- Have the **Self Billing** check box selected

Note

This is applicable in an extended consignment setup, in which you directly link the invoicing for a consumption of consignment inventory to the replenishment order or schedule.

In a basic consignment setup, in which the order and schedule procedures are split into a replenishment part and an invoicing part, the following are applicable:

- Invoicing is not available for consignment replenishment orders, which are sales orders for which the **Consignment Replenishment** check box is selected in the Sales Order Types (tdsIs0594m000) session.
- Because for consignment replenishment orders **Release to Invoicing** is not part of the order procedure, consumptions can be invoiced using a **Consignment Invoicing** sales order. These are sales orders for which the **Consignment Invoicing** check box is selected in the Sales Order Types (tdsIs0594m000) session.

For more information, refer to *Consignment in Sales and Procurement (p. 137)*.

Consignment in Sales and Procurement

You can use consigned inventory, for which inventory ownership and storage are handled by different parties, and select either a basic or extended consignment setup.

Note: Both setups can be used in Vendor managed inventory (VMI).

Extended consignment

In an extended consignment setup, vendor managed inventory (VMI) settings are laid down in a terms and conditions agreement between business partners. Therefore, if you want the item ownership to be consigned, in the Order Terms and Conditions (tctrm1130m000) session, set the **Payment** field to **Pay on Use** for a combination of item, business partner, and warehouse (Procurement) or **Ship-to Warehouse** (Sales).

When a (replenishment) order/schedule is created for the defined combination of item, business partner, and (ship to) warehouse, the **Payment** field on the order line/ schedule (line) is set to **Pay on Use**, as defaulted from the terms and conditions. If consignment inventory is consumed, the consumption can be linked to an existing order/schedule.

For each consumption, the following is generated:

- **Procurement**
A purchase payable receipt that is linked to an existing receipt in the Purchase Payable Receipts (tdpur4130m000) or Purchase Payable Receipts for Schedules (tdpur3118m000) session.
- **Sales**
A consumption line that is linked to an existing delivery in the Inventory Consumption - Lines (tdsIs4640m000) session. After the consumption line is processed in the Process Inventory Consumptions (tdsIs4290m000) session and invoicing is required, in the Sales Order Invoice Lines (tdsIs4106m100) or the Sales Schedule Invoice Lines (tdsIs3140m200) session, an invoice line linked to the sales order/schedule line is created for the consumption.

With extended consignment, you directly link the payment/invoicing for a consumption of consignment inventory to the replenishment order or schedule. The price for the payment/invoicing of consigned inventory is based on the price that is valid at the moment of replenishment or consumption, which you can define in the **Price Determination Based on** field of the Order Terms and Conditions (tctrm1130m000) session.

Note

If LN cannot link the consumption of consigned inventory to an existing order or schedule, the following happens:

- **Procurement**
A **Purchase Payment** order is automatically generated. If no receipt is available yet, based on the number group for warehouse receipts, a receipt is generated in Procurement and a purchase payable receipt is created.
- **Sales**
A **Consumption** order is automatically generated based on the **Consignment Invoicing Order Type** field in the Sales Order Parameters (tdsIs0100s400) session.

Basic consignment

In a basic consignment setup, the order and schedule procedures are split into a replenishment part and a payment/invoicing part.

Specify the following:

- **Purchase order procedure**
In the Purchase Order Type - Activities (tdpur0694m000) session, create separate **Consignment Replenishment** and **Consignment Payment** order types and define their activities. Enter the order types in the **Order Type for Consignment Replenishment** and **Order Type for Consignment Payment** fields of the Purchase Order Parameters (tdpur0100m400) session.
- **Purchase schedule procedure**
Select the **Consigned** check box in the Purchase Contract Lines (tdpur3101m000) session.
- In the **Price Determination Based On** field of the Purchase Order Parameters (tdpur0100m400) session, define how the price for the payment of consignment inventory is determined.
- **Sales order procedure**
In the Sales Order Type - Activities (tdsls0694m000) session, create separate **Consignment Replenishment** and **Consignment Invoicing** order types and define their activities.

Consignment replenishment

If consigned inventory must be replenished:

- **Procurement**
You handle the purchase orders/schedules up to the receipt of the goods. You need not pay the goods before consumption, so no invoice is created yet.
- **Sales**
You handle the sales order up to the delivery of the goods. You need not invoice the goods before the customer uses them, so no invoice is created yet.

You can only use the consignment replenishment part of the order/schedule procedure to replenish the consignment inventory.

Consignment payment/invoicing

If consigned inventory is used:

- **Procurement**
You must pay for it. Carry out the consignment payment part of the purchase order/schedule procedure. If you consume consigned inventory, a **Purchase Payment** order is automatically generated. For each consumption, a purchase payable receipt is linked to the purchase order line in the Purchase Payable Receipts (tdpur4130m000) session.
- **Sales**
You must invoice the customer for it. You must manually create a **Consignment Invoicing** sales order.

Retrobilling

If price changes are made to a sales contract or to an item after the renegotiation date, you can use the retrobilling functionality to re-invoice previously shipped items for sales orders and schedules. Price differences are handled through retrobilled sales orders, which have an item quantity of zero and an order amount that shows the price difference.

Retrobilling master data

To set up retrobilling, specify the following master data:

1. In the Sales Order Types (tdsIs0594m000) session, define a sales order type for retrobilling.
2. In the Sales Order Parameters (tdsIs0100s400) session, specify these fields:
 - **Retro-Billing Implemented**
 - **Order Type Retrobilling**
 - **Retro-Billing Cost/Service**
 - **Number Group Retro-Billing**
 - **Number Group Update**
 - **Date for Generating Retrobilled Advice**
3. In the Item - Sales Business Partner (tdIsa0510m000) session, specify these fields:
 - **Item applicable for Retro-Billing**
 - **Retro Billed SO per BP**

Retrobilling process

A retrobilled sales order has an item quantity of zero and an order amount that shows the price difference.

To generate a retrobilled sales order, complete the following steps:

1. Generate price change advices in the Generate Retrobilled Price Change Advice (tdsIs3270d000) session.

You can start this session as follows:

- Automatically, whenever you make a price change to a contract.
- Manually, to generate price change advices for changed item prices.

Note

- In the Generate Retrobilled Price Change Advice (tdsIs3270d000) session, even if the session starts automatically, you must manually enter a price change (a percentage or a fixed value). This price change is then applied to the specified range of sales orders, sales schedules, or shipments.
- The generated price change advice header information is stored in the Retrobilled Price Change Advice (tdsIs3570d000) session. The generated price change advice line information is stored in the Retrobilled Price Change Advice Lines (tdsIs3571d000) session. You can change or delete the price change advice line information before you approve the line.

2. Approve the price change advices in the Approve Retrobilled Price Changes (tdsIs3275d000) session. You can start this session from the appropriate menu of the Retrobilled Price Change Advice Lines (tdsIs3571d000) session.
3. Generate retrobilled sales orders in the Generate Retrobilled Sales Orders (tdsIs3271d000) session. You can start this session from the appropriate menu of the Retrobilled Price Change Advice Lines (tdsIs3571d000) session. To update the sales contract with the new price, select the **Update Contract with New Price** check box in the Generate Retrobilled Sales Orders (tdsIs3271d000) session.
4. Use the standard invoicing procedure to invoice the generated retrobilled sales order for the price difference.

Master data

Overview of commissions and rebates

Many companies motivate their relations by rewarding their sales performance. This can increase sales, which improves the competitive position of the company.

The following rewards are available:

- [Commissions](#)
- [Rebates](#)

Commissions and rebates are based on accurate information about sales orders, the relation who is responsible for the sales order, the relation's sales performance, and the link between performance and reward.

Procedures

The main procedure is the calculation of commissions and rebates. For more information, refer to *Calculating commissions and rebates (p. 146)*.

The following are sub-procedures:

- The reservation of commissions and rebates. For more information, refer to *Reserving commissions and rebates (p. 148)*.
- The payment of commissions to employees. For more information, refer to *Paying commissions to employees (p. 150)*.

Master data

Before you can use any of the commissions and rebates procedures, you must specify master data on who can receive commissions and rebates, how the linking is carried out and when calculations can be carried out.

You must specify the following master data:

1. The parameters for commissions and rebates in the Commissions/Rebates Parameters session.
2. Period tables in the Period Tables (tcccp0160m000) session and periods in the Periods (tcccp0170m000) session if you want to calculate commissions and rebates based on cumulative sales.
3. Relations in the Relations (tdcms0110s000) session.
4. Agreement groups in the Agreement Groups (tdcms0115m000) session if you want to define common agreements for more than one relation.
5. Relation teams in the Relation Teams (tdcms0116m000) session if you want to link multiple relations to an order (line), and add relations to the relation team in the Relations by Relation Team (tdcms0117m000) session.
6. Commission/rebate groups in the Commission/Rebate Groups (tdcms0118m000) session if you want to define common agreements for more than one item.
7. Default relations or relation teams by customer in the Default Relations by Customer (tdcms0119m000) session.

Agreements

Commissions and rebates agreement selection

When LN calculates the commission(s)/rebate(s) that are awarded to a relation for closing a sales order, it first searches for the applicable commission/rebate agreement, which you can define in the Commission Agreement - Grades (tdcms0635m000) and Rebate Agreement - Grades (tdcms0635m100) sessions.

It is possible that more than one commission/rebate agreement can be applied to a combination of sales orders and relations. In such a case, LN selects a commission/rebate agreement according to the priorities specified in the **Priority** fields of the Commissions/Rebates Parameters (tdcms0100s000) session.

Example

The following commission agreements apply:

	Agreement A	Agreement B	Agreement C
Sold to BP	-	-	-
Relation	John	John	
Relation Group	-	G01	-
Project	-	-	-
Item	-	-	X05
Commission Group	-	-	-
Commission Percentage	2%	1.5%	3%
Growing Commission	0%	0%	0%

- Agreement A specifies the commission for relation John.
- Agreement B specifies the commission for relation group G01.
- Agreement C specifies the commission for the combination of John and item X05.

If John is a member of relation group G01 and he sells an item X05, all three agreements can be applied.

Suppose the following commission search priorities are defined in the Commissions/Rebates Parameters (tdcms0100s000) session:

- Priority 1: Custom/Rel /Projec/Item
- Priority 2: Rel /Item / /
- Priority 3: Rel / / /
- Priority 4: Rel.Gr/ / /

The resulting priorities of the commission agreements will be:

Commission Agreement	Type	Priority
A	Rel	3
B	Rel.Gr	4
C	Rel / Item	2

Commission agreement C has the highest priority and will be applied: John gets 3% commission.

If John sells an item Y07, only agreement A or B can be applied. Since agreement A has a higher priority than B, John will receive 2%.

Calculating commissions and rebates

Calculating commissions and rebates

If commissions and rebates are used, the calculation of commissions and rebates is a mandatory procedure.

Complete the following steps in the calculation procedure of commissions and rebates:

Step 1: Commission Agreement - Grades (tdcms0635m000)/ Rebate Agreement - Grades (tdcms0635m100)

- Specify the commission agreements in the Commission Agreement - Grades (tdcms0635m000) session.
- Specify the rebate agreements in the Rebate Agreement - Grades (tdcms0635m100) session.

Make sure that you set the **Invoice Direct/Reserve** field in these sessions to **Invoice**. For information on *reserved* commission/rebates, refer to *Reserving commissions and rebates* (p. 148).

Step 2: Sales Order - Relations (tdcms0140m000)/ Sales Order Line - Relations (tdcms0141m000)

Provide a link between a relation and sales orders.

You can link a sales order (line) to a relation by clicking:

- **Sales Order - Relations** on the appropriate menu of the Sales Orders (tdsIs4100m000) session. As a result, the Sales Order - Relations (tdcms0140m000) session starts in which you can enter your data.

- **Sales Order - Relations** on the appropriate menu of the Sales Order - Lines (tdsIs4100m900) session. As a result, the Sales Order - Relations (tdcms0140m000) session starts in which you can enter your data.
- **Sales Order Line - Relations** on the appropriate menu of the Sales Order Actual Delivery Lines (tdsIs4106m000) session. As a result, the Sales Order Line - Relations (tdcms0141m000) session starts in which you can enter your data.

You must only perform this step manually if the **Method of Linking Rels. to Order/ Order Lines** field is set to **Manually** in the Commissions/Rebates Parameters (tdcms0100s000) session. Otherwise this step is executed **Automatically**, or **Interactively**.

Step 3: Calculate Commissions/Rebates (tdcms0240m000)

Calculate the commissions and rebates in the Calculate Commissions/Rebates (tdcms0240m000) session.

As a result, the status of the commission/rebate is set to **Calculated**.

You must only complete this step if the **Calculate Commission not Based on Cum Sales after Order Entry** and **Calculate Rebates not Based on Cum Sales after Order Entry** fields are set to **Manually** in the Commissions/Rebates Parameters (tdcms0100s000) session. Otherwise LN calculates the commissions/rebates **Automatically**, or **Interactively**.

Step 4: Calculate Commissions/Rebates on Cumulative Sales (tdcms1200m000)

Instead of calculating commissions or rebates for each individual sales order (or order line), you can calculate commissions or rebates on the basis of the sum of all sales orders that are closed in a particular period.

Cumulate the commission/rebate calculations for a certain period in the Calculate Commissions/Rebates on Cumulative Sales (tdcms1200m000) session.

You must only complete this step:

- For the agreements that have the **Cumulative Agreement** check box selected in the Commission Agreement - Grades (tdcms0635m000)/ Rebate Agreement - Grades (tdcms0635m100) sessions.
- If the **Calculate Commission Based on Cum. Sales after Order Entry** and **Calculate Rebates based on Cum. Sales after Order Entry** fields are set to **Manually** in the Commissions/Rebates Parameters (tdcms0100s000) session. Otherwise LN calculates the commissions/rebates on cumulative sales **Automatically**, or **Interactively**.

Step 5: Commissions Calculated by Order (tdcms0550m000)/ Rebates Calculated by Order (tdcms2550m000) and Commissions Calculated by Relation (tdcms1550m000)/ Rebates Calculated by Relation (tdcms3550m000)

You can view the commissions and rebates that are calculated by sales order in the Commissions Calculated by Order (tdcms0550m000) and Rebates Calculated by Order (tdcms2550m000) sessions. You can change the calculated amounts in the details sessions.

You can view the commissions and rebates that are calculated by relation in the Commissions Calculated by Relation (tdcms1550m000) and Rebates Calculated by Relation (tdcms3550m000) sessions. You can change the calculated amounts in the details sessions.

Step 6: Global Approval of Commissions/Rebates (tdcms0250m000)

Before you can process, invoice, or reserve the calculation, you must approve the commissions/rebates in the Global Approval of Commissions/Rebates (tdcms0250m000) session.

As a result, the status is set to **Approved**.

Step 7: Print Approved Commissions/Rebates (tdcms2402m000)

Print the approved, unreserved commissions and rebates in the Print Approved Commissions/Rebates (tdcms2402m000).

- If the **Link with Finance** check box is selected in the Commissions/Rebates Parameters (tdcms0100s000) session, the status changes to **Ready**.
- If the **Link with Finance** check box is cleared, the status changes to **Closed**.

Step 8: Release Commissions/Rebates to Invoicing (tdcms2201m000)

If the **Link with Finance** check box is selected in the Commissions/Rebates Parameters (tdcms0100s000) session, you must release the commissions to Financials and the rebates to Invoicing in the Release Commissions/Rebates to Invoicing (tdcms2201m000) session.

As a result, the status is set to **Closed**.

Reserving commissions and rebates

Reserving commissions and rebates

You can reserve the calculated commissions for Financials and the calculated rebates for Invoicing, or you can reserve them for an external financial package.

Therefore, the following procedures exist for reserving payments:

- Reservations with a link to Financials, or Invoicing. As a result, the **Link with Finance** check boxes are selected on the **Commission Calculation Details** and the **Rebate Calculation Details** tabs of the Commissions/Rebates Parameters (tdcms0100s000) session.
- Reservations without a link to Financials, or Invoicing. As a result, the **Link with Finance** check boxes are cleared on the **Commission Calculation Details** and the **Rebate Calculation Details** tabs of the Commissions/Rebates Parameters (tdcms0100s000) session.

The reservation procedure with a link to Financials, or Invoicing

Step 1: Before you can start the reservation procedure

Before you can start this reservation procedure, you must first complete steps 1 through 6 from the *Calculating commissions and rebates (p. 146)* topic. In step 2, you must make sure that you set the **Invoice Direct/Reserve** field in the Commission Agreement - Grades (tdcms0635m000) or Rebate Agreement - Grades (tdcms0635m100) sessions to **Reserve**.

Step 2: Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000)

After the commissions/rebates are approved, you must reserve them by means of the Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000) session.

- If the **Relation Type** is **Customer**, or **Supplier**, the status of the commission/rebate changes to **Reserved**.
- If the **Relation Type** is **Employee**, the status of the commission changes to **Closed**, because the commissions for employees are handled directly by the payroll department. For more information, refer to *Paying commissions to employees (p. 150)*

Step 3: Print List of Reserved Commissions/Rebates (tdcms2404m000)

If you want to check the reserved commissions/rebates, use the Print List of Reserved Commissions/Rebates (tdcms2404m000) session.

Step 4: Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000)

Approve the reserved commissions/rebates by selecting the **Approve Reserved Commissions/Rebates** check box in the Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000) session.

As a result, the status of the commissions/rebates is set to **Reservation Approved**.

Step 5: Print Reserved Commissions/Rebates (tdcms2403m000)

Print the approved reserved commissions/rebates in the Print Reserved Commissions/Rebates (tdcms2403m000) session. As a result, the status of the commissions/rebates is set to **Ready**.

Step 6: Release Commissions/Rebates to Invoicing (tdcms2201m000)

In the Release Commissions/Rebates to Invoicing (tdcms2201m000) session, you must:

- Release the reserved commissions to Financials.
- Release the reserved rebates to Invoicing.

As a result, the status is set to **Closed**.

The reservation procedure without a link to Financials, or Invoicing

Step 1: Before you can start the reservation procedure

Before you can start this reservation procedure, you must first complete steps 1 through 6 from the *Calculating commissions and rebates (p. 146)* topic. In step 2, you must make sure that you set the **Invoice Direct/Reserve** field in the Commission Agreement - Grades (tdcms0635m000) or Rebate Agreement - Grades (tdcms0635m100) sessions to **Reserve**.

Step 2: Print Reserved Commissions/Rebates (tdcms2403m000)/ Close Commissions Reserved for Employees (tdcms2102m000)

- If the **Relation Type** is **Supplier** or **Customer**, use the Print Reserved Commissions/Rebates (tdcms2403m000) session to print the invoices for the commissions/rebates. As a result, the status of the commissions/rebates is set to **Closed**.
- If the **Relation Type** is **Employee**, use the Close Commissions Reserved for Employees (tdcms2102m000) session to set the commissions to **Closed**. Next, the payment of commissions to employees is executed outside LN.

Note

The commissions/rebates can receive the statuses **Reserved** and **Reservation Approved** only if a **Link with Finance** exists.

Paying commissions to employees

Paying commissions to employees

The payment of reserved commissions to employees is performed by your company's payroll department. You must generate a report that includes the commissions that you must pay to an employee.

Note

Commissions for an employee relation are always reserved in LN. This topic only handles the payment of commissions to employees if the **Link with Finance** check box is selected on the **Commission Calculation Details** tab of the Commissions/Rebates Parameters (tdcms0100s000) session. If this check box is cleared, the payment of commissions to employees is executed outside LN after the commissions are set to **Closed** in the Close Commissions Reserved for Employees (tdcms2102m000) session.

The payment of commissions to employees procedure

Step 1: Before you can start the payment procedure

Before you can start this reservation procedure, you must first complete steps 1 through 6 from the *Calculating commissions and rebates (p. 146)* topic. In step 2, the **Invoice Direct/Reserve** field in the Commission Agreement - Grades (tdcms0635m000) and Rebate Agreement - Grades (tdcms0635m100) sessions is automatically set to **Reserve** for the **Employee Relation Type**.

Step 2: Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000)

Before you can generate payment lines for commissions to employees, the status of the commission must be **Closed**. A commission receives this status in the Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000) session. See also: *Reserving commissions and rebates (p. 148)*.

Step 3: Generate Payment Lines for Commissions to Employees (tdcms4201m000)

If the **Generating Payments** field is set to **Manually** in the Commissions/Rebates Parameters (tdcms0100s000) session, you must generate payment lines in the Generate Payment Lines for Commissions to Employees (tdcms4201m000) session.

If the **Generating Payments** field is set to **Interactively** or **Automatically**, payment lines for commissions to employees are generated in the Reservation and Approval of Reserved Commissions/Rebates (tdcms2202m000) session.

Step 4: Commissions Paid to Employees by Relation (tdcms1151m000)/ Commissions Paid to Employees by Order (tdcms0151m000)

Use the Commissions Paid to Employees by Relation (tdcms1151m000) session or the Commissions Paid to Employees by Order (tdcms0151m000) session to view the generated payment lines.

Step 5: Print Commissions Paid to Employees (tdcms4451m000)

Use the Print Commissions Paid to Employees (tdcms4451m000) session to print a list of the commissions that are not yet (fully) paid and send the report to the payroll department that can settle the payments.

Step 6: Commissions Paid to Employees by Relation (tdcms1151m000)/ Commissions Paid to Employees by Order (tdcms0151m000)

Use the Commissions Paid to Employees by Relation (tdcms1151m000) session or the Commissions Paid to Employees by Order (tdcms0151m000) session to enter the paid amounts that the payroll department returned to you.

Step 7: Global Update Commissions Paid to Employees (tdcms4250m000)

Use the Global Update Commissions Paid to Employees (tdcms4250m000) session to set the calculated commissions collectively as fully paid.

You can start this session from the appropriate menu of the Commissions Paid to Employees by Relation (tdcms1151m000)/ Commissions Paid to Employees by Order (tdcms0151m000) sessions.

You can also set a specific payment line as fully paid by selecting a payment line and by clicking **Update Paid Commissions** on the appropriate menu of the Commissions Paid to Employees by Relation (tdcms1151m000)/ Commissions Paid to Employees by Order (tdcms0151m000) sessions.

Commissions and rebates calculation examples

The following grades are explained:

- Example 1: Grade by amount
- Example 2: Grade by quantity - Maximum limit
- Example 3: Grade by amount - Calculation method net
- Example 4: Grade by amount - Profit percentages
- Example 5: Grade by amount - Parent relation
- Example 6: Grade by amount - Cumulative agreement

The following agreement parameters can be found in the Commission Agreement - Grades (tdcms0635m000) session and the Rebate Agreement - Grades (tdcms0635m100) session:

- **Grade by Quantity/Amount**
- **Grade Unit**
- **Grade Calculation**
- **Commission Over/ Rebate Over**
- **Grow Commission Over/ Grow Rebate Over**
- **Cumulative Agreement**

Example 1: Grade by amount

Agreement

To Amount	Prof Perc	Commission Percentage over Grade	Growing Percentage over Total	Fixed Amount	Maximum Limit
1000	0.00 [%]	1.00 [%]	0.00 [%]	0.00	0.00
2000	0.00	2.00	0.00	0.00	0.00

5000	0.00	4.00	0.50	0.00	0.00
10000	0.00	5.00	1.00	0.00	0.00
25000	0.00	5.00	1.50	0.00	0.00

A relation closed an order of 12,500.

Calculation	Commission Perc.	Commission
1,000 * 1%	grade 0-1000	10
1,000 * 2%	grade 1000-2000	20
3,000 * 4%	grade 2000-5000	120
5,000 * 5%	grade 5000-10000	250
2,500 * 5%	grade 10000-25000	125
Total commission -		525

Calculation	Growing Percentage	Total Commission
12,500 * 1.5%	187.5	712.50

Example 2: Grade by quantity - Maximum limit

Agreement						
To Quantity	Prof Perc	Commission Percentage over Grade	Growing Percentage over Total	Fixed Amount	Maximum Limit	

Commissions and Rebates

10	0.00 [%]	1.00 [%]	0.00 [%]	0.00	0.00
20	0.00	2.00	0.00	0.00	0.00
50	0.00	4.00	0.50	0.00	150.00
100	0.00	5.00	1.00	0.00	200.00
250	0.00	5.00	1.50	0.00	400.00

A relation closed an order of 200 jeans at the price of 100 each.

Calculation	Commission Perc.	Commission
10 * 100 * 1%	grade 0-10	10
10 * 100 * 2%	grade 10-20	20
30 * 100 * 4%	grade 20-50	120
50 * 100 * 5%	grade 50-100	250
50 * 100 * 5%	limit 250-200	-50
50 * 100 * 5%	grade 100-250	500
50 * 100 * 5%	limit 500-400	-100
Total commission -		750

Calculation	Growing Percentage	Total Commission
150 * 100 * 1.5%	225	975
200 * 100 * 1.5%	300	1050

Example 3: Grade by Amount - Calculation method net

Agreement					
To Amount	Prof Perc	Commission Percentage over Grade	Growing Percentage over Total	Fixed Amount	Maximum Limit
1000	0.00 [%]	1.00 [%]	0.00 [%]	0.00	0.00
2000	0.00	2.00	0.00	0.00	0.00
5000	0.00	4.00	0.50	0.00	0.00

10000	0.00	5.00	1.00	0.00	0.00
25000	0.00	5.00	1.50	0.00	0.00

A relation closed an order of 12,500.

Calculation	Commission Perc.	Commission
$(1000 - (1,000 * 1\%)) * 1\%$	grade 0-1000	9.9
$(1000 - (1,000 * 2\%)) * 2\%$	grade 1000-2000	19.6
$(3000 - (3,000 * 4\%)) * 4\%$	grade 2000-5000	115.2
$(5000 - (5,000 * 5\%)) * 5\%$	grade 5000-10000	237.5
$(5000 - (2,500 * 5\%)) * 5\%$	grade 10000-25000	118.75
Total commission	-	500.95

Calculation	Growing Percentage	Total Commission
$(12500 - (12,500 * 1.5\%) * 1.5$	184.68	685.63

Example 4: Grade by amount - Profit percentages

Agreement						
To Amount	Prof Perc	Commission Percentage over Grade	Growing Percentage over Total	Fixed Amount	Maximum Limit	
100000	10.00 [%]	0.00 [%]	0.00 [%]	0.00	0.00	
100000	20.00	0.00	1.00	0.00	0.00	

100000	50.00	0.00	2.00	0.00	0.00
200000	10.00	0.00	2.50	0.00	0.00
200000	20.00	0.00	3.50	0.00	0.00

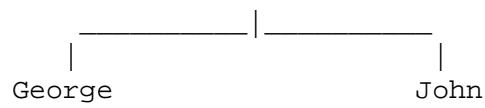
A relation closed an order of 125,000.

Calculation	Commission Perc.	Commission
125,000 * 2.5%	grade 100,000 - 200,000, 3125 profit 10%	
Total commission	-	3125

Example 5: Grade by Amount - Parent relation

Agreement for William, George and John						
To Amount	Prof Perc	Commission Percentage over Grade	Growing Percentage over Total	Fixed Amount	Maximum Limit	
1000	0.00 [%]	1.00 [%]	0.00 [%]	0.00	0.00	
2000	0.00	2.00	0.00	0.00	0.00	
5000	0.00	3.00	0.00	0.00	0.00	
10000	0.00	4.00	0.00	0.00	0.00	
25000	0.00	5.00	0.00	0.00	0.00	

William
|



William is the parent relation of George and John.
George and John form a relation team.

John and George are linked to an order line. The sale was for 1,250.

JOHN

Calculation	Commission	Perc.	Commission
1,000 * 1%	grade 0-1000	10	
250 * 2%	grade 1000-2000	5	
Total	-	15	

GEORGE

Calculation	Commission	Perc.	Commission
1,000 * 1%	grade 0-1000	10	
250 * 2%	grade 1000-2000	5	
Total	-	15	

WILLIAM

Calculation	Commission	Perc.	Commission
1,000 * 1%	grade 0-1000	10	
250 * 2%	grade 1000-2000	5	
1,000 * 1%	grade 0-1000	10	
250 * 2%	grade 1000-2000	5	
Total	-	30	

Example 6: Grade by Amount - cumulative agreement

In case the agreement is cumulative, LN does not calculate the commissions and rebates immediately, but stores the sales data in a separate file, sorted by agreement and relation. Each relation can have a different period table.

The relations are calculated every week.

Cumulative agreement

To Amount	Prof Perc	Commission Percentage over Grade	Growing Percentage over Total	Fixed Amount	Maximum Limit
20000	0.00 [%]	5.00 [%]	0.00 [%]	0.00	0.00
50000	0.00	10.00	0.00	0.00	0.00

In one week, the relation closed three orders.

Day	Amount
Monday	7,500
Tuesday	12,000
Friday	13,500
Sum	33,000

The commission is calculated over the total amount: 33,000.

Calculation	Commission Perc.	Commission
20,000 * 5%	grade 0-20000	1000
13,000 * 10%	grade 20000-50000	1300
Total	-	2300

Commissions and rebates history

The historical records pertaining to the calculation of commissions and rebates are stored separately from the commission and rebate records. You can use these history records to determine which actions were performed on the commissions and rebates. Historical records also provide a summary of the paid commissions and rebates.

Note

The commissions and rebates history can be viewed in the Commission/Rebate History (tdcms0560m000) session.

When a commission or rebate is modified or recalculated, two records are added to the history:

- The first record represents the previous situation. This record has a negative amount.
- The second record contains the data about the updated situation. This record has a positive amount.

Statistics

You can use Statistics to gain insight into the intake, turnover, and cancellation of orders and schedules. Statistics controls the activities that are required to define the desired format and layout for transferring historical data or actual data to statistical information. You can create user-defined statistical reports and displays to view this information, which facilitates data analysis.

You can also use Statistics to enter budgets. Budgets are used to compare the actual sales or purchases (statistics) with the estimated sales or purchases.

Procedure for statistics

To use statistics in a company:

Step 1: Specify master data for statistics

Select these check boxes:

1. **Purchase/Sales Statistics (STA)** in the Implemented Software Components (tccom0100s000) session.
2. **Maintain Statistics** in the User Profiles (tdpur0143m000) session of Procurement.
3. **Maintain Statistics** in the User Profiles (tdsIs0139m000) session of Sales.

If no user profile (sales) or user profiles (purchase) is specified, a user is authorized to maintain the statistics.

Step 2: Specify levels for statistics

When updating the statistics, the sales, purchase and commission/rebate history is read and compressed to data in statistics. The level of compression depends on the statistical levels, as selected in the Statistics Parameters (tdsta0100m000) session.

Before you can select the statistical levels in the parameters, you must first specify the levels in the Statistics Level (tdsta0601m000) session. In this session, you must specify the levels on which you want

to create/update the statistics for the level types **Purchase**, **Purchase Actual**, **Sales**, and **Sales Actual**. In the Statistics Level Attributes (tdsta0102m000) session, you can specify the level attributes (fields) that must be included in the statistical reports and overviews for the level types.

The **Sales** and **Purchase** levels determine which attributes are used for compressing the history data. Therefore, these statistical levels also determine the sort attributes you can select for the sort (see step 4). For example, if a sort is specified for both sales and purchase, you can select sales attributes and purchase attributes, such as sold-to BP (sales) and buy-from BP (purchase). However, the sales field must be present in the **Sales** level, and the purchase field must be present in the **Purchase** level before you can select it as a sort attribute.

The **Sales Actual** and **Purchase Actual** levels determine which history fields are overwritten by actual data if the **Actual Data** check box is selected when you update the statistics (see step 7). In this case, the attributes (fields) that are linked to these levels are not retrieved from the history data, but from the actual data for the item or the business partner.

If an attribute is not linked to a level, the statistics cannot be maintained or updated for that attribute. Data related to this attribute will be excluded from displays and reports.

Step 3: Specify parameters for statistics

After the statistical levels are specified, you can link the levels to the relevant parameter, such as **Sales Intake Level**, **Purchase Turnover Level**, and **Sales Actual Level** in the Statistics Parameters (tdsta0100m000) session. You must also specify the dates based on which the statistics are updated for the levels.

In the Statistics Parameters (tdsta0100m000) session, you can also specify the following:

- How parent business partner data is updated when statistical data is updated.
- How the gross profit percentage is calculated and displayed in statistics.
- The various periods of a year, including the period number, start date, and end date that are used in statistics.
- Whether detailed discounts must be recorded for purchase discounts, sales discounts, rebates, and commissions.
- Standard item codes to store and retrieve statistical data.

Step 4: Specify and activate sorts for statistics

In the Statistic Sorts (tdsta1600m000) session, specify sort codes, which are used to build a particular report or overview. You must indicate the type of statistical information (intake, turnover, cancellation) that must be kept for the sort and indicate whether budgets are allowed for the sort.

From this session, you can maintain the Statistics Sort Sequences (tdsta1101m000) session. In this session, you can select the sort attributes (fields) that are used to sort data in statistical reports and overviews.

With sort attributes, you can:

- Identify specific sequences for a selection of the level attributes, as specified in the Statistics Level (tdsta0601m000) session and as selected in the Statistics Parameters (tdsta0100m000) session.
- Fine-tune the level attributes, which can be regarded as a pre-selection from the database, for each individual statistics overview that you intend to build.

After specifying a sort, you must activate it before you can use it for a report or an overview. You can activate a sort directly in the Statistic Sorts (tdsta1600m000) session, or in the (De)activate Sorts (tdsta1200m000) session.

If the sort is set up for a budget, the sort need not be active to use it for a report or an overview. In addition, if you deactivate such a sort, the budget data is not deleted for the sort.

Step 5: Specify budgets

Optionally, a company can create budgets to compare with actual results, or to use them as a basis for planning in Enterprise Planning.

You can use the Budgets (tdsta2603m000) session to enter, maintain, and delete budgets for an active sort, year, and period. However, this is not a mandatory step in the procedure.

Before you create a new budget, you must first select a sort code. This choice will narrow down the data you can use in your budget. You can use the sort attributes as displayed in the Statistic Sorts (tdsta1600m000) session.

From this session, you can do the following:

- Maintain the Absolute Figures (tdsta2100m000) session, in which you can create or display detailed numbers for the budget in absolute figures.
- Maintain the Budget Percentages (tdsta2104m000) session, in which you can create or display detailed numbers for the budget in terms of percentages.

If the **Detailed Discount Specification** check box is selected in the Statistics Parameters (tdsta0100m000) session, from the Absolute Figures (tdsta2100m000) session or the Budget Percentages (tdsta2104m000) session, you can start the Sort Budget Data by Discount Type (tdsta2105m000) session to specify detailed discounts for sales and purchase discounts, rebates, or commissions.

Step 6: Specify a layout for statistics

Before you can print or display statistical data, you must link a sort code to a layout code and you must specify the layout for the data fields in the Statistics Layout (tdsta1610m000) session.

From this session, you can do the following:

- Maintain the Statistics Layout Column (tdsta1114m000) session. In this session, you can enter and view the column content, which defines the body of the report and what exactly is detailed in the report. If no column content is defined for the layout code, you cannot print or display statistical results.

- Maintain the Statistics Layout Content (tdsta1111m000) session. In this session, you can define the type of report that is printed: different types of statistics on one line, or a fixed type of statistics for each line.
- Maintain the Statistics Layout Selection (tdsta1112m000) session. In this session, you can select the data that is used and taken into account in the report calculation.
- Maintain the Statistics Layout Print/Page (tdsta1113m000) session. In this session, you can select the data that is actually printed on the report.

Step 7: Update statistics

Use the Update Statistics (tdsta2250m000) session to create or update the statistical files based on the history or the actual data.

If you decide to do a full update, the statistics are fully updated. Except for the budget data, all current statistical data is cleared and new statistics are created based on the current (history) data. You can also update the statistics based on new (history) data that was not taken into account before when updating the statistics.

Step 8: Display/Print statistics

Use the Statistics by Layout / Sort (tdsta1615m000) session to display the statistical results for a combination of layout code and sort code.

From this session, you can do the following:

- View the data for the sort attributes (fields) that are linked to a combination of layout code and sort code in the Statistics Sort Data Selection (tdsta1501m000) session.
- View the statistical results for a combination of layout code and sort code in absolute figures in the Figures by Layout / Sort (tdsta2500m000) session. The figures that are displayed depend on the statistics type.
- View the statistical results for a combination of layout code and sort code in absolute figures in the Figures by Layout / Sort (tdsta2500m000) session, only for the columns you entered on the **Columns** tab of the Statistics Layout (tdsta1610m000) session.
- Display the statistical results graphically.

Step 9: Print statistics

Use the Print Statistics (tdsta2400m000) session to print the statistical results.

From this session, you can do the following:

- View and maintain the data that is used and taken into account in the report calculation in the Statistics Layout Selection (tdsta1112m000) session.
- View and maintain the data that is printed on the report in the Statistics Layout Print/Page (tdsta1113m000) session.

Step 10: Archive and delete statistics

You can use the Archive/Delete Statistics (tdsta2250m100) session to transfer the statistics to an archiving file and/or to delete the statistics.

You can display the archived statistics and budgets under the company number as specified in the **Archiving Company** field of the Statistics Parameters (tdsta0100m000) session.

Appendix A

Glossary

A

account manager

The manager who is responsible for maintaining relations with accounts, or business partners.

activity

A step that you must carry out for the purchase/sales order type. An activity represents the sessions or the manual action that you must carry out for the purchase/sales order type.

additional cost line

Includes a cost item that can be linked as additional costs to an order or shipment. Examples of additional cost lines are administrative costs added to the order costs if the order amount is lower than a certain value, or freight costs added to the order if the total weight of the sold/purchased goods exceeds a certain value.

additional costs

Charges for extra services, such as extra packaging, insurance, and so on. Additional costs are added to the freight costs of a shipment, load, or a freight order cluster. They are levied for shipment lines or freight order cluster lines, which can be invoiced to the customer. This depends on the agreements made with the business partner.

additional cost scenario

A set of search attributes used to determine an order's or shipment's additional costs. Each scenario is linked to a [cost set](#).

additional cost set

The code under which a number of additional cost lines and scenarios can be stored. Cost sets can be linked to items, business partners or price lists and, via these, to orders and shipments.

administrative warehouse

A warehouse that offers a view of a warehouse that is managed by a business partner. An administrative warehouse corresponds with a physical warehouse controlled by the business partner's system. In that physical warehouse, the inbound and outbound processing takes place. The administrative warehouse mirrors the inventory levels present in the business partner's warehouse.

Administrative warehouses are used in situations such as the following:

- The warehouse is located at your site, but a supplier manages and possibly owns the inventory until you use the items.
- The warehouse is located at a customer's site. You own the inventory until the customer uses the items, but the customer manages the inventory.
- The warehouse is located at a subcontractor's site. You own the unfinished goods present in the warehouse, but the subcontractor manages the inventory.

Administrative warehouse is not one of the warehouse types that you can define in LN, setting up an administrative warehouse requires various parameter settings.

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

agreement group

A group of relations to which the same commission/rebate agreements are linked.

alternative items

Items that can serve as a substitute for the standard item if the standard item cannot be delivered or is being replaced.

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. 170)

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

See: *available-to-promise* (p. 171)

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.

available-to-promise

The item quantity that is still available to be promised to a customer.

In LN, available-to-promise (ATP) is part of a more extended framework of order promising techniques called capable-to-promise (CTP). If an item's ATP is insufficient, CTP goes beyond ATP in that it also considers the possibility of producing more than was initially planned.

In addition to the standard ATP functionality, LN also uses channel ATP. This term refers to the availability of an item for a certain sales channel, taking into account the sales limits for that channel.

For all other types of order promising functionality used in LN, the term CTP is used.

Acronym:

Abbreviation: ATP

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.

bill of material

A listing of all subassemblies, intermediates, parts, and raw materials that go into the parent assembly. The bill lists the quantity and costs of each component.

Synonym: BOM

BOM

See: *bill of material* (p. 172)

budget

A plan that includes the budgeted quantities and/or amounts by period for the sorts selected; the budgeted or expected sales or purchase figures.

Business Object Document (BOD)

An XML message used to exchange data between enterprises or enterprise applications. The BOD is composed of a noun, which identifies the message content, and a verb, which identifies the action to be taken with the document. The unique combination of the Noun and the Verb forms the name of the BOD. For example, noun ReceiveDelivery combined with verb Sync results in BOD SyncReceiveDelivery.

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.

business partner type

A way to group business partners with similar characteristics, for example, members of the EU, or subject to specific customs rules.

Note

A business-partner type is not the same as a business-partner role or financial business-partner group.

buydesign

BuyDesign is a third party configurator, that is integrated with LN to configure an item. The integration can be used only as part of the web user interface.

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 rate book

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

catalog

The highest level of a category structure. A catalog contains one or more categories, which contain items or subcategories. A catalog cannot be a member of another category.

category

A classification or division of items. The classification can be by form, fit, or function. Categories are used in catalogs. The highest level category is referred to as a catalog.

change order sequence number

A number that is used to assign the occurrence of changes to a purchase order or a sales order.

change reason

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

commission

The amount of money to be paid to an employee (sales representative) or buy-from business partner (agent) for closing a sales order.

commission/rebate group

A set of items that is grouped and then linked to an agreement.

commission agreement

A rate agreed to be paid as commission to an employee (sales representative) or buy-from business partner (agent) for the sale of a particular item (or item group).

competitor

A company that competes for the same sales orders. Generally, a competitor operates in the same market segment as your company.

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.

consigned

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

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

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

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

See also: ownership

Synonym: Pay on Use

consignment inventory

The goods owned by a third party and that are stored in a warehouse belonging to another party.

Two types of consignment inventory exist:

- **Owned consignment inventory**

Goods your company owns and stores in a customer's warehouse without receiving payment until the goods are used or sold. You do not register the goods as consignment inventory, because the goods are still part of your inventory.

- **Not-owned consignment inventory**

Goods a supplier owns, but that are stored in your warehouse without being paid for until the goods are used or sold. You register the goods as consignment inventory.

consumption

The issue from the warehouse of consigned items by or on behalf of the customer. The customer's purpose is to use these items for sale, production, and so on. After the items are issued, the customer becomes the owner of the items and the customer must pay the supplier.

contract price revision

A date-controlled agreement for price and discount elements on the contract line. Price revisions enable you to have several prices over time. An active revision is valid from its effective date up to the effective date of the next revision, or the expiry date of the contract line.

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.

cost item

An administrative item that is used to post extra costs to an order. Extra costs are, for example, accounting expenses, clearance charges, design costs, and freight expenses.

Cost items are not used for production and cannot be held in inventory. They are also referred to as expense items.

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 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. 173)

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.

customer furnished material

An item supplied by the customer being used as material in the production of an end-item for that same customer.

customer order number

The number the sold-to business partner assigned to the order. In the automotive industry, it can represent the sold-to business partner's purchase contract number.

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.

demand peg

A relationship between a planned order, or an actual supply order, and an item requirement that represents a definite commitment. LN cannot use the demand pegged supply for anything else than the pegged requirement, unless the peg is explicitly deleted.

- **Pegged supply**

The pegged supply can be a purchase order, a planned purchase order, a production order, a planned production order, a warehousing order with transaction type transfer, or a planned distribution order.

- **Pegged requirement**

The pegged requirement can be, among other things, a sales order line or a required component for a production order.

Related term: soft peg

dependent currency system

A currency system in which you can use multiple home currencies within a single company. For most entities, the financial company determines the local currency that is used. All transactions are registered in all the home currencies.

Currency rates are defined between the external currencies and the reference currency, and between the reference currency and the other home currencies. Transaction amounts are first converted into the reference currency and then the transaction amount in the reference currency is converted into the other home currencies.

See: standard currency system

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.

discount schedule

An entity in which you can store discount information that is valid for a given period of time and that is used to calculate discounts for an item.

A discount schedule includes the following elements:

- A discount schedule header, which contains the code, type, and use of the discount schedule.
- One or more discount schedule lines, which contain the discounts.

The discounts specified in a discount schedule are expressed as a percentage or an amount and are subject to a minimum or maximum quantity or value.

A discount schedule can be linked to a price book.

EDI messages

An electronic document (for example, an electronic order acknowledgment) that consists of an organization and a message.

Incoming and/or outgoing messages are processed in specific libraries invoked by EDI communication sessions (for example, in the Sales Control (SLS), Sales Invoicing (SLI), Accounts Payable (ACP), Cash Management (CMG), Purchase Control (PUR), Inventory Handling (INH), and Electronic Data Interchange (EDI) modules).

effectivity period

The period of time defined by the effective date and expiry date in which a record is valid.

effectivity unit

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

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.

enterprise unit

A financially independent part of your organization that consists of entities such as departments, work centers, warehouses, and projects. The enterprise unit's entities must all belong to the same logistic company, but a logistic company can contain multiple enterprise units. An enterprise unit is linked to a single financial company.

When you carry out logistic transactions between enterprise units, these are posted in the financial companies to which each enterprise unit is linked. You can define the relationships between the enterprise units, and thus the goods transfer that can take place between the enterprise units. To use invoicing and pricing between enterprise units, you must link the enterprise units to internal business partners.

You can use enterprise units to do separate financial accounting for parts of your business. For example, you can define enterprise units for separate parts of your organization that belong to one logistic company, but that are located in different countries. The accounting of each enterprise unit is performed in each country's national currency, and in the financial company linked to the enterprise unit.

exchange rate

The price at which one currency can be exchanged for another currency. In other words, the amount which one currency will buy another currency at a particular time.

forwarding agent

See: *carrier* (p. 174)

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.

goods transfer

The relationship that contains the information that is needed to transfer goods between two entities or between two enterprise units.

gross margin

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

hold reason

A reason for blocking a sales order or a sales order line, which can be:

- The open order balance exceeds the customer's credit limit.
- The customer has overdue invoices.
- The customer's status is doubtful.
- 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 EDI.
- The sales order has an invalid zip code.
- The sales order is entered by an inexperienced operator.
- The sales order line contains a blocked item.
- A promotion is linked to the sales order (line).
- A user-defined general reason.

An order can be held for more than one reason at any point in the sales order procedure. For example, an order can be blocked due to credit checking (the order balance exceeds the customers credit limit) at the same time as being blocked due to margin control (the gross margin of the order is exceeded).

independent currency system

A currency system in which all financial companies and logistic companies that are related to each other in the enterprise structure model use the same two or three home currencies. All transactions are registered in all the home currencies.

Currency rates are defined between the transaction currencies and all home currencies. Transaction amounts are converted directly from the transaction currency into the home currencies.

See: standard currency system

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.

inventory on hand

The physical quantity of goods in one or more warehouses (including the inventory on hold).

Synonym: on-hand inventory

invoice-to business partner

The business partner to which you send invoices. This usually represents a customer's accounts payable department. The definition includes the default currency and exchange rate, invoicing method and frequency, information about the customer's credit limit, the terms and method of payment, and the related pay-by business partner.

item

In LN, the raw materials, subassemblies, finished products, and tools that can be purchased, stored, manufactured, sold, and so on.

An item can also represent a set of items handled as one kit, or exist in multiple product variants.

You can also define nonphysical items, which are not held in inventory but can be used to post costs or to invoice services to customers. The following are examples of nonphysical items:

- Cost items (for example, electricity)
- Service items
- Subcontracting services
- List items (menus/options)

item order plan

A time-phased overview of your order planning.

The item order plan contains overview values for demand and forecast on one hand, and the other hand it provides information about scheduled receipts (actual orders) and planned supply (planned orders).

kit

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

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

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

- Purchased items
- Manufactured items

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

layout code

An identifying code and description of the layout properties of a report, such as paper size, font, range of data, column headings, and data.

level attribute

A data field whose information is updated and set aside for statistics overviews. It can be regarded as a pre-selection of statistics information, which can be fine-tuned later by means of sorts.

list group

A way to group list items. For example, you can use an SLS list group to group list items used on sales orders. A list item can belong to different list groups.

list item

A type of item that consists of multiple components. The components can also be managed and ordered separately. The type of list item (kit, menu, options, or accessories) indicates how the components are related.

List items are used to speed up the order-entry process. The order lines for a list item can contain main items or components.

list type

The way in which a list item can be defined.

logistic agreements

Conditions that must be formally agreed upon between a supplier and a customer regarding logistic data, such as schedule messages, frozen periods, authorizations, delivery patterns, carrier, and so on.

Logistics Service Provider (LSP)

See: *carrier* (p. 174)

Logistics Service Provider (LSP)

See: *carrier* (p. 174)

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.

lower cost or market value (LCMV)

A valuation method that compares the inventory value based on one of the inventory valuation methods (see below) with the inventory's market value. If the market value is lower, the entire inventory of a specific item is valued in the balance sheet using the market value.

The following inventory valuation methods can be used to determine the inventory value:

- **Fixed Transfer Price (FTP)**
- **Mov. Aver. Unit Cost (MAUC)**
- **First In First Out (FIFO)**
- **Last In First Out (LIFO)**
- **Lot Price (Lot)**
- **Serial Price (Serial)**

margin

The percentage that the net sales price is allowed to deviate from the target price.

margin control

The sales submodule that controls whether the sales order or quotation price of an item differs too much from the specified target price. The percentage that the net sales price is allowed to deviate from the target price is known as the allowed margin.

matrix attributes

A list of elements used to define a price, discount, promotion, or freight rate. The group of matrix attributes is identified by a matrix definition and type.

Imagine you are a furniture vendor and you decide to maintain your sales prices based on two elements:

- The specific item you sell.
- The way to handle payments.

In this case, the matrix type is **Sales Price**, the matrix definition is Furni (this name is user-definable), and the matrix attributes are **Item** and **Payment Method**.

In the Pricing matrix, you specify the values for the matrix attributes.

matrix definition

Defines the group of elements (matrix attributes) that a Pricing matrix uses to determine a price, discount, promotion, or freight rate.

Imagine you are a furniture vendor and you decide to maintain your sales prices based on two elements:

- The specific item you sell.
- The way to handle payments.

In this case, the matrix type is **Sales Price**, the matrix definition is Furni (this name is user-definable), and the matrix attributes are **Item** and **Payment Method**.

matrix priority

For a matrix type, the order in which matrix definitions are searched for.

menu

A type of item that consists of a group of items with similar characteristics that are classified under one generic item to facilitate order entry. The items in the group can be selected separately.

Example

A monitor, a computer mouse and a CD player are defined as related items used to configure a personal computer. But, you can also select a computer mouse as a separate item.

normal contract

A customer-oriented contract, agreed upon by suppliers and customers, that is used to record specific agreements. A normal contract is usually valid for approximately one year.

A normal contract cannot be activated if another active contract exists for the same business partner in a specific period.

on-hand inventory

See: *inventory on hand* (p. 182)

option

A generic item type that differs from other similar items by one or two features. For example, a group of chairs with similar main characteristics can differ in size and color.

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 lead time

The production time of an item expressed in hours or days, based on the lead time elements as defined in the routing operations.

order policy

The order parameter that controls the way an item is produced or ordered.

This can be:

- Anonymous, the item is produced or purchased independent of customer orders.
- To order, the item is produced or purchased only if customer orders exist for the item.

order priority simulations

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

over-delivery

A positive deviation from the original ordered quantity.

overdue invoice

The invoice that has been left unpaid too long.

packaging item

The containers or supports that are used to hold and move goods within manufacturing, distribution processes, and, specifically, within the warehouse. For example: boxes, pallets.

packing slip

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

Pay on Use

See: *consigned* (p. 175)

peg

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

period

Periods divide a year into regular intervals, such as weeks, months, or quarters, that can be used for statistical, hours accounting, planning, and cost controlling purposes.

period table

A table that consists of any number of time units, for example, months or weeks.

A period is used to define the time horizon during which, for example, a schedule is valid.

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 inventory transactions

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

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.

price book

An entity in which you can store price information that is valid for a given period of time.

A price book includes the following elements:

- A price book header, which contains the code, type, and use of the price book.
- One or more price book lines, which contain the items.

A quantity or value break discount schedule can be linked to a price book.

product structure

The sequence of steps by which components are put together to form subassemblies, until the finished product is produced.

The product structure is defined by a multilevel bill of materials, sometimes in combination with routing data.

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.

project structure

The project structure indicates the subprojects that belong to the main project. Project structures are especially important where there are extensive projects in an engineer-to-order situation.

Project structures can be important for network planning. This is because the start dates and finish dates of subprojects can depend on the computed start dates and finish dates of the main project's activities.

The costs of subprojects are aggregated to the relevant main project in the project calculation.

The project structure only applies to a project with a type other than **Budget**.

You can only delete a project structure if the main project has the **Free** or **Archived** status.

promising status

A status that informs you about whether a sales quotation line, sales order line, or sales component line can be promised to a customer, or whether inventory checks must still be carried out or insufficient inventory situations must still be resolved for the line.

promotion

The application of an additional discount, value off, or premium to a sales order based on predefined order levels of selected items. Two basic types of promotions exist: order level and line level.

promotional contract

A type of special contract that applies to each sold-to business partner. As a result, the sold-to business partner is not entered in the contract.

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.

purchase payable receipt

Indicates when billing is applicable for purchased goods and contains the payable and invoicing details for an order or schedule. By means of purchase payable receipts, updates to and from the Accounts Payable module are handled.

If the payment for the purchased goods is set to **Pay on Use**, the payable receipt is generated when inventory related to a purchase order or a purchase schedule is consumed, that is, issued from the warehouse. If the payment is set to **Pay on Receipt**, the payable receipt is generated the moment the purchased goods are received.

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.

rate determiner

The method to decide which date is used to determine the exchange rates.

During the composing process, all amounts in foreign currencies are converted to the home currency, based on the determined exchange rate.

rebate

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

rebate agreement

An agreement on the bonus (discount) to be paid to a customer for the sale of a particular item (or item group).

relation

A shortened term for trade relation. Relation is a collective term for an employee or buy-from business partner that is entitled to a commission, and a sold-to business partner entitled to a rebate. Relations can be grouped in a relation team for the purpose of assigning the same agreement structure.

relation team

A function used to group relations so that multiple relations can be linked to a sales order. As a result, the appropriate relations will be rewarded for the sales activities that concern a specific sales order.

request for quotation (RFQ)

A purchasing document that is used as a request to bidders to submit their terms, such as price, discount, delivery time, and payment terms for delivering a (quantity of a) product.

You can send the RFQ to several bidders. The bidders can submit RFQ responses for the specified items.

You can record the responses, negotiate, and compare the prices and discounts that are offered by different bidders.

An accepted response can be copied to a contract, an order, or a price book.

retroactive billing

See: *retrobilling* (p. 191)

retrobilling

To re-invoice previously shipped items using a price based on a new contract negotiation. Retrobilling can also be performed on individual sales orders/schedules that are not related to a contract.

Synonym: retroactive billing

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 contract

Sales contracts are used to register agreements about the delivery of goods with a sold-to business partner .

A contract is comprised of the following:

- A sales contract header with general business partner data, and optionally, a linked terms and conditions agreement.
- One or more sales contract lines with price/discount agreements and quantity information that apply to an item or price group.

sales office

A department that is identified in the company business model to manage the business partner's sales relations. The sales office is used to identify the locations that are responsible for the organization's sales activities.

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.

sales schedule

A timetable of planned supply of materials. Sales schedules support long-term sales with frequent deliveries. All requirements for the same item, sold-to business partner, ship-to business partner, and delivery parameter are stored in the same sales schedule.

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).

single currency system

A currency system in which a company uses only one home currency.

See: standard currency system

sold-to business partner

Usually a customer's purchase department, the business partner who orders goods or services from your organization, that owns the configurations you maintain, or for whom you perform a project.

The agreement with the sold-to business partner can include the following:

- Default price and discount agreements
- Sales order defaults
- Delivery terms
- The related ship-to and invoice-to business partner

sort code

An identifying code and description of a set of data fields grouped in a sequence. These data fields are used in statistics reports and displays. When a report or display is generated, the fields are filled with data from the database and displayed in the report or display according to the sequence defined in the sort code.

special contract

A customer-oriented contract, agreed upon by buy-from business partners and sold-to business partners that is used to record specific agreements for specific projects. A special contract can also be a promotional contract.

For special contracts, an overlap in effectiveness periods is allowed for the same item/business partner combination.

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**

subcontracting

Hiring certain services from another party, for example the execution of a part of a project or an operation of a production order.

Subcontracting is considered as purchasing a subcontracting service.

subcontracting purchase order

In LN, subcontracting is considered as purchasing a service from a subcontractor. Therefore, when subcontracting, a subcontracting purchase order is generated to record the subcontracted operation(s) and the associated costs.

success percentage

A percentage associated with a quotation that represents the probability of the business partner accepting the quotation. Acceptance results in the conversion of the quotation into a sales 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.

terms and conditions agreement

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

The agreement includes the following:

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

terms of payment

The average number of days from the date on which goods or services are ordered and the date on which they are paid.

triangular invoicing

The generation of internal financial settlements if goods and the invoice for the goods are sent by or received by different entities. The entities can be departments, warehouses, and internal or external business partners. LN automatically generates the internal invoices or the settlement between the entities in the financial companies that are involved.

upgrade price

A price that is defined for a requirement in Unit Effectivity (UEF). If the requirement is used in an effectivity unit's configuration, the upgrade price is added to the effectivity unit's sales price.

user profile (sales)

The default data that is recorded by the user and influences the creation of sales quotations, sales contracts, sales orders, and sales schedules. This data determines the method of order entry, default values during order input, and so on.

user profiles (purchase)

The default data that is recorded by the user and influences the creation of purchase requisitions, requests-for-quotation, purchase contracts, purchase orders, purchase schedules, purchase releases, call-offs, and approval rules. This data determines the method of order entry, default values during order input, and so on.

vendor managed inventory (VMI)

An inventory management method according to which the supplier usually manages the inventory of his customer or subcontractor. Sometimes, the supplier manages the supply planning as well.

Alternatively, the customer manages the inventory but the supplier is responsible for supply planning. Inventory management or inventory planning can also be subcontracted to a logistics service provider (LSP).

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

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

VMI warehouse

A warehouse for which the supplier of the stored goods performs one or both of the following tasks: manage the warehouse, including activities surrounding inbound and outbound processes, or plan the supply of the goods in the warehouse. The supplier may also be the owner of the inventory in the warehouse. The warehouse is usually located at the customer's premises.

warehouse

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

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.

Index

- account manager, 169
- Acknowledgement code**, 44
- activity, 169
- Activity**, 30
- additional cost line, 169
- additional costs, 169
- additional cost scenario**, 169
- additional cost set, 169
- Additional costs**, 69
 - order based, 48
 - setup, 46
 - shipment based, 50
- administrative warehouse**, 170
- advance shipping notice**, 170
- agreement group, 170
- Alternative item**, 21, 74
- alternative items, 170
- Alternative items**
 - item replacement, 20
- appropriate menu**, 170
- ASN**, 170
- assembly item**, 171
- assembly order**, 171
- ATP**, 72, 171
- ATP/CTP horizon**, 171
- availability type**, 171
- available-to-promise**, 171
- Available-to-promise (ATP)**, 72
- backorder, 172
- Backorder**, 72
- Back order, 97
- billing request**, 172
- billing request set**, 172
- bill of material**, 172
- Blocking**
 - sales orders, 69
- BOM**, 172
- budget**, 172
- Budget**, 163
- Business Object Document (BOD)**, 172
- business partner**, 173
- business partner type**, 173
- buydesign**, 173
- capable-to-promise**, 173
- Capable-to-promise (CTP)**, 72
- carrier**, 174, 174
- carrier rate book**, 174
- catalog**, 174
- Catalog**, 42, 57
- category**, 174
- Change code**, 44
- change order sequence number**, 174
- change reason**, 174
- Change reason**, 44
- change type**, 174
- Change type**, 44
- Changing sales data**
 - Invoicing, 94
- client rate book**, 174
- commission**, 175
- commission/rebate group**, 175
- commission agreement**, 175
- Commission**
 - agreement selection, 144
 - calculating, 146
 - calculation examples, 152
 - history, 161
 - overview, 143
 - paying to employees, 150
 - reserving, 148
- competitor**, 175
- component**, 175
- Component**, 73
- configurable item**, 175
- consigned**, 175
- Consignment**, 74, 137

consignment inventory, 176
Consignment payment, 137
Consignment replenishment, 137
consumption, 176
Consumption
 inventory, 131
 supplier's system, 131
contract price revision, 176
copy exception, 176
Copy template, 74
Copy templates, 109
cost item, 176
credit limit, 176
credit review period, 177
cross-docking, 177
Cross-docking, 75
Cross-docking order, 69
CTP, 72, 173
currency system, 39
customer approval, 177
Customer approval, 31
customer furnished material, 177
Customer furnished materials, 74
 Sales and Procurement, 91
customer order number, 178
customized item, 178
default supply source, 178
Delivered goods
 approving, 31
Delivery scheme, 118, 118
Delivery
 splitting, 69
delivery terms, 178
demand peg, 178
Demand pegging, 71
dependent currency system, 179
direct delivery, 39, 179
Direct delivery, 70, 81
 sales order, 70, 78
 service order, 70
Direct delivery sales order, 81
discount schedule, 179
EDI messages, 180
effectivity period, 180
effectivity unit, 180
electronic data interchange (EDI), 180
enterprise unit, 180
exchange rate, 180

Flexible sales order processing, 34
forwarding agent, 174
Freight Management, 81, 81, 84
freight order, 181
Freight order, 70
General sales data, 44
generic item, 181
Goods approval, 31
goods transfer, 181
gross margin, 181
History
 sales orders/schedules, 92
Hold back quantity, 98
hold reason, 182
Hold reason, 45
independent currency system, 182
installation group, 182
installment, 182
Installment, 101
Installment line, 101
Installment order, 73
Integration freight management, 81
Inventory check
 time-phased, 19
Inventory
 consumption, 131
inventory on hand, 182
inventory shortage
 handling, 14
invoice-to business partner, 183
Invoicing
 changing sales data, 94
item, 183
item order plan, 183
Item replacement, 20
kit, 183
layout code, 183
level attribute, 184
List component, 22
list group, 184
List group, 22
list item, 184
List item, 22
list items in the product catalog, 44
list type, 184
logistic agreements, 184
Logistics Service Provider (LSP), 174, 174
lot and serial set, 184

lower cost or market value (LCMV), 185
margin, 185
margin control, 185
Margin control
 example, 128
 overview, 125
 types, 126
 using, 127
matrix attributes, 185
matrix definition, 185
matrix priority, 186
menu, 186
multisite invoice, 39
normal contract, 186
on-hand inventory, 182
option, 186
order acknowledgment, 186
order balance, 186
Order blocking, 45, 105
order lead time, 186
order policy, 187
Order priority
 simulating, 108
Order priority simulation, 46
order priority simulations, 187
Orders
 changing/acknowledging, 53
over-delivery, 187
Over-delivery, 13
overdue invoice, 187
packaging item, 187
packing slip, 187
Pay on Use, 175
peg, 187
period, 187
period table, 188
plan item, 188
planned inventory transactions, 188
planned warehouse order, 188
price book, 188
Priority simulation, 46, 75
Product catalog, 42
product structure, 189
Product variant, 70
product variant, 189
 Sales, 23
Project pegging, 74
project structure, 189
promising status, 189
promotion, 189
Promotion, 73
promotional contract, 190
purchase order advice, 190
Purchase orders
 changing/acknowledging, 53
purchase order type, 190
purchase payable receipt, 190
quotation lines, 190
rate determiner, 39, 190
rebate, 190
rebate agreement, 190
Rebate
 agreement selection, 144
 calculating, 146
 calculation examples, 152
 history, 161
 overview, 143
 reserving, 148
relation, 191
relation team, 191
request for quotation (RFQ), 191
retroactive billing, 191
Retroactive billing, 141
retrobilling, 191
Retrobilling, 141
return order, 191
Return order, 73, 89
rush order, 191
Rush order, 71, 88
Sales, 11
 integration with freight management, 81
Sales contract, 118, 120
 copying, 122
sales contract, 192
 additional processes, 114
Sales contract delivery line, 118, 118
Sales contracts, 113
 evaluating, 123
 retrieving, 114, 116
 specifying, 114, 114
Sales Control
 integration with freight invoicing, 84
Sales data
 changing after release to invoicing, 69
Sales item data, 13
Sales item

- creating sales data, 13
- defaults, 13
- defining, 13
- defining business partner data, 14
- Sales master data**
 - general sales data, 44
 - sales item data, 13
 - sales organizational data, 30
- sales office**, 192
- Sales office**, 31
- sales order**, 53, 192
- Sales order/schedule history**, 92
- Sales order**
 - additional costs, 69
 - additional processes, 68
 - allocation, 71
 - blocking, 69, 105
 - flexible processing, 34
 - handling, 65
 - handling back orders, 97
 - linking freight orders, 70
 - overview, 65
 - priorities, 108
 - procedure, 66
 - returning, 89
 - rushing, 88
 - unblocking, 69
- sales order installment**, 192
- sales order lines**, 192
- Sales orders**
 - changing/acknowledging, 53
- sales order type**, 192
- Sales order type**
 - activities, 30
 - defining, 30
- Sales organizational data**, 30
- sales price**, 193
- Sales quotation**
 - master data, 61
 - status, 63
- Sales quotation procedure**, 62
- sales quotations**, 193
- Sales return order**, 89
- sales schedule**, 193
- Sales schedule**, 120
- Scheduled requirement**, 118, 118, 120
- serialized item**, 193
- Settlement**, 101
