

## Infor LN Procurement User Guide for Purchase Master Data

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## About this document

This document describes the process to set up the master data in Procurement, which includes the definition of the purchase item data and the related organizational and general data.

## Assumed knowledge

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

#### References

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

- User Guide for Purchase and Sales Schedules U9541 US
- User Guide for Product Catalogs U9815 US
- User Guide for Landed Costs U9675 US
- User Guide for Purchase Requisitions U9820 US
- User Guide for Requests for Quotation (RFQs) U9821 US
- User Guide for Purchase Orders U9824 US
- User Guide for Purchase Contracts U9822 US
- User Guide for Purchase Vendor Rating U9823 US
- User Guide for Statistics U9816 US
- User Guide for Subcontracting U9361 US
- User Guide for Budget Control U9655 US
- User Guide for Pricing U9179 US
- User Guide for Material Pricing U9865 US

#### How to read this document

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## **Procurement**

You use Procurement to manage purchase activities and maintain the data that is the result of these activities.

The procurement functionality includes several functional procedures that (partly) control the purchase of goods. The main purchase procedure is the <u>purchase order</u> procedure. In most cases, the purchase order procedure does not act as a stand-alone procedure, but is preceded and followed by other procedures.

These procedures (can) precede the purchase order procedure:

- Purchase requisition procedure
- Request for quotation (RFQ) procedure
- Purchase contract procedure

The <u>purchase schedule</u> procedure runs parallel to the purchase order procedure.

The <u>vendor rating</u> procedure follows the purchase order procedure.

Procurement includes this main data:

- Purchase master data
- Purchase requisitions
- Purchase request for quotations
- Purchase orders
- Purchase contracts
- Purchase schedules
- Purchase vendor rating
- Retrobilling
- Statistics
- Procurement parameters

## Item purchase data

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

# Specifying item purchase data and default item purchase data for an item group

Before order transactions can be used in Procurement, purchase-specific item data must be specified in the Item - Purchase (tdipu0601m000) session. To enter a purchased item, you must specify a large amount of information. If you set up defaults, you can reduce the amount of data that you must specify when you add a purchased item. The <u>item group</u> is used in combination with the <u>item type</u> to set up item defaults. You can specify defaults for purchased items that belong to an item group in the Items - Purchase Defaults (tdipu0102m000) session.

To specify item purchase defaults and purchased items:

- 1. Specify an item group in the Item Groups (tcmcs0123m000) session.
- 2. Specify default global item data in the Item Defaults (tcibd0102m000) session, in which you must enter the **Item Group** that you previously defined in the Item Groups (tcmcs0123m000) session.
- 3. Click **Purchase** in the Item Defaults (tcibd0102m000) session. The Items Purchase Defaults (tdipu0102m000) session starts in which you can specify item-purchase defaults for the combination of **Item Type** and **Item Group**.
- **4.** Specify an item in the Items (tcibd0501m000) session for the combination of **Item Type** and **Item Group** that you previously defined in the Item Defaults (tcibd0102m000) session. As a result, the default values from the Item Defaults (tcibd0102m000) session are inserted in the Items (tcibd0501m000) session.
- 5. Click **Purchase** in the Items (tcibd0501m000) session. The Items Purchase (tdipu0101m000) session starts in which you can enter the purchase data for the item that you created in the Items (tcibd0501m000) session. The default values from the Items Purchase Defaults (tdipu0102m000) session are inserted in the Items Purchase (tdipu0101m000) session.

#### Note

- If you use <u>multisite</u>, you can specify item purchase data by purchase office or site. Specify the <u>sites</u> and <u>purchase offices</u> on the appropriate tabs of the Item Purchase Defaults (tdipu0602m000) and Item Purchase (tdipu0601m000) sessions.
- To generate transactions for the purchased item, ordering-related item data must be specified in the Item Ordering (tcibd2100m000) session and costing-related item data must be calculated in the Item Costing (ticpr0107m000) session.

## Purchased Item 360

If the **Buyer** field is filled in the Items - Purchase (tdipu0101m000) session, you can use the Purchased Item 360 (tdipu0103m000) session to display all items that are relevant for the specific <u>buyer</u>. The Purchased Item 360 (tdipu0103m000) session gives a quick overview of item data and easy access to item- and purchase-related data.

You can use the Purchased Item 360 (tdipu0103m000) session to:

- View, maintain, and create item-related data.
- View, maintain, and create purchase data for an item, such as purchase orders, purchase contracts, requests for quotation, purchase schedules, etc.
- Easily perform multiple item-related tasks.
- View several item-related graphs. See Purchased item graphs (p. 55).

## Specifying item - purchase business partner data

Use the Items - Purchase Business Partner (tdipu0110m000) session to specify purchase business partner-specific information by item. This information is used to determine how the order is purchased and received from a purchase business partner. The Items - Purchase Business Partner (tdipu0110m000) session contains the default logistic data of a purchase business partner that is required for a purchase order. If the purchase business partner is an internal business partner, the Items - Purchase Business Partner (tdipu0110m000) session also contains the default logistic data for purchase schedules and purchase releases. If the purchase business partner is an external business partner, the logistic data for the purchase schedule or the purchase release is retrieved from the Purchase Contract Line Logistic Data (tdpur3102m000) session.

## Supplier 360

You can use the Supplier 360 (tdsmi1501m000) session to view, maintain, and create buy-from business partner-related data and display all business partners that are relevant for a specific <u>buyer</u>. The Supplier 360 (tdsmi1501m000) session provides an overview of buy-from business partner information and easy access to buy-from business partner-related data.

## Sourcing

If the same item is delivered by various business partners, you can assign a <u>priority</u> and a <u>sourcing</u> <u>percentage</u> to business partners in the Items - Purchase Business Partner (tdipu0110m000) session. For more information, refer to *Sourcing* (p. 23).

## Approved supplier list

You can use the Approved Supplier List (tdipu0110m200) session to view the approved supplier list.

The **Only Source from Approved Suppliers** check box in the Item - Purchase (tdipu0601m000) session determines which suppliers are approved to deliver the item.

## Calculating lead times and dates

## Calculating purchase item lead times

You can specify and calculate several lead times for a combination of purchased item and business partner.

In the Items - Purchase Business Partner (tdipu0110m000) and Purchase Contract Line Logistic Data (tdpur3102m000) sessions:

- The calculated lead time is displayed in the Calculated Lead Time (Days) field.
- The calculated full lead time is displayed in the Calculated Full Lead Time (Days) field.

## **Note**

Each time you open or close the Items - Purchase Business Partner (tdipu0110m000) or Purchase Contract Line Logistic Data (tdpur3102m000) sessions, LN (re)calculates the lead times.

## Calculating the (full) lead time

### 1. Calculating the average available hours for a day

To calculate the (full) lead time, LN first determines the average number of available hours for each working day based on the <u>workweek</u> for the <u>availability type</u>, which is specified in the **Default Availability Type** field of the Procurement Parameters (tdpur0100m000) session.

To calculate the average available hours for each available day, LN:

- **a.** Determines the available hours for each available day, based on the start time and end time
- **b.** Calculates the total available hours in a week by adding up the available hours for each day.
- **c.** Divides the total available hours in a week by the number of available days in a week. This results in the average available hours for each available day.

## 2. Calculating the lead time in hours

Using the average available hours for each available day, LN converts the lead time components to hours and calculates the lead time by adding up the following lead time components from the Items - Purchase Business Partner (tdipu0110m000)/ Purchase Contract Line Logistic Data (tdpur3102m000) sessions:

- Internal processing time
- Safety time
- Supply time or full supply time
- Transportation Time (Days).

The calculation of the transportation time is based on the implementation of Freight, which you can define in the Implemented Software Components (tccom0500m000) session. If Freight is not implemented, LN takes the transportation time between the ship-from business partner's address and the receiving warehouse's address based on a relevant distance table (if available) from the Distance Table by City (tccom4137s000) or Distance Table by ZIP Code/Postal Code (tccom4138s000) sessions. From which of these sessions the transportation time is retrieved, depends on the value of the **Usage Distance Tables** field in the COM Parameters (tccom0000s000) session.

If Freight is implemented, calculation of the transportation time is based on <u>carrier</u>, and <u>routes</u>. Route plans and <u>service levels</u> are not known at this point in time. To retrieve the transportation time:

- **a.** If the route, the carrier, the origin, and the destination addresses are known, LN first searches for <u>route plans</u> and then for <u>standard routes</u> with matching routes, carriers, and addresses.
- **b.** If more than one matching route plan or standard route is found, LN selects the route plan or standard route with a <u>transport means group</u> that matches the transport means group of the carrier.
- c. If LN still finds more than one route plan or standard route, route plans have priority over standard routes. If only standard routes are found, the standard route is selected following the settings of the Carrier/LSP Selection Criterion parameter in the Freight Planning Parameters (fmlbd0100m000) session.
- **d.** If LN still finds more than one route plan, it selects the first one it encounters in the database.

## 3. Calculating the lead time in days

Using the average available hours for each available day, LN converts the calculated lead time from hours into days. If a fraction of a day is left, LN rounds this to a whole day. This results in a calculated lead time that is always expressed in whole days.

Example- purchase availability type

The purchase availability type is PURAT. The workweek for availability type PURAT is as follows:

Day	Available	Start time	End time	Available hours
Monday	Yes	8:30:00	16:30:00	8
Tuesday	Yes	8:00:00	16:00:00	8
Wednesday	Yes	9:00:00	16:30:00	7.5
Thursday	Yes	8:00:00	16:30:00	8.5
Friday	Yes	8:00:00	16:00:00	8

Based on the above workweek, a total of 40 hours is available for each week. For each available day, on average eight hours are available, which equates to 40 available hours for each week/five available days for each week.

Using the average of eight available hours for each available day, LN converts the following lead time components into lead times that are expressed in hours.

Lead time compone	nt Lead time	Lead time in hours
Internal processing tir	ne 6 hours	6 hours
Safety time	6 hours	6 hours
(Full) supply time	1 day	8 hours

Example- availability type for carrying goods

The **Transportation Time (Days)** is calculated using the **Availability Type for Carrying Goods**, as specified in the COM Parameters (tccom0000s000) session, instead of the purchase availability type.

The **Availability Type for Carrying Goods** is EXPO. The workweek for availability type EXPO is as follows:

Day	Available	Start time	End time	Available hours
Monday	Yes	8:00:00	17:00:00	9
Tuesday	Yes	8:00:00	17:00:00	9
Wednesday	Yes	9:00:00	17:30:00	8,5
Thursday	Yes	8:00:00	17:30:00	9.5
Friday	Yes	8:00:00	17:00:00	9

Based on the above workweek, a total of 45 hours is available for each week. For each available day, on average nine hours are available, which equates to 45 available hours for each week/five available days for each week.

Using the average of nine available hours for each available day, LN converts the **Transportation Time** (**Days**) into a lead time that is expressed in hours.

Lead time component Lead time		Lead time in hours	
Transportation time	2 days	18 hours	

## Example- calculated lead time

The sum of the Internal Processing Time, Safety Time, and Supply Time is 20 hours. Which is, when converted to days, 2.5 days which equates to a total lead time of 20 hours/eight hours on average available for each available day. Because the calculated lead time is always expressed in whole days, LN rounds the lead time to 3 days. The Transportation Time (Days) is 18 hours. Which is, when converted to days, 2 days which equates to a total lead time of 18 hours/nine hours on average available for each available day. As a result, the Calculated Lead Time (Days) is 5.

## Determining the planned receipt date

When you specify a purchase order line or purchase schedule line, you must also calculate a planned receipt date. The planned receipt date is calculated based on the order or generation date, the item lead times, and the horizon. Depending on the horizon, the planned receipt date can be accurately or globally determined.

## Determining the horizon

LN determines the horizon by adding the lead time horizon to the current date and time taking into account the company calendar to which the purchase <u>availability type</u> is linked. LN compares the order/generation date with this horizon, which results in one of the following possibilities:

- The order/generation date lies beyond the horizon. Therefore, the planned receipt date is globally determined.
- The order/generation date lies within the horizon. Therefore, the planned receipt date is accurately determined.

## Note

- You can specify item lead times in the Items Purchase Business Partner (tdipu0110m000) and Purchase Contract Line Logistic Data (tdpur3102m000) sessions.
- The horizon is calculated from the Lead Time Horizon (Days) field in the Items Purchase Business Partner (tdipu0110m000) or Purchase Contract Line Logistic Data (tdpur3102m000) sessions.
- You can express the lead time components in hours and in days, but the lead time horizon is always expressed in days.
- You can specify the purchase availability type in the Procurement Parameters (tdpur0100m000) session.
- You can specify the availability type for carrying goods in the Availability Type for Carrying Goods field in the COM Parameters (tccom0000s000) session.
- The company calendar is the calendar that is linked to the company in the Companies (tcemm1170m000) session.
- Before the company calendar's start date and after the company calendar's end date, LN uses the workweek.
- If no data is available for the item in the Items Purchase Business Partner (tdipu0110m000) session, LN determines the planned receipt date using only the supply time from the Items Purchase (tdipu0101m000) session. For more information, refer to *Determining the planned receipt date based on the supply time only (p. 21)*.
- To calculate the planned receipt date, click **Calculate** in the Purchase Order Lines (tdpur4101m000) session or Purchase Schedule Lines (tdpur3111m000) sessions. The planned receipt date is displayed in the **Planned Receipt Date** field of these sessions.

## Example horizon determination

Current date/time: Wednesday, March 10/15:00:00

The company calendar for the Purchase Control availability type has an 8:00:00 start time and a 16:00:00 end time and is available from Monday through Friday each week

Lead time horizon (in days): 10

Because on Wednesday one hour is available, Wednesday counts for a whole day. So during the first week, three days are available. During the next week, five days are available. So, two days are left for the third week. Because LN finds time available on Tuesday, March 23, this day counts for a whole day and LN takes the last available time as the horizon time. So, the horizon is Tuesday, March 23/16:00:00.

Order/generation date beyond horizon

If the order date lies beyond the horizon, LN considers the purchase order/schedule as forecast demand for which no accurate determination of the planned receipt date is yet required.

LN determines the planned receipt date as follows, taking into account the company calendar:

Order/generation date + calculated lead time

LN retrieves the calculated lead time from the **Calculated Lead Time (Days)** field of the Items - Purchase Business Partner (tdipu0110m000) or Purchase Contract Line Logistic Data (tdpur3102m000) session.

Example order/generation date beyond horizon

Order/generation date: Thursday, March 25/17:00:00

Calculated lead time (in days): 5

The company calendar for the purchase availability type has an 8:00:00 start time and a 16:00:00 end time and is available from Monday through Friday each week.

Because Thursday, March 25/17:00:00, is not an available date/time according to the calendar, LN searches for the first available date/time to which the calculated lead time must be added, which is Friday, 26/8:00:00. So, four days are left for the next week. Because LN finds time available on the fourth day, Thursday, April 1, this day counts for a whole day and LN takes the last available time as the planned receipt date. So, the planned receipt date is Thursday, April 1/16:00:00.

Order/generation date within horizon

If the order/generation date lies within the horizon, LN considers the purchase order/schedule as immediate demand for which an accurate determination of the planned receipt date is required. Therefore, LN determines the planned receipt date by adding up the lead time components, taking into account the related <u>calendars</u> for each component.

LN determines the planned receipt date as follows:

Order/generation date + internal processing time + supply time + transportation time + safety time.

LN retrieves the order/generation date and the lead time components as follows:

- Order date from the Order Date field in the Purchase Order Lines (tdpur4101m000) session.
- Generation date from the Generation Date field in the Purchase Schedules (tdpur3110m000) session.
- <u>Internal processing time</u> from the **Internal Processing Time** field in the Items Purchase Business Partner (tdipu0110m000) session or Purchase Contract Line Logistic Data (tdpur3102m000) session.
- <u>Safety time</u> from the **Safety Time** field in the Items Purchase Business Partner (tdipu0110m000) session or Purchase Contract Line Logistic Data (tdpur3102m000) session.
- <u>Supply time</u> from the **Supply Time** field in the Items Purchase Business Partner (tdipu0110m000) session or Purchase Contract Line Logistic Data (tdpur3102m000) session.
- Transportation time from the Transportation Time (Days) field in the Items Purchase Business Partner (tdipu0110m000) session or Purchase Contract Line Logistic Data (tdpur3102m000) session.

## Calendar search path

When determining the planned receipt date, LN considers and searches for the <u>calendars</u> that are related to the lead time components as follows:

#### 1. Internal processing time

If a purchase office is specified for the item and buy-from business partner combination and a calendar is specified for the <u>purchase office</u>, LN takes into account the purchase office's calendar. You can specify the purchase office's calendar in the Departments (tcmcs0565m000) session.

2. If no calendar is specified for the purchase office or if no purchase office is specified, LN takes into account the company calendar.

## 3. Supply time

If a ship-from business partner is specified and the ship-from business partner's calendar is specified, LN takes into account the ship-from business partner's calendar.

- **4.** If no ship-from business partner calendar is available, LN takes into account the buy-from business partner's calendar.
- If no buy-from business partner calendar is available, LN takes into account the company calendar.

## 6. Transportation time

If a carrier is specified and a buy-from business partner is linked to the carrier and the buy-from business partner's calendar is known, LN takes into account the buy-from business partner's calendar.

7. If a carrier is specified, and a buy-from business partner is linked to the carrier, but the buy-from business partner's calendar is not specified, LN takes into account the company calendar.

- **8.** If a carrier is specified, but no buy-from business partner is linked to the carrier, LN takes into account the company calendar.
- **9.** If no carrier is specified, LN takes into account the company calendar.

### 10. Safety time

If a ship-from business partner is specified and the ship-from business partner's calendar is specified, LN takes into account the ship-from business partner's calendar.

- **11.** If no ship-from business partner calendar is available, LN takes into account the buy-from business partner's calendar.
- **12.** If no buy-from business partner calendar is available, LN takes into account the company calendar.

#### Note

LN searches for the actual calendars based on:

- The calendar that is related to the lead time component.
- The purchase <u>availability type</u>.
- The availability type for carrying goods.
- The calendar's start date and end date.

Example order/generation date within or before horizon

Order/generation date:	Friday, March 12/7:00:00
Internal processing time (in hours)	): 6
Supply time (in days):	1
Transportation time (in days):	2
Safety time (in hours):	4

The company calendar for the purchase availability type and for the **Availability Type for Carrying Goods** has an 8:00:00 start time and a 16:00:00 end time and is available from Monday through Friday each week. The buy-from business partner's calendar for the purchase availability type and for the **Availability Type for Carrying Goods** has an 8:30:00 start time and a 16:30:00 end time and is available from Monday through Friday each week. The ship-from business partner's calendar for the purchase availability type has a 9:00:00 start time and a 17:00:00 end time and is available from Monday through Friday each week.

LN determines the planned receipt date as follows:

1. LN adds the internal processing time to the order/generation date, taking into account the company calendar. Because Friday, March 12/7:00:00, is not an available date/time according

- to the company calendar, LN searches for the first available date/time to which the internal processing time must be added, which is Friday, March 12/8:00:00.
- **2.** LN adds the internal processing time to Friday, March 12/8:00:00. The resulting date/time is Friday, March 12/14:00:00.
- 3. LN adds the supply time to Friday, March 12/14:00:00, taking into account the company calendar. According to the company calendar on Friday, March 12, two hours are left. Because the supply time is expressed in days, LN considers Friday, March 12, as a whole day. So, the resulting date/time is Friday, March 12/16:00:00.
- **4.** LN adds the transportation time to Friday, March 12/16:00:00, taking into account the buy-from business partner's calendar. According to the buy-from business partner's calendar on Friday, March 12, half an hour is left. Because the transportation time is expressed in days, LN considers Friday, March 12, as a whole day. The second transportation day is the first available day after Friday, March 12, which is Monday, March 15. So, the resulting date/time is Monday, March 15/16:30:00.
- **5.** LN adds the safety time to Monday, March 15/16:30:00, taking into account the ship-from business partner's calendar. According to the ship-from business partner's calendar, on Monday, March 15, half an hour is left. The remaining 3,5 hours is added to Tuesday, March 16, starting at 9:00:00. So, the resulting date/time is Tuesday, March 16/12:30:00, which is the planned receipt date.

## Determining the planned receipt date based on the supply time only

When you specify a purchase order line and no data is available for the item in the Items - Purchase Business Partner (tdipu0110m000) session, LN determines the planned receipt date using only the supply time from the Items - Purchase (tdipu0101m000) session.

To calculate the planned receipt date, choose **Calculate** in the Purchase Order Lines (tdpur4101m000) session. LN shows the planned receipt date in the **Planned Receipt Date** field of this session.

If the supply time is expressed in:

- Hours, LN takes into account all the time that is available on a day according to the company calendar.
- Days, LN considers a day as a whole day if some time is available on that day according to the company calendar.

LN calculates the planned receipt date as follows, taking into account the company calendar:

Order date + supply time

You can specify the:

- Order date in the Order Date field of the Purchase Order Lines (tdpur4101m000) session.
- Supply time in the Supply Time field of the Items Purchase (tdipu0101m000) session.

LN searches for the company calendar based on:

- The purchase <u>availability type</u>
- The calendar's start date and end date
- You can specify the purchase availability type in the Procurement Parameters (tdpur0100m000) session.
- Before the company calendar's start date and after the company calendar's end date, LN uses the workweek.

## Example 1 - Supply time in days

Supply time in days: 2

Order date: Friday, March 12/11:00:00

The company calendar for the purchase availability type has an 8:00:00 start time and a 16:00:00 end time and is available from Monday through Friday each week.

LN adds the supply time to Friday, March 12/11:00:00, taking into account the company calendar. According to the calendar, on Friday, March 12, five hours are left. Because the supply time is expressed in days, LN considers Friday, March 12 as a whole day. So, one day of the supply time is left for the next week. Because LN finds time available on Monday, March 15, this day counts for a whole day and LN takes the last available time as the planned receipt date. So, the planned receipt date is Monday, March 15/16:00:00.

## Example 2 - Supply time in hours

Supply time (in hours): 16

Order date: Friday, March 12/11:00:00

The company's actual calendar for the purchase availability type has an 8:00:00 start time and a 16:00:00 end time and is available from Monday through Friday each week.

LN adds the supply time to Friday, March 12/11:00:00, taking into account the company calendar. According to the calendar, on Friday, March 12, five hours are left. Because the supply time is expressed in hours, LN takes into account all the time that is available on a day. So, five hours are planned on Friday and 11 hours are left for next week. Because LN finds eight hours available on Monday, three hours are left for Tuesday. This results in a planned receipt date of Tuesday, March 16/11:00:00.

## Sourcing

## Sourcing

Sourcing is the way in which you assign orders to business partners who deliver the same items. You can give suppliers a <u>priority</u> and a <u>sourcing percentage</u>.

If you want to assign an order for an item for which you have several business partners, the following applies:

- **1.** LN searches for the business partner with the highest priority (lowest number). This business partner receives the order.
- 2. In case there are business partners with the same priority, LN looks at the sourcing percentages. The order is then assigned according to these percentages.

In both cases, LN takes into account the order quantity restrictions of the business partners.

## Note

You can define the priority, sourcing percentage, and order quantity restrictions in the Items - Purchase Business Partner (tdipu0110m000) session. For more information, refer to *Using priorities (p. 23)* and *Using sourcing percentages (p. 24)*.

## Using priorities

The <u>priority</u> functionality enables you to add a certain rating to business partners who deliver the same item. If you want to order a specific item, LN assigns this order to the business partner with the highest priority (lowest number).

#### Note

When a valid business partner is found with a specific priority, LN stops searching for business partners with lower priorities.

There are only two reasons to continue searching for business partners with a lower priority:

- The business partner is not effective on the supply date
- The business partner has a <u>sourcing percentage</u> of 0%

If there are business partners with the same priority, but with minimum or maximum order quantities, LN also takes these quantities into account. If, for example, the minimum order quantity of a specific business partner is higher than the assigned order quantity, this business partner cannot deliver the item.

For examples of assigning order quantities to business partners based on sourcing percentages, refer to *Using sourcing percentages* (p. 24).

## Using sourcing percentages

The sourcing percentage functionality enables you to divide orders among several purchase business partners. This is only of importance if you have several business partners that:

- Deliver the same item.
- Have the same priority to deliver this item.

In this case, the ordered quantity is divided among these business partners according to the assigned sourcing rule.

Often business partners have minimum or maximum order quantities. In this case, LN takes these quantities into account. The result can differ from the result when there are no quantity restrictions.

The maximum order quantity of a business partners can be less than the assigned number of items, according to the sourcing percentage. In this case, the remainder is divided among the other business partners, according to their sourcing percentages.

In contrast, the minimum order quantity of a supplier can be higher than the assigned number of items. In this case, the business partner does not get an order. All items are divided among the other business partners according to their sourcing percentages.

#### Note

Sourcing percentages must not be used in a scale of 100. These percentages are just used to make a division.

### **Examples**

In the following examples, the business partners have the same priority to deliver a specific item.

-	Sourcing percentage, example 1	Sourcing percentage, example 2
Supplier 1	50%	50%
Supplier 2	30%	40%
Supplier 3	20%	40%
Totals	100%	130%

The requirement is 1000 items, and the calculations below are done by LN. These calculations result in ordering items from various business partners. The examples are calculated without and with taking the order quantity restrictions into account.

## Example 1

-	Calculation Items*	Quantity**	Calculation	Items***
S1	.50 x 1000 500	400 (max.)	-	400
S2	.30 x 1000 300	400 (max.)	(30/50) x 600	360
S3	.20 x 1000 200	300 (max.)	(20/50) x 600	240

## Example 2

-	Calculation	Items*	Quantity**	Calculation	Items***
S1	(50/130) x 1000	385	400 (min.)	-	000
S2	(40/130) x 1000	308	500 (max.)	(40/80) x 1000	500
S3	(40/130) x 1000	308	500 (max.)	(40/80) x 1000	500

## Legend

*	The number of items that you want to order from the suppliers.
**	The supplier's maximum or minimum order quantity.
***	The number of items that are ordered from the suppliers in case of order quantity restrictions.

## Manufacturer's items

## Purchasing manufacturer's items

Companies often order components from purchase business partners who do not produce the components themselves. These intermediate purchase business partners offer equivalent components, which are items that conform to their original item's specifications, from different manufacturers.

These functionalities are available to specify, approve, and use manufacturer's items:

- Manufacturer part number (MPN) item functionality
- Multiple manufacturer item functionality

### Important!

- If you did not use the multiple manufacturer item functionality in a previous version of LN, you cannot set up multiple manufacturer items in the current version. You must use the MPN functionality to purchase manufacturer's items because the MPN item functionality is the preferred and most extensive functionality.
- If you already used the multiple manufacturer item functionality in a previous version of LN, for each item, you can choose whether you want to define it as a multiple manufacturer item or as an MPN item.

#### MPN items

To use the MPN item functionality, select these check boxes:

- Implemented Software Components (tccom0100s000)
   Manufacturer Part Numbers
- Items Purchase (tdipu0101m000) MPN Item

For more information, refer to Setting up and using MPN items (p. 27).

Multiple manufacturer items

These restrictions apply to the multiple manufacturer item functionality:

- Multiple manufacturer items can be used only in purchase orders and purchase requisitions. You cannot use these items in purchase contracts, purchase schedules, and RFQs.
- The master data cannot be changed when the effective date lies before the current date.

To use the multiple manufacturer item functionality, select the **Multiple Manufacturer Item** check box in the Items - Purchase (tdipu0101m000) session.

For more information, refer to Setting up and using multiple manufacturer items (p. 30).

## Note

You can convert the multiple manufacturer master data to the MPN master data for an item. For more information, refer to *Converting multiple manufacturer items to MPN items* (p. 31).

## Setting up and using MPN items

## Setting up MPN items

To set up manufacturer part numbers (MPNs):

- 1. Select the **Manufacturer Part Numbers** check box in the Implemented Software Components (tccom0100s000) session.
- 2. Select or clear the **Multiple Items per MPN** check box in the Procurement Parameters (tdpur0100m000) session.
- 3. Select the MPN Item check box in the Items Purchase (tdipu0101m000) session.
- **4.** Set the **Item Cross Reference** field to **MPN** in the Buy-from Business Partner (tccom4120s000) session.
- **5.** In the Manufacturers (tcmcs0160m000) session, specify the information about the manufacturers and assign a status to the manufacturers.
- 6. In the Manufacturer Part Numbers (tdipu0145m000) session, specify manufacturer part numbers (MPNs) and link the MPNs to manufacturers. If the **Multiple Items per MPN** check box is cleared in the Procurement Parameters (tdpur0100m000) session, also use the Manufacturer Part Numbers (tdipu0145m000) session to link an item to a combination of MPN and manufacturer.
- 7. If the **Multiple Items per MPN** check box is selected in the Procurement Parameters (tdpur0100m000) session, use the Items by MPN (tdipu0149m000) session to link items to a combination of MPN and manufacturer.
- 8. If business partners cannot deliver all MPNs, specify which manufacturer part numbers can be delivered by which business partners for an item in the MPNs by Item Business Partner (tdipu0148m000) session. You can also use this session to link a preferred MPN to an item and business partner. Through the Import MPNs by Item Business Partner (tdipu0248m000) session, you can link all MPNs for an item to the selected business partner. However, if no MPNs are specified for an item-business partner combination, the business partner can deliver all MPNs of an item.

### Note

You can use the Global update MPN Details (tdipu0245m000) session to globally update the status and effectivity period of MPNs.

## Using MPN items

In Procurement, MPN items can be used in these business objects:

- Purchase requisitions
- Requests for quotation (RFQs)
- Purchase contracts
- Purchase orders
- Purchase schedules

### **Defaulting logic**

This general defaulting logic applies to the MPN functionality in a business object:

- If you select a manufacturer part number (MPN) by zooming from the **Cross Reference Item** field in the relevant session, the **Item**, **Manufacturer**, and **Preferred Manufacturer Part Number** are automatically defaulted from the Manufacturer Part Numbers (tdipu0145m000) or Items by MPN (tdipu0149m000) session.
- If the Cross Reference Item field is not specified and you enter an MPN item in the Item field, the Preferred Manufacturer Part Number and Manufacturer are defaulted from the MPNs by Item Business Partner (tdipu0148m000) session.
- Generation of an MPN set is based on the data available in the MPNs by Item Business Partner (tdipu0148m000) session.

## **Purchase requisitions**

If a **Buy-from Business Partner** is specified in the Purchase Requisition Lines (tdpur2502m000) session, LN checks whether the business partner is allowed to deliver the MPN in the MPNs by Item - Business Partner (tdipu0148m000) session.

When you convert a requisition to an order, the status of the MPN must be **Approved**. LN copies the **Preferred Manufacturer Part Number** to the purchase order and generates an <u>MPN set</u> that is linked to the purchase order.

You can always convert a requisition to an RFQ.

### Requests for quotation (RFQs)

When you link a business partner to an RFQ, the **Manufacturer Part Number** from the RFQ Lines (tdpur1502m000) session is copied to the **Manufacturer Part Number** field in the RFQ Responses (tdpur1506m000) session. However, if the preferred MPN from the RFQ line is not allowed for a business partner, the business partner cannot be linked to the RFQ. Therefore, you must select another business partner or you must change the **Manufacturer Part Number** in the RFQ Lines (tdpur1502m000) session.

When you convert an RFQ to a purchase order or a contract and the status of the MPN is **Approved**, LN copies the **Manufacturer Part Number** to the purchase order or purchase contract and generates an <u>MPN set</u> for the purchase order. If the item is an MPN item but no MPN is filled on the RFQ, the MPN and manufacturer are defaulted from the Items - Purchase (tdipu0101m000) session.

#### **Purchase contracts**

Business partners are allowed to supply alternative MPNs, but always against the original contract price.

If a purchase order is generated from a <u>delivery contract</u>, the MPN is used as a default. However, defaulting is not applicable if a purchase contract is linked to a purchase order.

#### **Purchase orders**

When the purchase order line with an MPN item is saved, LN automatically links an MPN set to the purchase order line (detail). When you click the **MPN Set** button, the Purchase Order Line MPN Sets (tdpur4601m100) session is started in which you can view and maintain the MPN set that is linked to the purchase order line (detail).

If you change the **Preferred Manufacturer Part Number** on the purchase order line and this MPN is not part of the MPN set, a question is asked if you want to add this MPN to the MPNs by Item - Business Partner (tdipu0148m000) session and if you want to make it the preferred MPN in the MPNs by Item - Business Partner (tdipu0148m000) session.

If the preferred MPN is changed or deleted in the Purchase Order Line MPN Sets (tdpur4601m100) session, the preferred MPN on the purchase order line (detail) is also changed or deleted. You cannot maintain the MPN set after receipts are executed for the purchase order line.

When an item is received in the Warehouse Receipt (whinh3512m000) session or in the Purchase Receipts (tdpur4106m000) session, the actual MPN that appears in these receipt sessions must belong to the MPN set that is linked to the purchase order line.

After receipts are executed for the purchase order line, the actual MPN is transferred to the Purchase Actual Receipt History (tdpur4556m000) session.

#### Purchase schedules

Because MPNs change regularly, you cannot specify a manufacturer part number (MPN) on the schedule header. Although the scheduled item appears on the schedule header, the MPN must be specified on the schedule line.

When the purchase schedule line with an MPN item is saved, LN automatically links an MPN set to the purchase schedule line. When you click the MPN Sets button, the Purchase Schedule Line MPN Sets (tdpur3611m100) session is started in which you can view and maintain the MPN set that is linked to the purchase schedule line.

If the preferred MPN is changed or deleted in the Purchase Schedule Line MPN Sets (tdpur3611m100) session, the preferred MPN on the purchase schedule line is also changed or deleted. You cannot maintain the MPN set after receipts are executed for the purchase schedule line.

When an item is received in the Warehouse Receipt (whinh3512m000) session or in the Purchase Schedule - Receipts (tdpur3115m200) session, the actual MPN that appears in these receipt sessions must belong to the MPN set that is linked to the purchase schedule line.

After receipts are confirmed for the purchase schedule line, the actual MPN is transferred to the Purchase Actual Receipt History (tdpur4556m000) session.

### Note

The **Preferred Manufacturer Part Number**, **Manufacturer**, and the contents of the <u>MPN sets</u> that are linked to the purchase schedule lines must match before schedule lines can be <u>clustered</u> in the same purchase release line detail in the Purchase Release Line - Details (tdpur3522m000) session.

For more information, refer to Clustering purchase schedule lines.

## Setting up and using multiple manufacturer items

Setting up multiple manufacturer items

To set up multiple manufacturer items:

- 1. Specify the item's default manufacturer in the Items (tcibd0501m000) session. If the **Multiple**Manufacturer Item check box is cleared in the Items Purchase (tdipu0101m000) session, this is the only valid manufacturer for an item-purchase business partner combination.
- 2. In the Items Purchase (tdipu0101m000) session:
  - Select the Multiple Manufacturer Item check box.
  - If required, select the Effective Date by Change Order check box.
  - If required, select the Multiple Change Orders check box.
  - In the **Multiple Manufacturer Item Check** field, select the session in which LN must check the manufacturer's validity (status).
- **3.** In the Manufacturers (tcmcs0160m000) session, specify the information about the manufacturer and assign a status to the manufacturer.
- 4. In the Item Manufacturer (tdipu0130m000) session, specify item-manufacturer combinations. Use this session to specify the various manufacturers that are approved to supply the item. If you do not use Data Management, you can also use this session to enter effective and expiry dates for an item-manufacturer combination or to approve an item-manufacturer combination. If you use Data Management, you must create change orders in Change Management to change the validity of the item-manufacturer combination, or to approve item-manufacturer combinations in the Change Order (dmchm0150m005) session.
- 5. In the Item Manufacturer and Business Partner (tdipu0135m000) session, specify for an item which manufacturers can be delivered by which purchase business partners. You can only specify approved item-manufacturer combinations or select approved purchase business partners for an item-manufacturer combination.

### **Note**

- If you procure items directly from the manufacturer, you must define the manufacturer as the buy-from business partner as well.
- In the Items Purchase Business Partner (tdipu0110m000) session, you can specify a preferred manufacturer for an item-purchase business partner combination.

Using multiple manufacturer items

### Purchase requisitions

When you specify a multiple manufacturer item in the Purchase Requisition Lines (tdpur2502m000) session, the manufacturer is defaulted from the manufacturer you specified in the Items (tcibd0501m000) session. The item-manufacturer combination can either be approved or waiting for approval. Blocked manufacturers are not allowed. However, from the **Manufacturer** field in the Purchase Requisition Lines (tdpur2502m000) session, you can zoom to the Item - Manufacturer (tdipu0130m000) session and select another manufacturer

code from the list of item-manufacturer combinations that are approved or waiting for approval. When you convert a requisition to an order, LN checks the manufacturer's validity before the requisition is converted to an order.

#### Purchase orders

when you specify a multiple manufacturer item in the Purchase Order Lines (tdpur4101m000) session, the manufacturer is defaulted from the manufacturer you specified in the Items - Purchase Business Partner (tdipu0110m000) session. If this **Manufacturer** field is blank, the manufacturer is defaulted from the Items (tcibd0501m000) session. LN only allows approved item-manufacturer combinations on the order line. However, from the **Manufacturer** field in the Purchase Order Lines (tdpur4101m000) session, you can zoom to the Item - Manufacturer (tdipu0130m000) session and select another manufacturer code from the list of approved item-manufacturer combinations.

## Warehouse receipts

When an item is received in the Receipt Lines (whinh3112s000) session of Warehousing, a **Manufacturer** 's validity is checked on the <u>order date</u>. If the manufacturer is no longer valid on the receipt date, but was valid on the order date, the goods can still be received. You can also manually specify an approved manufacturer for the item.

## Converting multiple manufacturer items to MPN items

If you use the multiple manufacturer item functionality to order manufacturer's items, but you want to start using the <u>manufacturer part number (MPN)</u> item functionality instead, you can convert the multiple manufacturer master data to the MPN master data for an item.

This data can be converted:

- Item manufacturers to manufacturer part numbers
- Item manufacturer business partners to MPNs by business partner

## **Note**

Because the multiple manufacturer master data contains effectivity and status information, but the MPN master data only contains effectivity data for MPNs, master data cannot always be converted consistently. Therefore, you must decide whether the master data setup for multiple manufacturer items is simple enough to be converted to the new MPN master data.

Conversion is most successful if:

- Item manufacturers are effective on the current date.
- The effectivity periods of the item manufacturers and the item manufacturer business partners have the same effective and expiry dates.

You can also choose to only copy the item manufacturers to MPNs and next link business partners to the MPNs in the Import MPNs by Item - Business Partner (tdipu0248m000) session.

## Converting the master data

If you clear the **Multiple Manufacturer Item** check box that was previously selected for an item in the Items - Purchase (tdipu0101m000) session and select the **MPN Item** check box instead, the conversion process is triggered.

It depends on a number of settings whether you can only copy item manufacturers to manufacturer part numbers, or you can also copy item manufacturer business partners to MPNs by business partner.

Copying item manufacturers to manufacturer part numbers

If the **Multiple Manufacturer Item Check** field is **Item-Manufacturer** in the Items - Purchase (tdipu0101m000) session, the Convert Item-Manufacturers to Manufacturer Part Numbers? question is displayed.

If the **Multiple Manufacturer Item Check** field is **Item-Manufacturer and Business Partner** in the Items - Purchase (tdipu0101m000) session, a dialog box is displayed with the following check boxes:

- Convert Item-Manufacturers to MPNs
- Convert Item Manufacturer BPs to MPNs per BP

If you click Yes to the question Convert Item-Manufacturers to Manufacturer Part Numbers? or you select the Convert Item-Manufacturers to MPNs check box in the dialog box, LN converts item manufacturers from the Item - Manufacturer (tdipu0130m000) session to MPNs in the Items by MPN (tdipu0149m000) and Manufacturer Part Numbers (tdipu0145m000) sessions.

### Item-manufacturer conversion rules

### **General rules**

These rules apply when you convert item manufacturers to manufacturer part numbers:

- LN first converts item manufacturers that are effective on the current date (see example 1).
- If no item manufacturers are effective on the current date, LN converts item manufacturers that will become effective in the future (see example 2).

#### Selection rules in the Item - Manufacturer (tdipu0130m000) session

- The **Manufacturer Item** field, which becomes the MPN item, must be filled.
- If the **Multiple Items per MPN** check box is cleared in the Procurement Parameters (tdpur0100m000) session and the **Manufacturer Item** occurs more than once, only the first item is copied to the Manufacturer Part Numbers (tdipu0145m000) session.
- If the **Multiple Items per MPN** check box is selected in the Procurement Parameters (tdpur0100m000) session and the **Manufacturer Item** occurs more than once, all items are copied to the Items by MPN (tdipu0149m000) session.
- The **Manufacturer Item** cannot contain multibyte characters.
- The item-manufacturer's **Expiry Date** must fall after the current date.

The item manufacturers that are converted can have any status.

## Copying item manufacturer business partners to MPNs by business partner

To copy item manufacturer business partners to MPNs by business partner, the **Multiple Manufacturer Item Check** field must be **Item-Manufacturer and Business Partner** in the Items - Purchase (tdipu0101m000) session.

If you select the Convert Item Manufacturer BPs to MPNs per BP check box in the dialog box that is displayed after you change the item into an MPN item, LN converts item manufacturer business partners from the Item - Manufacturer and Business Partner (tdipu0135m000) session to MPNs by business partner in the MPNs by Item - Business Partner (tdipu0148m000) session.

### Item-manufacturer BP conversion rules

#### General rules

These rules apply when you convert item manufacturer BPs to MPNs per BP:

- If item manufacturers are converted that are effective on the current date, LN can only convert item manufacturer business partners that are also effective on the current date (see example 1).
- If LN converts item manufacturers that will become effective in the future, LN can only convert item manufacturer business partners that fall within the effectivity period of the item manufacturer (see example 2).

## Selection rules in the Item - Manufacturer and Business Partner (tdipu0135m000) session

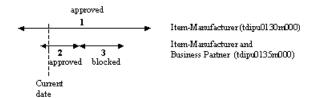
- 1. LN first checks whether an item-manufacturer-business partner combination exists for which the **Buy-from Business Partner** and **Ship-from BP** are the same.
- 2. If no such record is available, LN searches for an item-manufacturer-business partner combination with a blank **Ship-from BP**.
- **3.** If no such record exists, the **Ship-from BP** can have any value for the item-manufacturer-business partner combination.

The item manufacturer business partners that are converted cannot have the **Blocked** status or a lower status than the item manufacturer. For example, if the item manufacturer has the **Approved** status, but the item manufacturer business partner has the **For Approval** status, the item manufacturer business partner cannot be copied.

### Note

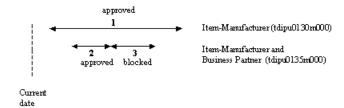
If both the Convert Item-Manufacturers to MPNs and Convert Item Manufacturer BPs to MPNs per BP check boxes are selected, but LN cannot copy any of the item manufacturer business partners, the item manufacturer is not copied either.

## Example 1 - Item manufacturers effective on current date



- 1, 2, and 3 are records in the Item Manufacturer (tdipu0130m000) and Item Manufacturer and Business Partner (tdipu0135m000) sessions. The arrows represent the records' effectivity periods.
- Records 1 and 2 are taken into consideration for copying. Record 3 is not used because it is effective after the current date, while records exist that are effective on the current date.
- Record 1 is converted to the Manufacturer Part Numbers (tdipu0145m000) session and record 2 to the MPNs by Item Business Partner (tdipu0148m000) session.
- If record 1 had the For Approval status, records 1 and 2 would also be converted.

## Example 2 -Item manufacturers not effective on current date



- 1, 2, and 3 are records in the Item Manufacturer (tdipu0130m000) and Item Manufacturer and Business Partner (tdipu0135m000) sessions. The arrows represent the records' effectivity periods.
- Because the item manufacturer business partner records (2 and 3) fall within the effectivity period of the item-manufacturer that will become effective in the future (1), all records are taken into consideration for copying.
- Both 2 and 3 must have a status higher than or equal to the item manufacturer's status (1) and none of the item manufacturer business partner records can have the **Blocked** status. Because record 3 is blocked, record 1 cannot be converted to the Manufacturer Part Numbers (tdipu0145m000) session and records 2 and 3 cannot be converted to the MPNs by Item Business Partner (tdipu0148m000) session.
- If both the Convert Item-Manufacturers to MPNs and Convert Item Manufacturer BPs to MPNs per BP check boxes are selected, and no other valid business partners are linked to the item-manufacturer that can be copied, the item manufacturer is not copied either.

## Purchase organizational data

Before you can perform purchase procedures, you must specify purchase organizational data, such as the <u>purchase order types</u> that define the mandatory steps in the purchase order procedure, <u>purchase offices</u> that you can use to create purchase contracts, orders, and schedules, and <u>user profiles</u> with user-specific default data. If <u>multisite</u> is implemented, you can also specify procurement data and parameters specific for <u>sites</u>.

## Specifying purchase order types

The purchase order type determines the <u>activities</u> that are included in the order procedure, and how and in which sequence the order procedure is carried out. When a purchase order type is linked to a purchase order, the purchase order is processed according to the activities specified for the purchase order type.

To specify purchase order types and their activities:

- 1. Specify a purchase order type in the Purchase Order Types (tdpur0194m000) or Purchase Order Type (tdpur0694m000) session. In addition to the normal purchase order type, several special order types exist, such as **Cost Order**, **Collect Order**, and **Return Order**. The creation and processing of these orders can differ from normal purchase orders.
- 2. On the Activities tab in the Purchase Order Type (tdpur0694m000) session, specify:
  - 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. Therefore, you can automate the processing of purchase orders.

For more information, refer to Flexible purchase order processing (p. 36).

## Specifying purchase offices

The purchase office determines the location from which purchase orders, contracts, schedules, requisitions, and requests for quotation (RFQs) are processed. A purchase office is required to complete

transactions with buy-from business partners. Various purchase offices can be set up for one company. After you set up the purchase office, you can specify user profiles.

To specify a purchase office:

- 1. Define the purchase office as a department in the Enterprise Unit (tcemm0630m000) session.
- 2. Specify purchase-office-specific data in the Purchase Offices (tdpur0112m000) session. The enterprise unit to which the department is linked informs you about the financial company to which financial transactions for the purchase office are posted. If you want to use purchase offices in combination with purchase orders, purchase schedules, purchase contracts, schedule releases, call-offs, requests for quotations, or requisitions, you must specify the concerned series fields.

## Specifying procurement data by site

If <u>multisite</u> is implemented, you can specify procurement data and parameters specific for a <u>site</u>. This is data such as settings for back orders and purchase prices. Specifying procurement data by site is required if these data and settings are different from the companywide or global procurement parameters. For more information, refer to Setting up a multisite structure within a company.

## Specifying user profiles

User profiles are used to set up default information for purchasing employees, so documents can be processed faster. In the Purchase User Profiles (tdpur0143m000) session, you can link a user to a purchase office, order type, and warehouse for each login code. If <u>multisite</u> is implemented, you can also link a user to a <u>site</u>.

When the user creates a purchase order, call-off, purchase contract, purchase requisition, request for quotation, approval rule, purchase schedule, or purchase release, the user profile determines the defaults. This accelerates the purchase-related transaction entry processes.

## Specifying approval rules

Purchase order approval is a mandatory step in the purchase order procedure. You can validate purchase orders against <u>approval rules</u> before their status becomes **Approved**.

For more information, refer to Approval rules for purchase orders (p. 40).

## Flexible purchase order processing

You can automate the processing of purchase 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, etc.

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

- 1. <u>Purchase order types</u> and purchase order type <u>activities</u>.
- 2. Default devices to which (error) reports for a user are printed.

## Purchase order types and activities

Specify purchase order types and link activities to the order types in the Purchase Order Type (tdpur0694m000) session. By selecting or clearing the **Automatic** check box for an activity, you can specify its execution mode.

#### Important!

Ensure that the list of activities that is 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 activities that are linked to the purchase order line (detail) and the status of the activities in these sessions:

- Purchase Order Activities (tdpur4113m000)
- Purchase Order Line Status (tdpur4534m000)
- Purchase Order Intake Workbench (tdpur4601m200)

#### Mandatory activities

When you create an order type in the Purchase Order Type - Activities (tdpur0560m000) session, LN automatically links several mandatory activities to the order type, such as:

- Generate Supply Orders for Subcontracting (tdpur4216m000). This activity is available and mandatory only for the subcontracting order type.
- Release Purchase Orders to Warehousing (tdpur4246m000).
- Purchase Receipts (tdpur4106m000).
- Update Sales / Service Order with Delivery Information (tdpur4222m000). This activity is available and mandatory only for the direct delivery order type.
- Process Delivered Purchase Orders (tdpur4223m000).

#### Note

- For the consignment payment order type, the activities Release Purchase Orders to Warehousing (tdpur4246m000) and Purchase Receipts (tdpur4106m000) are not linked.
- For the direct delivery order type, the activity Release Purchase Orders to Warehousing (tdpur4246m000) is not linked.

#### Optional activities

Various optional activities are also automatically added to the Purchase Order Type - Activities (tdpur0560m000) session, such as:

- Print Purchase Orders (tdpur4401m000)
- Generate Freight Orders (tdpur4220m000)
- Print Claims (tdpur4420m000)
- Print Return Notes (tdpur4411m000)
- Print Purchase Invoices (tdpur4404m000)

You can remove the optional activities from the order type, if required.

#### **Execution of activities**

The actual execution of the activities that are linked to the order type is determined during the order procedure.

For example, although Release Purchase Orders to Warehousing (tdpur4246m000) and Purchase Receipts (tdpur4106m000) can both be linked as a mandatory activity to the order type, either the Release Purchase Orders to Warehousing (tdpur4246m000) activity or the Purchase Receipts (tdpur4106m000) activity is executed during the order procedure. This applies to purchase orders with a cost or service item. A purchase order is released to Warehousing if the **Release to Warehousing** check box is selected in the Items - Purchase (tdipu0101m000) session for the cost or service item. If the **Release to Warehousing** check box is cleared, you must manually maintain the receipts for the purchase order in the Purchase Receipts (tdpur4106m000) session.

#### Default devices

Specify a default device to which reports are printed for the user in the Purchase User Profiles (tdpur0143m000) session.

When you insert a user profile in the Purchase User Profiles (tdpur0143m000) session, these printing sessions are automatically inserted in the Default Devices by User (tdpur0140m000) session:

- Print Requests for Quotation (tdpur1401m000).
- Print RFQ Reminders (tdpur1402m000).
- Print Letter for Unsuccessful Bidders (tdpur1410m000).
- Print Purchase Contract Acknowledgments (tdpur3405m000).
- Print Purchase Contract Termination Letters (tdpur3406m000).
- Print Purchase Orders (tdpur4401m000).
- Print Return Notes (tdpur4411m000).
- Print Claims (tdpur4420m000).

For each printing session, you can define the device that is used for printing in the Default Devices by User (tdpur0140m000) session. You can start this session by clicking **Default Devices by User** on the <u>appropriate</u> menu in the Purchase User Profiles (tdpur0143m000) session. The **Device** in the Default Devices by User (tdpur0140m000) session is defaulted from the **Device** in the Purchase User Profiles

(tdpur0143m000) session, but can be overwritten in the Default Devices by User (tdpur0140m000) session.

The device search path for printing external documents:

- 1. From the Default Devices by User (tdpur0140m000) session.
- 2. From the Purchase Order Type Activities (tdpur0560m000) session.
- 3. If no device can be found, you must select a device from a pop-up screen.

The device search path for printing internal documents:

- **1.** From the Purchase User Profiles (tdpur0143m000) session.
- 2. From the Purchase Order Type Activities (tdpur0560m000) session.
- **3.** If no device can be found, you must select a device from a pop-up screen.

#### Note

- If an error report is printed, LN always uses the device specified in the **Device** field of the Purchase User Profiles (tdpur0143m000) session. If no device is specified, you must select a device.
- For automatically executed activities, no process reports are printed.

## Purchase order status and flexible purchase order processing

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

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

## Example

Order type sequence	Activity	Automat- ic
1	Print Purchase Orders (tdpur4401m000)	Yes
2	Release Purchase Orders to Warehousing (tdpur4246m000)	Yes
4	Process Delivered Purchase Orders (tdpur4223m000)	No

Because Print Purchase Orders (tdpur4401m000) is an automatic activity, the purchase order is printed after it is approved. Next, LN automatically executes the activity Release Purchase Orders to Warehousing

(tdpur4246m000). You must manually process the purchase order in the Process Delivered Purchase Orders (tdpur4223m000) session.

# Approval rules for purchase orders

You can validate purchase orders against <u>approval rules</u> before their status can become **Approved**. These rules enable you to specify conditions based on which purchase orders are approved.

To use approval rules:

#### Step 1:

Specify a number group for approval rules in the **Number Group for Approval Rules** field of the Purchase Order Parameters (tdpur0100m400) session.

#### Step 2:

Set the **Basis for Approval Rule** field to <u>Acceptance</u> or <u>Exceptions</u> in the Purchase Order Parameters (tdpur0100m400) session.

#### Step 3:

Specify whether it is mandatory to check the approval rules before purchase orders can be approved in the **Approval Rules Mandatory** field of the Purchase Order Parameters (tdpur0100m400) session.

#### Step 4:

Specify the approval rules in the Approval Rules (tdpur0191m000) session.

#### Step 5:

If you want to validate purchase orders against approval rules before their status can become **Approved**, select the **Apply Approval Rules** check box in the Approve Purchase Orders (tdpur4210m100) session.

## Default purchase office

During purchase document specification, a default <u>purchase office</u> is retrieved. You can always manually change the default purchase office.

Depending on the type of document, LN takes specific steps to retrieve the default purchase office.

# Manually created purchase order and purchase orders generated by Project

LN uses the following logic to retrieve the purchase office:

- 1. From the Purchase User Profiles (tdpur0143m000) session.
- If you linked a default purchase office to an enterprise unit, which you can perform by selecting
  the **Default Purchase Office** check box in the Enterprise Units (tcemm0130m000) session,
  from the enterprise unit of the warehouse.
- 3. From the Buy-from Business Partner (tccom4120s000) session.
- 4. You must manually enter the purchase office.

## Automatically generated purchase order

LN uses the following logic to retrieve the purchase office:

- If the value of the Origin field in the Purchase Orders (tdpur4100m000) session is Requisition, RFQ, or Contracts, the purchase office is retrieved from the purchase office supplied by the origin.
- 2. If you linked a default purchase office to an enterprise unit, which you can perform by selecting the **Default Purchase Office** check box in the Enterprise Units (tcemm0130m000) session, from the enterprise unit of the warehouse. If purchase orders are generated for direct delivery sales orders, the default purchase office is retrieved from the enterprise unit that is linked to the sales order's sales office.
- 3. From the Items Purchase Business Partner (tdipu0110m000) session.
- **4.** From the Buy-from Business Partner (tccom4120s000) session.
- **5.** From the Items Purchase (tdipu0101m000) session.
- **6.** From the Purchase User Profiles (tdpur0143m000) session.

### Purchase requisition

LN retrieves the default purchase office from the Purchase User Profiles (tdpur0143m000) session. However, you can change this purchase office manually. You can also leave the **Purchase Office** field empty in the Purchase Requisitions (tdpur2501m000) session. If you leave this field empty, LN follows the logic for automatically generated purchase orders to retrieve the purchase office.

## Request for quotation (RFQ)

LN uses the following logic to retrieve the purchase office:

- **1.** From the Purchase User Profiles (tdpur0143m000) session.
- 2. You must manually enter the purchase office.

## Rate determiners in Procurement

You can use <u>rate determiners</u> to specify which date is used to determine the <u>exchange rates</u>. 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 System** 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 these <u>rate determiners</u> in Procurement:

Currency System: Single Currency

Rate Determiners: Document Date

Expected Cash Date

Manually Entered

Fixed

**Receipt Date** 

Currency System:

Independent currency

Document Date

Expected Cash Date

Manually Entered

Fixed Hard

Fixed Local

Fixed Local and Hard

Receipt Date

Currency System:

Dependent Currency

Rate Determiners:

Document Date

Expected Cash Date

Manually Entered

Fixed

Receipt Date

Using rate determiners

#### Currency rate determiner

For the standard currency system, you can only use Document Date and Manually Entered.

#### Document Date

LN uses the rate that is valid on the date and time on which the documents are created. The **Document Date** rate determiner applies to all types of transactions. You can manually change the rate.

The rate is updated by Invoicing when the invoice is posted.

#### Manually Entered

You can manually enter the rate. By default, LN uses the rate that is valid on the date and time on which the documents are created. The **Manually Entered** rate determiner applies to all types of transactions.

#### Delivery Date

If the goods are not yet delivered, LN uses the rate that is valid on the order date. However, if this order date is in the past, LN uses the rate that is valid on the current date.

If the goods are delivered, LN uses the rate that is valid on the actual delivery date.

The **Delivery Date** rate determiner only applies to sales orders, service orders, and sales invoices. You cannot manually change the rate.

#### Receipt Date

LN uses the rate that is valid on the date and time on which you expect to receive the goods. The **Receipt Date** rate determiner only applies to purchase orders and purchase invoices. You cannot manually change the rate.

#### Expected Cash Date

LN uses the rate that is valid on the date and time at which payment of the sales invoice or purchase invoice is expected.

Expected cash date = expected delivery/receipt date + payment period

The payment period is specified in the Payment Terms (tcmcs0113s000) session. The **Expected Cash Date** rate determiner applies to all types of transactions. You cannot manually change the rate.

The rate is updated by Invoicing when the invoice is posted.

#### Fixed

You can use this rate determiner only for a dependent currency system or a single currency system. The **Fixed** rate determiner applies to all types of transactions.

If you manually enter the rates between the transaction currency and the reference currencies, the rate is fixed. If you do not manually enter the rates, the rate is not fixed and LN uses the rate that is valid on the date and time on which the documents are created.

#### Fixed Hard

You can use this rate determiner only for an independent currency system. The **Fixed Hard** rate determiner applies to all types of transactions.

If you manually enter the rate between the transaction currency and the reporting currencies, the rates are fixed. The local currency rate is based on the document date of the actual document.

If you do not manually enter the rate between the transaction currency and the reporting currencies, the rates are not fixed and LN uses the rates that are valid on the date and time on which the documents are created.

#### Fixed Local

You can use this rate determiner only for an independent currency system. The **Fixed Local** rate determiner applies to all types of transactions.

If you manually enter the rate between the transaction currency and the local currency, the rate is fixed. The other rates are based on the document date of the actual document.

If you do not manually enter the local currency rate, the rate is not fixed and LN uses the rate that is valid on the date and time on which the documents are created.

#### ■ Fixed Local and Hard

You can use this rate determiner only for an independent currency system. The **Fixed Local** and **Hard** rate determiner applies to all types of transactions.

If you manually enter the rate between the transaction currency and the home currencies, the rates are fixed. The local currency rate is based on the document date of the actual document.

If you do not manually enter the rates between the transaction currency and the home currencies, the rates are not fixed and LN uses the rates that are valid on the date and time on which the documents are created.

## General purchase data

Before you can perform purchase procedures, you must specify general purchase data, such as an approver list for use in the purchase requisition procedure, data to track order changes and to determine the reason for the changes, and <u>additional cost sets</u>.

## Specifying additional cost sets

Additional costs can be placed on an order as extra cost (items) after the last item is recorded. Several additional cost items can be assigned to an order by bringing them together in a <u>cost set</u>. LN can automatically apply these cost sets to purchase orders.

For more information, refer to Additional costs on purchase orders (p. 48).

## Setting up the approver list

Before a <u>purchase requisition</u> can be converted to a <u>purchase order</u> or a <u>request for quotation (RFQ)</u>, it must be approved by an approver that appears on the approver list.

For more information, refer to Purchase requisition approval process.

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

Because a company's requirements can change during the order process, purchase orders are dynamic documents. You can specify change codes and acknowledgement codes to track order changes and the reasons why these changes occurred. Although this functionality is designed to work specifically with EDI, a company without EDI functionality can also use these codes to record 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 record information regarding changes that are communicated by the purchase business partner. A purchase order acknowledgment is a message

sent by the purchase business partner to the purchaser to confirm the receipt of the purchase order. This usually implies the acceptance of the order by the purchase business partner.

To maintain and track changes:

- 1. Use the Change Reasons (tdpur0197m000) session to specify change reasons codes, 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 (tdpur0198m000) session to specify change types that indicate the type of change made to a purchase order or order acknowledgement such as change order line, add order line, and change header data. The change types are assigned to the purchase order after the change is made on the order.
- 3. Use the Purchase Order Parameters (tdpur0100m400) session to specify various default change codes and change types, which are defaulted to the purchase order line in case of changes.
- 4. Use the Purchase Acknowledgments (tdpur0154m000) session to specify purchase order acknowledgements and the destination of the codes, which can be Header, Line, or Any. The acknowledgement code includes a group of information, which appears on the purchase acknowledgment document. This code can represent the reasons for a changed purchase order.

## Additional costs on purchase orders

Cost items are used to define charges such as freight, handling, and administrative fees. These costs can be added to an order so the order accurately reflects charges billed to a customer or charges billed to you by your buy-from business partners. Additional costs can be placed on an order as extra cost (items) after the last item recorded. Several additional cost items can be assigned to an order by bringing them together in a <u>cost set</u>. LN can automatically apply these cost sets to purchase orders.

To assign <u>additional costs</u> of items to purchase price lists and buy-from business partners, after which these costs can be added to the purchase order:

#### **Step 1: Purchase Order Parameters (tdpur0100m400)**

In the Purchase Order Parameters (tdpur0100m400) session, specify these fields:

- First Position Number for Additional Costs Sets
  Specify the first position number for a purchase order line with additional costs.
- (Re)calculate Additional Costs Indicate whether additional costs are calculated when an order is approved, and recalculated when an order is modified.
  - No
    The additional costs are not (re)calculated. You can manually maintain additional costs in the Purchase Order Lines (tdpur4101m000) session.

#### Interactive

A question is displayed that asks you whether the additional costs must be (re)calculated. If so, manually specified additional costs can be lost.

#### Automatic

The additional costs are automatically (re)calculated when you approve or modify the purchase order.

#### Step 2: Purchase Additional Cost Set (tdpur0624m000)

The header of the Purchase Additional Cost Set (tdpur0624m000) session refers to the Purchase Additional Cost Sets (tdpur0124m000) session. Use this session to group additional costs into sets and define the currency that must be used for the cost set. Cost sets are used to group additional charges to be incurred on the order such as freight and handling. Cost sets can be linked to buy-from business partners or price lists, which enables you to automatically add appropriate charges to orders.

The lines of the Purchase Additional Cost Set (tdpur0624m000) session refer to the Purchase Additional Cost Set Items (tdpur0128m000) session. Use this session to define the <u>cost items</u> that belong to a cost set. On the <u>cost set line</u>, you can define when the additional costs are applicable and how these additional costs must be retrieved or calculated. Examples of cost set lines that you can specify in this session are administrative costs added to the order if the order amount is lower than a certain value, or freight costs added to the order if the total weight of the purchased goods exceeds a certain value.

#### Step 3: Purchase Cost Sets per Price List / Business Partner (tdpur0127m000)

Use the Purchase Cost Sets per Price List / Business Partner (tdpur0127m000) session to link a default cost set to a price list or a buy-from business partner. In this session, you can also indicate whether the cost set lines are added to the purchase order automatically or interactively.

#### Step 4: Price Book Lines (tdpcg0131m000)

To define the actual charges to be applied, Pricing is used. Use the Price Book Lines (tdpcg0131m000) session to define the charges for additional cost items. You must select the price book and the cost item and then define price breaks. The pricing structure for the cost sets is flexible. Therefore, the structure can be unique or the same for different business partners.

#### Note

Because costs are calculated based on order totals, they are added when you close the purchase order line in the Purchase Order Lines (tdpur4101m000) session. In addition, the **Price** field on the order line is a price per unit. For additional cost items, this field is blank. The amount applied is displayed in the **Order Amount** field on the purchase order 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 affect the corresponding sales order, and vice versa. You can specify the handling of change order information.

## Change order parameters

This table shows the parameters that determine the handling of change order information:

Sales Order Parameters (tdsls0100s400)	Purchase Order Parameters (tdpur0100m400)
Prompt for Change Codes	Mandatory Entry of 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 and acknowledging orders

#### 1. Changing a purchase order (line)

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

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

#### 2. Communicating 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, inform the buy-from business partner by telephone, <u>EDI message</u>, mail, or in another way.

#### 3. Implementing the changes

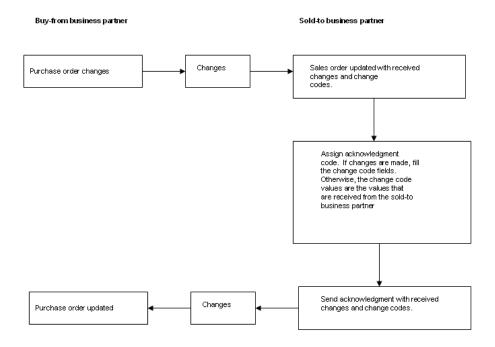
If the buy-from business partner agrees with the changes, the same changes must be made to the corresponding sales order (line). To acknowledge the changes, the buy-from business partner must specify:

- The **Sales Acknowledgment** field in the Sales Orders (tdsls4100m000) session in case of an order change.
- The **Sales Acknowledgment** field in the Sales Order Lines (tdsls4101m000) 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 a 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 (tdsls4100m000) and Sales Order Lines (tdsls4101m000) sessions.

Example

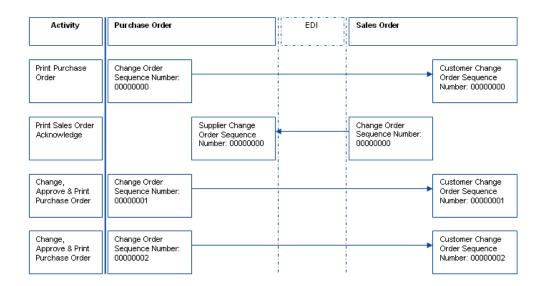


#### Example

If you use <u>electronic data interchange (EDI)</u> to communicate changes, you can view the latest <u>change order sequence number</u> received from:

- The buy-from business partner in the **Supplier Change Order Sequence** field of the Purchase Orders (tdpur4100m000) session
- The sold-to business partner in the **Customer Change Order Sequence** field of the Sales Orders (tdsls4100m000) 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 Partner (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 in the Sold-to Business Partner (tccom4110s000) session determines which changes are printed.

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

# Appendix A Graphs

## Purchased item graphs

Graphs display different types of information for an item.

In the **Graphs** group box of the Purchased Item 360 (tdipu0103m000) session, you can select these graphs:

- On Time Delivery
- Vendor Rating Top 8
- Buying Percentage
- Price History
- Planned Available

To display information for the selected graph, select an item from the item list in the Purchased Item 360 (tdipu0103m000) session.

#### **Note**

Administrators can personalize graphs in the Personalize Graphs on Sessions (ttadv9130m100) session.

## On Time Delivery

This graph shows the top five suppliers with the best on-time delivery performance for the selected item. You can view the data of all suppliers, or suppliers with 5, 10, 25, or more orders.

The rating is based on this data:

- The criterion type Delivery.
- The current period. You can use the arrow keys to select another period.
- The Adjusted Rating.

#### Note

Vendor rating must be applicable for the suppliers. Update the vendor ratings regularly to display accurate ratings. You can view a supplier's ratings in the Vendor Ratings by Period (tdpur8102m000) and Vendor Ratings by Criterion (tdpur8102m100) sessions.

## Vendor Rating Top 8

This graph shows the vendor rating of the first eight suppliers for the selected item.

The rating is based on this data:

- The criterion type **Period Rating**.
- The current period.
- The Adjusted Rating.

#### Note

- Vendor rating must be applicable for the suppliers. Update the vendor ratings regularly to display accurate ratings.
- You can view a supplier's ratings in the Vendor Ratings by Period (tdpur8102m000) and Vendor Ratings by Criterion (tdpur8102m100) sessions.

## **Buying Percentage**

This graph shows the proportional purchased quantity of the selected item from suppliers (for a maximum of 10 suppliers).

The percentages are based on this data:

- The last 12 months.
- The total purchased quantity for a combination of the item, period, and supplier, which is retrieved from the tdpur801 table. This quantity is expressed in the inventory unit.

#### Note

- Vendor rating must be applicable for the suppliers. Update the vendor ratings regularly to display accurate ratings.
- The table tdpur801 has no associated session. Consequently, you cannot view the total quantity in a session.

## **Price History**

This graph shows the price history of the selected item listed by suppliers (for a maximum of three suppliers).

This logic is used to determine which suppliers to include in the graph:

1. The item's default business partner as specified in the **Buy-from Business Partner** field of the Items - Purchase (tdipu0101m000) session.

2. The first business partners from the Items - Purchase Business Partner (tdipu0110m000) session.

With the current date used as the search date, this search order is used:

- a. Business partners with the **Item** specified, the **Item Buy-from Business Partner status** set to **Approved**, and the **Preferred** field set to **Single Source**.
- **b.** Business partners with the **Item** specified, the **Item Buy-from Business Partner status** set to **Approved**, and the **Preferred** field set to **Preferred**.
- c. Business partners with the **Item Group** specified, the **Item Buy-from Business Partner** status set to **Approved**, and the **Preferred** field set to **Single Source**.
- d. Business partners with the **Item Group** specified, the **Item Buy-from Business Partner** status set to **Approved**, and the **Preferred** field set to **Preferred**.

The price history is based on this data:

- The last six months.
- The item price for a combination of the item, period, and supplier, which is retrieved from the tdpur801 table. The item price is calculated by dividing the total value by the total quantity.

#### Note

- Vendor rating must be applicable for the suppliers. Update the vendor ratings regularly to display accurate ratings.
- The table tdpur801 has no associated session. Consequently, you cannot view the item price in a session.

#### Planned Available

This graph shows the planned availability of the selected item for each day of a week. The quantity that is planned to be available is expressed in the inventory unit.

By default, the current week is shown. The arrow keys can be used to navigate to another week.

The planned availability data is retrieved from these sessions:

- Planned Inventory Transactions (whinp1500m000)
- Warehouse Item Inventory (whwmd2515m000)

# Appendix B Glossary

#### acceptance rule

If an approval rule is based on acceptance rules, LN automatically approves a purchase order that meets a valid rule. If you define approval rules based on acceptance, you define for what combination of data elements you want LN to approve the purchase order.

#### 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 our 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 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.

#### 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.

#### approval rule

A combination of data elements, such as buy-from business partner, buyer, planner, effective date, expiry date, and amount, based on which LN approves purchase orders. The approval rules, on their turn, are based on acceptance rules or exception rules.

#### approved supplier list

A list of buy-from business partners approved to deliver a specific item.

#### 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.

#### buyer

The employee of your company who is the contact to the concerned buy-from business partner. The buyer is also known as the purchasing agent.

#### calendar

A set of definitions, that are used to build a list of calendar working hours. A calendar is identified by a calendar code and <u>availability type</u> combination.

#### 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.

Synonym: forwarding agent, Logistics Service Provider (LSP), Third Party Logistics (3PL), Packaging Service Provider (PSP)

#### change order sequence number

A number that is used to assign the occurrence of changes to a purchase order or a sales order.

#### clustering

Grouping several schedules lines to send the lines in one purchase release.

For clustering, first the next schedule issue date, according to the issue pattern, is determined. Next, the schedule lines are clustered based on the segment time unit, and the segment length, derived from the segment set.

#### Note

Clustering only applies to non-referenced schedules.

#### 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.

#### delivery contract

A list of time-phased delivery, derived from a contract and converted to purchase orders. A delivery contract is not a real schedule, but a schedule solution to generate purchase orders in time.

#### Example

Contract line	Delivery contract	Purchase order (PO)
100 pieces (pcs)	2000/12/01 20 pcs	PO1 2000/12/01 20 pcs
-	2000/02/08 25 pcs	PO2 2000/02/08 25 pcs
-	2000/12/15 40 pcs	PO3 2000/12/15 40 pcs
-	2000/12/22 15 pcs	PO4 2000/12/22 15 pcs

#### 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

#### 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).

#### electronic data interchange (EDI)

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

#### exception rule

If an approval rule is based on exception rules, LN automatically approves a purchase order that does not meet a valid rule. If you define approval rules based on exception, you define for what combination of data elements you do not want LN to approve the purchase order.

#### 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. 60)

#### full supply time

The total time required to obtain an item that is not forecasted. This time is used to calculate the full cumulative order lead time for an item, which includes the cumulative lead time of purchased parts.

#### **Example**

For item A, the supplier communicated a *supply time* of 50 days. This is in fact a reduced lead time and is only possible because a three year forecast is sent to the supplier for this item. If additional quantities are needed, which are not included in the forecast, the supplier needs the *full supply time*, which is 300 days.

#### generation date

The date the specific schedule is (re)generated.

#### 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

#### internal processing time

The time required between the recognition of needs and the release of the purchase order. Internal processing time includes document preparation and sourcing.

#### item group

A group of items with similar characteristics. Each item belongs to a particular item group. The item group is used in combination with the item type to set up item defaults.

item type

A classification of items used to identify if the item is, for example, a generic item, a service item, or an equipment item. Depending on the item's type, certain functions will only apply to that item.

Logistics Service Provider (LSP)

See: carrier (p. 60)

manufacturer part number (MPN)

The unique identification of a manufacturer's item code, which is used in the item ordering and identification process.

MPN set

A set of manufacturer part numbers (MPNs) that belongs to a purchase order line or a purchase schedule line.

multisite

Refers to the management of multiple sites within a single (logistic) company.

In a multicompany structure, which includes several companies, multisite applies to each of the logistic companies.

order date

The date on which the order is manually specified or is automatically generated.

Packaging Service Provider (PSP)

See: carrier (p. 60)

priority

An option that enables you to add a certain rating for suppliers. If the priority is defined, the item/supplier combinations are sorted according to descending priority.

#### purchase contract

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

#### A contract is comprised of:

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

#### purchase office

A department in your organization that is responsible for buying the materials and services required by your organization. You assign number groups to the purchase office.

#### purchase order

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

#### A purchase order contains:

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

#### purchase 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 requisition

A request by a user to obtain authorization for the procurement of goods and services.

A purchase requisition includes both standard and nonstandard material, cost, or service requirements. Information on a purchase requisition includes name, department, location, purchase office, and approver in the header section. The requisition line detail includes item, supplier, quantity, price, and amount.

A purchase requisition can be converted to one of the following:

- Purchase order
- Request for quotation (RFQ)

#### purchase schedule

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

#### 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.

#### 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. A bidder can submit an RFQ response 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.

#### route

Line of travel from your warehouses to the ship-to or ship-from business partner's warehouse and vice versa. Use routes to group business partners that are located in the same area or along one convenient route.

You can arrange addresses by routes to print picking lists and shipping notes sorted by route.

#### route plan

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

#### safety time

The time that you can add to the normal lead time to protect delivery of goods against fluctuations in the lead time so that an order can be completed before the order's real need date.

#### service level

The level of service offered by a carrier in connection with goods transports, such as speedy delivery, delivery within twelve hours, and so on. Usually, a service level is related to the freight rates that a carrier uses to calculate prices for transportation services.

#### single currency system

A currency system in which a company uses only one home currency. This home currency is also the reference currency. This currency system is especially for use for companies that operate in a single country.

See: standard currency system

#### site

A business location of an enterprise that can maintain its own logistical data. It includes a collection of warehouses, departments and assembly lines at the same location. Sites are used to model the supply chain in a <u>multisite</u> environment.

These restrictions apply to sites:

- A site cannot cross countries. The warehouses and departments of the site must be in the same country as the site.
- A site is linked to one planning cluster. Consequently, all warehouses and work centers of a site must belong to the same planning cluster.
- A site is linked to one logistic company.

You can link a site to an enterprise unit or an enterprise unit to a site.

If an enterprise unit is linked to a site, the entities of the site belong to the enterprise unit. Conversely, if a site is linked to an enterprise unit, the entities of the enterprise unit belong to the site.

#### sourcing percentage

A percentage used to calculate how orders are divided among suppliers.

#### sourcing rule

The planning system that contains the rules for allocating demand based on a combination of supplier priority and percentage allocation to specific suppliers.

#### standard currency system

A currency system in which foreign currency transactions are translated straight from the transaction currency to the local currency, without triangulation through the reference currency. By default, reporting currencies are directly translated from the transaction currency into the reporting currency; however, reporting currencies can also be translated from the local currency.

#### standard route

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

#### supply time

The total time required to obtain an item that is forecasted. This time is used to calculate an item's order lead time, based on which a company takes commitment decisions and executes capacity planning and order management.

#### Example

For item A, the supplier communicated a *supply time* of 50 days. This is in fact a reduced lead time and is only possible because a three year forecast is sent to the supplier for this item. If additional quantities are needed, which are not included in the forecast, the supplier needs the *full supply time*, which is 300 days.

Third Party Logistics (3PL)

See: carrier (p. 60)

transport means group

A classification used to group means of transport, such as:

- Vans
- Trucks
- Container ships
- Cargo aircraft

For each group, properties are defined, such as:

- The average speed
- The loading capacity

Each means of transport defined in Freight belongs to a transport means group. For example, transport means group: Vans, means of transport: van with licence number XX333444.

#### 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 rating

A classification of a supplier based on certain criteria. These criteria can be based on deliveries (on time, sufficient quality) and on other factors.

#### workweek

The seven days of the week, for which the available and non-available hours are defined.

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