# Infor LN User Guide for Site Activation

## Important Notices



## Trademark Acknowledgements



## Publication Information



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# About this document

This document describes the processes and procedures involved in activating the multisite concepts.

### 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 the activation of the multisite concepts. Use the current editions of these related references for information that is not covered in this guide:

- *User Guide for Enterprise Structures*
- *User Guide for Setting Up a Company (U9503 US)*
- *User Guide for Item Setup*

### How to read this document

This document is assembled from online Help topics.

Text in italics followed by a page number represents a hyperlink to another section in this document.

Underlined terms indicate a link to a glossary definition. If you view this document online, clicking the underlined term takes you to the glossary definition at the end of this document.

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# Chapter 1
# Introduction

1

## Activating multisite - overview

Activation is a set of processes that must be performed to adopt the multisite functionality. Activation consists of a preparatory stage and an activation stage. The progress of the activation processes is indicated by various statuses.

During the preparatory stage, you must define or adjust master data and set parameters. The activation stage entails launching the process that builds data based on the setup completed in the preparatory stage.

The multisite functionality that must be activated is subdivided into concepts and activation activities.

A concept is a specific functionality subset. A concept, in turn, consists of multiple activation activities. An activation activity is a step that you must complete to activate a concept, for example, setting parameters in a specific session. When all activation activities of a concept are completed, you can activate the concept.

The concepts are activated in the Multisite Concepts Activation (tcemm4600m000) session.

### When is activation required?

If your current LN version results from a new, first-time installation, the multisite concepts are activated automatically. Therefore, you are not required to perform the activation processes, and the sessions and functionality involved in the activation processes are unavailable.

**Note**

If you do not want to use sites, you must inactivate the **Sites** and the **Job Shop by Site** concepts. See *Resetting the Sites and Job Shop by Site concepts (p. 67)*.

If your current LN version was migrated from an older version previously without sites, to adopt the multisite functionality in a multicompany or single company environment, you must activate the multisite concepts.

## The multisite concepts

The multisite functionality consists of these concepts:

- **Item Type Product**
- **Standard Cost by Enterprise Unit**
- **Planning Cluster Mandatory**
- **Sites**
- **Job Shop by Site**

## Item type Product

The supply of an item can differ for each site. The item can be purchased at one site and subcontracted or produced at another site. However, the item type is a static and global setting. Consequently, the item types **Purchased** and **Manufactured** must be merged into the item type **Product**.

## Standard cost by enterprise unit

In a multisite environment, the calculation of an item's standard cost must be performed at a more detailed level than the company level. Therefore, the item costing data must be available by enterprise unit instead of by company. Additionally, data such as the costing warehouse, costing source, and intercompany trade settings are required in the item costing data.

## Planning cluster mandatory

Item planning is performed for one or more sites if Enterprise Planning is implemented. Therefore, planning clusters must be linked to sites. This is to accomplish that planning is performed for the items related to the sites and the underlying entities.

## Sites

Various logistics data, commercial data, planning data and other master data must be available at a more detailed level than the company level. For this purpose, this data must be grouped by site or by office for each company within the multicompany structure.

## Job shop by site

In a multisite environment, there can be differences in the bills of material (BOMs) and routings used to manufacture items at the various production sites. To accommodate such variations, BOMs, routings and other master data must be maintained at site level.

## Prerequisites

Before starting the activation process, create a design of the intended enterprise structure, identifying the sites to be used, the activities to be carried out at each site, and the warehouses and departments to be included in each site.

If Enterprise Planning is implemented, determine the planning clusters to be used, and link these to the warehouses for which planning is to be performed collectively. The specified planning clusters and the linked warehouses affect the creation of sites.

Before activating the **Standard Cost by Enterprise Unit** multisite concept, identify the level at which to calculate the standard costs: company or enterprise unit. If the level is to be enterprise unit, identify the enterprise units for which to calculate the standard costs.

Set up item groups, because these affect the creation of item default data at site or company level.

**Recommended actions**

- Perform table sharing. See *Infor LN User Guide for TableSharing (comtableshug U9505).*
- Archive the companies of your existing multicompany structure.
- Perform the site activation process in a testing environment before actually adopting the multisite functionality.

# An outline of the multisite activation process

The activation process is performed in the Multisite Concepts Activation (tcemm4600m000) workbench session.

The activation is done by multisite concept. After completing the activation of the first concept, you proceed to the next concept.

You must activate these multisite concepts:

- **Item Type Product**
- **Standard Cost by Enterprise Unit**
- **Planning Cluster Mandatory**
- **Sites**
- **Job Shop by Site**

You can activate the first three concepts in any order.

The **Sites** concept must be the penultimate, and the **Job Shop by Site** concept must be the last concept to be activated.

## Preparatory stage

The preparatory stage of the activation process is launched by setting the activation status of a multisite concept to **In Preparation**. This enables the activation activities of the concept.

An activation activity is a specific set of master data or parameter setup. Each multisite concept has various activation activities.

## Example

These are the activation activities of the **Item Type Product** concept:

- **Print Item Defaults used for Product**
- **Copy Defaults to Product**
- **Reassign Item Group**

The activities are enabled when you set the status of the concept to **In Preparation**.

Most activation activities are mandatory. You must complete the mandatory activities before you can proceed to the activation stage.

The order in which to perform the activation activities is indicated by the availability of the activity options in the Multisite Concepts Activation (tcemm4600m000) workbench session.

## The **Sites** concept

The **Sites** concept has two preparatory stages. During the first preparatory stage, enterprise structure master data is defined. This stage has the **Enterprise Model in Preparation** status. During the second preparatory stage, item data and other master data is defined. This stage has the **In Preparation** status.

**Note**

To set a multisite concept to **Active**, you must have super user rights. Users with normal user rights can perform activation activities and set the concept statuses **Enterprise Model in Preparation** or **In Preparation**.

## Activation stage

After performing the activation activities, you can activate the multisite concept. This launches the activation process based on the setup completed in the activation activities and sets the concept status to **Active**.

For most concepts, the activation process is launched by clicking **Activate**. For the **Standard Cost by Enterprise Unit** concept, the activation is launched after completing the activation activities.

When a multisite concept is **Active**, you cannot perform the activation activities or change the concept status, but you can view the activation data and access some of the activities in the Activation Activity (tcemm4610m000) session.

## Multicompany environments

Concept statuses are set for all companies of the multicompany environment at once.

Some activation activities, such as **Assign Sites**, are also performed for the entire multicompany environment. This is because the database tables of the Enterprise Modeling Management module are shared among the companies of the multicompany environment.

Consequently, this data is identical for each company and therefore, this activity can be performed for the entire multicompany environment at once.

Most activation activities are performed for individual companies.

Before you can set a multisite concept to **Active**, the mandatory activation activities of the concept must be completed in all companies of the multicompany environment.

To complete the activation activities, you can work simultaneously in multiple companies of the multicompany environment.

# The Multisite Concepts Activation (tcemm4600m000) workbench

The Multisite Concepts Activation (tcemm4600m000) workbench session is used to activate the multisite concepts. In this workbench, you can monitor and perform the activation activities of the multisite concepts.

The workbench provides an overview of the multisite concepts and the activation activities for each concept.

For each concept and each activation activity, a status shows the progress of the activation process.

The workbench consists of a **Summary** tab and one tab for each multisite concept:

- **Item Type Product**
- **Standard Cost by Enterprise Unit**
- **Planning Cluster Mandatory**
- **Sites**
- **Job Shop by Site**

The summary tab shows the status of each concept.

Each concept tab shows this information:

- The status of the concept.
- The status of each activation activity required to activate the concept.
- The user who set the concept status or performed an activation activity.
- The date and time on which the user set a concept status or performed an activation activity.

In the workbench, the status of the concepts and the activation activities reflect the progress in the entire multicompany environment. The status of activation activities for individual companies of the multicompany is displayed in the Activation Activity (tcemm4610m000) session.

To set a multisite concept status or to perform an activation activity, in the Multisite Concepts Activation (tcemm4600m000) workbench session, click the relevant concept tab and click the appropriate button. See *Activating multisite concepts (p. 14)*.

# Activating multisite concepts

Activating a multisite concept involves these main steps:

- Set the status of the concept to **In Preparation** to enable the activation activities.
- Perform the activation activities.
- Set the status of the concept to **Active**.

## Activating a multisite concept

1. In the Multisite Concepts Activation (tcemm4600m000) workbench session, click the appropriate concept tab.
2. Click **In Preparation**. You are prompted to continue or cancel.
3. Click OK to enable the activation activities.
4. Perform the activation activities.
5. Click **Activate** to activate the concept.
6. Repeat the procedure to activate the next multisite concept.

**Note**

Whether an option is available in the Multisite Concepts Activation (tcemm4600m000) workbench session depends on your user rights and the status of other concepts or activation activities.

## Performing activation activities

1. On the appropriate concept tab of the Multisite Concepts Activation (tcemm4600m000) workbench session, click an activation activity. For example, in the **Item Type Product** concept tab, click **Print Item Defaults used for Product**.

   If you click an activation activity option in the Multisite Concepts Activation (tcemm4600m000) workbench session, the Activation Activity (tcemm4610m000) session starts in which the options and sessions required to complete the activity are available.

2. In the lines section of the Activation Activity (tcemm4610m000) session, select the company for which to perform the activation activity.
3. From the appropriate menu of the lines section of the session, select **Start Activity**.

   Alternatively, on appropriate menu of the header section of the session, select **Start Activity for All Companies**.
4. From the appropriate menu of the lines section of the session, start the master data or the parameter sessions in which to complete the setup for the current activation activity and specify the data and settings as required.
5. From the appropriate menu of the lines section of the session, select **Finish Activity**.

   Alternatively, from the appropriate menu of the header section of the session, select **Finish Activity for All Companies**.
6. If multiple companies are present, perform steps 2 - 5 for the other companies.
7. Close the Activation Activity (tcemm4610m000) session.
8. In the Multisite Concepts Activation (tcemm4600m000) workbench session, click the next activation activity and repeat the procedure until all activation activities are completed.

## Checking and correcting activation activities

After finishing an activation activity, you can start the Activation Activity (tcemm4610m000) session to check and correct the activity, if required. To correct an activity, select the relevant company and from the appropriate menu of the lines section, select **Restart Activity**. For steps that are performed for all companies simultaneously, from the appropriate menu of the header section of the session, select **Restart Activity for All Companies**.

Until the concept is activated, you can restart an activation activity as many times as you need.

## Activation activities by concept

For each multisite concept you must perform multiple activation activities. This table shows information about the activation activities by multisite concept:

| Multisite concept | Topic |
| --- | --- |
| **Item Type Product** | *Activating item type Product for multisite (p. 17)* |
| **Standard Cost by Enterprise Unit** | *Activating standard cost by enterprise unit for multisite (p. 19)* |
| **Planning Cluster Mandatory** | *Activating mandatory planning clusters for multisite (p. 23)* |
| **Sites** | *Activating sites (p. 25)* |
| **Job Shop by Site** | *Activating Job Shop by Site for multisite (p. 53)* |

# Chapter 2
# Item Type Product

2

## Activating item type Product for multisite

**Item Type Product** is one of the multisite concepts that must be activated to enable the functionality for multisite. Activating this concept entails converting and merging the item types **Purchased** and **Manufactured** into the item type **Product**.

Before you can use the item type **Product**, the value of the **Item Type Product** must be **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session. If this parameter is **Active**, the item type **Product** replaces the item types **Purchased** and **Manufactured**, which are no longer available.

To change the status from **Inactive** to **Active**, complete these steps:

### Step 1: In Preparation

Click **In Preparation** in the **Item Type Product** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session. Consequently, the status changes from **Inactive** to **In Preparation** for each company of the current multicompany environment.

### Step 2: Print Item Defaults used for Product

To verify if item defaults are used to create new items, use the Print Item Defaults used for Product (tcibd0402m100) session. The report displays, by item group, the item defaults that are available for the item types **Purchased** and **Manufactured**. You can also identify the item groups that do not have item defaults for **Product** items.

### Step 3: Copy Defaults to Product

If item defaults are used to create new items, specify the item defaults for the **Product** item type and related item group.

In the Copy Defaults to Product (tcibd0207m100) session, you can copy the default item data for a combination of item group and **Purchased** or **Manufactured** item type to defaults for **Product**. The default item data also includes the sub-entity defaults, such as item sales defaults.

To start this session for specific item defaults, select a record in the Item Defaults (tcibd0102m000) session and click **Copy Defaults to Product** on the appropriate menu.

## Step 4: (optional) Reassign Item Group

If an item group includes both **Purchased** and **Manufactured** items, and you want to retain the differences between these variants, you can assign the **Purchased** and **Manufactured** items to separate item groups.

1. Copy an existing item group to a new item group, including the related master data, in the Copy Item Group (tcmcs0223m000) session.
2. Assign the **Purchased** and **Manufactured** items to separate item groups in the Reassign Item Group (tcibd0201m000) session.

To start the Reassign Item Group (tcibd0201m000) session for a specific item, select the item in the Items (tcibd0501m000) session and click **Reassign Item Group** on the appropriate menu.

## Step 5: Activate

To actually upgrade the item types **Purchased** and **Manufactured** to **Product** and to remove the item defaults for **Purchased** and **Manufactured** items, click **Activate** in the **Item Type Product** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session.

Consequently, the **Item Type Product** parameter is set to **Active**.

**Note**: The sessions of the multicompany environment are unavailable for end users during the execution of this step.

# Chapter 3
# Standard Cost by Enterprise Unit

3

## Activating standard cost by enterprise unit for multisite

To use the functionality for multisite, the value of the **Standard Cost by Enterprise Unit** field must be **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session.

If this parameter is **Active**, the standard cost calculation for an item is performed by enterprise unit instead of by logistic company.

To change the status from **Inactive** to **Active**, complete these steps:

### Step 1: Calculation Office Setup

Before you can set the status to **In Preparation**, a default calculation office must be linked to each production department.

This is done as follows:

1. Click **Calculation Office Setup** in the Multisite Concepts Activation (tcemm4600m000) workbench session.
2. In the Production Order Parameters (tisfc0100s000) session, set the **Calculation Office defined in** field from **Default Production Order Data** to **Prepare for Production Department**.
3. Assign a default calculation office to each production department.
4. In the Production Order Parameters (tisfc0100s000) session, set the **Calculation Office defined in** field to **Production Department**.

### Step 2: In Preparation

Click **In Preparation** in the **Standard Cost by Enterprise Unit** tab of the Multisite Concepts Activation (tcemm4600m000) workbench session. Consequently, the status changes from **Inactive** to **In Preparation**.

## Step 3: Generate Interim Item Costing Data

Generate item costing (default) data that includes the enterprise unit for an item or a range of items, in the Cost Calculation by Enterprise Units - Generate Migration Table (ticpr0220m000) session. The costing data is generated based on the warehouse specified in the Item - Ordering (tcibd2100m000) session. The enterprise unit is also retrieved from this warehouse.

After running the Cost Calculation by Enterprise Units - Generate Migration Table (ticpr0220m000) session, temporary item costing data is generated in the Standard Costs by Enterprise Unit - Conversion data (ticpr0120m000) session. For an item, multiple records of item costing data can be generated by enterprise unit.

## Step 4: Maintain Interim Item Costing Data

View and modify the generated temporary item costing (default) data in the Standard Costs by Enterprise Unit - Conversion data (ticpr0120m000) session. You can also specify temporary item costing data in this session.

## Step 5: Upgrade Item Costing Data

Upgrade the costing (default) data from the company level to the enterprise unit level for an item or a range of items in the Cost Calculation by Enterprise Units-Upgrade (ticpr0220m100) session. You can skip the unused items.

After running the Cost Calculation by Enterprise Units-Upgrade (ticpr0220m100) session, the temporary item costing data by enterprise unit is upgraded to actual item costing data by enterprise unit in the Item - Costing (ticpr0107m000) or Item - Costing Defaults (ticpr0108m000) sessions.

**Note**:

- If an item cannot be upgraded, for example, on account of data inconsistencies, you can manually remove this item from the Standard Costs by Enterprise Unit - Conversion data (ticpr0120m000) session. After the **Standard Cost by Enterprise Unit** concept is set to **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session, you can create the item manually in the Item - Costing (ticpr0107m100) or Item - Costing Defaults (ticpr0108m000) sessions.
- As soon as the first item is upgraded, the value of the **Standard Cost by Enterprise Unit** parameter in the Multisite Concepts Activation (tcemm4600m000) session already changes to **Active**.

## Step 6: Calculate Standard Costs by Enterprise Unit

Calculate the standard cost by enterprise unit for the upgraded items in the Calculate Standard Cost (ticpr2210m000) session.

You can view the calculated standard cost for an item and enterprise unit in the related sessions, such as Item - Costing (ticpr0107m000), Item Standard Costs (ticpr3601m000), and Item - Standard Cost (ticpr3500m000).

## Step 7: Delete temporary costing data

To delete the temporary costing data from the Standard Costs by Enterprise Unit - Conversion data (ticpr0120m000) session, use the Cost Calculation by Enterprise Units - Delete Migration Table (ticpr0220m200) session.

**Note**: Before deletion, verify if items exist that are still to be upgraded. To verify, check the value of the **Standard Costs at Level** field in the Items (tcibd0501m000) and Item Defaults (tcibd0102m000) sessions, which can be **Company** or **Enterprise Unit**.

# Chapter 4
# Planning Cluster Mandatory

4

## Activating mandatory planning clusters for multisite

To use the functionality for multisite, the value of the **Planning Cluster Mandatory** field must be **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session. If this parameter is **Active**, planning clusters are mandatory.

To activate mandatory planning clusters, complete these steps:

### Step 1: In Preparation

Click **In Preparation** in the **Planning Cluster Mandatory** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session. Consequently, the status changes from **Inactive** to **In Preparation**.

### Step 2: Manually Update Planning Clusters

Based on your enterprise structure design as described in *Activating multisite - overview (p. 9)*, assign specific planning clusters to warehouses. This is to limit the number of warehouses to which to assign the default planning cluster that is defined in the next step.

The default planning cluster is automatically assigned to warehouses with an "empty" planning cluster when you carry out step 4. Consequently, during the activation of the **Sites** parameter, when sites are assigned to warehouses, only the sites linked to the default planning cluster are available for the warehouses to which the default planning cluster is assigned in step 3.

This may offer a too limited choice of sites, especially if your enterprise structure includes multiple planning clusters and multiple sites. Therefore, you are recommended to assign specific planning clusters to warehouses, based on your enterprise structure design, before defining and activating the default planning cluster.

## Step 3: Specify Default Planning Cluster

Specify a default planning cluster in the **Default Planning Cluster** field of the EP Parameters (cprpd0100m000) session for each logistic company of the current multicompany environment.

**Note**: You cannot specify an existing planning cluster from the Planning Clusters (tcemm1135m000) session as the default planning cluster. The default planning cluster contains the new value that replaces the “empty” planning cluster of warehouses, effectivity units, and plan items when the **Planning Cluster Mandatory** concept is set to **Active**, see next step.

## Step 4: Activate

**Note**: For this step, super user rights are required.

Click **Activate** the **Planning Cluster Mandatory** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session. Consequently, you must perform a data upgrade run, and these processes are performed:

- The Initialize Data Upgrade Run (ttspt2200m000) session starts. Refer to the Online Help of this session for further information about the data upgrade run.
- The status changes from **In Preparation** to **Active**.
- For the warehouses, effectivity units, and plan items with "empty" planning clusters, LN replaces the "empty" planning cluster with the default planning cluster specified in the previous step.
- Planning clusters have become mandatory. Therefore, a planning cluster must be present for each warehouse or plan item. During the activation of the next concept, **Sites**, you must link a planning cluster to each site when you define sites.

# Chapter 5
# Site Activation Overview

5

## Activating sites

To create sites and site related master data, you must activate the **Sites** concept in the Multisite Concepts Activation (tcemm4600m000) workbench session.

### Prerequisites

Before activating the **Sites** concept, these parameters must be set to **Active**:

- **Item Type Product**
- **Standard Cost by Enterprise Unit**
- **Planning Cluster Mandatory**

The **Sites** concept includes the settings displayed in the procedure steps below. For each setting, the user activities are briefly outlined. Details are provided in subsequent topics.

The step titles refer to the activation activity options in the Multisite Concepts Activation (tcemm4600m000) workbench session. The sessions referred to in each step are accessed from the Activation Activity (tcemm4610m000) session. See *Activating multisite concepts (p. 14)* and *The Multisite Concepts Activation (tcemm4600m000) workbench (p. 13)*.

1. **Enterprise Model in Preparation**
   The first stage of the site activation process involves adding sites to the enterprise model.
   a. **Enterprise Model in Preparation**
      Set the **Sites** concept to **Enterprise Model in Preparation** in the Multisite Concepts Activation (tcemm4600m000) workbench session.
   b. **Create Sites**
      a. Define sites using the Sites (tcemm0150m000) and Site (tcemm0650m000) sessions.
      b. Generate subentity settings by site, for example, warehousing settings by site.

c.

**Assign Sites**

a. Assign sites to entities using the Assign Sites (tcemm0250m000) session.

b. Verify the results of the site assignment process.

d. **Relate Machines to Sites**
Optionally, manually link machines that are not related to work centers to sites using the Machines (Machine Types) (tirou0102m000) session.

e. **Generate Master Data by Office**
Generate global default data by office in the Generate Master Data by Office (tccom0232m000) session.

f. **Validate Enterprise Model**
Use the Validate Enterprise Model for Multisite (tccom0230m000) session to validate the enterprise model defined in the previous steps.

See *Activate sites - Enterprise model in preparation (p. 29)*.

2. **In Preparation**
The second stage of the site activation process involves adding sites to items and other master data.

a. **In Preparation**
Set the **Sites** concept to **In Preparation** in the Multisite Concepts Activation (tcemm4600m000) workbench session.

b.

Optionally, generate default item data by site, office, or by site and subentity in the Generate Master Data (tccom0231m000) session using these options in the Multisite Concepts Activation (tcemm4600m000) workbench session:

a. **Generate Item Defaults**

b. **Generate Item Planning Defaults**

See *Activate sites - In preparation, generate item default data (p. 33)*.

c. Validate the data using the Validate Master Data for Multisite (tccom0230m100) session.

c. Generate item data by site, office, by site and subentity, or by office in the Generate Master Data (tccom0231m000) session using these options in the Multisite Concepts Activation (tcemm4600m000) workbench session:

a. **Generate Item Data**

b. **Generate Warehousing Item Data**

c. **Generate Planning Item Data**

d. **Generate Production Item Data**

e. **Generate Procurement Item Data**

f. **Generate Sales Item Data**

g. **Generate Service Item Data**

See *Activate sites - In preparation, generate item data (p. 37)*.

**d. Validate Item Data**
Validate the data using the Validate Master Data for Multisite (tccom0230m100) session.

**e.** Define additional master data by site in the Generate Master Data (tccom0231m000) session using these options in the Multisite Concepts Activation (tcemm4600m000) workbench session:

**a. Generate Common Master Data**

**b. Generate Production Master Data**

**c. Generate Procurement Master Data**

**d. Generate Sales Master Data**

**e. Generate Service Master Data**

**f. Generate Project Master Data**

**g. Generate Quality Master Data**

**h. Generate Warehousing Master Data**
See *Activate sites - In preparation, generate other site related master data (p. 45)*

**f. Validate Other Master Data**
Validate all data using the Validate Master Data for Multisite (tccom0230m100) session.

**3. Active**
Set the **Sites** concept to **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session. See *Activate sites - Activating the Sites parameter (p. 51)*.

# Chapter 6
# Enterprise Model in Preparation

6

## Activate sites - Enterprise model in preparation

The first stage of the site activation process comprises adding sites to the enterprise model. This stage includes these steps:

### Step 1:

In any of the logistic companies of the current company environment, click **Enterprise Model in Preparation** on the **Sites** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session.

Consequently, the status changes from **Inactive** to **Enterprise Model in Preparation** for the companies of the current company environment defined in the Companies (tcemm1170m000) session.

**Note**:

- If **Repetitive Manufacturing (RPT)** is implemented, the **Job Shop Production Schedules** check box in the Repetitive Manufacturing Parameters (tirpt0100m000) session must be cleared.
- Site activation is unavailable for financial companies.

### Step 2:

Close and reopen LN. Consequently, the Sites (tcemm0150m000) and Site (tcemm0650m000) sessions become available.

### Step 3:

Define sites using the Sites (tcemm0150m000) and Site (tcemm0650m000) sessions. In the Sites (tcemm0150m000) session, click New to define a new site.

In the Site (tcemm0650m000) session that opens, specify:

- The properties, such as the site's planning cluster, logistic company, and address.
- An enterprise unit, if all of the site's entities must belong to the same enterprise unit.

## Step 4:

In the **Settings** tab of the Site (tcemm0650m000) session, define subentity settings by site.

The subentity setting buttons refer to these sessions:

- **Procurement**
  Procurement Settings by Site (tdpur0111m000)
- **Sales**
  Sales Settings by Site (tdsls0511m000)
- **Warehousing**
  Warehousing Settings by Site (whwmd2101m000).
- **Production**
  Production Settings by Site (timfc0180m000)
- **Service**
  Service Settings by Site (tsmdm1103m000)

When you start these sessions, default settings are generated from the company parameters related to the subentities. For example, if you click **Warehousing**, the Warehousing Settings by Site (whwmd2101m000) session opens and warehousing settings from various warehousing parameter sessions are defaulted to this session. You can change the default settings if required.

Defining subentity settings by site is a prerequisite to assign sites to entities, see next step. For example, you cannot link a site to a production department if production settings by site are not present. More information is provided in the Online Help of the settings by site sessions.

## Step 5:

In the Assign Sites (tcemm0250m000) session, assign sites to entities. Select the sites to be assigned and the types of entities to which the selected sites must be assigned. You can run this session multiple times, each time using different address attributes as criteria.

**Note**: Sites cannot be assigned to financial warehouses.

It is recommended to run this session in simulation mode and print an error report before running the actual assignment process. This helps you to verify the results and identify errors in the site assignment process. You can repeat the simulation run to correct errors as often as needed.

After running the actual assignment process, you can still change the assigned sites.

## Step 6:

Verify the results of the site assignment process. You must manually assign sites to entities for which the assignment process was unsuccessful. Repeat the assignment process and verify the results until all entities are assigned as required.

To manually assign sites to entities, from the relevant tabs in the Enterprise Unit (tcemm0630m000) or the Site (tcemm0650m000) session you can start these sessions:

| Entity | Session |
|---|---|
| Work center | Work Centers (tirou0101m000) |
| Line station | Stations (tiasl1545m000) |
| Work cells | Work Cells (tirpt0140m000) |
| Repair cells | Repair Cells (tirpt0140m100) |
| Production department | Production Departments (tirou2100m000)<br>When a site is assigned to a production department during the site assignment process, the site is automatically passed on to the shop floor components related to the production department.<br>The shop floor components include:<br>■ Work centers<br>■ Work cells<br>■ Line stations<br>■ Machines related to work centers.<br>■ Repair cells<br>**Note**<br>If a site was not assigned to a production department, or if a site was not assigned to the related shop floor component, you must assign the site manually:<br>**1.** Open the Production Departments (tirou2100m000) session.<br>**2.** For each production department, specify a site (if not present) and click **Pass the Site** in the Production Department (tirou2600m000) session. |
| Sales office | Sales Offices (tdsls0512m000) |
| Purchase office | Purchase Offices (tdpur0112m000) |
| Service office | Service Offices (tsmdm1100m100) |
| Accounting office | Departments (tcmcs0165s000) |
| Shipping office | Shipping Office (fmfmd0680m000) |

| | |
|---|---|
| Assembly lines | Assembly Lines (tiasl1530m000) |
| Warehouses | Warehouses (whwmd2500m000) |
| Service locations | Locations (tswcs0125m000) |

### Step 7:

If machines not related to work centers are present, manually link these machines to sites using the Machines (Machine Types) (tirou0102m000) session.

### Step 8:

In the Generate Master Data by Office (tccom0232m000) session, define default data by office. The default data by office are created based on the global default data.

Global default data are settings from sales, procurement, and service parameter sessions that are defaulted to sales offices, purchase offices, and service offices, respectively. These default settings can be changed for individual sales offices, purchase offices or service offices after you clear the Use Global check box in these sessions:

| Office | Session | Use Global |
|---|---|---|
| Sales office | Sales Offices (tdsls0512m000) | **Use Global Sales Parameters** |
| Purchase office | Purchase Offices (tdpur0112m000) | **Use Global Procurement Parameters** |
| Service office | Service Offices (tsmdm1100m100) | **Use Global Service Parameters** |

### Step 9:

Use the Validate Enterprise Model for Multisite (tccom0230m000) session to validate the enterprise model defined in the previous steps.

The error report lists, for example, the warehouses, offices or other department without sites, or shop floor elements whose sites are different from the sites of the related shop floor warehouses. The complete list of checks used in this validation is displayed in the report if the **Validation Information** check box is selected.

Repeat the validation until no more errors are listed.

# Chapter 7
# In Preparation - Generate Item Default Data

7

## Activate sites - In preparation, generate item default data

The first steps of the second stage of the site activation process comprise adding sites to item default data. These steps are optional, skip these steps if no item default data is defined for your multicompany structure.

### Step 1:

Click **In Preparation** on the **Sites** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session. Consequently, the status of the concept changes to **In Preparation**.

### Step 2:

1. Generate default item data by site.

   This is done in the Generate Master Data (tccom0231m000) session. This session is only available if the site activation status is **In Preparation**.

   Recommended procedure:

   a. Select these check boxes:
      - **Item Defaults** (in the **Item Defaults** column)
      - **Simulation**
      - **Process Report**
      - **Error Report**

   b. Click **Generate**.

   c. Check the process and error reports and correct any errors before actually generating master data. The error report is only generated if errors occur. You can repeat running the simulation until all errors are corrected.

   d. Select the **Planning Defaults** check box and repeat the previous steps.

   The resulting item by site default data is maintained in the Item Control and Defaults by Site (tcibd1552m000) session. See *Generating item default data by site (p. 34)*.

2. Define item default data by sales, purchase, or service office.

   For purchase offices and service offices, this is only required if the default data by office differ from the local default data. However, if the **Items Service by Office is Mandatory** is selected in the General Service Parameters (tsmdm0100m000) session, defining item default data is mandatory for service offices.

   This is done manually:

   a. In the Item Defaults (tcibd0502m000) session, define an item type and item group combination.

   b. Add default data to this combination.

   c. Add sales, purchase, and service offices to this combination.

   Consequently:

   - Based on the default data, item data by sales office is generated during the activation process. This also applies to service offices if the **Items Service by Office is Mandatory** is selected in the General Service Parameters (tsmdm0100m000) session. For purchase offices, no item data is generated, you must manually specify this data.
   - After the **Sites** concept is activated, when you create a new item based on the item defaults, item data by the sales or service office is generated. For purchase offices, no item data is generated, this must be created manually.

3. Define item default data by site and subentity.
   This is done as follows:

   a. In the Item Defaults (tcibd0502m000) session, specify a site.

   b. In the Item Control and Defaults by Site (tcibd1552m000) session, select the relevant **Create** check boxes to specify the subentities for which default item data related to the site must be generated.

### Step 3:

Validate the default data by checking the **Item Defaults** check box and clicking **Validate** in the Validate Master Data for Multisite (tccom0230m100) session.

The **Validation Information** report in this session lists the validation checks performed.

# Generating item default data by site

Default item data by site are generated in the Generate Master Data (tccom0231m000) session by selecting the **Item Defaults** and the **Planning Defaults** check boxes in the **Item Defaults** column and clicking **Generate**. Preferably, first generate the **Item Defaults** default data and then the **Planning Defaults** default data.

## Item Defaults

To add sites to the item default data, for each item related to an item group in the Item Defaults (tcibd0102m000) session, LN retrieves the sites of the warehouses linked to the items in these sessions:

- Item - Ordering (tcibd2100m000)
- Items - Planning (cprpd1100m000)
- Item Data by Warehouse (whwmd2510m000)
- Planned Inventory Transactions (whinp1500m000)
- Item - Warehouse - Inventory Transactions (whinr1510m000)
- Items - Sales (tdisa0501m000)
- Items - Purchase (tdipu0101m000)
- Items - Service (tsmdm2100m000)

The resulting item by site default data is maintained in the Item Control and Defaults by Site (tcibd1552m000) session.

## Planning Defaults

To add sites to the item-planning default data in the Items - Planning Defaults (cprpd1110m000) session, in this session LN updates the **Ordering Site** field with the site of the warehouse in the **Default Warehouse** field.

# Chapter 8
# In Preparation - Generate Item Data

8

## Activate sites - In preparation, generate item data

Generating item data by site is a mandatory step in the site activation process.

The site related item data are generated using the Generate Master Data (tccom0231m000) session. This session is only available if the site activation status is **In Preparation**.

**Important!**

To generate item data by site, you must perform steps 1 and 2 in the following procedure before generating any of the other item master data. This is because the data generated in these steps must be present before the other item data can be generated.

After completing steps 1 and 2, you are recommended to complete the following steps one by one, in the indicated order instead of selecting multiple options and generating master data for these options in one go. This is to achieve the best results and to avoid overburdening the system.

In each step performed in the Generate Master Data (tccom0231m000) session, it is recommended to select the **Simulation**, **Process Report**, and **Error Report** check boxes and correct any errors before actually generating master data. You can repeat the simulation and correct errors as often as required.

In the **Item Data** group box of the Generate Master Data (tccom0231m000) session:

1. Select the **Common** check box to generate item data by site.
2. Click **Generate**.

   The item data by site are added to these sessions:
   - Items by Site (tcibd1550m000)
   - Item - Ordering by Site (tcibd2150m000)
   - Date-Effective Supply Source by Site (tcibd1155m000)

   See *Generating general item data by site (p. 39)*.
3. Select the **Warehousing** check box to generate Warehousing item data by site.

4. Click **Generate**.

   The item data from the Item Data by Warehouse (whwmd2510m000) session is added to the Item - Warehousing by Site (whwmd4104m000) session. The site is retrieved from the warehouse of the item in the Item Data by Warehouse (whwmd2510m000) session.

5. Select the **Planning** check box to update Enterprise Planning item data by site.

6. Click **Generate**.

   The site and the warehouse of the items in the Item - Ordering by Site (tcibd2150m000) session is added to the plan item in the Items - Planning (cprpd1100m000) session.

7. Select the **Manufacturing** check box to generate Manufacturing item data by site.

8. Click **Generate**.

   The Manufacturing item data is added to the Item - Production by Site (tiipd0151m000) session. See *Generating Manufacturing item data by site (p. 40)*.

9. Select the **Procurement** check box to generate Purchase Control item data by site and purchase office.

10. Click **Generate**.

    The Purchase Control item data is added to the Items - Purchase by Site (tdipu0181m000) and Items - Purchase by Office (tdipu0181m100) sessions. See *Generating Procurement item data by site and office (p. 40)*.

11. Select the **Sales** check box to generate Sales Control item data by site and sales office.

12. Click **Generate**.

    The Sales Control item data is added to the Items - Sales by Site (tdisa0181m100) and Items - Sales by Office (tdisa0181m000) sessions. See *Generating Sales item data by site and office (p. 41)*.

13. Select the **Service** check box to generate Service item data by site.

14. Click **Generate**.

    The Service item data is added to the Items - Service by Site (tsmdm2120m100) and Items - Service by Service Office (tsmdm2120m000) sessions. See *Generating Service item data by site and office (p. 43)*.

15. Select the **Project** check box and click **Generate** to add sites to the Project item and item default data and settings in the:
    - Items - Project Defaults (tppdm0506m000) session. The site is retrieved from the warehouse defined for the item in the Item - Ordering Defaults (tcibd2101m000) session.
    - Items - Project (tppdm0505m000) session. The site is retrieved from the warehouse defined for the item in the Item - Ordering (tcibd2100m000) and Item - Ordering by Site (tcibd2150m000) sessions, and from the warehouse listed on deliverables, such as planned purchase orders, and planned warehouse orders.

16. In the Validate Master Data for Multisite (tccom0230m100) session, complete these steps to validate the data:
    - In the **Item Data** column, select the **All** check box.
    - Click **Validate**.

## Generating general item data by site

General item data by site are generated in the Generate Master Data (tccom0231m000) session by selecting the **Common** and clicking **Generate**.

After selecting the **Common** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN generates Common item data by site in these sessions:

- Items by Site (tcibd1550m000)
- Item - Ordering by Site (tcibd2150m000)
- Date-Effective Supply Source by Site (tcibd1155m000).

To generate general item data by site, for each item present in the Items (tcibd0501m000) session, LN completes these steps:

1. Check whether data is present in the Item Defaults by Site (tcibd1551m000) session.
2. If yes, based on the default data, generate item data by site in the Items by Site (tcibd1550m000) session. For these items, by default the **Use Global Item** check box is cleared in the Items by Site (tcibd1550m000) session.
3. If no, check whether the item is present in any of these sessions:
    - Item Control and Defaults by Site (tcibd1552m000)
    - Item - Ordering (tcibd2100m000)
    - Items - Planning (cprpd1100m000)
    - Item Data by Warehouse (whwmd2510m000)
    - Planned Inventory Transactions (whinp1500m000)
    - Items - Sales (tdisa0501m000)
    - Items - Purchase (tdipu0101m000)
    - Items - Service (tsmdm2100m000)
    - Planned Inventory Transactions (whinp1500m000)
    - Item - Warehouse - Inventory Transactions (whinr1510m000)
4. If no, take no further action. No data is generated.
5. If yes, retrieve the site of the warehouse of the item.
6. Add the site to the item data in the Items by Site (tcibd1550m000) session. For these items, by default the **Use Global Item** check box is selected in the Items by Site (tcibd1550m000) session.

For the Date-Effective Supply Source by Site (tcibd1155m000) session, data is also generated based on data from the Date-Effective Supply Source (tcibd0510m000) session and the Items by Site (tcibd1550m000) session.

### Supply sources

For non-planned items, and items for which no item-ordering data is present, the default supply source is set to **Distribution** in the Items by Site (tcibd1550m000) session.

For all other items, the default supply source is retrieved from the **Actual Supply Source** field of the Items (tcibd0501m000) session.

## Generating Manufacturing item data by site

After selecting the **Manufacturing** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN generates Manufacturing item data by site in the Item - Production by Site (tiipd0151m000) session.

The data is retrieved from:

- The Items (tcibd0501m000) session
- The Item - Production (tiipd0101m000) session
- The Item - Production Defaults (tiipd0102m000) session, if default data have been specified.
- The value in the **Site** field is retrieved from the warehouse or the work center listed in these sessions:
  - Bill of Material (tibom1110m000)
  - Generic BOMs (tipcf3110m000)
  - Production Orders (tisfc0501m000)
  - Production Schedules (tirpt4101m000)
  - Production Schedule Lines (tirpt4102m000)
  - Routing Operations (tirou1102m000). Sites are not retrieved from subcontracting work centers.

## Generating Procurement item data by site and office

After selecting the **Procurement** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN generates Purchase Control item data by site in the Items - Purchase by Site (tdipu0181m000) session and item data by purchase office in the Items - Purchase by Office (tdipu0181m100) session. In these sessions, you can verify and, if required, adjust the generated results.

### Items - purchase by site

The procurement data by site is generated for the sites retrieved from:

- The warehouses listed in these sessions:
  - Delivery Patterns by Warehouse / BP / Item (tdipu0124m000)
  - RFQ Lines (tdpur1502m000)
  - RFQ Responses (tdpur1506m000)
  - Purchase Requisitions (tdpur2501m000)
  - Purchase Contract Lines Overview (tdpur3501m500)

- Purchase Order - Lines to be Released (tdpur4501m140)
- Purchase Orders - by Manual Activities (tdpur4501m150)
- Purchase Order - Lines to be Received (tdpur4501m400)
- Purchase Order Lines Monitor (tdpur4501m500)
- Purchase Order Material Supply Lines (tdpur4116m000)
- Purchase Order Change Request Material Supply Lines (tdpur4116m100)

- The site of the line station linked order line information in the Purchase Order Line - Linked Information (tdpur4502s000) session.

### Items - purchase by office

If data is present for the relevant item type and item group in the Items - Purchase Defaults by Office (tdipu0182m100) session, procurement item data by office is generated for the offices and items combinations retrieved from these sessions:

- Request for Quotation (tdpur1600m000)
- RFQ Lines (tdpur1502m000)
- Purchase Requisitions (tdpur2501m000)
- Purchase Requisition (tdpur2600m000)
- RFQ Responses (tdpur1506m000)
- Purchase Contracts Overview (tdpur3500m500)
- Purchase Contract Lines Overview (tdpur3501m500)
- Purchase Contracts - by Item/Price Group (tdpur3510m000)
- Purchase Schedules (tdpur3110m000)
- Purchase Schedule (tdpur3511m000)
- Purchase Schedule Lines (tdpur3111m000)
- Project Related Data For Schedule (tdpur3111m100)
- Purchase Schedule Lines (tdpur3111m200)
- Purchase Orders - Overview (tdpur4500m500)
- Purchase Orders (tdpur4100m000)
- Purchase Order Lines (tdpur4101m000)
- Purchase Order Change Request Material Supply Lines (tdpur4116m100)

## Generating Sales item data by site and office

After selecting the **Sales** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN generates Sales Control item data by site in the Items - Sales by Site (tdisa0181m100) session and item data by sales office in the Items - Sales by Office (tdisa0181m000) session. In these sessions, you can verify and, if required, adjust the results.

## Sales items

In these sessions, the **Site** field is filled with the site of the warehouse in the **Warehouse** field:

- Items - Sales (tdisa0501m000)
- Item - Sales Defaults (tdisa0602m000)

## Sales item data by site

If data is present for the relevant item type and item group in the Item - Sales Defaults by Site (tdisa0182m100) session, sales item data by site is generated in the Items - Sales by Site (tdisa0181m100) session based on the sites of the warehouses and the work centres listed in these sessions:

- Sales Order Lines (tdsls4101m000)
- Sales Order Material Supply Lines (tdsls4116m000)
- Sales Order Line Components (tdsls4163m000)
- Sales Quotation Lines (tdsls1501m000)
- Sales Contract Lines (tdsls3501m000)
- Sales Release Lines (tdsls3508m000)
- Sales Release Lines - Sequence Shipping Schedule (tdsls3116m000)
- Sales Release Line Details - Pick-up Sheet (tdsls3116m100)
- Sales Release Lines - Sequence Shipping Schedule (tdsls3116m200)
- Sales Schedules (tdsls3111m000)
- Sales Schedule Lines (tdsls3107m000)
- Pick-up Sheets (tdsls3107m100)
- Inventory Consumptions (tdsls4140m000)
- Inventory Consumption Lines (tdsls4141m000)
- Orders by Inventory Consumption Line (tdsls4142m000)
- Sales Order Template Lines (tdsls2506m000)

## Sales item data by office

For existing item data by sales office in the Items - Sales by Office (tdisa0181m000) session, the site of the warehouse is added. New data is generated based on the sales office listed in these sessions:

- Sales Order Lines (tdsls4101m000)
- Sales Order Line Components (tdsls4163m000)
- Sales Quotation Lines (tdsls1501m000)
- Sales Contract Lines (tdsls3501m000)
- Sales Schedules (tdsls3111m000)

In the Items - Sales Defaults by Sales Office (tdisa0182m000) session, the **Site** field is filled with the site of the warehouse in the **Warehouse** field.

# Generating Service item data by site and office

After selecting the **Service** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN generates Service item data by site.

## Serialized Items (tscfg2100m000)

In the Serialized Items (tscfg2100m000) session, the value in the:

- **Production Site** field is retrieved from the site of the warehouse listed on the production orders, production schedules, or assembly orders that initiated the production of the item.
- **Repair Site** field is retrieved from the site of the warehouse listed in the **Warehouse** field of the Serialized Items (tscfg2100m000) session.
- **Location Site** field is retrieved from the site of the address listed in the **Address** field of the Serialized Items (tscfg2100m000) session.

## Items - Service (tsmdm2100m000)

In the Items - Service (tsmdm2100m000) session, the value of the **Site** field is updated with the site of the warehouse in the **Warehouse** field.

## Items - Service Defaults (tsmdm2105m000)

In the Items - Service Defaults (tsmdm2105m000) session, the value of the **Site** field is updated with the site of the warehouse in the **Warehouse** field.

## Items - Service by Service Office (tsmdm2120m000)

In the Items - Service by Service Office (tsmdm2120m000) session, new data is generated if:

- The **Items Service by Office is Mandatory** check box is selected in the General Service Parameters (tsmdm0100m000) session. The data is based on the service office present in:
  - Service orders
  - Maintenance sales orders
  - Maintenance work orders
  - Claims
  - Maintenance sales quotes
- Data is present in the Items - Service Defaults by Service Office (tsmdm2125m000) session, the new data is based on the default data.

For existing data in the Items - Service by Service Office (tsmdm2120m000) session, the value in the **Repair Site** field is updated with the site of the warehouse in the **Repair Warehouse** field.

## Items - Service by Site (tsmdm2120m100)

In the Items - Service by Site (tsmdm2120m100) session, new data is generated based on:

- The site present in:
  - Service orders
  - Maintenance sales orders
  - Maintenance work orders
  - Claims
  - Maintenance sales quotes
- Data from the Items - Service Defaults by Site (tsmdm2125m100) session, if default data is present.

## Items - Service Defaults by Service Office (tsmdm2125m000)

In the Items - Service Defaults by Service Office (tsmdm2125m000) session, the site of the warehouse in the **Repair Warehouse** field is updated to the **Repair Site** field.

# Chapter 9
# In Preparation - Generate Other Site Related Master Data

9

## Activate sites - In preparation, generate other site related master data

Generating site related master data other than item data is a mandatory step in the site activation process.

The other than item master data are generated using the Generate Master Data (tccom0231m000) session. This session is only available if the activation status is **In Preparation**.

For the best results, and to avoid overburdening the system, you are recommended not to generate all site related master data at once but to complete this process by carrying out the following steps one by one, in the indicated order.

In each step performed in the Generate Master Data (tccom0231m000) session, it is recommended to select the **Simulation**, **Process Report**, and **Error Report** check boxes and correct any errors before actually generating master data. You can repeat running the simulation until all errors are corrected.

In the **Other Master Data** group box of the Generate Master Data (tccom0231m000) session, select:

1. The **Common** check box to add the **Ship-from Site** and the **Ship-to Site** to the Scenarios by Landed Costs Set (tclct1105m000) session. In this session, the site of the **Ship-from Warehouse** is defaulted to the **Ship-from Site**, and the site of the **Ship-to Warehouse** is defaulted to the **Ship-to Site**.
2. The **Manufacturing** check box to add sites to Manufacturing data.

   See *Generating other Manufacturing master data by site (p. 46)*.
3. The **Procurement** check box to generate Purchase Control master data by site.

   See *Generating other Procurement master data by site (p. 47)*.
4. The **Sales** check box to generate Sales Control master data by site.

   See *Generating other Sales master data by site (p. 48)*.
5. The **Service** check box to generate Service master data by site.

See *Generating other Service master data by site (p. 48)*.

6. The **Quality** check box to generate Quality master data by site.

   See *Generating other Quality master data by site (p. 49)*.

7. The **Warehousing** check box to generate Warehousing master data by site. If the kit type is **Product**, the **Site** field is populated with the site related to the supply-from and supply-to warehouse.

   If the supply-from and supply-to warehouses have different sites, a site is not added and an error is listed in the report. If the kit type is **Line Station**, the site of the first warehouse of the first kit component is assigned.

8. In the Validate Master Data for Multisite (tccom0230m100) session, complete these steps to validate the data:
   - In the **Other Master Data** column, select the **All** check box.
   - Click **Validate**.

# Generating other Manufacturing master data by site

After selecting the **Manufacturing** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN adds sites to these sessions:

- Production Models (tirpt2100m000)
- Products (tirpt2130m000)
- Subcontracting Models (tisub1100m000)
- Subcontracting Bill of Material (tisub1110m000)
- Tool Numbers (titrp0102m000)
- Tool Kits (titrp0103m000)

## Process

To add a site to a production model and a product, LN completes these steps:

1. Check if the work cell, repair cell, receiving warehouse, and quarantine warehouse related to the production model have the same site. If no, a site is not added to the production model and the process continues checking the next production model. See note.
2. Assign the site of the production model's work cell to the production model in the Production Models (tirpt2100m000) session.
3. Add a site to the production model's item in the Items by Site (tcibd1550m000) and Item - Production by Site (tiipd0151m000) sessions, if not yet added during the *Generating Manufacturing item data by site (p. 40)* process step.
4. Add the site of the production model to the product in the Products (tirpt2130m000) session.
5. Repeat these steps for the other product models and products present in the multicompany environment.

To add a site to a subcontracting model and a subcontracting bill of material (BOM), LN completes these steps:

1. Check if the warehouses of the materials related to the subcontracting model have the same site.

   If no, a site is not added and the process continues checking the next subcontracting model. See note.
2. Add the site of the warehouses to the subcontracting model in the Subcontracting Models (tisub1100m000) session.
3. Add the site of the subcontracting model to the subcontracting bill of material (BOM) in the Subcontracting Bill of Material (tisub1110m000) session.

**Note**

If a site cannot be added, an error is listed on the report. You must manually adjust the sites of the related warehouses.

Next, you must add the correct site to the production or subcontracting model either manually or by rerunning the process by selecting the **Manufacturing** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session.

To add a site to a tool number and a toolkit, LN completes these steps:

1. Assign site of the warehouse related to the tool number to the tool number in the Tool Numbers (titrp0102m000) session.
2. Check if the tool numbers of the toolkit relate to the same site. If no, a site is not added to the toolkit and you must manually adjust the sites of the tool numbers and add a site to the toolkit either manually or by rerunning the process.
3. Assign the site of the tool numbers of the toolkit to the toolkit in the Tool Kits (titrp0103m000) session.

## Generating other Procurement master data by site

After selecting the **Procurement** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN adds sites to these sessions:

- Delivery Patterns by Warehouse / BP / Item (tdipu0124m000)
- Planned Delivery Moments (Shipment Based) (tdipu0125m000)
- Planned Delivery Moments (Receipt Based) (tdipu0126m000)
- Purchase Offices (tdpur0112m000)
- Purchase User Profiles (tdpur0143m000)
- Purchase Contracts (tdpur3100m000)
- Purchase Contract Lines (tdpur3101m000)

### Process

The site that is added to these sessions is retrieved from the related warehouse.

## Generating other Sales master data by site

After selecting the **Sales** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN adds sites to these sessions:

- Items - Sales Business Partner (tdisa0510m000)
  The ship-from site is retrieved from the ship-from warehouse, and the ship-to site is retrieved from the ship-to warehouse.
- Items - Sales Business Partner by Office (tdisa0190m000)
  The site is retrieved from the ship-from warehouse.
- Items - Sales Business Partner by Site (tdisa0190m100)
  The site is retrieved from the ship-to warehouse.
- Sales Offices (tdsls0512m000)
  The site is retrieved from the related warehouse.
- Sales User Profiles (tdsls0139m000)
  The site is retrieved from the related warehouse.
- Sales Contract Lines (tdsls3501m000)
  The site is retrieved from the related warehouse and ship-to warehouse.

**Note**

If a site is not specified for a warehouse related to an object in the above sessions, you must add sites to the warehouses and to the **Site** field in the above sessions.

## Generating other Service master data by site

After selecting the **Service** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN adds sites to these sessions:

- Installation Groups (tsbsc1100m000)
  To fill the **Location Site** field, LN takes the site related to the department specified in the **Department** field. The **Repair Site** field is populated with the site related to the **Operations Department**.
- Service Offices (tsmdm1100m000)

| Field: | Is populated with warehouse related to field: |
|---|---|

| Site | Warehouse |
|---|---|
| Site Incoming Parts | Warehouse Incoming Parts |
| Site Outgoing Parts | Warehouse Outgoing Parts |

- Service User Cost Defaults (tsmdm1162m000)

  Sites are only applicable for cost type **Material**. The **Site** field is populated with the site related to the warehouse specified in the **Warehouse** field.

- Items - Service Business Partner by Site (tsmdm2130m200)

  The **Site** field is populated with the site related to the warehouse specified in the **Warehouse** field.

## Generating other Quality master data by site

After selecting the **Quality** check box and clicking **Generate** in the Generate Master Data (tccom0231m000) session, LN adds sites to these sessions:

- Testing Combinations (qmptc0119m000)

| Field: | Is populated with warehouse related to field: |
|---|---|
| Site | From Warehouse |
| To Site | To Warehouse |

- Quality Series Defaults (qmptc0131m000)

  If a warehouse is specified, the **Site** field is populated with the site related to the warehouse.

  If a department and no warehouse is specified, the **Site** field is populated with the site related to the department.

  If an enterprise unit and no warehouse or department is specified, the **Site** field is populated with the site related to the enterprise unit.

# Chapter 10
# Activate

10

## Activate sites - Activating the Sites parameter

The final stage in the activation process is the actual multisite activation.

You can only execute this stage if:

- You have super user authorization.
- The activation status is **In Preparation**.

Before launching the activation:

- Complete and successfully validate the setup in the **In Preparation** stage.
- It is strongly recommended to create a backup of the company environment.

To activate the multisite concept:

1. Click **Activate** on the **Sites** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session.
2. Click Yes in the dialog box displaying the message: "This step will lock the companies to start the Data Upgrade Run. Do you want to continue?"

   **Note**: Locking the companies means that the sessions of the company environment are unavailable for end users during the execution of the process.
3. In the Initialize Data Upgrade Run (ttspt2200m000) session that starts, specify the settings for the data upgrade run.
   - To immediately start the data upgrade run, select the **Start Data Upgrade Engine After Initialization** and click **Initialize**. See step 8 for the steps carried out during the data upgrade run.
   - Otherwise, clear this check box and see next step.
4. Click **Initialize** to complete the creation of the data upgrade run and close the Initialize Data Upgrade Run (ttspt2200m000) session.
5. Start the Data Upgrade Runs (ttspt2500m000) session.

6. Select the data upgrade run created in the previous steps and if required, adjust the settings.
7. In the appropriate menu, select Data Upgrade Engine.
8. In the Data Upgrade Engine (ttspt2201m000) session that opens, check the run settings if required and click **Continue** to start the data upgrade run. You can run the process in simulation mode first.

   The data upgrade run includes these steps:

   a. Revalidate the master data setup.
   b. Add sites to operational data such as orders, quotations, claims, shipments, and so on, that are not stored in history tables.
   c. Set the **Sites** concept to **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session.
   d. Unlock the sessions of the company environment.

      **Note**: This means that from this step onward, end users can resume working in the company environment.

   e. Assign sites to history data, that is, orders, shipments, quotations, and so on that are present in history tables.

**Note**

In case of errors during the revalidation of the master data setup, an error report is created and the process stops. You must manually correct the errors and restart the data upgrade run starting the Data Upgrade Runs (ttspt2500m000) session and clicking Data Upgrade Engine.

# Chapter 11
# Activating Job Shop by Site

11

## Activating Job Shop by Site for multisite

To use the Job Shop by Site functionality, the **Job Shop by Site** concept must be **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session.

If the concept is **Active**, the bill of material (BOM) and routing for an item are managed on site level.

Before you can activate the **Job Shop by Site** concept, you must activate these concepts in the Multisite Concepts Activation (tcemm4600m000) workbench session:

- **Item Type Product**
- **Standard Cost by Enterprise Unit**
- **Planning Cluster Mandatory**
- **Sites**

To change the status from **Inactive** to **Active**, complete these tasks:

### Step 1: Set parameter to In Preparation

Click **In Preparation** on the **Job Shop by Site** tab of the Multisite Concepts Activation (tcemm4600m000) workbench session.

The status changes from **Inactive** to **In Preparation** for each company of the current multicompany environment, including the financial companies.

In addition, various sessions become available in which you must define and validate the master data that are required to use the Job Shop by Site functionality. These sessions are accessed from the Multisite Concepts Activation (tcemm4600m000) workbench session.

### Step 2: Preparation and validation

In this step, you must set up various master data. This is done for each individual logistic company or company of type **Both** in your multicompany environment. This master data is not present in financial companies.

This setup includes the creation of Job Shop Bills of Material and Job Shop Routings that replace the current Bills of Material and the current Item routings.

The setup is performed in the **Job Shop by Site** tab in the Multisite Concepts Activation (tcemm4600m000) workbench session. See *Activating multisite concepts (p. 14)* and *The Multisite Concepts Activation (tcemm4600m000) workbench (p. 13)*.

In activation activities for which data is generated, generate the data and validate the data as often as needed until no more errors are listed in the report.

The step titles in this list refer to the activation activity options in the Multisite Concepts Activation (tcemm4600m000) workbench session. The sessions referred to in each step are accessed from the Activation Activity (tcemm4610m000) session.

1. **Preliminary Validation**
   In the Validate Master Data for Job Shop by Site (timfc0200m000) session, select the **Conflicting Concepts** check box to verify that no conflicting parameter settings are present. See *Validate that no conflicting concepts exist (p. 65)*.

2. **Define BOM and Routing Parameters**
   In the Job Shop Master Data Parameters (tirou0100m000) session, specify these company settings:
   - **BOM Model Number Group**
   - **BOM Model Order Series**
   - **Default Job Shop Routing**
   - Optionally, adjust these settings:
     - **Allow Multiple Job Shop BOMs per Item and Site**
     - **Use Site-specific Reference Operations Only**
     - **Approve Structures Automatically**

3. **Define BOM and Routing Settings**
   a. In the Production Settings by Site (timfc0180m000) session, specify these settings by site:
      - **Operation Rate Currency**
      - Clear the **Use Global Parameters** check box and optionally, specify BOM series and default job shop routings by site.
   b. Validate the settings specified in steps 2 and 3 by selecting the **New Job Shop Settings** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session.
   c. Validate the use of Subcontracting rate factors by selecting the **Subcontracting Rates** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session.

4. **Generate Machine Types and Capacity Groups**
   a. Generate machine types and machine groups in the Generate Machine Types and Machine Groups (tirou4260m000) session. See *Job Shop by Site activation - Generate machine types and machine groups (p. 57)*.

**b.** To add machines to operations, routing operations, and task relationships related to work centers that use machine types, use these options in the Multisite Concepts Activation (tcemm4600m000) workbench session :
- **Correct Machines on Generic Routing**
- **Correct Machines on Routing**
- **Correct Machines on Production Order**
- **Correct Machines on Task Relationships**

See *Job Shop by Site activation - Generate machine types and machine groups (p. 57)*.

**c. Validate**
Validate the machine types and machine capacity groups by selecting the **Machine Types** and **Machine Groups** check boxes in the Validate Master Data for Job Shop by Site (timfc0200m000) session. See *Validating machine types and machine groups (p. 59)*.

**5. Generate Reference Operations**
Generate reference operations in the Generate Reference Operations (tirou4250m000) session. In this session, reference operations are created from tasks and task relations. See *Job Shop by Site activation - Generating and validating reference operations (p. 60)*.

**6. Generate New Operation Rates**
Generate new operation rates in the Generate Operation Rates (ticpr1251m000) session. See *Job Shop by Site activation - Generate and validate operation rates (p. 58)*.

**7. Autofill Generic Routing**
If the **Product Configurator (PCF)** check box is selected in the Implemented Software Components (tccom0100s000) session, complete these steps:
- Use the Autofill Generic Routing (tipcf3210m200) session to add sites, reference operations, and machine types to generic routings.
- Validate the data by selecting the **Existing Master Data** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session.

See *Autofill and validate generic routing (p. 63)*.

**8. Generate Job Shop Routing**

**a.** Use the Generate Job Shop Routings (tirou4200m100) session to copy routings from the Item - Routings (tirou1101m000) session to the Job Shop Routings (tirou4100m000) session and the Standard Job Shop Routings (tirou4100m100) session.

See *Job Shop by Site activation - Converting sequences to revisions (p. 61)* on the options to convert operation sequences to job shop routing versions.

**b.** Select the **Job Shop Routings** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session to check that routings are copied successfully, and that the routing codes present on orders and other objects match the generated routing codes.

For orders without routing codes, a check is performed whether routings have been generated that match the order quantities and revision reference dates.

See *Validate Job Shop routings (p. 64)*.

9. **Generate Production and Job Shop BOM**
   Use the Generate Production and Job Shop Bills of Material (tibom3200m400) session to copy bills of material (BOMs) from the Bill of Material (tibom1110m000) session to the Job Shop Bills of Material (tibom3100m000) and to the Production Bills of Material (timfc3100m000) session.

   BOM lines whose expiry dates lie before the date specified in the **Create From** field of the Generate Production and Job Shop Bills of Material (tibom3200m400) session are not copied.

   Revision controlled items are copied to a Job Shop BOM and a Production BOM.

   Non-revision controlled items must be copied to a Job Shop BOM. Optionally, they can be copied to a Production BOM.

   In the Generate Production and Job Shop Bills of Material (tibom3200m400) session, a check verifies that values are specified in the **BOM Model Number Group** and **BOM Model Order Series** fields in the Job Shop Master Data Parameters (tirou0100m000) session and in the Production Settings by Site (timfc0180m000) session for each site.

10. **Define Machine Types in PCS Activities**
    If the **Project Control (PCS)** check box is selected in the Implemented Software Components (tccom0100s000) session, use the Activities (tipcs4101m000) session to specify machine types for activities that are linked to work centers with machine groups. This is because machine types are mandatory for activities when the Job Shop by Site functionality is activated.

11. **Autofill PCS Activities**
    If the **Project Control (PCS)** check box is selected in the Implemented Software Components (tccom0100s000) session, use the Autofill PCS Activities (tipcs4201m100) session to add reference operations to activities. The task code is used as the reference-operation code. The reference operation related to the machine type and the work center of the activity is selected.

## Step 3: Activation

Click **Activate** on the **Job Shop by Site** tab of the Multisite Concepts Activation (tcemm4600m000) workbench session.

**Note**: This button is only available for super users.

The status changes from **In Preparation** to **Active** for each company of the current multicompany environment at the end of the process.

The first step of the activation process is the automatic launch of the validation steps that you previously performed using the Validate Master Data for Job Shop by Site (timfc0200m000) session.

References to routings and BOMs are converted to Job Shop routings and Job Shop BOMs for these objects:

- Planned orders of type **Planned Production Order**
- Production orders in the Production Orders (tisfc0501m000) session.
- Production order advice in the Production Order Advice (whina3100m000) session.
- Testing combinations in the Testing Combinations (qmptc0119m000) session.
- Requisitions in the Purchase Requisitions (tdpur2501m000) session.

- Requests for Quotation in the Requests for Quotation (tdpur1501m000) session.
- Costing breaks in the Costing Breaks - Production Resources (tppdm3102m000) session.

This master data is corrected:

- Sub Work Centers (type will be Main Work Center)
- CPQ templates
- Testing Combinations
- Item Production

# Job Shop by Site activation - Generate machine types and machine groups

If the Job Shop by Site functionality is activated, machines are converted to machine types. The ID code of a machine becomes the ID code of the generated machine type. A machine type and the number of machines used in a work center constitute a machine capacity group.

Using machine types and machine capacity groups for work centers is optional. If a work center uses machine types and machine capacity groups, an operation for a work center must refer to a machine type of the work center.

If the Job Shop by Site functionality is not activated, operation A for work center X can refer to a machine, and operation B for the same work center can be without a reference to a machine. After the implementation of the Job Shop by Site functionality, either all operations, or none of the operations of a work center must refer to a machine.

Consequently, if you choose to use machine types for work center X, during the activation of the Job Shop by Site functionality, machine types must be added to work center X's operations without machine types.

## Generating machine types, machine groups and adding machines to operations

During the preparation stage of the activation procedure, complete these steps:

1. In the Generate Machine Types and Machine Groups (tirou4260m000) session, generate machine types and machine capacity groups for work centers.
2. In these sessions, add machines to operations, routing operations, and task relationships related to work centers that use machine types:
   - Correct Machines on Routing Operations (tirou1102m100)
   - Correct Machines on Generic Routing Operations (tipcf3120m100)
   - Correct Machines on Production Order Operations (tisfc0110m200)
   - Correct Machines on Task Relationships (tirou0104m100)

3. To ensure that the correct machines are specified for planned orders, generate planned orders in the Generate Order Planning (cprrp1210m000) session after running the Correct Machines on Routing Operations (tirou1102m100) session.

   In the Generate Order Planning (cprrp1210m000) session, planned orders are generated based on the machines corrected for routing operations in the Correct Machines on Routing Operations (tirou1102m100) session.

   After the activation of the Job Shop by Site functionality, the machines are converted to machine types.

4. Validate the machine types and capacity groups by selecting the **Machine Types** and **Machine Groups** check boxes in the Validate Master Data for Job Shop by Site (timfc0200m000) session. See *Validating machine types and machine groups (p. 59)*

# Job Shop by Site activation - Generate and validate operation rates

In the Generate Operation Rates (ticpr1251m000) session, the existing operation rates are copied to the Operation Rates (ticpr1151m000) session.

The new operation rates have these properties:

- Date effective
- The generated operation rates are without sites. Therefore, they are applicable for all sites.
- These **Types of Operation Costs** are supported:
  - **Labor**
  - **Labor Setup**
  - **Machine**
  - **Overhead on Man Hours**
  - **Overhead on Machine Hours**

The new operation rates are approved upon generation. Therefore, you cannot add sites to these rates or insert any other changes.

An exception to this rule is the operation rates of type **Labor**. These operation rates are copied to rates of type **Labor** and type **Labor Setup**. These rates can be changed, and must be approved manually.

## Validating operation rates

After you have generated the machine types, machine groups, reference operations and operation rates, perform the **Operation Rates** validation in the Validate Master Data for Job Shop by Site (timfc0200m000) session.

The **Operation Rates** validation checks whether, in the Operation Rates (ticpr1151m000) session, operation rates have been generated that have an ID code that is identical to the existing ID codes of the operation rates present in these sessions:

- Stations (tiasl1545m000)
- Work Centers (tirou0101m000)
- Reference Operations (tirou4150m000)
- Machine Capacity Groups (tirou4161m000)
- Work Cells (tirpt0140m000)

In these sessions, operation rates are present that were defined before the Job Shop by Site functionality is set up. If such rates are present with ID codes that do not match the new operation codes generated in the Operation Rates (ticpr1151m000) session, these are listed in the validation report and you must manually adjust the ID codes.

LN also checks whether unapproved operation rates are still present. Operation rates of type **Labor Setup** are generated without being approved. These operation rates must be manually approved or removed.

# Validating machine types and machine groups

Validate machine types and capacity groups by selecting the **Machine Types** and **Machine Groups** check boxes in the Validate Master Data for Job Shop by Site (timfc0200m000) session.

The **Machine Groups** validation checks whether the machine type ID codes generated in the Machine Capacity Groups (tirou4161m000) session match the machine ID codes present in these objects for the related work center:

- Generic routings
- Production orders
- Planned production orders

The **Machine Types** validation checks whether, in the **Machine** field of the Serialized Items (tscfg2100m000) session, machine ID codes are present that match the machine type ID codes generated in the Machine Types (tirou4160m000) session.

If yes, the machine codes are converted to machine type codes on the production orders, planned production orders, generic routings, and serialized items.

Production orders, planned production orders, generic routings, and serialized items whose machine codes do not match the generated machine type ID codes, are listed on the validation report. The machine codes must be manually adjusted.

# Job Shop by Site activation - Generating and validating reference operations

In the Generate Reference Operations (tirou4250m000) session, reference operations are created from tasks and task relations.

Tasks and reference operations are modeled differently. A task consists of task details and, optionally, multiple task relationships. The task relationships constitute a sublevel of the task. In the reference operation, the task relationship and the task information are presented at the same level.

Therefore, as a rule, multiple reference operations are created from one task. The only exception is a task without a default machine and default work center, and the **Use Site-specific Reference Operations Only** check box is cleared in the Item - Production by Site (tiipd0151m000) session. In that case, a single reference operation is generated from a task.

The ID of a reference operation is composed of the reference operation code, machine type, site, and work center of the reference operation.

Based on a task and the related task relationships, these reference operations are generated:

- A default reference operation.
- One reference operation for each site, if the **Use Site-specific Reference Operations Only** check box is selected in the Item - Production by Site (tiipd0151m000) session.
- One or more reference operations based on the default settings of the task defined in the Tasks (Reference Operations) (tirou0103m000) session:
  - If a default work center and a default machine is specified, a reference operation is created for the machine type, work center, and the site related to the work center.
  - If only a default work center is specified, a reference operation is created for the work center and the site related to the work center.
  - If only a default machine is specified, a reference operation is created for the machine type and the site related to the machine type.
- One or more reference operations based on these settings of the task relationship defined in the Task Relationships (tirou0104m000) session:
  - If a work center and a machine are specified, a reference operation is created for the machine type, work center, and the site related to the work center.
  - If only a work center is specified, a reference operation is created for the work center and the site related to the work center.
  - If only a machine is specified, a reference operation is created for the machine type and the site related to the machine type.

**Note**

Machines are converted to machine types in the Job Shop by Site activation process. See *Job Shop by Site activation - Generate machine types and machine groups (p. 57)*.

## Validating reference operations

After you have generated reference operations, validate the reference operations by selecting the **Reference Operations** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session.

For tasks that are present in generic routings, PCS activities, production orders, and testing combinations, this validation checks whether the task ID matches the ID of a reference operation generated in the Generate Reference Operations (tirou4250m000) session.

The matching tasks present on the generic routings, PCS activities, production orders, and testing combinations are converted to reference operations when the Job Shop by Site functionality is activated.

If no matching tasks are present, you cannot run these sessions and consequently, the Job Shop by Site functionality cannot be activated:

- Generate Job Shop Routings (tirou4200m100).This session is used to copy routings from the Item - Routings (tirou1101m000) session to the Job Shop Routings (tirou4100m000) and Standard Job Shop Routings (tirou4100m100) sessions.
- Autofill Generic Routing (tipcf3210m200). This session is used to add sites, reference operations, and machine types to the Job Shop routing. See *Autofill and validate generic routing (p. 63)*

# Job Shop by Site activation - Converting sequences to revisions

To copy routings from the Item - Routings (tirou1101m000) session to the Job Shop Routings (tirou4100m000) and Standard Job Shop Routings (tirou4100m100) sessions, the routing operation sequences must be converted to routing revisions.

Before the implementation of the Job Shop by Site functionality, a routing operation had one or more versions. A version was represented by a sequence number and an effective date. Thus, each operation had one or more sequences, and each sequence had an effective date. For example, operation 10 could have three sequences, each with different effective dates than operation 20.

When the Job Shop by Site functionality is activated, the new Job Shop routings are used. For a Job Shop routing, versions are defined as revisions in the routing header instead of operation sequences.

## Creating routing revisions

In the Generate Job Shop Routings (tirou4200m100) and Generate Production and Job Shop Bills of Material (tibom3200m400) sessions, these options are available to convert operation sequences to revisions:

## Minimal

One revision is created from the operation sequences that are present on or after the date specified in the **Create From** field. For each operation, the sequence that is effective on the current date is added as an operation to the new revision. The date specified in the **Create From** field is the effective date of the new revision and the new operations.

**Note**

Sequences that are not effective on the current date are not converted.

For example, the old routing or BOM has operations 10 and 20. Operation 10 has sequences 10/1, 10/2, and 10/3. Sequence 10/2 is effective on the current date. Operation 20 has sequences 20/1, 20/2, 20/3, and 20/4. Sequence 20/1 is effective on the current date.

Consequently, revision 001 is created with operations 10 and 20. Operation 10 is created from sequence 10/2, and operation 20 is created from sequence 20/1. The other sequences are not converted.

## Extended

Multiple revisions can be created from the operation sequences.

One revision is created for each effective date and expiry date present in the operation sequences, that falls after the date specified in the **Create From** field. An exception is that effective or expiry dates that do not differ by more than one day are converted to a single revision.

The date specified in the **Create From** field is the effective date of the first new revision and the new operations.

**Note**

Sequences that are not effective after the date specified in the **Create From** field are not converted.

Revisions have no expiry dates. A revision is effective until the next revision becomes effective.

If the **Validate and Approve** check box is selected in the Generate Job Shop Routings (tirou4200m100) session or the Generate Production and Job Shop Bills of Material (tibom3200m400) session, the newly created revisions receive the **Approved** status, except for revisions with effective dates in the future. Revisions with effective dates in the future receive status **New**, which allows you to modify these revisions.

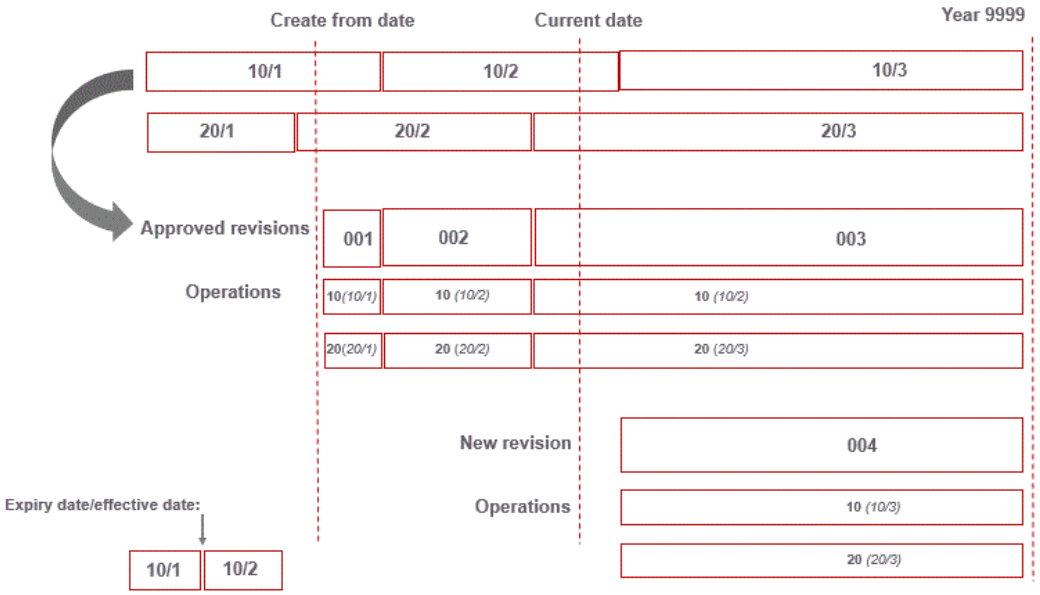
# Creating revisions using the Extend option - example

The old routing or BOM has operations 10 and 20. Operation 10 has sequences 10/1, 10/2, and 10/3. Operation 20 has sequences 20/1, 20/2, and 20/3.

This diagram displays the old operation sequences and the revisions and operations created from them using the **Extended** option in the Generate Job Shop Routings (tirou4200m100) session or the Generate Production and Job Shop Bills of Material (tibom3200m400) session.

In the diagram, the upper two bars represent the operation sequences. The subsequent bars represent the resulting revisions and operations.

The date specified in the **Create From** field is the effective date of the first revision, 001.




In the diagram, the expiry date of an operation sequence is the same as the effective date of the next operation sequence. Thus, the expiry date of 10/1 is identical to the effective date of 10/2.

Consequently, one revision is created for the expiry date of 10/1 and the effective date of 10/2, another revision for the expiry date of 20/2 and the effective date of 20/3, and so on.

The first revision is 001. The effective date of the first revision equals the date specified in the **Create From** field. Revision 001 ends where the next revision, 002 starts. The effective date of revision 003 marks the expiry of 002.

Revision 004 partly parallels 003. This is because revision 004 is not yet approved. When 004 receives the **Approved** status, the effective date of 004 will mark the expiry of revision 003.

Typically, the expiry date of the last BOM or operation sequence is set to the maximum date of 12/31/9999.

Because each routing has two operations, 10 and 20, the new revisions have two operations.

# Autofill and validate generic routing

This step is performed only if the **Product Configurator (PCF)** check box is selected in the Implemented Software Components (tccom0100s000) session.

Various values generated in previous steps must be added to the Job Shop routing in the Job Shop Routing Operations (tirou4101m000) session.

In the Autofill Generic Routing (tipcf3210m200) session, add these values to the Job Shop routing:

- The site from the Item - Production by Site (tiipd0151m000) session.
- The task from the Tasks (Reference Operations) (tirou0103m000) session. The task code is copied to the **Reference Operation** field in the Job Shop Routing Operations (tirou4101m000) session.
- The machine code of the machine related to the work center of the operation is copied to the **Machine Type** field in the Job Shop Routing Operations (tirou4101m000) session, if the work center is related to machine groups. If not, the machine type is not specified.

## Validating generic routings

Select the **Existing Master Data** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session to validate these data generated in the Autofill Generic Routing (tipcf3210m200) session:

- Reference operation
- Machine types
- The basic number of machines

For PCS Activities, a check is performed whether reference operations and machine types are added.

# Validate Job Shop routings

Select the **Job Shop Routings** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session to check that routings are copied successfully from the Item - Routings (tirou1101m000) session to the Job Shop Routings (tirou4100m000) and Standard Job Shop Routings (tirou4100m100) sessions, and that the routing codes present on orders and other objects match the generated routing codes.

When the Job Shop by site functionality is activated, routings are mandatory for planned production orders and production orders. For planned production orders and production orders without routing codes, a check is performed for whether routings have been generated that match the order quantities and revision reference dates.

For orders and other objects with a routing, these checks are performed:

- Does the routing code of an order or other object match one of the routing codes present in the Job Shop Routings (tirou4100m000) session?
- Is an approved revision of the routing present in the Job Shop Routings (tirou4100m000) session whose revision date matches the reference date of the order or other object?

The same checks are performed for these objects:

- Planned orders of type **Planned Production Order** in the Planned Orders (cprrp1100m000) session.
- Production orders in the Production Orders (tisfc0501m000) session.

- Production order advice in the Production Order Advice (whina3100m000) session.
- Testing combinations in the Testing Combinations (qmptc0119m000) session.
- Requisitions in the Purchase Requisitions (tdpur2501m000) session.
- Requests for Quotation in the Requests for Quotation (tdpur1501m000) session.
- Costing breaks in the Costing Breaks - Production Resources (tppdm3102m000) session.

For planned production orders and production orders without a routing, LN checks whether routings are present that have these properties:

- **Planned production orders**
  - Effective on the order reference date
  - Applicable for the order quantity
  - Approved
  - The **Use for Planning** check box is selected.
- **Production orders**
  Production orders that are no rework orders and with status up to **Completed**.
  - Effective on the order reference date
  - Applicable for the order quantity
  - Approved

# Validate that no conflicting concepts exist

To validate that no parameters are set that conflict with the Job Shop by Site functionality, select the **Conflicting Concepts** check box in the Validate Master Data for Job Shop by Site (timfc0200m000) session.

These check boxes must be cleared:

- **Use Shared Work Centers** in the Job Shop Master Data Parameters (tirou0100m000) session.
- **Workload Control Implemented** in the Planning Parameters (cprpd0100m000) session.

These check boxes must be selected:

- **Version Control** in the Production Order Parameters (tisfc0100s000) session.
- **PBOM History** in the Engineering Data Management Parameters (tiedm0100m000) session, if the **Engineering Revisions** check box is selected in the Implemented Software Components (tccom0100s000) session.

## Table sharing

The Item Production (tiipd001) and Item Production Defaults (tiipd002) tables must not be shared.

This is because when sites are activated, the **Job Shop Site** field of the Item - Production (tiipd0101m000) session contains the site of the BOM and the routings for the item related to the current company. Sites

are activated if the **Sites** parameter is set to **Active** in the Multisite Concepts Activation (tcemm4600m000) workbench session.

If these tables are shared, and you activate sites, the same site is allocated to the item for each company, whereas this site only applies to the current company. Therefore, you cannot activate sites properly if the item Production (tiipd001) and Item Production Defaults (tiipd002) tables are shared.

# Appendix A
# Reset Sites and Job Shop by Site

A

## Resetting the Sites and Job Shop by Site concepts

When LN is newly implemented, that is, the new implementation is a first-time implementation and not an upgrade of an earlier version, the multisite concept parameters are set to **Active**. The multisite concept parameters and the other sessions and options involved in multisite activation are not displayed.

Organizations who require to deactivate the multisite functionality for specific reasons can reset the **Sites** and the **Job Shop by Site** concept parameters to **Inactive**.

This applies to organizations who have an LN configuration without the multisite functionality and who want to install a new LN configuration that is to be similar to the existing configuration, using similar setup and processes. Therefore, the **Sites** and **Job Shop by Site** concept parameters of the new configuration must be inactive. The new configuration is to run independently from the existing configuration.

To reset the **Sites** and the **Job Shop by Site** concept parameters, complete these steps:

1. On the appropriate menu of the Implemented Software Components (tccom0500m000) session, select Personalize Toolbar.
2. In the Personalize Toolbar dialog box, unhide the **Reset Job Shop by Site** option and the **Reset Sites** option to display these options in the Implemented Software Components (tccom0500m000) session.
3. Save and close the Personalize Toolbar dialog box.
4. In the Implemented Software Components (tccom0500m000) session, select the **Reset Job Shop by Site** option and the **Reset Sites** option and set these concept parameters to **Inactive**.

Resetting the **Item Type Product**, **Standard Cost by Enterprise Unit**, and **Planning Cluster Mandatory** concept parameters is not required, because the impact of these settings on the business processes is limited.

**Note**

The **Reset Job Shop by Site** option is unavailable once you have defined or more machine capacity groups, reference operations, Job Shop routings, or Job Shop BOMs.

The **Reset Sites** option is unavailable once you have defined one or more sites.

# Appendix B
# Glossary

B

## 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.

## bill of material (BOM)

A list of all parts, raw materials, and subassemblies that go into a manufactured item and show the quantity of each of the parts required to make the item. The BOM shows the single-level product structure of a manufactured item.

## calculation office

A work center of the type **Costing Work Center** that is used to determine the enterprise unit for a project, or production order and also has an administrative function.

**Note**

When linked to production orders, the **Use as Calculation Office** check box in the Work Centers (tirou0101m000) session must be selected for the work center.

## cost type

Categories that are used to register the type of costs. Cost types enable you to have a more detailed view of the source of costs.

## effectivity unit

A reference number, for example a sales order line or a project deliverable line, that is used to model deviations for a unit effective item.

### enterprise unit

A financially independent part of your organization that includes entities such as departments, work centers, warehouses, and projects. The enterprise unit's entities must all belong to the same logistic company, but a logistic company can contain multiple enterprise units. An enterprise unit is linked to a single financial company.

When you carry out logistic transactions between enterprise units, the resulting financial transactions are posted to the financial companies to which each enterprise unit is linked.

### entity

A separate and independent building block for a planning cluster, site, or enterprise unit. For example, warehouse, work center, employee, sales department, purchase department, project, customer, supplier, financial company.

### financial company

A company that is used for posting financial data in Financials. You can link one or more enterprise units from multiple logistic companies to one financial company.

### financial company

Part of an LN database in which you can store all data concerning financial transactions.

## financial warehouse

A warehouse with warehouse type **Financial**. A financial warehouse is used to show the inventory levels and enable financial processing of owned inventory that is actually stored in a physical, that is, "real," warehouse belonging to another business unit or branch office within the same organization. The owning unit and the unit storing the inventory have their own p & l accountability.

## intercompany trade relationship

A "from and to" relationship between two parts of an organization. When an intercompany trade relationship is defined, the transactions between the from and the to-part of the relationship are regarded as intercompany trade. Consequently, specific cost and revenue bookings are posted for the from and the to-part.

The from-part incurs costs for goods delivered or services rendered to the to-part. The to-part is indebted to the from-part. The from-part invoices the to-part to be compensated for the costs incurred, if specified in the intercompany trade agreement.

The parts constituting an intercompany trade relationship can be:

- A financial company
- An enterprise unit
- An entity

A trade relationship between two parts applies to the underlying entities linked to these parts. For example, a trade relationship between two enterprise units applies to the entities linked to these enterprise units.

An intercompany trade relationship is linked to one or more intercompany trade agreements. In turn, each intercompany trade agreement is linked to an intercompany trade scenario. In this way, transfer pricing rules are defined for each trade scenario that is linked to the trade relationship. The transfer pricing rules determine the amounts of the intercompany trade transactions and, if specified, the internal invoices.

## 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.

## line station

A work center that is part of an assembly line. A line station is used in the production of FAS (final assembly schedule) items. A line station can have multiple positions, which enables more than one item to be present in one line station.

## logistic company

An LN company used for logistic transactions, such as the production and transportation of goods. All the logistic data concerning the transactions is stored in the company's database.

### machine

In LN, a mechanical object on which operations can be carried out to produce items.

Machines are linked to operation rates. The operation rate and the labor rate together form the basis for the actual costing of production orders.

### machine capacity group

The number of machines of a machine type in a work center and its logistical and planning properties.

### machine type

The definition of the machine at company level. For example: A Haas turning lathe ST30.

### 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.

### plan item

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

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

You can plan these items by means of the following:

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

Plan items can be one of the following:

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

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

### planned purchase order

A planned order in Enterprise Planning to purchase a certain quantity of an item from a supplier (buy-from business partner).

### planned warehouse order

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

### planning cluster

An object used to group warehouses for which the inbound and outbound flow of goods and materials is planned collectively. For this purpose, the demand and supply of the warehouses of the planning cluster is aggregated. Within a planning cluster one supply source is used, such as production, purchasing or distribution.

If multisite is implemented, a planning cluster must include one or more sites. The site or sites include the warehouses for which the planning processes are performed. A site is linked to one planning cluster.

### product

An item that is purchased, subcontracted, manufactured, or assembled.

### production department

A group of production resources, work centers and work cells, physically related to each other. For example, a production hall is a production department.

### production model

A predefined configuration that specifies the production method, list of materials, time and capacity required and reporting method.

A production model contains the following:

- Production process
- Time and capacity required
- Production process reporting
- Materials supply process
- Item inspection method
- Required tools

If the **Multi-Product Production** check box on a production model for repetitive manufacturing is selected, a list of products is added to the production model that specifies which items are produced.

**Note**

- Production models are revision controlled. A new revision is generated for every change to the existing configuration.
- The order system must be **Planned**.
- Project Control is disabled.

## 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.

## reference operation

An operation is an activity performed by a machine. A list of reference operations is a library of available operations for job shop production orders.

A reference operation may be defined on multiple levels:

- **Operation Code**
  The reference operation can be executed on all sites, in all work centers and on all machines linked to the company.
- **Operation Code + Machine Type**
  The reference operation can be executed on all sites that have one or more machines of the specified machine type.
- **Operation Code + Site**
  The reference operation can be used in all work centers and all machines linked to the specified site. Note: Recommended if a site has its own setup logic for specific operations. This type of reference operation can be used in a work center without machines.
- **Operation Code + Machine Type + Site**
  The reference operation can be used on all machines of a specific machine type and in all work centers and all sites which have the machine type present. Note: Recommended if the machine type has its own setup for specific operations.
- **Operation Code + Site + Work Center**
  The reference operation can be used for specific work center and site combination. Note: this operation can only for work centers without machines.
- **Reference Operation + Machine Type + Site + Work Center**
  The reference operation can only be used for one specific machine type on one work center/site combination.

## repair cell

A repair cell is a dedicated work cell linked to a production model.

**Note**

- A repair cell cannot be linked to work stations.
- Repair cells are used in repetitive manufacturing to repair rejected items.

## routing

The sequence of operations required to manufacture an item.

For each operation, the reference operation, machine, and work center are specified, as well as information about setup time and cycle time.

## sales office

A department that is identified in the company business model to manage the business partner's sales relations. The sales office is used to identify the locations that are responsible for the organization's sales activities.

## 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 multisite 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.

## standard cost

The sum of the following item costs as calculated by the standard cost calculation code:

- Material costs
- Operational costs
- Surcharges

Prices that are calculated against other price simulation codes are simulated prices. The standard cost is used for simulation purposes and in transactions when no actual price is available.

Standard cost is also an inventory valuation method for accounting purposes.

## subentity

A reference to an LN package, such as Manufacturing or Warehousing. For example, items by subentity refer to sessions such as Items - Planning (cprpd1100m000), or Item Data by Warehouse (whwmd2510m000). Similarly, site by subentity refers to site data by LN package, which is available in sessions such as Warehousing Settings by Site (whwmd2101m000) or Production Settings by Site (timfc0180m000).

## task

An activity to manufacture or repair an item. For example, sawing, drilling, or painting.

A task is carried out on a work center, and can be related to a machine.

### warehouse

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

### work cell

A production unit consisting of one or more work stations in a fixed sequence.

A work cell is used in repetitive manufacturing for the production of a repetitive item.

### work center

A specific production area consisting of one or more people and/or machines with identical capabilities, that can be considered as one unit for purposes of the capacity requirement planning and detailed scheduling.

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