Long-Term Planning (PP-MP-LTP)



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Icons

| lcon | Meaning |
|--------------|----------------|
| Δ | Caution |
| | Example |
| ₽ | Note |
| Ø | Recommendation |
| 4129 | Syntax |
| \mathbf{P} | Тір |

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Long-Term Planning (PP-MP-LTP)

Long-Term Planning (PP-MP-LTP)

Purpose

This component provides support for **long-term production planning** and for carrying out **simulations in short and mid-term planning**.

To carry out an annual planning or a rolling quarterly planning run you require information on the future stock and requirements situation. This means you need to know how sales and operations planning influence resources. That is, whether the results of sales planning can actually be produced with capacity on hand. If such information is available it is possible to decide at an early date whether extra work centers will be required to cope with bottlenecks, or whether additional machinery will have to be purchased to reach the sales target.

In long-term planning you can also plan materials that usually require very little planning in operative planning, such as, materials planned using reorder point planning, bulk material, and materials planned using KANBAN. In long-term planning, you can plan these materials as you would MRP materials. This provides you with an overview of how these materials influence the demand program.

The purchasing department can also use the results of long-term planning. They use the information on the future requirements quantities to estimate future orders. This provides them with a basis for negotiating delivery schedules and contracts with vendors. Vendors also gain from long-term planning as they are sent a preview of future purchase orders.

Integration

- Operative data provides the basis for long-term planning: material master, BOMs, routings and work centers. Therefore, there is no need to create new operative data.
- The planning and evaluation procedures in long-term planning are separate from the operative planning and evaluation procedures. Separate tools are available for long-term planning, although these tools are basically the same ones as you also use in operative planning. This means the effort involved in getting used to new functions is kept to a minimum.
- The materials you want to plan in long-term planning must have already been planned in operative MRP.
- When the long-term planning run is complete, you can firm the planned orders in a planning scenario and transfer them to operative MRP.
- Long-term planning is integrated with the following components:
 - Purchasing Information System
 - You can transfer the planning results from external procurement to the Purchasing Information System where you can carry out further evaluations.
 - Inventory Controlling

You can transfer the requirements and receipts calculated in long-term planning to Inventory Controlling.

– Cost Center Accounting

Long-Term Planning (PP-MP-LTP)

You can transfer activity requirements data calculated in long-term planning to Cost Center Accounting as planned figures.

Features

Simulations with Different Versions of the Demand Program

In **long-term planning**, you can create your own **versions of the demand program**, which are only used for simulative planning. This means you can calculate and compare the effects of various versions of the demand program in simulative mode in Material Requirements Planning (MRP) and in Capacity Planning. For each version of the demand program, the system calculates the capacity requirements, the activity category requirements of the cost centers and the purchased parts requirements.

After evaluating the results of simulative planning, you may decide to leave the current demand program as it stands or you can replace it with the preferred long-term planning version.

Simulation of Short and Mid-term Planning

To simulate short and mid-term planning, you require a realistic representation of the current planning situation. Therefore, within a defined period of time you can transfer the fixed receipts, the firm planned orders and purchase requisitions as well as the sales orders from operative planning to long-term planning. Since many functions from operative planning (for example, changing and firming planned orders) are also available in long-term planning, you should not carry out long-term planning and operative planning at the same time for the same planning period to avoid any inconsistencies in the planning result.

The following application scenarios in long-term planning in the short and mid-term planning period are recommended:

Short-term planning

The current operative planning version is copied to long-term planning to be optimized. The planning result from operative planning is then optimized in a long-term planning scenario. Note that no planning activities are carried out in operative planning during this planning period. Once you are satisfied with the optimization, the results of long-term planning are copied back to operative planning.

• Mid-term planning

The current operative planning version for a future planning period is copied to long-term planning (for example, for the following week). In this case, the current week is planned in operative planning and the following planning period is planned in long-term planning. At the beginning of a week, the results of long-term planning for this week are copied to operative planning.

Creating Planned Independent Requirements Versions

Creating Planned Independent Requirements Versions

Use

You can create various versions of the demand program for long-term planning. These different versions of planned independent requirements are then calculated in simulative mode in Material Requirements Planning (MRP) and in Capacity Planning. You assign a version number to each planned independent requirements version. The system uses these version numbers to differentiate between these simulative versions and the operative version of the demand program.

Integration

The aim of long-term planning is to check and adjust the planning results created using the simulative versions of the demand program.

Once you have checked the results, you activate the appropriate simulative versions which converts them into operative versions. This means that the versions planned in long-term planning can either complement operative versions or they can replace them entirely within a specified period.

Prerequisites

In Customizing for *Demand Management*, in the workstep *Define Version Numbers*, you must create the version numbers for the different simulative demand programs you want to create.

Features

You can either create new versions of planned independent requirements for long-term planning or you can copy existing planned independent requirements (from operative planning, for example) to a simulative version number. A special report is available for copying existing versions.

Copying Planned Independent Requirements Versions for LTP

Copying Planned Independent Requirements Versions for LTP

Procedure

To copy existing planned independent requirements versions to a simulative version, proceed as follows:

1. Starting from the Long-term Planning node, choose *Planned indep.reqmts* \rightarrow *Copy version*.

The system calls up the report Copy Version.

- 2. Limit the selection of the existing versions using the following selection criteria:
 - Plant
 - Material
 - Selection period
- 3. In the section of the screen entitled, *Version*, enter the number of the existing version in the *Source version* field and the number of the simulation version in the *Target version* field.
- 4. In the section of the screen entitled *Change target version*, you can change the quantities in the simulative version using various arithmetic operations and you can move them month by month into the future.

If you want to change the quantity in the simulative version, in the *Change* field, enter the quantity by which the individual schedule lines of the simulation version are to be changed and select the arithmetic operation to be used.

If you want to move the schedule lines of the simulation versions, enter the number of months in the *Postpone by n month(s)* field.

- 5. The target version is not activated for long-term planning which means that the field, *Target version active* has not been selected.
- 6. To carry out the report, you can also maintain the following settings:
 - If you want a history of the copied version to be maintained, select the History field.
 - If you want a list with the copied schedule lines after the report has been carried out, select the field, *Create list of results*.
 - If you want to test the report in simulative mode first select the No data base changes (simulation) field.
- 7. Once you have set all the parameters, choose *Execute*.

The source version(s) are copied with the specified selection criteria.

Creating and Releasing a Planning Scenario

Use

You use the planning scenario to define the settings for long-term planning. The planning scenario controls how long-term planning is to be carried out.

To compare different versions of planned independent requirements or plants, you can create various planning scenarios and then compare the planning results of these scenarios.

Prerequisites

You must create one or several planned independent requirements versions.

Features

The following settings are possible in the planning scenario

- You allocate the **planned independent requirements versions** for which long-term planning is to be carried out. Here, you can use already existing operative versions or you can allocate versions that have been created specially for long-term planning.
- You assign the plants in which long-term planning is to be carried out.
- You define the **planning period.** All planned independent requirements in this period are planned. If you do not enter any period, the system automatically starts planning from the current date and continues to the date of the last planned independent requirement.

When evaluating the planning result, you should also take the period before the planning period into account as dependent requirements may lie before the start date of the planning period as a result of the safety time.

- You define the **initial stock level** (that is, plant stock at time of planning) to be used in the long-term planning calculations. The following options are available:
 - No initial stock: In this case, the system records a plant stock level of zero for planning.
 - Safety stock as initial stock: In this case, the safety stock entered in the material master record is used as the initial stock.
 - Plant stock at the time of planning: The system calculates the current plant stock at the time of planning for each material and uses this as the initial stock.
 - Average plant stock: The system calculates the average stock using data from stock Controlling when you start the report <u>Calculating the Average Plant Stock [Page 16]</u>.
- You define whether the system is also to create dependent requirements for materials that are planned using consumption-based planning, for bulk materials or for materials planned using KANBAN.
- You define whether **sales orders** are to be taken into account in long-term planning. That is, whether or not they are to be copied from operative planning. However, sales orders cannot be changed in long-term planning. In addition to the sales order, quotation requests, quotations, SD scheduling agreements, SD scheduling agreements from external service agents, contacts and deliveries are also taken into account.

- You can define whether or not you also want to use a **planning time fence** in long-term planning. This means that the planning time fence from MRP is valid for materials for which the planning time fence is relevant.
- You define whether or not you want to work with **direct production**. This means the system creates an order network in the planning run for materials which are flagged for direct production. Here, you can only change the header order of the order network and the lower level planned orders are displayed only. In the simulative planning run, the system creates separate planning segments entitled *Direct production* for components planned with direct production just as in the operative planning run.
- You define whether **make-to-order planning** or **individual project planning** is to be carried out.
- You define whether long-term planning is to be carried out as **gross requirements** planning. See also: <u>Gross Requirements Planning in Long-term Planning [Page 28]</u>.
- You define whether the **receipts** from operative planning are to be taken into account in long-term planning.
 - Whether fixed receipts (production orders, purchase orders, shipping notifications, scheduling agreement schedule lines, shipping notifications for schedule lines, manually created reservations, stock transfer orders, stock transfer reservations, delivery schedules for stock transport orders and stock transport reservations, QM inspection lots) are to be taken into account in long-term planning. If yes, fixed receipts that were already planned in the short-term period, for example, are included in the net requirements calculation. However, they cannot be changed.
 - Whether fixed purchase requisitions are included in long-term planning. If yes, fixed purchase requisitions already planned in the short-term period, for example, are included in the net requirements calculation. However, they cannot be changed.
 - Whether **firm planned orders** are included in long-term planning. Firm planned orders can be changed and are included in the net requirements calculation.
- By entering a BOM selection ID, you can determine that the BOMs you maintained specially for long-term planning are to be used in long-term planning and not the BOMs from operative planning. See also: <u>Carrying Out Long-term Planning with an Independent LTP BOM [Page</u> <u>26]</u>.
- You can define the **available capacity version** to be used in long-term planning. By using the capacity version you can maintain several available capacities for a capacity source in the work center.

Settings in the initial screen of the planning scenario

When creating a scenario, you can define specific default settings for the planning scenario in the initial screen. You can then also change these settings in the planning scenario as necessary. The following options are available:

- Standard settings for long-term planning
 - The most useful control parameters for the execution of long-term planning are already selected in the planning scenario if you selected the *Long-term planning* field in the initial screen.
- Standard settings for gross requirements long-term planning

The most useful control parameters for the execution of long-term planning as a gross requirements planning run are already selected in the planning scenario if you selected the *Long-term planning* field in the initial screen.

Standard settings for the short-term simulation

The control parameters required for the short-term simulation are already selected in the planning scenario if you selected the *Short-term simulation* field in the initial screen.

Copying parameters from already existing scenarios

If you want to copy the parameters from an already existing scenario, select the field entitled, *Copy parameters from scenario* and enter the number of the planning scenario you want to use as a reference.

Releasing a planning scenario

You first have to release a planning scenario before you can plan it in the long-term planning run. When you release the planning scenario, the system creates planning file entries for all materials in all the plants allocated to the planning scenario. There is a separate planning file entry for this purpose. This guarantees that your operative planning is kept completely separate from your simulative planning. This long-term planning file contains all the materials that are also contained in the operative planning file. After the release, every change relevant to MRP triggers an entry in the planning file as in operative planning.

When releasing the planning scenario, you can choose whether you want the system to create the planning file entries either online or in the background.

Activating a planned independent requirements version

Once you have evaluated and adjusted the simulative planning result, you can activate a planned independent requirements version in the planning scenario and, if necessary, you can give it a new version number. As the validity period of the new version, the system either enters the period recorded when maintaining the simulative planned independent requirements version, or, if no period has been maintained here, the system records the planning period of the planning scenario. Once you have activated the planned independent requirements version, it is valid for operative planning.

Logistic Controlling Data

No entries can be made in the fields in the section of the screen entitled *Logistics Controlling*. These fields are for display purposes only if you have already transferred data to the Purchasing Info System or to Inventory Controlling. Here, the following is displayed:

- The version with which the data of the long-term planning is saved in the Purchasing Information System is recorded in the *Version Purchasing Info System* field.
- The version with which the data of long-term planning is saved in Inventory Controlling is displayed in the *Version, Inventory Controlling* field.
- The date of the last data transfer to the Purchasing Info System is saved in the Last transfer to PURCHIS field.
- The date of the last data transfer to Inventory Controlling is saved in the Last transfer to Inventory Controlling field.

Creating and Changing the Planning Scenario

Creating and Changing the Planning Scenario

Procedure

Creating the Planning Scenario

To create the planning scenario, proceed as follows:

1. Starting from the Long-term Planning node, choose *Planning scenario* \rightarrow *Create*.

The system branches to the initial screen of the planning scenario.

Enter a numerical key and a short text for the planning scenario. Define the standard settings you want to use by selecting the appropriate field or specify that you want to copy the settings from an already existing planning scenario.
 Choose .

The system calls up the planning scenario.

3. To allocate the planning scenario to the plants, choose the *Plants* pushbutton.

A dialog box appears entitled, Planning Scenario - Allocated Plants.

To add more plants, choose 🔀 New entry.

4. To allocate the planning scenario to the planned independent requirements versions that are to be included in planning, select *Plnnd indep.reqmts*.

A dialog box appears entitled, Planning Scenario - Allocated Plants.

Choose **b** and enter the version number to be planned with this planning scenario and choose *Copy*. If necessary, repeat this step until you have allocated all the versions you want to plan.

If you have maintained several versions and if certain versions are to be replaced by other versions, enter the version to be replaced in the *Version to be replaced* field and, if necessary, enter the period in which this version is to be replaced in the fields *From* and *To*.

If, for example, you want to plan the majority of materials using a specific version from operative planning and if you have also created a separate simulative version to replace the operative version you must enter both version numbers. In so doing, in the simulative version number row, you must enter the operative version in the *Replaced version* field.

- 5. Check the default control parameters and change them, if necessary.
- 6. Choose 💾.

Changing the planning scenario

To change the planning scenario, proceed as follows:

1. Starting from the Long-term Planning node, choose *Planning scenario* \rightarrow *Change*.

The system branches to the initial screen of the planning scenario.

2. Enter the numerical key of the appropriate planning scenario and choose ♥.

Creating and Changing the Planning Scenario

The system calls up the planning scenario. The control data maintained when creating the scenario is displayed and can be changed as required - as long as the scenario has not been released.



Releasing the Planning Scenario

Releasing the Planning Scenario

Procedure

To release the planning scenario, proceed as follows:

1. Starting from the planning scenario, choose *Release* + *save*.

The system displays the dialog box entitled *Release Planning Scenario* with an information message stating that once you have released the planning scenario, you can only change the allocation of the planned independent requirements versions.

2. Choose Yes to release the planning scenario.

The dialog box, Create Planning File Entries appears.

3. Define whether the planning file entries are to be created immediately or in background mode and select the appropriate pushbutton.

If you selected, *Immediately*, the planning file entries are created online.

If you selected, *Background mode*, the system displays the dialog box, *Start date values* to define the data for starting the background job.

Once the planning scenario is released, the system displays a message stating that the planning scenario has been released and saved.

Calculating Average Plant Stock

Calculating Average Plant Stock

Use

The average plant stock can be used to determine the opening stock for long-term planning. If you want to start long-term planning using the average plant stock, a separate report is available in long-term planning.

The system uses the data that was updated in Inventory Controlling to calculate the average plant stock.

Procedure

To determine the average plant stock for long-term planning, proceed as follows:

1. Starting from the Long-term Planning node, choose *Long-term planning* → *Average plant stock.*

The system branches to the initial screen for calculating the average stock.

- 2. Enter the following parameters to allocate the average plant stock:
 - Planning scenario
 - Plant
 - If necessary, the MRP controller
- 3. Enter the period in which the average plant stock is to be calculated.
- 4. If you first want to carry out the report in test mode, select the *Test mode (no database changes)* field.
- 5. If you want to see a list with the average stocks of the individual materials in the selected plant, select the *Display individual results* field.

Copying Firm Planned Orders from Operative Planning

Copying Firm Planned Orders from Operative Planning

Use

To simulate short and mid-term production planning, you require a realistic representation of the current operative planning situation. Therefore, as well as the fixed receipts, you can also copy the firm planned orders from operative planning to long-term planning where you can process them.

Prerequisites

To copy firm planned orders, you have two options:

- In the planning scenario, you must flag the *Include firm planned orders* field and in the initial screen of the long-term planning run, in the *Firm planned orders* field, you must enter the indicator *Use setting in the planning scenario*.
- In the initial screen of the long-term planning run, in the *Firm planned orders* field, you enter the indicator *Copy firm planned orders from operative planning*.

Features

The system copies the firm planned orders to long-term planning per material in the planning run. Here, the system selects and copies all the firm planned orders for every material in a BOM structure irrespective of whether the orders were firmed as a result of the planning time fence or manual changes.

In long-term planning, the system saves the MRP date of the planned order last on the time axis to be copied from operative planning for each material.

When copying the planned orders from operative planning, the system deletes all existing firm and unfirm simulative planned orders in the period being copied from long-term planning.

Only the planned order headers are copied. This means that any changes to components made in operative planning are lost in the copying process.

The planned orders copied to long-term planning are automatically firmed.



Assembly orders are only displayed in long-term planning as you cannot change sales orders in long-term planning.

In direct production, you can only change the header order of an order network. The other planned orders are displayed only since only the header order is copied.

Executing MRP for Long-term Planning

Executing MRP for Long-term Planning

Use

The following functions are available for executing the planning run which is always carried out with reference to a planning scenario:

- Total planning
- Single-item, single-level planning
- Single-item, multi-level planning
- Single-item, multi-level planning in simulative mode [Page 23]
- Make-to-order planning
- Individual project planning

Prerequisites

You must have released the planning scenario.

Features

- You can carry out long-term planning as either net requirements planning or as gross requirements planning [Page 28].
- MRP for long-term planning is carried out at plant level. The storage locations which are either excluded from the planning run or which are planned separately are also planned in the plant segment.
- Only planned orders are created in the planning run in long-term planning. Therefore, in the
 initial screen for the planning run, you cannot set a creation indicator for purchase
 requisitions or delivery schedules.
 These simulative planned orders are created with different order types, depending on
 whether the materials are procured internally or externally.
- The system plans all low-level codes of the planning file created for the planning scenario.
- The planning horizon is not relevant to long-term planning which means that only the two planning run types, net change planning and regenerative planning are available.
- You can carry out MRP for long-term planning with a <u>separate BOM [Page 26]</u>. That is, with a BOM specifically for long-term planning.

Actions

After starting the planning run, the system carries out MRP for the specified planning scenario and displays the following results:

- At finished product level, the system creates simulative planned orders for the long-term planning version of the demand program.
- Simulative dependent requirements and simulative planned orders are created for the components.

Executing MRP for Long-term Planning

• If you set the indicator "2" in the initial screen of the planning run in the *Scheduling* field, the system creates simulative capacity requirements for the materials produced in-house.

Carrying Out MRP for Long-Term Planning

Carrying Out MRP for Long-Term Planning

Procedure

Carrying out total planning online

1. Starting from the Long-term Planning node, choose Long-term planning \rightarrow Planning run \rightarrow Online.

The system branches to the initial screen for total planning.

- 2. Enter the *planning scenario* key and the *planning plant*.
- 3. Enter the control parameters for the planning run. You can only select *net change planning* or *regenerative planning* as the processing key.

Determine whether or not firm planned orders are to be copied from operative planning by entering the appropriate indicator in the *Include firm planned orders* field.

The following indicators exist:

- a) Use setting defined in planning scenario. The firm planned orders are copied if the indicator *Include firm planned orders* is set in the planning scenario. The firm planned orders are not copied if the indicator *Include firm planned orders* is not set in the planning scenario.
- b) The firm planned orders are copied from operative planning irrespective of the settings in the planning scenario.
- c) The firm planned orders are not copied from operative planning irrespective of the settings in the planning scenario.
- 4. If you want to see the material list of planned materials, select the Display list field.
- 5. To shorten the runtime of the total planning run, select the Parallel processing field.
- 6. To start the planning run, choose ♥.

Carrying out single-item planning

To carry out single-item planning, proceed as follows:

1. Starting from the Long-term Planning node, choose Long-term planning \rightarrow Sng-item, multi-lvl or Long-term planning \rightarrow Sng-item, sng-lvl.

The system branches to the initial screen for single-item planning.

- 2. Enter the key of the planning scenario as well as the material and the planning plant.
- Enter the control parameters for the planning run. You can only select *net change planning* or *regenerative planning* as the processing key. Determine whether or not firm planned orders are to be copied from operative planning by entering the appropriate indicator in the *Include firm planned orders* field.

The following indicators exist:

 a) Use setting defined in planning scenario. The firm planned orders are copied if the indicator *Include firm planned orders* is set in the planning scenario.

Carrying Out MRP for Long-Term Planning

The firm planned orders are not copied if the indicator *Include firm planned orders* is not set in the planning scenario.

- b) The firm planned orders are copied from operative planning irrespective of the settings in the planning scenario.
- c) The firm planned orders are not copied from operative planning irrespective of the settings in the planning scenario.
- 4. If you want to plan all the components in a BOM structure even if the BOM has not changed, select the field entitled, *Also plan unchanged components*.
- 5. If you want to see the results of the single-item planning run before they are saved, select the field *Display results before they are saved.*
- 6. If you want to see the material list of planned materials after planning, select the *Display material list* field.
- 7. To start the planning run, choose ♥.

Carrying out make-to-order planning

1. Starting from the Long-term Planning node, choose Long-term planning \rightarrow Sng-item, sales ord.

The system displays the screen entitled, *Make-to-Order Long-term Planning - Multi-Level.*

- 2. Enter the key of the planning scenario as well as the sales order and the sales order item.
- 3. Enter the control parameters for the planning run. Determine whether or not firm planned orders are to be copied from operative planning by entering the appropriate indicator in the *Include firm planned orders* field.

The following indicators exist:

- a) Use setting defined in planning scenario. The firm planned orders are copied if the indicator *Include firm planned orders* is set in the planning scenario. The firm planned orders are not copied if the indicator *Include firm planned orders* is not set in the planning scenario.
- b) The firm planned orders are copied from operative planning irrespective of the settings in the planning scenario.
- c) The firm planned orders are not copied from operative planning irrespective of the settings in the planning scenario.
- 4. If you want to plan all the components in a BOM structure even if the BOM has not changed, select the field entitled, *Also plan unchanged components*.
- 5. If you want to see the results of make-to-order planning before they are saved, select the field *Display results before they are saved.*
- 6. If you want to see the material list of planned materials after planning, select the *Display material list* field.
- 7. To start the planning run, choose ♥.

Carrying Out MRP for Long-Term Planning

Carrying out individual project planning

1. Starting from the Long-term Planning node, choose Long-term planning \rightarrow Sng-item, Project.

The system displays the screen entitled, Long-Term Project Planning – Multi-Level.

- 2. Enter the key of the planning scenario as well as the project definition and the WBS element.
- 3. Enter the control parameters for the planning run. Determine whether or not firm planned orders are to be copied from operative planning by entering the appropriate indicator in the *Include firm planned orders* field.

The following indicators exist:

- a) Use setting defined in planning scenario. The firm planned orders are copied if the indicator *Include firm planned orders* is set in the planning scenario. The firm planned orders are not copied if the indicator *Include firm planned orders* is not set in the planning scenario.
- b) The firm planned orders are copied from operative planning irrespective of the settings in the planning scenario.
- c) The firm planned orders are not copied from operative planning irrespective of the settings in the planning scenario.
- 4. If you want to plan all the components in a BOM structure even if the BOM has not changed, select the field entitled, *Also plan unchanged components*.
- 5. If you want to see the results of the individual project planning run before they are saved, select the field *Display results before they are saved.*
- 6. If you want to see the material list of planned materials after planning, select the *Display material list* field.
- 7. To start the planning run, choose ♥.

Simulation Mode

Simulation Mode

Use

Single-item, multi-level planning in simulative mode enables you to check the results during the planning run and to make adjustments. In contrast to planning with the parameter *Display results before saving*, the system **displays problems with lower-level assemblies or with components on a higher-level or on the finished-product level** and these can be solved immediately.

Prerequisites

You have selected the *Simulation mode* field in the initial screen for the single-item, multi-level planning run and started the planning run.

Features

- All the materials in a BOM structure are planned top-down.
- All changes are saved in the main memory. The results are not entered in the database until after changes are saved.
- For problems with dates such as order dates in the past, the system sets an exception message in the planned order of the higher-level material or in the planned order of the finished product and displays the delay. If there is a delay, the system displays the total number of days that a planned order is delayed due to a problem with a lower-level assembly or component. The system displays this information in two additional columns in the planning result of the finished product.



If the start date of an assembly for a finished product is 3 days in the past and the start date of the component that is installed in the assembly is 5 days in the past, the system displays a delay time of 8 days in the planning result of the finished product.

- Evaluation functions such as the order report and the pegging function enable you to quickly find the procurement element causing the delay or the exception message.
- You can change the relevant procurement elements and repeat the planning run for the next lower level of the BOM. The system then automatically firms the changed MRP elements.

Plan in Simulation Mode

Plan in Simulation Mode

1. In the material list: Choose 🔳 and then 🖾 Selected results.

The system displays the planning result for the header material where you can make changes to the material. You can call up the planning result for the next material (component) by choosing \square .



Double-click on a material in the material list to access the planning result of an individual material.

2. Check the planning result for the header material.

The system displays two additional columns in the planning result: the *Exception lower level* column and the *Delay* column.

In the *Exception at lower level* column, the system displays the numbers of the exception messages that appear for the MRP elements in lower BOM levels. The system displays the number of days an MRP element is delayed in the *Delay* column.

3. Position the cursor on the exception message that interests you and choose

The system displays the descriptive text for the exception message in the status line. To access further information about the message, double-click the status line.

4. Position the cursor on the MRP element with the exception message and choose 🖧

The dialog box Order structure of MRP element appears.

5. Choose 🛄.

In the dialog box, the system displays all MRP elements belonging to the lower-level components with the exception messages that belong to them.

6. Position the cursor on the MRP element that you want to change and choose 🖾.

The planning result for the selected component now appears. The system also displays the details for the selected MRP element in the lower screen area so that you can make changes.

- 7. Change the MRP element, if necessary.
- 8. Choose ♥ in the lower screen area.

The system transfers the changed data. The changed MRP element is firmed automatically.

9. Choose 😏.

The system executes the planning run for the changed material and the lower BOM levels again.

- 10. Repeat steps 3 to 9 until you are satisfied with the planning results for all BOM levels.
- 11. Choose 💾

Your planning results are saved in the database. If you exit this transaction without saving, your planning results are lost.

Plan in Simulation Mode

Carrying Out MRP for LTP with an Independent LTP BOM

Carrying Out MRP for LTP with an Independent LTP BOM

Use

You can use an independent BOM for long-term planning. This means you can create a separate BOM for long-term planning different to the one used in operative planning.

By using an independent BOM in long-term planning, you have the advantage that you can simulate planned changes to BOMs in advance. Therefore, using long-term planning, you can determine in advance how the use of a different assembly or raw material would affect available capacity and the purchasing budget.

Integration

BOM explosion in the long-term planning run is carried out using the same master data and Customizing settings as in operative planning.

Prerequisites

In Customizing for BOMs, in the IMG activity Define BOM usage, you must create a BOM usage for long-term planning.

You create a new BOM usage by copying the settings of the BOM usage for *production*, for example.

- In the IMG activity, *Define allowed material types for BOM header*, you must enter the *BOM usage for long-term planning* and copy the settings for the *BOM usage for production*.
- In the IMG activity Define order of priority for BOM usages, you must create a Sel ID (selection ID for alternative BOM selection) specifically for long-term planning and enter the Selection priority of the BOM usages. You must assign priority "1" to the BOM usage "long-term planning". You should assign selection priorities 2 and 3 to the same BOM usages as you used for the Sel ID for MRP. In the standard system, the selection ID "01" is the sel ID used in MRP.
- You must create a BOM with the BOM usage for long-term planning.
- In the *planning scenario*, in the *BOM selection ID* field, you must enter the *selection ID* you created for long-term planning.

Features

When selecting the BOM in the long-term planning run, the system firstly searches for the BOM with the *BOM usage for "Long-term planning"*, using the *sel ID (selection ID) for long-term planning*. The indicator for the selection of alternative BOM in the material master is used to determine the correct BOM:

Example:

| | BOM usage | Priority |
|-------|----------------------|----------|
| BOM 1 | "Long-term planning" | 1 |
| BOM 2 | "Production" | 2 |

Carrying Out MRP for LTP with an Independent LTP BOM

Using the Customizing settings, the system determines that BOM 1 has the highest priority for long-term planning.

If you set the BOM selection to "selection by order quantity" in the material master record, the system checks whether the lot-size range of BOM 1 matches the order quantity. If the long-term planning BOM is to be used with a different lot size, the system checks BOM 2 and uses it, if necessary.

If you set the BOM selection to "selection by explosion date", the system checks BOM 1 to see whether the order date matches the effective date of BOM 1. If this is not the case, BOM 2 is used.

If you set BOM selection to "selection by production version", the system uses the BOM defined in the production version. However, this BOM must be below the quantity of the BOMs that are to be taken into account, which is selected by the system using the selection ID.

Gross Requirements Planning in Long-Term Planning

Gross Requirements Planning in Long-Term Planning

Use

You can carry out gross requirements planning in long-term planning for cost evaluation and budgeting. With this procedure, you only plan the actual requirements quantities without taking available stock, material-specific lot-sizes or scrap into account.

Gross requirements planning is supported by the following functions:

- Use of special lot-sizing procedures for long-term planning
- No calculation of scrap quantities in long-term planning

Prerequisites

You must create a planning scenario for gross requirements planning. If you select *gross long-term planning* when creating the planning scenario, the system automatically proposes the appropriate control parameters.

Features

Lot-sizing procedures in long-term planning

In a gross requirements planning scenario in long-term planning, the system always uses either a lot-for-lot or a period lot-sizing procedure for the lot-sizing calculation for all explosion levels, even if other lot-sizing procedures are set in the material master record.

You achieve this by selecting the *Use gross lot size* field in the *planning scenario* and by entering either a lot-for-lot order quantity or a period lot-size in the *gross lot size* field. In the planning run, all materials selected as "gross lot size" are planned without taking the parameters from the material master record into account.

Long-term planning without scrap

In long-term planning, you can calculate which material requirements and costs could be saved if no scrap were produced in simulative mode.

You do this by setting the *Switch off scrap calculation* indicator in the planning scenario. This results in the following:

- No assembly scrap is planned in the net requirements calculation.
- Neither component nor operation scrap are not taken into account in the BOM explosion.

Excluding Materials and Capacities from Long-term Planning

Excluding Materials and Capacities from Long-term Planning

Use

You can limit the long-term planning run as follows:

- Using the material status, you can exclude materials from long-term planning.
- You can exclude materials from long-term planning for individual BOMs.
- You can exclude capacities in the work center from long-term planning. This means if capacity planning is carried out in the long-term planning run, this capacity is excluded from the capacity check.

Procedure

Excluding materials using the material status

To exclude a material from long-term planning using the material status, proceed as follows:

- 1. Define the appropriate material status in Customizing for the Material Master.
- 2. Enter the appropriate status in the material master record of the material in question (MRP 1 screen) in the *MM/PP Status* field.

Excluding materials in the BOM

If you do not want to exclude a material from long-term planning in general but only for one particular BOM, you can define a key for BOM explosion stating that the BOM item which has been assigned this key is not to be included in the long-term planning run.

To do this, proceed as follows:

- 1. In Customizing for Bills of Materials, in the workstep *Define BOM Explosion Control*, define a key for the BOM explosion control that excludes the BOM from long-term planning.
- 2. Enter the key for the explosion control in the BOM item (*Item* \rightarrow *Full, MRP data*).

Excluding capacities from long-term planning

If you want to exclude a capacity from long-term planning, proceed as follows:

- 1. Call up the work center.
- 2. In the capacity header of the appropriate capacity category, select the *Long-term planning* field (section of the screen entitled, *Planning details*).

Evaluating Long-Term Planning

Evaluating Long-Term Planning

Use

Several evaluation options are available for evaluating the results created in long-term planning with reference to a planning scenario.

Features

- MRP lists are also created for long-term planning. Moreover, the stock/requirements list as well as the planning situation as an individual layout are included in the long-term planning menu.
- To compare the results of long-term planning with the operative planning, you can access a **compare function** from all evaluations. The operative planning of a particular material can be directly compared to the long-term planning results of a specific planning scenario.
- The function **Scenario reqmts** is also available. You can display the total simulative requirements of a material for a planning scenario. Here, you can also select materials using MRP controllers.

Evaluating MRP Lists and Stock/Requirements Lists

Evaluating MRP Lists and Stock/Requirements Lists

Procedures

Evaluating MRP Lists

To access the MRP list for a single material, start from the long-term planning node and choose *Evaluations* \rightarrow *MRP list - material.*

To select the MRP list using certain criteria, start from the long-term planning node and choose *Evaluations* \rightarrow *MRP list* – *Coll. displ.*

Comparing MRP Lists

1. To compare the long-term planning MRP list with the operative MRP list for the selected material, choose *Goto* → *Operational MRP list comparison* from the long-term planning MRP list.

The system displays the screen entitled *Comparison of MRP List Scenario – Operational: Period Totals.*

In the period totals display, the values from the scenario and from operative planning are displayed together in pairs. The value from the planning scenario is displayed in the left-hand column and the value from operative planning is displayed in the right-hand column. Periods with quantity variations are highlighted.

- 2. Choose *Planning scenario* if you only want to see the period totals for the planning scenario.
- 3. Choose *MRP list* if you only want to see the period totals from operative planning.
- 4. If you want to see the individual MRP elements for one specific totals row, position the cursor on the totals row and choose Reviod.

In the lower section of the screen, the system displays the individual MRP elements for the period.

5. To compare the long-term planning MRP list with the MRP list of another planning scenario, choose *Goto* → *Comparison* → *Comparison with another scenario* from the long-term planning MRP list.

The functions available here are identical to those in the planning scenario / operative MRP list compare.

Evaluating the Stock/Requirements List

To access the stock/requirements list, start from the long-term planning node and choose *Evaluations* \rightarrow *Stock/reqmts list.*

Comparing Stock/Requirements Lists

To compare the long-term planning stock/requirements list with the operative stock/requirements list for the selected material, choose $Goto \rightarrow Stock/requirements$ list comparison from the long-term planning stock/requirements list:

The following procedure is the same as described for the MRP lists.

Evaluating the Planning Situation (Individual Layout)

Evaluating the Planning Situation (Individual Layout)

Procedures

Evaluating the Planning Situation (Individual Layout)

To call up the planning situation, choose *Evaluations* \rightarrow *Planning situation mat.* from the long-term planning node.

Comparing the planning scenario with the operative planning situation or the operative planning result

You can compare the planning situation of the planning scenario with the operative planning situation or with the operative planning result.

To compare the simulative planning situation with the operative planning situation, select the *Planning situation* field on the initial screen of the planning situation.

To compare the simulative planning situation with the operative planning result, select the *Planning result* field on the initial screen of the planning situation.

The system branches to the comparison of the planning scenario and the operative planning situation or the operative planning result.

The system displays the planning scenario data and the data for the operative planning situation (or the operative planning result). The data from the operative planning situation (or from the operative planning result) are highlighted.

- If you only want to see the operative planning situation data or the operative planning results data, choose *Edit* → *Only compare values*.
- If you only want to see the planning scenario, choose $Edit \rightarrow Only$ original values.
- If you only want to see the differences, choose $Edit \rightarrow Differences$.

When opening or closing the row details, the data is always accessed and closed for the planning scenario data as well as the operative planning situation data or the operative planning result data.

Comparing the planning situation of a scenario with another planning scenario

To compare the planning situation of a planning scenario with the planning situation of another planning scenario, select the field *Planning scenario* in the initial screen of the planning situation and enter the key of the planning scenario which is to be used for comparison. The functions available here are identical to the functions available for the comparison of the planning scenario with an operative evaluation.

Changing/Displaying the Requirements of the Planning Scenario

Changing/Displaying the Requirements of the Planning Scenario

Procedure

If you want to access the total requirements of a material with reference to a planning scenario, proceed as follows:

1. Starting from the Long-term Planning node, choose *Planned indep.reqmts* → *Reqmts for scenario.*

The system branches to the initial screen for the evaluation.

- 2. In the initial screen, enter the following data:
 - To call up the total requirements for a material directly, enter the material number in the *Material* field.
 - To check an MRP controller's complete list of materials, enter an MRP controller in the *MRP controller* field.

The system displays the screen entitled *Planned Indep. Reqmts* \rightarrow Long-Term Planning: *Planning Table*.

In the table, the system displays the material number, the plant, the version and the planned independent requirements schedule lines.

You can change the planned independent requirements.

The Repetitive Manufacturing Planning Table

The Repetitive Manufacturing Planning Table

Purpose

If you use the repetitive manufacturing planning table (REM planning table) in operative planning, you can now also use the planning table in long-term planning to carry out simulative planning for a planning scenario.

Implementation Considerations

The planning table in long-term planning requires the same settings as the operative REM planning table. You only have to create a planning scenario and enter this in the initial screen of the planning table.

Features

- You can copy the planned orders from operative planning and then process them in the planning table.
- When you are satisfied with the simulative planning results, you can copy the planned orders to operative planning.
- To call up the planning table in long-term planning, start from the long-term planning node and choose *Long-term planning* → *Planning table.*

Capacity Planning in Long-Term Planning

Capacity Planning in Long-Term Planning

Use

You can also use capacity planning in long-term planning to determine overloads on certain work centers as early as possible. You can react to these overloads by rescheduling planned orders using the capacity planning table.

Integration

You can access capacity planning from:

• Planned order processing

See also: Executing Capacity Planning in the Planned Order [Page 38].

- The planning result of single-item planning
- The current stock/requirements list

Prerequisites

To carry out capacity planning, the simulative planned orders must be scheduled.

Features

The following evaluations are available:

- Work center utilization per period
- Work center load required for the production of the selected material
- Detailed display of the overloads at the work centers
- Pegged planned order determination
- Link to capacity planning table

Actions

To access capacity planning from the stock/requirements list, proceed as follows:

1. Starting from the stock/requirements list, choose $Goto \rightarrow Capacity situation$.

The system displays a dialog box entitled Settings for Capacity Planning.

2. Enter the necessary settings and choose ♥.

The system displays the evaluation of the capacity situation in an overview screen.

For more information on executing capacity planning, see also PP Capacity Planning [Ext.].

Processing Planned Orders in Long-Term Planning

Processing Planned Orders in Long-Term Planning

Use

As in operative planning, in long-term planning you can also manually create and change planned orders. As opposed to operative planning, the planned orders in long-term planning always reference a planning scenario and are called **simulative planned orders**.

Integration

You can change the firm planned orders copied from operative planning as well as the planned orders created in the long-term planning run.

When copying the firm planned orders, the system only copies the planned order headers which means that any manual changes made to BOM items in the planned order are not copied to long-term planning.

Features

The following functions are available in long-term planning for processing planned orders:

- Creating/changing/displaying simulative planned orders
- Displaying and printing components
- Checking and leveling capacity
- Scheduling
- Firming simulative planned orders
- Automatic deletion of firm planned orders

Out-of-date, firm planned orders are automatically deleted in the long-term planning run if you have defined the *roll forward period* in Customizing for MRP. Here, the system deletes all firm planned orders that lie before the roll forward period.

For more information on processing planned orders, see also *PP Material Requirements Planning*, in the section entitled <u>Planned Order Processing [Ext.]</u>

Creating and Changing Simulative Planned Orders

Creating and Changing Simulative Planned Orders

Creating a Simulative Planned Order

To create a simulative planned order manually, proceed as follows:

1. Starting from the Long-term Planning node, choose Long-term planning \rightarrow Simulative planned order \rightarrow Create.

The system displays the initial screen for creating simulative planned orders.

- 2. Enter the following data:
 - Planning scenario
 - Planned order profile
 - If necessary, the number of an existing planned order whose data you want to copy over to the new planned order.
- 3. Choose ♥.

The system displays the details screen for the planned order where you can maintain the order data.

4. Enter data as required.

Changing and Displaying a Simulative Planned Order

To change or display a simulative planned order, proceed as follows:

1. Starting from the long-term planning node, choose Long-term planning \rightarrow Simulative planned order \rightarrow Change.

The system displays the screen entitled, Change Simulative Order.

 Enter the planning scenario and the number of the planned order to be changed and choose Image: Scenario and the number of the planned order to be changed and choose

The system displays the details screen.

- 3. Make the necessary changes.
- 4. Save your changes.



In long-term planning, a changed planned order is automatically firm – as is a planned order created manually.

Leveling Capacity in the Planned Order

Leveling Capacity in the Planned Order

Prerequisites

The planned order must be scheduled.

Procedure

1. Starting from the Long-term Planning node, choose Long-term planning \rightarrow Simulative planned order \rightarrow Change.

The system displays the details screen for the planned order. From this screen, you can call up the capacity check, if necessary, by choosing $Edit \rightarrow Capacity check$. The system then checks available capacities. If no overload exists on the work centers in question, the system displays a message stating that no overload exists. If an overload does exist, the system branches to the capacity situation where you can make any necessary changes.

2. To level capacities, choose $Goto \rightarrow Capacity$ leveling.

The system displays the dialog box entitled, *Settings for Capacity Planning* if you have not yet defined any parameters for capacity planning.

3. Select the appropriate planning type and the period type for capacity planning. If necessary, select a period of examination. Choose *Continue*.

The system carries out scheduling using the parameters set in Customizing.

- 4. If scheduling could not be carried out free of error, the system displays an overview of the scheduling errors based on the planned orders in question. From here, you can access the scheduling log to check the details on the scheduling errors. To do this, choose *Log*.
- 5. Choose Continue. The system displays the evaluation of the capacity situation.

Capacity leveling is also displayed with reference to a work center and a capacity category (for example, machine or person) and the unit of measure is displayed from the work center. Here, the following is valid: If a planning work center (routing header) is entered in the routing the system first displays this work center with the corresponding capacity category. Otherwise, the selection is random. The system also displays the following data:

- Order number, order quantity and order finish date
- Available capacity
- Total capacity requirements for the selected work center
- Capacity requirements for the material
- Capacity requirements of the selected planned order

Capacity loads resulting from the selected planned order are specially indicated.

Firming Planned Orders in Long-Term Planning

Firming Planned Orders in Long-Term Planning

Use

Planned orders created automatically in the planning run of long-term planning are changed (quantities and dates) in the next planning run if the requirements situation has changed. If you do not want the planned orders to be changed automatically in subsequent planning runs, you can firm them. Firm planned orders are not changed in the planning run. This means the system does not make any automatic changes to either the planned order quantities or dates. Firm planned orders can only be changed manually.

Firm simulative planned orders can be copied from long-term planning to operative planning.

Features

To copy firm planned orders, you have the following options:

• Firming as a result of manual changes

Planned orders you create or change manually are automatically firmed and are flagged with an asterisk in the stock/requirements list.

By deleting the firming indicator in the planned order, you can cancel the reversal.

• Firming using the planning time fence

Planned orders that lie in the <u>planning time fence [Page 40]</u> (defined in the material master record or per MRP group in Customizing) are firmed if they have been allocated an MRP type with the appropriate firming type. However, the firming indicator is not set and they are only firmed as long as they lie in the planning time fence.

• Firming using the manual planning time fence

The advantage of the <u>manual firming date [Page 41]</u> over the procedure with the planning time fence is that the planned orders for materials which have been assigned an *MRP type with no firming type* are also firmed. The manual firming date is set by the planner in the stock/requirements list or in the planning result.

Firming Planned Orders Using the Planning Time Fence

Firming Planned Orders Using the Planning Time Fence

Use

Using the planning time fence, you can stop the order proposals in the near future from being automatically changed. In the planning time fence, which you can define specifically for each material, the system no longer automatically changes order proposals in the MRP run. The system calculates the finish date of the planning time fence dynamically starting from the MRP date.

Integration

You can work with a planning time fence for materials planned in MRP and for master schedule items planned in master production scheduling (MPS) and also in long-term planning.

Prerequisites

In Customizing for MPS or for MRP, you must maintain MRP types with firming types. The firming type defines how the order proposals are firmed and scheduled.

For the planning time fence to work, you must enter an MRP type with a firming type in the material master record.

Features

All planned orders that lie in the planning time fence are firmed. This means that they can no longer be changed automatically by the system in the planning run in long-term planning.

Outside the planning time fence, the system creates order proposals as usual according to the shortage quantity and the lot-sizing procedure. Once these planned orders move into the planning time fence, they are automatically firmed depending on the how you have set the firming type.

The planning time fence can be defined per material in the material master record or via the MRP group.

Firming Planned Orders Using the Manual Firming Date

Firming Planned Orders Using the Manual Firming Date

Use

Using the manual firming date, you can stop the system from automatically changing your planned orders in the near future in the planning run in long-term planning. Up until this date, which is defined per material, the system does not make any automatic changes to order proposals.

The manual firming date is set by the planner in the stock/requirements list or in the planning result. You can select a date of your choice. If a planning time fence has been defined for a material, the following is valid:

If the manual firming date lies before the end of the planning time fence, the planning time fence is valid.

If the manual firming date lies after the end of the planning time fence, the planning time fence is extended until this date.

Integration

You can use the manual firming date in master production scheduling, in material requirements planning and in long-term planning.

Features

If you set the manual firming date, all planned orders in long-term planning whose order finish dates lie before this date are firmed for the planning run if these materials have been assigned an MRP type with either no firming type or firming type 1 or 2.

Order proposals for materials which have been assigned an *MRP type with firming type* 3 or 4 are **not** automatically firmed even if their order finish dates lie before the manual firming date.

Regarding the manual firming date, materials which have been assigned an *MRP type without a firming type* are dealt with in the same way as materials with firming type 1.

Actions

You can enter the manual firming date in the **planning result** by choosing $Planning \rightarrow Set$ firming date.

You can also set the manual firming date in the stock/requirements list in long-term planning. To do this, proceed as follows:

1. Starting from the stock/requirements list of a material, choose $Edit \rightarrow Set$ firming date.

The system displays a dialog box where you can enter, change or delete the manual firming date.

- Enter the date and choose ♥.
- 3. Choose List \rightarrow Refresh.

Copying the Long-Term Planning Results to Operative Planning

Copying the Long-Term Planning Results to Operative Planning

Use

Once you have optimized the results of long-term planning, you can copy them to operative planning.

It is not only possible to copy the demand program to operative planning, you can also copy the planned orders firmed in long-term planning per material using the MRP transaction *Interactive single-item planning*.

When copying the results to operative planning, you can set the system to create purchase requisitions and delivery schedules instead of planned orders for materials procured externally.

Prerequisites

- You must firm the simulative planned orders you want to copy to operative planning. You can firm planned orders by:
 - Making manual changes
 - Using the planning time fence
 - Setting a manual firming date
- If, when copying the data to operative planning, you want the system to create purchase requisitions or delivery schedules for materials procured externally instead of planned orders, enter the appropriate indicators in the *Create pur. req.* and *Schedule lines* on the initial screen of single-item, interactive planning (in MRP).

Δ

When copying the results to operative planning, the system does not carry out any source determination. If you want the system to create delivery schedules and purchase requisitions to which a vendor has already been assigned, you must maintain the necessary master data in the Purchasing menu before carrying out the planning run in long-term planning.

For more information on source determination for purchase requisitions and delivery schedules, see also material requirements planning,

Source determination for External Procurement [Ext.]

Features

Copying Planned Orders to Operative Planning

You copy the results in the *single-item, interactive planning run* (in the MRP menu). In the singleitem, interactive planning run, you can copy the firm simulative planned orders of a planning scenario.

Creating Purchase Requisitions and Delivery Schedules in Operative Planning

You can set the system to create purchase requisitions and delivery schedules (schedule lines) for materials procured externally when copying results to operative planning.



Copying the Long-Term Planning Results to Operative Planning

Copying Period

The system proposes a copying period:

• Beginning of copying period

This date determines the beginning of the period for copying firm planned orders from long-term planning. The system copies all firm planned orders whose order finish dates lie after the date you enter.

The system proposes the order finish date of the last firm planned order copied from operative planning to long-term planning.

• End of copying period

This date determines the end of the period for copying firm planned orders from longterm planning. The system copies all firm planned orders whose order finish dates lie before the finish date you enter.

If you used a manual firming date to firm planned orders in long-term planning, the system proposes this date as the end of the copying period.

You can also set a new copying period by overwriting the proposed values.

Planning Results After Copying

After the system has copied the firm planned orders, purchase requisitions and delivery schedules (schedule lines) it displays them in the planning results and then copies them to operative planning when you save the planning results. The firm planned orders are flagged for a BOM explosion which may be necessary.

When copying the planning results, the system deletes the planned orders in operative planning in the copying period and replaces them with the firm planned orders from long-term planning.

If the purchase requisitions and delivery schedules in operative planning were not firmed, they are deleted from operative planning after copying the simulative planned orders, and the receipt elements copied from long-term planning are used in operative planning.

However, firm purchase requisitions and delivery schedules (schedule lines) are not deleted from operative planning. You can avoid the danger of having double sets of purchase requisitions and delivery schedules (schedule lines) if, in the planning scenario, you determine that all fixed receipts are to be taken into account in long-term planning.

Copying Firm Planned Orders to Operative Planning

Copying Firm Planned Orders to Operative Planning

Prerequisites

You must firm the simulative planned orders you want to copy.

Procedure

1. Starting from the MRP node, choose *Planning* \rightarrow *Single-Item, Interactive.*

The initial screen for single-item, interactive planning appears.

2. Enter the plant and the material number, then check the control parameters.

If purchase requisitions and delivery schedules (schedule lines) are to be created when copying the data, enter the appropriate indicator in the *Create pur.req* and *Schedule lines* fields.

3. To start the planning run, choose ♥.

The Planning Result - Individual Lines screen appears.

4. From the *Planning Result* screen, choose *Edit* → *Copy simulative LT plnd ords* to copy the planned orders.

The system displays the dialog box entitled, Copy Firm Planned Orders From LTP.

5. Enter the number of the planning scenario and choose ♥.

The system proposes a copying period.

- 6. Check the proposed copying period and change it, if necessary.
- 7. Choose У.

The system checks the date you entered.

8. Choose Copy planned orders.

The system copies the planned orders and they then appear in the planning results.

9. Save your data.

Result

The system copies all firm planned orders in the selected period from long-term planning to operative planning.

Δ

In MRP, the system deletes all the planned orders in the copying period.

Copying/Evaluating External Procurement Data to PURCHIS

Copying/Evaluating External Procurement Data to PURCHIS

Use

You can copy the planning results of external procurement to the Purchasing Information System where you can carry out further evaluations which are made available to the vendor so he also has an overview of future requirements. You can also create and evaluate standard analyses for materials, vendors, and material groups directly from long-term planning.

Features

By selecting the function *Set up data*, the data is transferred to the purchasing information system where it can be analyzed in more detail using the various standard analyses. The data is saved in the information structure S012 of the purchasing information system under a planning version number. The purchasing information system provides you with a wide-ranging selection of possibilities for analyzing data, for example immediately apparent graphics. You also have the option of comparing the planning data of long-term planning with the actual data in the purchasing information system.

The standard analyses can also be accessed directly from long-term planning for materials, vendors, or material groups.



If you want to evaluate purchasing data although the external procurement data has not yet been copied to the purchasing info system or if the data was copied a long time ago, and you want to carry out a current evaluation for certain materials, vendors or material groups immediately, you can do this using the ad-hoc evaluation. For more information, see also, <u>Standard Analyses [Ext.]</u>.

Actions

Transferring Data to the Purchasing Information System

To transfer all the data of a planning scenario to the purchasing information system, proceed as follows:

1. Starting from the long-term planning node, choose *Evaluations* \rightarrow *Purchasing Info Sys.* \rightarrow *Set up data.*

The system displays the report for setting up purchasing information date from long-term planning.

For more information, see also:

Updating Standard Analyses for Long-Term Planning: Purchasing Info System [Ext.]

Evaluating External Procurement Data for Materials, Vendors, or Material Groups (Standard Analysis)

Three standard analyses are available for evaluating the external procurement data in the purchasing information system:

Copying/Evaluating External Procurement Data to PURCHIS

- Material
- Vendor
- Material group

For more information on how to carry out a standard analysis, see also:

Standard Analysis [Ext.]

Comparing Order Values/Copying Planning Versions

In one version of the information structure S012 on which the standard analyses for long-term planning are based, only one order value can be saved at a time. For more information on how to evaluate a planning scenario for different types of order value calculation and on how to compare the results, see also:

Updating Standard Analyses for Long-Term Planning: Comparing Order Values [Ext.]

Copying Stock/Requirements Data to Inventory Controlling

Copying Stock/Requirements Data to Inventory Controlling

Use

You can calculate future stock levels using the information available on existing requirements and planned future receipts. The data calculated in long-term planning concerning the stock and requirements situation can be copied to Inventory Controlling where it can be evaluated using the standard analysis functions.

Features

The Inventory Controlling system provides you with an easy-to-use tool for displaying and evaluating the stock and requirements data calculated in long-term planning.

The key figures of the standard analysis, "stock/reqmts" for long-term planning are not updated continuously and therefore have to be carried out using the function *Set up data*.

The information structure S094 provides the data for the standard analysis "stock/reqmts". The data on the stock/requirements situation from long-term planning are transferred to this information structure with a separate planning version.



If you want to execute the ad-hoc standard analysis "stock/reqmts", but you do not want to trigger an update, you can access the standard analysis directly. From the long-term planning node, choose *Evaluations* \rightarrow *Inv. Controlling* \rightarrow *Evaluation*. Proceed as described in the section entitled, *Evaluating Stock/Requirements Data (Standard Analysis)*, however, do not carry out an update and select the field *Ad-hoc evaluation* on the selection screen of the standard analysis, "Stock/Reqmts".

Actions

Copying Data to Inventory Controlling

To transfer all the data of a particular scenario to Inventory Controlling, proceed as follows:

Starting from the main long-term planning node, choose *Evaluations* \rightarrow *Inventory Controlling* \rightarrow *Set up data.*

For more information, see also:

Updating Standard Analyses for Long-Term Planning: Stock/Requirements [Ext.]

Evaluating Stock/Requirements Data (Standard Analysis)

The standard analysis, "stock/reqmts" is available in long-term planning for evaluating the stock/requirements data.

For more information on how to carry out a standard analysis, see also:

Standard Analysis [Ext.]

Copying Stock/Requirements Data to Inventory Controlling

Transferring Activity Type Requirement to Cost Center Accounting

Use

You can transfer the activity requirements data calculated in long-term planning to Cost Center Accounting as planned figures. The system uses this information to determine the production costs for each cost center and for costing products.

Features

The activity quantities are calculated using the activity types and their formulas in the work centers. The activity requirement quantities calculated in long-term planning are taken into account when comparing the activity requirements with the work center's available activity. The activity prices of the activity types are calculated using the available activity and planned costs. The activity prices are included in product costing.

The activity requirements of long-term planning are not automatically updated in cost center accounting. Instead, they are transferred to cost center accounting using a separate function in long-term planning after you have adjusted the planning results.

Actions

Maintaining the Transfer Control for Data Transfer

If you have not yet transferred any data, you first have to define a CO version, a controlling area and the fiscal year to which the data from long-term planning is to be transferred.

1. Starting from the long-term planning node, choose *Environment* \rightarrow CO activity reqmts \rightarrow *Transfer to c.center.*

The system branches to the initial screen for transferring production activity requirements to cost center accounting.

2. Choose Transfer control.

The system branches to the initial screen for the transfer control.

- 3. Maintain a new entry with a CO version, controlling area, and a fiscal year for the data transfer from long-term planning.
- 4. Select the *long-term planning* field and enter the planning scenario whose data is to be transferred.
- 5. Enter the scheduling type to determine which scheduling results are to be read for the data transfer.
- 6. Save your entries.

Transferring Activity Requirements to Cost Center Accounting

To transfer the activity requirements data to cost center accounting, proceed as follows:

1. Starting from the long-term planning node, choose *Environment* \rightarrow CO activity reqmts \rightarrow *Transfer to c.center.*

Transferring Activity Type Requirement to Cost Center Accounting

The system branches to the initial screen for transferring production activity requirements to cost center accounting.

- 2. Enter the following data for the transfer:
 - The plant from which the long-term planning data is to be transferred. If you do not enter a plant, the system transfers the data from all plants in the controlling area.
 - The CO version to which data from long-term planning is transferred.
 - The CO periods to which data is to be transferred.

The CO period can differ from the long-term planning period. If, for example, the CO period is *month* and the activity types were planned weekly, then the system only transfers the data of the last week of the month up to the last day of the month.

3. If the transfer is to be carried out in background mode, select the *Background processing* field.

If you want a list of the activity types and requirements per cost center, select the *Cost center/Activity types* field.

4. Choose Execute.

The planned data for the cost center are updated whereby the activity requirements are determined from the routing data.

The cost center planning displays how much activity was planned by production.