Order Browser

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Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax
	Tip

Contents

Order Browser **5**
Creating Order BOMs without Configuration **6**
Create an Order BOM **7**
Example: Creating Without Variant Configuration **9**
Working with the Order Browser and Order Analysis **11**
Navigation in the Order Browser **13**
Calling up the Order Browser and Order Analysis **15**
Variable Display Depth **17**
Display Log **19**
Engineering Change Management in the Order Browser **20**
Order Analysis **21**
Material Replacement **23**
Replacing the Material **24**
Fixing a BOM in the Order Browser **25**
Fixing BOMs in the Order Browser **26**
Example: Multi-Level Fixing in the Order Browser **27**
Order BOM Editing **29**
Changing an Order BOM **30**
Display an Order BOM **31**
Transferring BOMs to Project System **32**
Multi-Level Order BOM Reporting **33**
BOM Explosion **34**
   Displaying BOMs Level by Level 35
   Displaying a Multi-Level BOM Explosion 37
   Displaying a Summarized BOM 39
Where-Used Lists **40**
BOM Comparison **41**

Order Browser

Definition

Navigation tool used to display the multi-level BOM of a material entered in a sales order item.

Use

You use the order browser when you, as a make-to-order manufacturer, work with order BOMs. After you have created a sales order and, if required, executed variant configuration, it is necessary to technically post-process the BOMs. The changes that you carry out during this process are only valid for this sales order.

In a central screen you get an overview of the current processing status of a multi-level BOM for a sales order item and you can navigate to the process and evaluation functions for order BOMs.

Structure

In the order browser, the multi-level BOM is displayed similarly to in the product structure browser [Ext.]. This means you see an overview tree, whose branches you can show and hide. As opposed to the product structure browser, in the overview tree of the order browser, only the BOM headers and items are displayed.

In the overview tree, the whole multi-level BOM for a sales order item is displayed. If an assembly was not saved as order-specific, the material BOM is displayed at the appropriate point.

In the order browser you process both configurable and non-configurable order BOMs. However, configurable order BOMs are only displayed if you have selected *result-orientated* in the configuration profile.

Detached order assemblies [Ext.] are **not** displayed in the overview tree. You can see an overview of the detached order assemblies for a sales order item in order analysis [Page 21].

Creating Order BOMs without Configuration

Use

In order to adjust your product to the requirements of the customer you want to change a non-configurable assembly with reference to a specific order.

Features

If you want to create an order BOM for a non-configurable material you have the following options:

- Fixing the BOM in the Order Browser

    The system generates an order specific copy of the material BOM in which you can make the necessary changes.

    See also:

    Fixing a BOM in the Order Browser [Page 25]

- You create an order BOM manually

    You use this function primarily if you want to create an order BOM for a material that does not yet exist in the multi-level BOM for the sales order item. In this case you get a detached order assembly.

    See also:

    Create an Order BOM [Page 7]

    Detached Order Assembly [Ext.]

- You execute a material replacement in the order browser.

    You use this function in certain circumstances, for example when an assembly in the multi-level BOM is used in different nodes and you want to make various changes to the different nodes. When you execute a material replacement, the system creates a new material master record.

    See also:

    Material Replacement [Page 23]

Create an Order BOM

Prerequisites

You have entered the sales order for which you want to create the order BOM.

Procedure

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Order BOM → Create.*

    The *Create Order BOM: initial screen* appears.

2. Enter the sales order number, the order item, the material number and the BOM usage.

3. If you want to use a material BOM, or an existing order BOM to copy from, go to step 4. If you want to create an order BOM without a reference, click ⬤ and go to step 7.

    ➡️

    You cannot use a configurable BOM as a reference.

4. Click 🔲 *Order BOM* (copy order BOM) or 🔲 *Material BOM* (copy material BOM).

    The *Copy material BOM* or *Copy order BOM* dialog box appears.

5. Enter the data required and click ⬤.

    The item overview appears, for the bill of material you are using as a reference.

6. Select the items you want to copy to the order BOM and click 🔲.

    The item overview for your new order BOM appears. The items you transferred are displayed in the item overview.

7. Enter new items and alter items if necessary. Entering items in order BOMs is similar to entering items in material BOMs. However, you cannot enter class items in order BOMs. You can find further information in the *Bills of Material* documentation in Creating New Items [Ext.].

8. Save your order BOM.

Result

The system creates an order BOM.

You can find further information on the special features of order BOMs compared with material BOMs in Editing an Order BOM [Page 29].

Order BOMs for Configurable Materials

If you use this function to create an order BOM for a configurable material, you will always see a **result-orientated** order BOM.

If you call up the variant configuration at a later date, do not forget that the order BOM is merged with a material BOM that has the same material number. The order BOM is then only merged with the material BOM when the following conditions are met:

Create an Order BOM

- The assembly is configurable.

- A valid material BOM with the same material number is available.

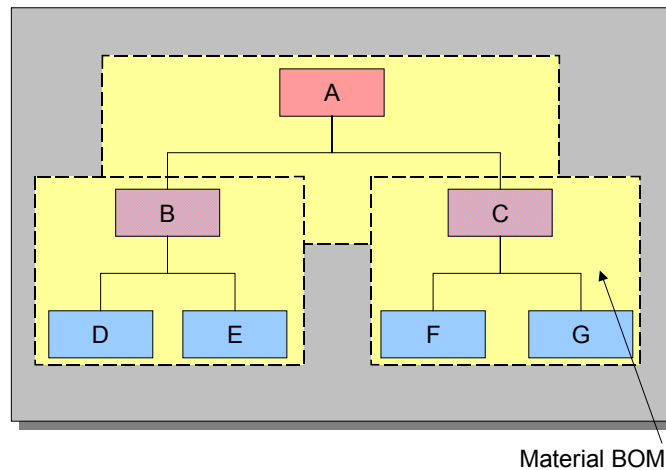You can stop the merge operation with the help of a customer enhancement.

You can find further information about merging in Merging with Global Material BOMs [Ext.]

Example: Creating Without Variant Configuration

The material BOM for material A contains components B and C, which are themselves assemblies. The material BOM for material C contains components D and E and the material BOM for material C contains components F and G.
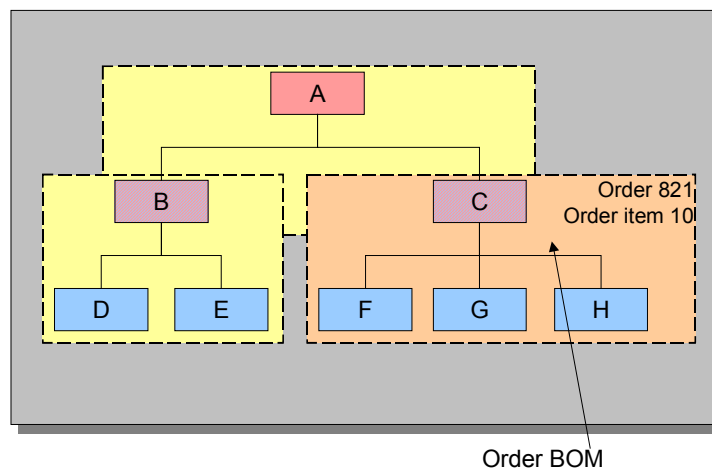
Multi-Level BOM for the Sales Order Item

Material BOM

A sales order is created for customer Smith, with the number 821. Material A is inserted under sales order item 10 in this sales order. At the request of customer Smith, for this sales order, the bill of material for assembly C is changed manually. Component H is added to components F and G. This change should not take effect in the material BOM, because assembly C is only expected to be produced once in this form, for customer Smith.

An order BOM is generated from the material BOM for material C. Since nothing was changed in the bills of material for materials A and B, in this sales order the material BOM will continue to be used for these assemblies.

Multi-Level BOM with an Order BOM

Order BOM

Example: Creating Without Variant Configuration

Working with the Order Browser and Order Analysis

Purpose

You work with the order browser if you want to clearly display the multi-level BOM for a sales order item, on a central screen. From the order browser you can navigate to the editing and reporting functions for order BOMs and, if necessary, variant configuration.

Prerequisites

You have created a sales order and entered a material in a sales order item.

If you work with variant configuration, you have set the *Order BOM* indicator and selected *result-oriented* in the configuration profile for the configurable materials. When you entered the sales order, you assigned values to the class characteristics that are assigned to the material in the sales order item.

Process Flow

The process flow when editing an order BOM with the order browser can be as follows:

1. Enter the required data on the initial screen. You can find further information in Call up the Order Browser and Order Analysis [Page 15]

    If you work with Variant Configuration [Ext.], the result of the BOM explosion depends on whether you have completely assigned values to the characteristics and whether you have fixed the bill of material.

    Configurable assemblies are displayed in the order browser as follows:

In variant configuration, if you have...	Then the system displays ...
Changed or manually fixed a configurable assembly	The order BOM
Assigned values completely to a configurable assembly, but have not fixed it	The material BOM components resulting from the assignment of Characteristic Values [Ext.]
Have not assigned values to a configurable assembly	Only the non-variable parts, in other words, those components, which do not have Object Dependencies [Ext.]

2. You call up **order analysis** and have an overview of all the assemblies in the multi-level BOM for the sales order item. You see, for instance:

    −   Which assemblies have been saved as order-specific

    −   With which assemblies the material BOM is still being used

    −   Which order assemblies are not yet integrated in the multi-level BOM (detached order assemblies)

        These assemblies are only displayed in the order analysis and not in the order browser.

    −   Which assemblies are used more than once in the multi-level BOM.

        If you need to, you can switch back to the order analysis between the following steps, to look at the current status.

Working with the Order Browser and Order Analysis

3. You call up the **order browser**. In the overview tree you display the branches you are interested in.

4. You go directly to variant configuration, to assign values to the class characteristics for the subordinate configurable assemblies.

➡

> We recommend you specify a time when the configuration is complete. Only then should you start processing the order BOMs. If you call up variant configuration again after this time, and then save your data, you should remember that this causes the material BOMs to be adjusted. In variant configuration, changes to the configuration model, in other words, to material BOMs, object dependencies etc., have higher priority. Therefore, you should only edit bills of material in variant configuration in situations where changes to material BOMs should be transferred to the order BOMs

5. If you want to make different changes to an assembly that is used more than once, you first have to replace the material on one of the nodes.

6. If you want to make sales-order-specific changes to an assembly that has not yet been saved as order-specific you should fix the material BOM.

7. You go to the single-level order BOMs and carry out the necessary changes there.

8. Transfer bills of material to Project System if necessary.

➡

> We recommend you assign IDs to the components as soon as possible, where the material number is to be replaced. These should also be fixed. Only then should you transfer the bills of material to Project System. By doing this you avoid additional postprocessing.

9. Go to the BOM explosion screens if you need to, so you can display and print the multi-level BOM.

➡

> We recommend that, after every change to a bill of material (for instance, after a revaluation in variant configuration, or after fixing or editing a single-level order BOM) you click 🔄, so that the system explodes the bill of material again and displays the current status. This is important if you change a component quantity, for example. This can lead to the system selecting a different alternative BOM during Alternative Determination [Ext.]

> Alternatively to that, in the order browser screen you can set: Setting the indicator *Autom. Update*. When you do this, the system updates the multi-level BOM after each change.

Navigation in the Order Browser

Use

In the order browser you display the multi-level BOMs of a sales order item and you can navigate to the various process and evaluation functions for order BOMs. Configurable as well as non-configurable assemblies are displayed.

Features

Object-specific Functions

You call up the object-specific functions using the icons in the overview tree as well as using the context menu.

Icons in the Overview Tree

Icon	Meaning	By clicking ...
🖧	BOM Header	on the right mouse button, you display the context menu with the processing functions for order BOMs.
🖧	BOM Items	
🖧	Subordinate assembly has a material BOM	
📝	Subordinate assembly has an order BOM	
✔	Configuration is complete	here, you display the enhancement components. You can only change this in the variant configuration.
✖	Configuration is incomplete or locked	
🔍	Original available (document item only)	here, you display the original data.

By clicking on the right mouse button, you call up the **context menu** for a BOM header or a BOM item. The functions, which can be executed in the current processing situation, are listed in the context menu.

Display Functions

- Expand sub-tree

- Display (item overview or item detail screen)

- Expand in the new window of the product structure browser

Processing Functions

- [BOM Transfer to Project System [Ext.]](#)

- Create order BOM (for BOM items)

Navigation in the Order Browser

- Material Replacement [Page 23] (for non-configurable BOMs)

- Fix [Page 25] – single-level (for material BOMs)

- Fix – multi-level (for material BOMs)

- Change (for order BOMs)

- Change with change number (for order BOMs)

- Process in the Engineering Workbench

Additional Functions

- Send

- Generate work item

- Store in the object folder

General Functions

You call up functions for the entire multi-level sales order item BOM in the application toolbar.

Icons in the application toolbar

Icon	Function	Description
🔍	Find	Displays a dialog box when you look for materials, documents and classes in the overview tree. The system automatically expands the subtree, in which the desired object is found, and highlights it.
📋	Legend	Displays the legend for the product structure browser objects.
📑	Display variant	Displays a dialog box, in which you can determine which information is displayed in the overview screen.
🔄	Update	Re-explodes the BOM and updates the display in the overview tree.

Using the menu path *Go to,* you go to the reporting functions as well as to additional functions of the order BOM.

Calling up the Order Browser and Order Analysis

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Order BOM → Order browser.*

   The *Order BOM: Initial Screen* screen appears.

2. Enter the sales order number and item, the BOM application and also a date or a change number.

   If you enter a change number here, the system uses this change number to select the valid development level.

   See also:

   Engineering Change Management in the Order Browser [Page 20]

   ➡

   When you click on 📚, the system displays a list of the last ten sales order numbers used.

3. Click ✅.

   The system displays additional data in the initial screen:

   - Ordering party

   - Purchase order number

   - Material number in the sales order item

   - Order quantity and sales unit

   - If the *Valid from* and *Change no.* fields are blank, the system automatically sets the date determined in sales and distribution. If the date, determined in sales, is exceeded, the system inserts the current date instead.

4. If you are working with large BOMs and only want to display the assembly on the top level of the multi-level BOM, enter a value for the maximum explosion level.

2. Click on 🖥 to enter the settings for explosion and display. You can

   - Define the view. Find further information in the documentation for *PP - Bills of Material*, in Defining a View for BOM Explosion [Ext.]

   - Restrict the view:

     – Using the indicator *Ltd Explosion* (Limited Explosion) you can select whether BOM items kept in stock should be exploded further. You can find further information in the documentation for *PP - Bills of Material*, in Restricting the View for BOM Explosion [Ext.]

     – Using the indicator *Var. Display Depth* (Variable Display Depth) you can specify that only a section of the multi-level BOM is displayed in the order browser. You can find further information in Variable Display Depth [Page 17]

   - Specify whether the multi-level BOM should be automatically up-dated after each processing step.

Calling up the Order Browser and Order Analysis

- Select whether the overview tree and the processing functions are displayed in the same window.

  You can specify that the overview tree of the order browser and the processing functions are displayed within the same window. If you do this, the overview tree is displayed in the left or top screen area. If you select a processing function in the context menu of a BOM header or BOM item, then the system displays this function in another screen area (right or bottom).

  Before you switch to another processing function remember to save, or click .

6. Click on *Order browser* or *Order analysis*.

Variable Display Depth

Use

In the design, you do not usually process the entire multi-level BOM for a sales order item but rather you concentrate on a specific assembly. You often do not want to display the entire multi-level BOM for a sales order item in the overview tree of the order browser, rather only the subtree for the assembly you want to process.

Prerequisites

You have set the *Variable disp. depth* (Variable display depth) indicator in the dialog box *Order browser: Settings*.

Features

When you call up the order browser, the *Display Depth* dialog box appears. There, you select the material number of the assembly at the head of the subtree that you want to display.

If you want to display another subtree at a later date, click on 🔄, to go back to the *Display Depth* dialog box.

The following functions are available in the *Display Depth* dialog box:

Function	Procedure	Notes
Display subtree	Enter the material number for the assembly at the head of the subtree. Use the possible entries function to do this, if necessary.	If an assembly in the multi-level BOM is used on various different nodes, you can clearly identify a node using the information on levels and nodes in the entry help.
Displaying the whole multi-level BOM	Deselect the *Retain Variable disp. depth* indicator.	This results in the *Display Depth* dialog box no longer being displayed during the current session.

⚠️

In the initial node the system displays the material for the sales order item in all processing situations. This is also the case when you only display a subtree.

Activities

Activating Variable Display Depth

You activate variable display depth as follows:

You are in the order browser initial screen.

1. Click 🗔.

2. The *Order Browser: Settings* dialog box appears.

3. Set the *Variable disp. depth* indicator.

Variable Display Depth

4.   Click on   *Order Browser*.

Display Log

Use

If you execute one of the following functions in the order browser, the system creates a log:

- Material Replacement
- Fix – single-level
- Fix – multi-level

With the help of the log you can see which activities the system has carried out using these functions.

Activities

In order to display the log choose *Extras → Logs*. You can choose which logs are displayed:

Function	Description
🗒 *Current Log*	Displays the last log generated.
Today's Log	Displays all the logs for the BOM functions that the logged-on user has executed during the day.
All Logs	Displays a selection screen in which you can look for any log.

Engineering Change Management in the Order Browser

Use

Please read the notes in this document if you process your BOM using a change number.

Features

Selecting a Valid Development Level

If you enter a change number in the initial screen of the order browser, the system uses this change number to select the valid development level. The system determines the components that are valid on the valid-from date and displays them in the overview tree of the order browser and in the order analysis.

Parameter effectivity

When you have processed a BOM with reference to change numbers with effectivity parameters, the system displays the dialog box *Effectivity parameter assignment*. The system recommends the parameter values that you entered in the sales order, as a default. We recommend that you use these default values.

See also:

Assignment of the Effectivity Parameters [Ext.]

Changing an Order BOM with a Change Number

You always carry out assembly level changes in the order browser. If, in the order browser, you want to change an assembly using a change number, enter the change number in the initial screen for changing a **single-level** BOM.

Order Analysis

Use

You carry out an order analysis if you want an overview of all assemblies in the multi-level BOM for a sales order item.

Features

In an order analysis, the multi-level BOM assemblies for a sales order item are displayed. The bills of material are displayed on a series of tab pages:

- Order BOMs

    All order BOMs that exist for a sales order item.

- Detached order assemblies

    All assemblies that have been created with reference to a sales order item, but are not yet integrated in the multi-level BOM. After processing has finished, no more assemblies should appear on this tab page. You can find further information in Detached order assembly [Ext.]

    If a component within a detached assembly is itself an assembly, it is only displayed if it is an order assembly. The system also displays these on the tab page, with the detached assemblies, and sets the *sub-assembly* indicator.

- Material BOMs

    All bills of material that have not been saved as order-specific, in other words the order-independent assemblies.

- BOM header invalid

    Order BOMs whose headers are invalid on the *Valid from* date on the initial screen.

- BOM item invalid

    Order BOMs that have no valid items on the *Valid from* date on the initial screen.

- Multiple assemblies

    Assemblies that are used more than once in a multi-level BOM for a sales order item.

List Functions

Each time, the BOMs from the individual tab pages are shown in a list. The following functions are available on this list, for example:

- Sort
- Filter
- Print
- Export (for example in table costing data)

For more information see: ABAP List Viewer (ALV): Grid Control [Ext.].

Order Analysis

Activities

If you are in the order browser, click ▣ *Order Analysis*.

Material Replacement

Use

You replace the material on a node in a multi-level BOM for a sales order item, if you want to make different changes to a **non-configurable** assembly, which is used on various nodes in the multi-level BOM.

> If you want to replace the material in a **configurable** assembly, you need to use instantiation in variant configuration to do this. An instantiation is then particularly necessary if you have configured material BOMs differently to various nodes, and now want to fix. You can find further information about instantiation in Instantiation of a Configurable Material [Ext.].

Material replacement is necessary, if an assembly is used on more than one node and you

- Want to make order-specific changes to one of the nodes, but want to use the unchanged material BOM on the other nodes

- Want to make different changes to various nodes in the bill of material

- Transfer a BOM to Project System

Features

The system creates an order BOM **on the selected node** and a new material master record. This process copies data from the original material master record and the items from the original BOM.

You can select the data range you want to copy:

- If you only transfer the *Basic data for plant* the system copies basic data and MRP data for the plant in the sales order. A material master record is created, which only contains the data absolutely necessary for material replacement. You can edit this material master record manually.

- If you select *Maximum transfer* the system also copies further data from the original material master record, such as sales/distribution and costing data. This process only copies data for the plant in the sales order, or group data, should plant data not be available.

Replacing the Material

Prerequisites

The BOM, whose header material you replace, has to be a material BOM.

The superior BOM, in other words, the BOM containing the components to be replaced, has to be an order BOM.

If you use variant configuration, we recommend you complete configuration before you start material replacement. You instantiate [Ext.] configurable assemblies in variant configuration.

Procedure

You are in the order browser.

1. Select the BOM header whose material you want to replace.

2. Open the BOM header context menu with the right mouse button and select *Material Replacement.*

   The *Setting Material Data* dialog box appears.

3. Select which data you want the system to copy to the material master.

   - Basic data for plant

   - Maximum transfer

4. Enter a material number and a short text for the new material.

   If you do not enter a material number, the system assigns a material number from an internal number range.

5. Click ✔.

   The system executes the material replacement.

Result

The system:

- Creates a new material master record with the new material number

- Copies the BOM for the previous material and saves it as an order BOM, whose header is then assigned the new material number

- Replaces the previous component in the superior order BOM item with a component that has the new material number

- Writes a log [Page 19], in which system activities during material replacement are documented.

Fixing a BOM in the Order Browser

Use

You fix a material BOM if you want to make order-specific changes to the bill of material. In the order browser, you use this function primarily for non-configurable BOMs.

Prerequisites

You have created a sales order. You have not yet saved the bill of material you want to fix, as order-specific.

Features

When you fix a bill of material, the system creates an order-specific copy of the material BOM. In other words, it generates an order BOM from a material BOM. If you fix a BOM in the order browser, the system saves the data in the same way as for fixing [Ext.] a result-orientated order BOM [Ext.] in the variant configuration.

You fix	The system creates an order BOM that contains the following components:
A non-configurable material BOM	The same components as the material BOM
A configurable material BOM	• All non-variable parts (components without object dependencies) • The variable parts (components with object dependencies), which the system selected as a result of the values assigned to the characteristics.

You can fix a bill of material on a single-level or on multiple levels. When you fix a bill of material on a **single-level**, the system creates just the one order BOM.

When you fix a bill of material on **multiple-levels**, the system generates order-specific copies for all subordinate material BOMs as well. The BOM, with which you trigger the multi-level fix, has to be a material BOM. The system creates order BOMs for all material BOMs of the subtree. If a subordinate assembly already has an order BOM the system leaves it as it is. If however, there are still material BOMs under such an order BOM, these are fixed.

Order BOMs for Configurable Materials

If you use this function to fix an order BOM for a configurable material, you will always see a **result-orientated** order BOM.

If you call up the variant configuration at a later date, do not forget that a configurable order BOM is merged with a material BOM that has the same material number.

You can stop the merge operation with the help of a customer enhancement.

See also:

Merging with Global Material BOMs [Ext.]

Fixing BOMs in the Order Browser

1. In the BOM header context menu select *Fix order BOM - single level* or *Fix order BOM - multi-level*.

   The system displays a list of the bills of material that are fixed.

   The dependent requirements indicator for individual and collective requirements is displayed in this BOM. If this indicator supports *collective requirements only*, then you have to change this in the order BOM so that the BOM is included in the MRP. You can find further information in Order BOMs in MRP [Ext.].

2. Check whether you really want to fix all of the bills of material listed. If you do, click ✔.

   If one or more of the material BOMs you want to fix is used repeatedly in the multi-level BOM for the sales order item, these are displayed in an extra dialog box.

3. Check again, whether you want to fix these bills of material, or whether you first want to replace the material on one of the nodes. If you want to fix the bills of material, click ✔.

   The system fixes the bills of material. In so doing, it writes a log [Page 19], in which system activities during fixing are documented.

4. Click 🔄.

   The system refreshes the current components in the bill of material. The order BOMs are displayed in the order browser. Now you can edit them.

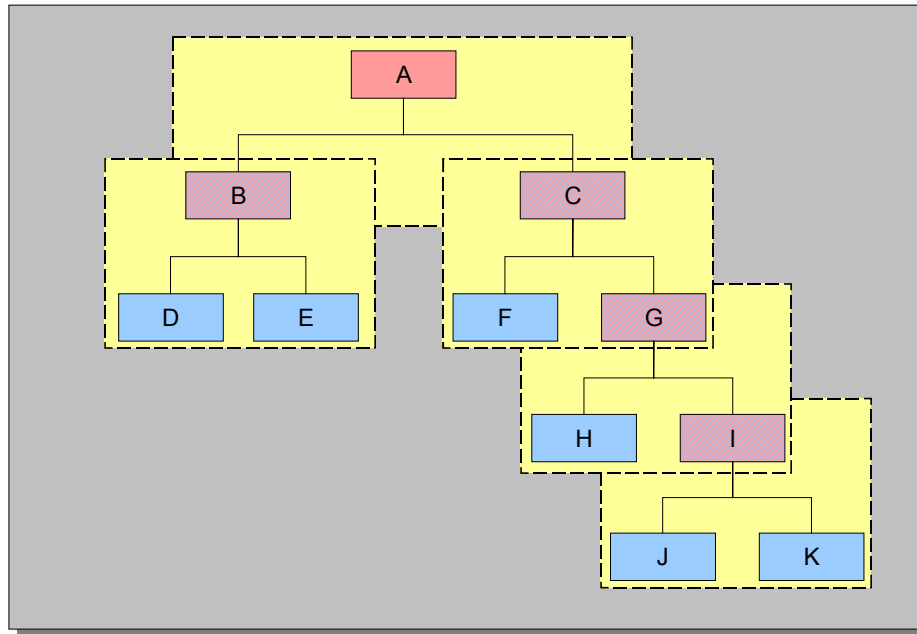   The system creates order BOMs with today's date.

   If you do not enter a date on the order browser initial screen, the system enters a default date. This default date may be prior to today's date in certain circumstances. If you **display** the multi-level BOM in the order browser on this date, the order BOM may not yet be valid, and so will therefore not be displayed. If this is the case, go back and enter a different date on the initial screen.

Example: Multi-Level Fixing in the Order Browser

You have entered Material A in item 10 of sales order 821. In the multi-level BOM, C is the header material of a sub-tree. You want to redesign assembly C and all subordinate assemblies for the sales order.
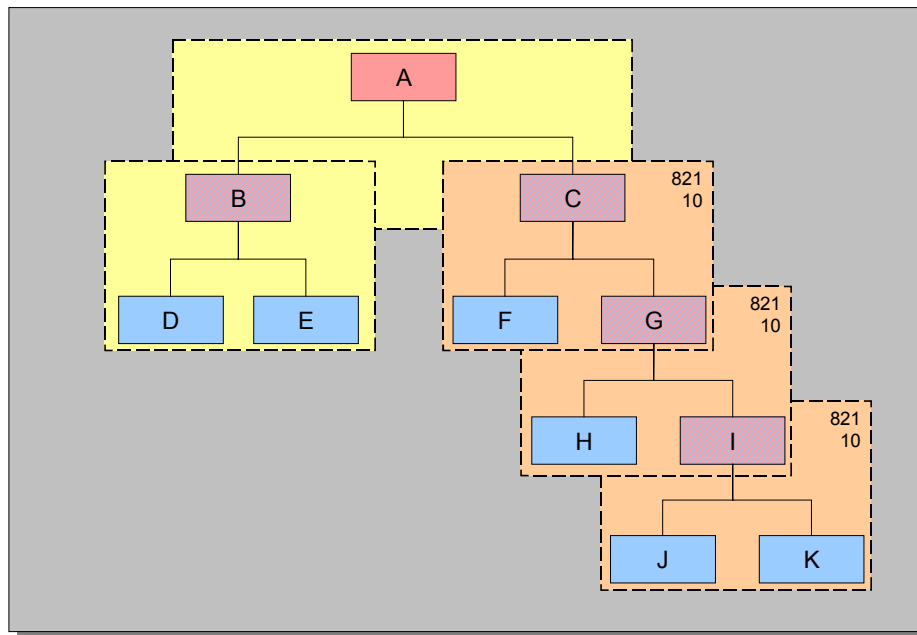
Multi-Level BOM before Fixing

You select the BOM header in assembly C and fix the bill of material on multiple levels.

Following this, the system saves all subordinate bills of material as order-specific:

After the Multi-Level Fixing of the Sub-Tree under Assembly C

Example: Multi-Level Fixing in the Order Browser

Order BOM Editing

Use

With this function you change a non-configurable order BOM.

Prerequisites

You have fixed a material BOM or manually created an order BOM.

The same prerequisites apply here, as for editing material BOMs. You can find further information in the *Bills of Material* documentation in Before you Change a BOM [Ext.].

You can change an order BOM with this function, if you either created it for a non-configurable material, or if the system saved the order BOM as result-oriented in variant configuration.

Features

If you enter the order-specific components in an order BOM, you work as you would when editing a material BOM.

You can extend an order BOM, by transferring items from an existing order BOM or material BOM.

It is not possible to transfer items from a configurable BOM.

More than one person can edit different assemblies in a multi-level BOM at the same time. A single assembly can, however, only be edited by one person at a time. This assembly is then locked to other users, until it is saved.

The following restrictions apply to order BOMs:

- A result-oriented order BOM is non-configurable. Therefore, you cannot create class items [Ext.] in these bills of material either.

- You can't create alternative BOMs [Ext.] for an order BOM.

- You can't create variant BOMs [Ext.] for an order BOM.

- When you change an order BOM, you can work with change numbers, but not with revision levels.

Click when you have finished editing an order BOM, so the system determines the newly current components in the order BOM.

Changing an Order BOM

Prerequisites

You have manually created the order BOM you want to change or, the system saved the order BOM as result-oriented during variant configuration.

Procedure

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Order BOM → Change.*

   The *Change Order BOM: initial screen* appears.

   ➡

   If you are working with the order browser [Ext.], choose the context menu for the BOM header instead.

   - *Change*, to go directly to the item overview. In this case go straight to step 3.

   - *Change with change number*, to go to the *Change order BOM: Initial screen*

2. Enter the sales order number, the order item, the material number and the BOM usage and then click ✅.

   The item overview appears.

3. Change the items similarly to editing item data in material BOMs. Take note of the limitations related to order BOMs (see Editing an Order BOM [Page 29]).

4. If you want to transfer items from a material BOM or an existing order BOM, proceed as follows:

   a. Choose *Edit → Extend → Extend order BOM* or *Extend material BOM*.

   b. The *Copy order BOM* or *Copy material BOM* dialog box appears. Enter the BOM you want to use as a reference and click ✅.

      ➡

      You cannot use a configurable BOM as a reference.

      The item overview appears, for the bill of material from which you want to transfer items.

   c. Select the items you want to copy to the order BOM and click 📖.

   d. The item overview for the BOM you want to change appears. The items you transferred are displayed in the item overview.

5. Save your order BOM.

Display an Order BOM

Prerequisites

You have manually created the order BOM you want to display, or the system saved the order BOM as result-oriented during variant configuration [Ext.].

Procedure

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Order BOM → Display.*

   If you are working with the order browser [Ext.], choose the *Display* command in the context menu for the BOM header instead.

2. The *Display Order BOM* initial screen appears.

3. Enter the sales order number, the order item, the material number and the BOM usage and then click 🗸.

   The item overview appears.

You can find further information on displaying bills of material in the *Bills of Material* documentation in Steps for Displaying a Simple Material BOM [Ext.].

Transferring BOMs to Project System

Use

You use the order browser for BOM transfer, if you want to transfer a bill of material on a particular node of the overview tree to Project System.

Prerequisites

The general prerequisites for BOM transfer to Project System apply here. You can find further information in the *PS - Project System* documentation in Bill of Material Transfer [Ext.].

You have ensured that no assembly in the multi-level BOM for the sales order item is used more than once. For more information, see BOM Transfer and Assemblies Used More than Once [Ext.].

You have selected the *New Version* in the *Order browser: Initial Screen*.

Procedure

You are in the order browser.

1. Click 🔄 to ensure that you are working with the most current processing status.

    The system updates the multi-level BOM.

2. Select the header of the bill of material you want to transfer to Project System.

3. In the BOM header context menu select *BOM transfer to PS*.

    The *BOM Transfer* screen appears. The following fields already contain data and are not ready for input.

    -   Sales document (sales order number)

    -   Sales document item (sales order item)

    -   Material

    -   Plant

    -   BOM usage

    In the following fields there are default values that you can overwrite:

    -   BOM category (material BOM or sales order BOM)

    -   BOM application

    -   Requirement quantity

4. Enter the data that is not already given and click 🕐.

See also:

BOM Transfer to Project System [Ext.]

Multi-Level Order BOM Reporting

Use

With these functions you gain an overview of a multi-level BOM for a sales order item. You use the reporting functions for order BOMs, similarly to those for material BOMs. You can find further information in Reporting Functions [Ext.].

BOM Reporting Functions

Aim of the Report	Function
Gain an overview of the structure of your bill of material	BOM Explosion [Page 34]
Display a list of the uses of a material in order BOMs	Where-Used List [Page 40]
Compare an order BOM, for example, with another order BOM or a material BOM	BOM Comparison [Page 41]

BOM Explosion

Use

You use this function to gain an overview of a multi-level BOM for a sales order item.

Features

You can display a multi-level BOM for a sales order item in the following ways:

- As a list sub-divided by assemblies

- As a hierarchically structured list

- As an overview of the quantities of all parts required to assemble a product

> When the system explodes a multi-level BOM for a sales order item, it ignores any detached order assemblies [Ext.]. These are order assemblies, which you have not yet inserted into the multi-level BOM.

Displaying BOMs Level by Level

Use

You use this function if you want to display the components for every assembly in the multi-level BOM for a sales order item.

Prerequisites

On the screen *BOM level by level: View* (see Extending the View for BOM Explosion [Ext.]) the *multi-level* indicator must be set.

Procedure

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Reporting → BOM explosion → Order BOM → BOM level by level.*

    The *BOM Level by Level: Initial Screen* appears.

2. Enter the sales order number and the order item.

3. In the *Application* field, enter the key of the procedure for automatic alternative determination.

    ➡

    On the initial screen you do not have to enter a material number. In multi-level order BOM explosions, the whole bill of material (from the material in the sales order item) is always displayed. If you are interested in a particular assembly from an extensive bill of material, it can help to enter the material number of the header material for this assembly on the initial screen. You can then see the assembly on the screen straight away without having to scroll.

4. Enter data for selecting a BOM [Ext.] if necessary.

    ➡

    For the required quantity the system automatically proposes the order quantity from the sales document. This value can not be changed here.

5. Click 🖳 and enter the selection criteria for BOM explosion.

6. Click 🕗.

Result

You see a list of all items that fulfill your selection criteria. The quantities refer to the required quantity displayed in the list header.

- In the reporting list for *BOM level by level,* you first see all components on the first level. For components that are themselves assemblies, the *Asm* (assembly) indicator is set.

- If a component is itself an assembly, its components are displayed in a separate block. You see all the assemblies that exist for components of the previous level.

    ➡

    An assembly is not exploded under certain circumstances.

Displaying BOMs Level by Level

- If a class node exists in a multi-level BOM, the material that results from the value assignment is displayed in the reporting list. However, if this material is an assembly, its components are no longer displayed in the reporting list.

- You can find further reasons for a BOM explosion being terminated in When is a BOM Explosion Terminated? [Ext.]

Displaying a Multi-Level BOM Explosion

Use

You use this function if you want to display all components in the multi-level BOM for a sales order item in a structure.

Procedure

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Reporting → BOM explosion → Order BOM → Multi-level BOM.*

   The *Structure Level by Level: Initial Screen* appears.

2. Enter the sales order number and the order item.

4. In the *Application* field, enter the key of the procedure for automatic alternative determination.

   On the initial screen you do not have to enter a material number. In multi-level order BOM explosions, the whole bill of material (from the material in the sales order item) is always displayed. If you are interested in a particular assembly from an extensive bill of material, it can help to enter the material number of the header material for this assembly on the initial screen. You can then see the assembly on the screen straight away without having to scroll.

5. Enter data for selecting a BOM [Ext.] if necessary.

   For the required quantity the system automatically proposes the order quantity from the sales document. This value can not be changed here.

6. Click 📇 and enter the selection criteria for BOM explosion.

7. Click 🕒.

Result

You see a list of all items that fulfill your selection criteria. The quantities refer to the required quantity displayed in the list header.

- In the *multi-level BOM* reporting list - as opposed to the *level by level BOM* reporting list - the components in an assembly are displayed directly underneath the assembly and have a higher level number.

- If a component is itself an assembly, first the components in the subordinate assembly are listed directly beneath it. Only then is the listing of the components in the superior assembly continued.

   An assembly is not exploded under certain circumstances.

Displaying a Multi-Level BOM Explosion

- If a class node exists in a multi-level BOM, the material that results from the value assignment is displayed in the reporting list. However, if this material is an assembly, its components are no longer displayed in the reporting list.

- You can find further reasons for a BOM explosion being terminated in When is a BOM Explosion Terminated? [Ext.]

Displaying a Summarized BOM

Use

In certain application areas in a company, such as material requirements planning (MRP) and costing, you need an overview of all the components required to make a product. A summarized BOM offers a complete listing of the assemblies and individual components in a product structure.

Procedure

1. Choose *Logistics → Production → Master data → Bills of material → Bill of material → Reporting → BOM explosion → Order BOM → Summarized BOM.*

   The *Summarized BOM: Initial Screen* appears.

2. Enter the sales order number and the order item.

5. In the *Application* field, enter the key of the procedure for automatic alternative determination.

   ➡️

   On the initial screen you do not have to enter a material number. In multi-level order BOM explosions, the whole bill of material (from the material in the sales order item) is always displayed. If you are interested in a particular assembly from an extensive bill of material, it can help to enter the material number of the header material for this assembly on the initial screen. You can then see the assembly on the screen straight away without having to scroll.

6. Enter data for Selecting a BOM [Ext.] if necessary.

   ➡️

   For the required quantity the system automatically proposes the order quantity from the sales document. This value can not be changed here.

7. Click 🗔 and enter the selection criteria for BOM explosion.

6. Click 🕐.

Result

You see a list of all items that fulfill your selection criteria. The quantities refer to the required quantity displayed in the list header.

- This reporting function produces a **complete** count of the components across all levels in a product structure.

- This list does not show you the structure of the product. Individual components which occur more than once in the product are displayed as one item, with a sum total item quantity.

Where-Used Lists

Use

You use this function if you want to know in which order assemblies and for which orders a material is used.

Features

The system displays a list of the order BOMs with order number and order item, in which a material is used. You can find further information in the *Bills of Material* documentation in Where-Used Lists [Ext.]. As opposed to where-used lists for material BOMs, where-used lists for order BOMs are always single-level.

> The system also displays components in detached order assemblies [Ext.]. These are assemblies, which you have not yet inserted into the multi-level BOM for the sales order item.

BOM Comparison

Use

You use this function to compare an order BOM with, for instance, another order BOM or a material BOM.

Features

The system displays a list in which the same, similar and different items belonging to two bills of material are shown side-by-side. You can find further information in the *Bills of Material* documentation in <u>BOM Comparison [Ext.]</u>.

> You can also compare a detached order assembly with another assembly.