Configuration Management (LO-CM)

Release 4.6C
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## Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>🚨</td>
<td>Caution</td>
</tr>
<tr>
<td>🗣</td>
<td>Example</td>
</tr>
<tr>
<td>📖</td>
<td>Note</td>
</tr>
<tr>
<td>🕵️‍♂️</td>
<td>Recommendation</td>
</tr>
<tr>
<td>🕵️‍♂️</td>
<td>Syntax</td>
</tr>
<tr>
<td>💡</td>
<td>Tip</td>
</tr>
</tbody>
</table>
Contents

Configuration Management (LO-CM) ................................................................. 6
Life Cycle Phase .................................................................................................. 9
Life cycle profile ............................................................................................... 10
Configuration Definition .................................................................................. 13
Configuration Folder ......................................................................................... 14
Controlled Objects ........................................................................................... 16
Baseline ............................................................................................................. 17
Object Types ...................................................................................................... 19
Working with Configuration Management ....................................................... 20
Navigation in the CM Workbench ................................................................. 23
Worklist ........................................................................................................... 25
Structure of a Configuration Folder or Baseline .............................................. 27
Display Browser ............................................................................................. 29
Working with Configuration Folders ............................................................... 30
Entering Controlled Objects ............................................................................. 31
Dummy for Controlled Objects ....................................................................... 32
Cumulate Objects by Drag & Drop ................................................................. 33
Cumulate Objects Manually ........................................................................... 34
Accompanying Documents ........................................................................... 35
Variable Object Identification ....................................................................... 37
Status Management in Configuration Management ........................................ 39
System Status for a Configuration Definition ................................................ 40
System Status for a Configuration Folder ...................................................... 41
Creating a Successor Folder .......................................................................... 42
Creating a Successor Folder .......................................................................... 44
Creating a Baseline ......................................................................................... 45
Indicating the Relevant Objects .................................................................... 46
  Maintaining the Attribute Configuration-Management-Relevant ................. 47
  Setting up Customizing for Material Masters .............................................. 48
Cumulating Objects in the Configuration Folder ........................................... 50
Automatic Completion of the Structure ........................................................... 51
  Determining the Structure Information about BOMs ................................. 52
  Example 1: Automatic Completion of the Structure .................................. 54
  Example 2: Automatic Completion of the Structure .................................. 57
  Example 3: Automatic Completion of the Structure .................................. 60
Fixing Objects ................................................................................................. 62
  Locking Material Master Records ............................................................. 63
  Fixing a BOM ............................................................................................. 64
  Fixing a Document Info Record .................................................................. 65
Comparing Configuration Folders and Baselines .......................................... 66
Delete Configuration Folder ........................................................................... 67
Configuration Management (LO-CM)

Purpose
During their life, products and projects go through various Life cycle phases such as engineering/design, sales, production and maintenance. In each life cycle phase, a product has different configurations. A configuration is made up of multiple different objects that describe the product in the relevant life cycle phase. For example, these can be documents, materials, BOMs or other objects. The cumulation of objects changes over the course of time and is different from life cycle phase to life cycle phase.

With Configuration Management you identify the objects that describe a product in a particular life cycle phase and cumulate them in a metaobject – a configuration folder. With the help of different configuration folders in various life cycle phases you manage the configuration of products and projects over different life cycle phases.

Configuration Management can be used in various business processes:

- **Collaborative Engineering**
  
  The features offered in Release 4.6C support the Collaborative Engineering & Project Management processes.

  Extensive documentation on this can be found in the SAP library under Logistics → PS → Project system → Collaborative Engineering & Project Management (CEP) [Ext].

- **Baselining**
When your product reaches a milestone, you freeze the processing status for a specific point in time in a Baseline [Page 17]. This processing status can later be reproduced at any time.

Information on Baselining can be found in this documentation under Creating a Baseline [Page 45].

Integration

These components are integrated with Configuration Management:

- LO – Collaborative Engineering & Project Management
- LO – Engineering Change Management
- LO – Material master
- CA – Document management
- PP – BOMs
- LO – Project System

Features

- Flexible determination of life cycle phases

  In a company the various products go through different life cycle phases. You can personally define the individual life cycle phases for your products and projects in Customizing Configuration Management and flexibly combine them with one another in order to meet your company’s requirements.

- Accompanying documents

  With accompanying documents, you can comprehensively document the processing processes of a configuration folder. Accompanying documents connected to the document management system (CA-DMS) via an object link and are managed with their functions.

- Worklist

  From a worklist, you always have fast access to the configuration folders that you work with.

  See: Worklist [Page 25]

- Status management

  See: Status management in Configuration Management [Page 39]

- Integration of product structure browser and project structure browser

  With the product structure browser and the project structure browser, you look for objects that are relevant for a configuration and copy them, using Drag & Drop, into your configuration folders.

- Automatic Completion of the Structure

  If you create a Baseline, the system automatically looks for objects that are relevant for the product and adds them to the Baseline.

  See: Automatic completion of the structure [Page 51]
Configuration Management (LO-CM)

- **Comparison of configurations**
  
  You can compare the hierarchically structured object lists of several configuration folders or Baselines with each other.

- **Transfer of the As-Built configurations**
  
  This function supports the transition from the production to maintenance phase. An As-Built configuration is an installation that you automatically generate from the system with the help of existing production data (process and production orders). This operation can be integrated in the confirmation of a production order. You can transfer such an installation into a configuration folder.

  **See:** [As-Built configuration (ABC) [Ext.]]
Life Cycle Phase

Definition
Stage in the life of a product or project that, from the point of view of a company, is of commercial importance.

Use
In a company, products and projects go through numerous life cycle phases from their creation to the end of maintenance.

You create a life cycle phase if you want to document, or publish on the Internet, specific configurations (that means the processing statuses of objects) in the relevant stage of creation, development, production, or maintenance.

Example
A product can go through the following life cycle phases:

- Sales (as sold)
- Specification (as specified)
- Engineering/design (as designed / as engineered)
- Work scheduling (as planned)
- Production (as built)
- Delivery (as shipped)
- Plant maintenance (as maintained)

In Customizing Configuration Management you can freely define the life cycle phases necessary for your company (work step Application control → Define life cycle profile).

Life Cycle Phases for Collaborative Engineering & Project Management (CEP)
In the life cycle phases contained in the standard system in the configuration profile CEP you have special functions for Collaborative Engineering. The following features apply in the configuration folders that you create in one of these life cycle phases:

- The system displays the icon . Click on this to publish the configuration folder.
- The system hides the icon . In the life cycle phases of Collaborative Engineering you can not create any Baselines.
Life cycle profile

Definition

Template for the lifetime of a product of project, from the start in engineering/design or in SD, throughout the production, right up to the maintenance.

Use

In Customizing Configuration Management you define life cycle profiles (Work step Application control → Define life cycle profile).

If you create a Configuration definition [Ext.], you assign a life cycle profile to it. In so doing, you determine the sequence of the life cycle phases [Page 9] the configuration definition objects go through.

Structure

A life cycle profile contains

- A defined group of life cycle phases

  A life cycle profile contains those life cycle phases that, from the point of view of the company, are relevant for a specific product or project.

- Strictly defined phase transitions

  The phase transitions determine the sequence the individual phases go through.

Example: Life Cycle Profile with Three Phases

![Diagram of life cycle profile with three phases: as designed, as planned, as built]
Company-Specific Life Cycle Profiles

In your company, you may need different life cycle profiles for various products or projects. This is why you can define several life cycle profiles in Customizing. In each life cycle profile, you use only those life cycle phases that, from the point of view of your company, are relevant for a product or project. If, for example, you simply buy a product, create a configuration definition for this product with another life cycle profile to that for a product that you produce and sell yourself.

As an automobile manufacturer, you use, for example, a life cycle profile with the following phases for the configuration definition of your vehicles:

- Specification (as specified)
- Engineering/Design (as designed)
- Work Scheduling (as planned)
- Production (as built)
- Delivery (as shipped)

Some assemblies, such as the clutch you design yourself, but they are produced by a supplier. You send the supplier an exact description of the product that you want them to produce and on receipt, you check whether the clutch meet your specifications. For the configuration definitions of these assemblies, you use a life cycle profile with the following phases:
Multiple Phase Transitions

You can define that within a life cycle profile, several different transitions between certain life cycle phases are possible. In this way, you can, for example, skip certain life cycle phases as required.

In the following example, a transition from phase 1 into phase 2 and from phase 2 into phase 3 is possible. You also have the option to skip directly from phase 1 into phase 3.
Configuration Definition

Definition

Frame in which all configurations of a product or project throughout all the phases of a life cycle are cumulated.

Use

If you have an idea for a new product or project that you want to control with Configuration Management, first create a configuration definition.

When creating, choose a life cycle profile [Page 10] that is defined in Customizing. The permitted life cycle phases and phase transitions are determined. In the course of time, you create configuration folders and, if necessary, Baselines in these life cycle phases.

A configuration definition can be described as a bracket, which incorporates all configuration folders and Baselines for a particular product. Using the description of the configuration folder, you can easily comprehend the genesis of the product.
Configuration Folder

Definition
Folder in which all objects that describe a product or project in a specific life cycle phase are collected.

Use
You cumulate different objects (such as documents, materials, BOMs and so on) for a consistent configuration in a configuration folder.

In contrast to a Baseline no specific processing status for the object is kept in the configuration folder. However, the configuration folder serves as a template for the generation of a Baseline.

Structure
A configuration folder is uniquely identified by the following data:

- Configuration definition
- Life cycle profile
- Life Cycle Phase
- Folder number

Objects
- Controlled Objects
  The controlled object is the object for the configuration folder. For example, this can be a material or a project definition. You enter the controlled object on the ConfFolder tab page.
  See: Controlled objects [Page 16]
- Structure
  You can assign any number of additional objects to the controlled object that describe the product or project in more detail, such as BOMs, documents and WBS elements. These are saved in a hierarchical structure.
  See: Structure of a Configuration Folder or Baseline [Page 27]

Detail and Management Data
- Status
  You can find the status of a configuration folder on the ConfFolder tab page.
  See: Status management in Configuration Management [Page 39]
- Text
  Here you can enter text, in order to document the processing process of the configuration folder.
• Accompanying documents
  With accompanying documents, you can comprehensively document the processing
  processes of a configuration folder.

• Recipient list
  In the recipient list, you enter the people or organizational units to which you want to
  send the folder.

  In Release 4.6C the recipient list can only be used in the life cycle phases for
  Collaborative Engineering (CEP).

• Additional data
  Here you can enter an alternative number (variable object identification) for the
  configuration folder. Prerequisites for this are settings in Customizing for Configuration
  Management (Section CM-Objects → Configuration folder → Variable object
  identification).
Controlled Objects

Definition
An object, whose configurations are controlled with the help of a configuration folder. The controlled object is the object for the configuration folder.

Structure
In the hierarchical object overview of a configuration folder or Baseline the controlled object is high up in the initial node.

To describe the controlled object in more detail, you can assign other objects to it in a configuration folder such as BOMs, documents (technical drawings, general task lists) and so on.

Example
For example, if you want to control the configuration of a turbine with Configuration Management, you enter the material number of the turbine as a controlled object in the configuration folder.

See also:
Dummy for Controlled Objects [Page 32]
Baseline

Definition
Snapshot of the configuration of a product at a specific point in time.

Use
A specific configuration is frozen in a Baseline. This means that the current processing status of all objects that are relevant for the description of the configuration are fixed at a specific point in time. A configuration that has been frozen in a Baseline can be reproduced at any time.

Structure
A Baseline is uniquely identified by the following data:
- Configuration definition
- Life cycle profile
- Life cycle phase
- Number of the configuration folder from which the Baseline has been generated
- Number of the Baseline

Objects
A Baseline contains the same controlled object as in the configuration folder from which it was generated.
Furthermore, the structure of a Baseline can contain other objects that are not contained in the configuration folder but that are relevant for a unique description of a configuration. The system determines these objects automatically when you generate a Baseline.

See: Automatic completion of the structure [Page 51]

In contrast to a configuration folder, the processing status of a specific object is fixed to the Baseline date and can be reproduced from there.

See: Fixing Objects [Page 62]

Detail and Management Data
A Baseline contains the same detail and management data as in the configuration folder.

Integration
A Baseline
- Is assigned to a configuration definition
- Was generated from a specific configuration folder
- Is found in the same life cycle phase as the configuration folder from which it was generated
Baselines from Various Life Cycle Phases

as designed

as planned

See also:
Creating a Baseline [Page 45]
Object Types

You can include objects of the following object types in a configuration folder:

- Material
- Document
- Material BOM
- Project definition
- WBS element
- Network operation
- Serial number

On the Material tab page you can assign a serial number to a material in order to individually distinguish a particular piece from all other pieces of the material. A prerequisite for this is that a combination of material number and serial number already exists in the system.

- Equipment (only as controlled object)
- Installation

The Baselining processes is supported for the objects in **bold**.

⚠️

Configuration Management supports various processes in *Product Lifecycle Management* (PLM). Remember that not all object types can be used sensibly in all processes and life cycle phases.

For example, the objects from projects systems can be used in the framework of Collaborative Engineering & Project Management, however, they can not be fixed in all Baselines.

**Also see:** Collaborative Engineering & Project Management (CEP) [Ext.]
Working with Configuration Management

Purpose

This process gives a general overview of working with Configuration Management.

The sequence of work steps in this process can be used as an example. All work steps, with the exception of step 1 can be repeated as often as you like in each Life cycle phase [Page 9].

Prerequisites

You have made the settings in Customizing for Configuration Management.

If you create Baselines, you must first set the status Relevant for Configuration Management in the material master records and document info records whose processing status you later want to reproduce.

Process Flow

You have an idea for a new product.

1. You create a Configuration definition [Page 13].

   At this point in time, it is not necessary for you to have already created material master records or other data for the new product.

   If you create a configuration definition, the system asks you to select a Life cycle profile [Page 10]. A life cycle profile is defined in Customizing, and determines which life cycle phases the product goes through.

   The system automatically creates the first Configuration folder [Page 14] in the first life cycle phase.

   First Configuration Folder in the First Life Cycle Phase

   as designed

2. You enter the controlled object [Page 16] in the configuration folder.

   For example, this could be a material master record. If you have not yet created the material master record you can first create a Dummy for controlled object [Page 32].

   The system displays the controlled object at the head of the structure of the configuration folder (bottom left screen area – see Navigation in the CM Workbench [Page 23]).

   See: Entering controlled objects [Page 31]

3. In the structure of the configuration folder you cumulate the objects that describe a product in more detail. These could be documents and BOMs. For this, you have two possibilities:

   - Cumulate objects by Drag & Drop [Page 33]
   - Cumulate objects manually [Page 34]
4. If your product or project skips over into a new life cycle phase, create a new configuration folder (creating a successor folder [Page 42]) in this phase.

**Successor Folder in a New Life Cycle Phase**

In each configuration folder, you enter the objects that describe the product in the relevant phase or version.

In various life cycle phases, a product or project is often described by different objects. Consequently, the configuration folders in various life cycle phases often contain objects of different types.

It is, for example, possible that a configuration folder in the specification phase only contains documents. In the design phase, materials and BOMs are often added. However, in the maintenance phase, a configuration folder principally contains equipment.

5. You can also create successor folders in the same life cycle phase to represent different versions of a product.

**Successor Folders in the Same Life Cycle Phase**

6. When the design reaches a specific milestone, you create a Baseline [Page 17].

In a Baseline, you freeze the processing status of the product on a specific key date. You can then reproduce the processing status of the product on the key date of the Baseline at any time.
Baselines from Various Life Cycle Phases

See: Creating a Baseline [Page 45]
Navigation in the CM Workbench

Use

The CM Workbench is the central navigation and processing tool for Configuration Management. All the functions for creating, changing and displaying configuration folders and Baselines are available to you in one individual screen area.

Features

The following screen areas are available to you for working with the CM Workbench:

Worklist

Here, the configuration folders and Baselines that you are working with are displayed. By double clicking on the configuration folder or Baseline, its content is displayed in the screen areas Header, Details and Objects.

Using the button you can hide or reveal the worklist.

Also see: Worklist [Page 25]

Header

The header data of a configuration folder or a Baseline are displayed here.

With the buttons in this screen area, you carry out the central activities in Configuration Management.

<table>
<thead>
<tr>
<th>Button</th>
<th>Activity</th>
</tr>
</thead>
</table>

April 2001
Navigation in the CM Workbench

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>📁</td>
<td>Create configuration definition</td>
</tr>
<tr>
<td>📦</td>
<td>Create successor folder</td>
</tr>
<tr>
<td>🍃</td>
<td>Create Baseline (not CEP)</td>
</tr>
<tr>
<td>📈</td>
<td>Publish folder (only CEP)</td>
</tr>
</tbody>
</table>

**Structure**

The objects of a configuration folder or a Baseline in an overview tree are displayed here. Using the button 📁 you can hide or reveal the structure.

**Details**

Detail and management data for configuration folders or Baselines is displayed here on different tab pages.

**Browser**

The product structure or project structure are displayed here. Using the button 🎞 you can hide or reveal the browser.

**Also see:** Display browser [Page 29].

**Activities**

To call up the CM Workbench select *Logistics ➔ Central functions ➔ Configuration Management* in the SAP Easy Access menu.
Worklist

Use

Using the worklist you select the configuration folders and Baselines that you want to process or display in the CM Workbench.

Features

The worklist contains two overview trees:

- Favorites
  
The objects in the favorites tree are kept permanently in the worklist.
  
  When you create a configuration definition it is automatically transferred into your favorites.

  ![Favorites](image)
  
  The system always saves your favorites when you select **or** **.

- Selection
  
The objects that the system found in the last search are displayed in the selection tree.
  
  To find an object (such as configuration folder or Baseline) select **. The system displays the found objects in the selection tree.
  
  The configuration folders and Baselines in the selection tree are only kept temporarily in the worklist. If you want to permanently keep a folder or a Baseline in your worklist, use Drag & Drop to move them from the selection tree into the favorite’s tree.

The overview tree is made up of a hierarchical structure.

### Hierarchical Structure within the Worklist

- **Configuration definition**
  - **Life cycle phase**
    - **Configuration folder**
      - **Baseline**

Icons in the application toolbar

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
<th>What you ought to know</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Expand subtree" /></td>
<td>Expand subtree</td>
<td></td>
</tr>
</tbody>
</table>
## Worklist

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compress subtree</td>
<td></td>
</tr>
<tr>
<td>Search</td>
<td>With this function, you only look for the objects that are already in your worklist. If you want to look for other configuration folders or Baselines, choose instead.</td>
</tr>
<tr>
<td>Print</td>
<td></td>
</tr>
<tr>
<td>Choose layout</td>
<td></td>
</tr>
<tr>
<td>Add folder or Baseline to favorites list</td>
<td>Using the dropdown menu next to the button, you can also select folders or Baselines to remove from your favorite’s list.</td>
</tr>
<tr>
<td>Details</td>
<td>By clicking on this button, you display the contents of a folder or Baseline in the other screen areas of the CM Workbench.</td>
</tr>
</tbody>
</table>
Structure of a Configuration Folder or Baseline

Definition
Hierarchically structured list for managing objects in a configuration folder or Baseline.

Use
In the structure of a configuration folder you cumulate the objects that better describe the controlled object [Page 16] and that belong to a product or project.

Structure
In the Structure screen area below the worklist, the objects of a configuration folder or Baseline are displayed in the form of an overview tree. You can transfer other objects from the Browser [Page 29] into the structure of a configuration folder using Drag & Drop.

Furthermore, in the Details screen area, you find the Structure tab page. In this tab page, the system only displays the objects that are directly subordinated to those objects selected in the overview tree.

Icons in the Structure Screen Area

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
<th>What you ought to know</th>
</tr>
</thead>
<tbody>
<tr>
<td>🕵️‍♂️</td>
<td>Search</td>
<td>With this function, you only look for the objects that are already part of the structure.</td>
</tr>
<tr>
<td>🗄️</td>
<td>Print</td>
<td></td>
</tr>
<tr>
<td>📊</td>
<td>Choose layout</td>
<td>Using layouts, you can display other columns with additional information about the objects. Using the dropdown menu alongside the button, you can cumulate your own layouts.</td>
</tr>
<tr>
<td>🔪</td>
<td>Cut</td>
<td></td>
</tr>
<tr>
<td>📂</td>
<td>Copy</td>
<td>You use this function to process the structure.</td>
</tr>
<tr>
<td>🦩</td>
<td>Paste</td>
<td></td>
</tr>
<tr>
<td>🔡</td>
<td>Up one level</td>
<td>If you have selected an object in the structure, you go to the directly superior object in the hierarchy by clicking on this button.</td>
</tr>
<tr>
<td>🕵️‍♂️</td>
<td>Overview of the entire structure</td>
<td>By clicking on this button you expand the entire structure.</td>
</tr>
</tbody>
</table>

Integration
You can display documents in the structure from the CM Workbench. If you want to display the original, proceed as follows:
Structure of a Configuration Folder or Baseline

1. Select the document in the structure.
2. To display the context menu, click the right mouse button on the document.
3. Select *Original document*. 
Display Browser

Use

You use this graphics browser to get a quick overview of the relationships between objects with which you want to work in Configuration Management. In the browser

- You will find information about the predecessor and successor relationships between configuration folders and Baselines.
- You look for objects relevant to a configuration folder. Using Drag & Drop you transfer the objects from the browser into the structure of the configuration folder.

Procedure

First select the object that you want to see in the initial node of the browser and click 🔄.

帻

If you want to display an object from the worklist in the browser, first deselect the object in the structure of the configuration folder (screen area bottom middle), by clicking in a free area of the screen and then select the object in the worklist. (If an object is selected in both screen areas, the object is displayed from the structure of the configuration folder as default.)

帻

If you have not selected an object in either the worklist or the structure, the system displays the controlled object from the current configuration folder in the browser.

Result

Depending on the type of selected object, the system displays either the product structure browser or the project structure browser:

- If you have selected a project definition, a WBS element or a network operation, the system displays the project structure browser.
- Otherwise the system displays the product structure browser.

For more information, see Product structure browser [Ext.].
Working with Configuration Folders

Use

Here you find the functions and procedures for working with configuration folders.
Entering Controlled Objects

Procedure

You are in a configuration folder.

1. Select the tab page ConfFolder (Configuration folder).
2. Select a value from the field Type of controlled object.
   
   If the object that you want to enter as a controlled object (such as material master record), has not yet been created in the SAP System, you can provisionally enter a dummy instead. For more information, see Dummy for controlled objects [Page 32].

3. In the group box Controlled object enter the number of the controlled object and save.

Result

The controlled object is displayed in the header of the configuration folder structure.

If the field Type of controlled object is empty, you can enter a description in the group box controlled object for information purposes. However, this has no operative meaning. The system rejects the description as soon as a type for the controlled object is selected.

See also:

Controlled Objects [Page 16]
Dummy for Controlled Objects

Use

You enter a dummy if the object that you want to enter has not yet been created in the SAP System.

For example, you have planned the material number T-30000 for a new turbine. Since the turbine is still in the specification phase, you have not yet created a material master record.

Nevertheless, you can enter the material number T-30000 as a controlled object in the configuration folder if you select the Dummy material as the type of controlled object.

At a later date, after you have created the object, change the type of controlled object (such as to Material).

As long as the type of controlled object is a dummy the description of the object has no operative meaning.

Activities

If you want to enter a dummy, first select an entry on the ConfFolder tab page in the field Type of controlled object that starts with Dummy.
Cumulate Objects by Drag & Drop

Use

You use this function if you want to look for dependent objects via the product structure browser or the project structure browser.

Procedure

If you want to look for other objects that may be relevant for the configuration folder, starting from the controlled object or any other object in the structure of the configuration folder, proceed as follows:

1. Select an object in the structure.
   
   Make sure that no objects are selected in the worklist.

2. Choose Drag & Drop.
   
   The browser is displayed in the left hand screen area. For more information, see Display browser [Page 29].

3. In the browser, you look for objects relevant to a configuration folder.
   
   In the product structure browser and project structure browser you can display the relationships between objects and navigate around the project or product structures.

   In the browser, you can go directly to the display of individual objects by clicking on the right mouse button, in order to see them more precisely and to decide whether they are relevant for the configuration folder.

4. In order to transfer an object into the structure of the configuration folder, drag it with the mouse to an object in the overview tree of the screen area Structure (see Navigation in the CM Workbench [Page 23]).

   If you transfer an object with Drag & Drop, make sure to click on the symbol and not on the name.

Result

The system adds the new object to the structure as a subordinated node of the object to which you drag it.
Cumulate Objects Manually

Use
You enter the objects manually using the keys, if you know the number of the object (such as material number) and you do not want to search with the browser.

Procedure
You are in a configuration folder.
1. Select the tab page Structure.
   On this tab page, additional tab pages are displayed for each object type.
2. In the overview tree of the screen area Structure (see Navigation in the CM Workbench [Page 23]) select the object to which you want to add the new object as a subordinated node.
   On the tab page Structure, the system only shows the subordinated nodes of the object that you selected in the overview tree.
3. Select the tab page for the type of object that you want to move to the configuration folder (such as material or WBS element).
4. Enter the identified object data and select ✔.

Result
The system displays the object in the structure of the configuration folder.
Accompanying Documents

Use
With accompanying documents, you can comprehensively document the work processes in Configuration Management.

Integration
Accompanying documents are connected to the document management system (CA-DMS) via an object link and are managed with their functions.

Prerequisites
You can then only assign an accompanying document to a configuration folder or Baseline if, in Customizing the document type, an object link for configuration folders or Baselines has been planned (Customizing for document management, work step Control Data ➔ Define document type).

Features
You can assign accompanying documents to configuration folders and to Baselines.
On the Accompanying Document tab page, there is a list in which you can enter accompanying documents. The following functions are available to you:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Assign document" /></td>
<td>Assign document</td>
</tr>
<tr>
<td><img src="image" alt="Delete document assignment" /></td>
<td>Delete document assignment</td>
</tr>
<tr>
<td><img src="image" alt="Find document" /></td>
<td>Find document</td>
</tr>
<tr>
<td><img src="image" alt="Arrange list in ascending order" /></td>
<td>Arrange list in ascending order</td>
</tr>
<tr>
<td><img src="image" alt="Arrange list in descending order" /></td>
<td>Arrange list in descending order</td>
</tr>
<tr>
<td><img src="image" alt="Display document info record" /></td>
<td>Display document info record</td>
</tr>
<tr>
<td><img src="image" alt="Display original" /></td>
<td>Display original</td>
</tr>
<tr>
<td><img src="image" alt="Print original" /></td>
<td>Print original</td>
</tr>
</tbody>
</table>
Differences to Documents in the Structure

This table presents the most important differences between accompanying documents and documents in the structure of a configuration folder or Baseline.

<table>
<thead>
<tr>
<th>Documents in the structure</th>
<th>Accompanying documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>describe a product or project (object level)</td>
<td>describe work processes in the configuration management itself (meta level)</td>
</tr>
<tr>
<td>You enter in the structure tab page or copy from the product structure browser or project structure browser using Drag &amp; Drop</td>
<td>You enter in the accompanying documents tab page</td>
</tr>
<tr>
<td>Automatically transferred into the successor folders and Baselines</td>
<td><strong>Not</strong> automatically transferred into the successor folders or Baselines</td>
</tr>
<tr>
<td>Can no longer expand if a Baseline is fixed</td>
<td>Can still create after the Baseline has been fixed</td>
</tr>
</tbody>
</table>
Variable Object Identification

Use

Use this function to refer to an object by another form of identification. This function is available from Release 4.6C. You define variable object identifications in Customizing (under Logistics General → Configuration Management → CM Objects → Variable Object Identification).

Integration

Variable object identification (VOI) is theoretically available for several objects in Release 4.6C. However in the standard system it has only been activated for configuration folders.

Prerequisites

Before you can define variable object identifications you must have maintained the Customer Include in the relevant container table. For more details see the IMG for Variable Object Identification under Define Identification Categories.

To define VOIs you can define ID types for the variable object identification. You can combine up to 3 ID types in an ID group. The ID types in a group have a logical relationship. The group represents the complete identification. The ID types are part of the identification.

A variable object identification could consist of the year, month and a number. In this case the year, month and number are each an ID type in an ID group.

In Customizing you can also stipulate:

- Whether a VOI is unique, that is whether a VOI can refer than one object
- Whether an ID type is a required entry
- The default ID group

Features

Variable object identification is a generic tool in the SAP System. How it is used can differ from application to application. For instance the VOI may have a separate tab page or appear as a field on a detail screen. The field label search help and, if available, the field help for the original field are displayed.

In the above example, the display could appear as below
In lists and reports where the whole VOI is written in one field, the ID types are separated using the separator that is defined in Customizing, for example 2000/09/43221.

Activities
If you have defined several VOIs for an object, you define a default VOI in Customizing. You can change the VOI in the transaction itself by choosing 📑. A dialog box appears in which you can select the ID group to be used. You can then save these settings user-specifically.
Status Management in Configuration Management

Use

These Configuration Management objects are subject to status management:

- Configuration definition
- Configuration folder

When these objects have reached a particular processing status, set a new status. The status influences which business transactions can be carried out.

Features

In the SAP Standard system, a specific Systemstatus [Ext.] is strictly defined for configuration definitions and Baselines.

For each configuration definition and each configuration folder, you can also define a status profile for the user status.

If you want to work with the user status, you must first define a status profile for the user status. You define the status profiles for individual object types in Customizing Configuration Management under CM objects → <Object type> → Define status profile.

Activities

On the Configuration folder and Configuration definition tab pages, there is a Status field, on which all statuses are listed that are set in the current processing situation for the configuration folder or configuration definition.

Click on [1], to display detailed information on the statuses. On the Business transactions tab page, there is information about which operations are permitted in the current processing situation.
System Status for a Configuration Definition

Features

The following system statuses are available for a configuration definition:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>What you ought to know</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANG</td>
<td>Created</td>
<td>When you create a configuration definition, the system automatically sets this initial status.</td>
</tr>
<tr>
<td>CMSP</td>
<td>Locked</td>
<td>When you lock a configuration definition, no more configuration folders can be changed, created or deleted in this configuration definition.</td>
</tr>
<tr>
<td>CABG</td>
<td>Completed</td>
<td>This status can not be revoked.</td>
</tr>
</tbody>
</table>

With these buttons you set or undo the system status:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>System activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lock configuration definition</td>
<td>Set status CMSP</td>
</tr>
<tr>
<td></td>
<td>Unlock the configuration definition</td>
<td>Revoke status CMSP</td>
</tr>
<tr>
<td></td>
<td>Close configuration definition</td>
<td>Set status CABG</td>
</tr>
</tbody>
</table>

Activities

To set a status, click on the symbol at the bottom of the Configuration definition tab page.
System Status for a Configuration Folder

Features

The following system statuses are available for a configuration folder:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>What you ought to know</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANG</td>
<td>Created</td>
<td>When you create a configuration folder, the system automatically sets this initial status.</td>
</tr>
<tr>
<td>CMSP</td>
<td>Locked</td>
<td>If a configuration folder is locked, no changes can be made to the folder. Furthermore, no successor folders or Baselines can be created. A locked folder can not be deleted.</td>
</tr>
<tr>
<td>CBER</td>
<td>Baselining permitted</td>
<td>Only after this status has been set can you create a Baseline.</td>
</tr>
<tr>
<td>CABG</td>
<td>Closed</td>
<td>This status can not be revoked.</td>
</tr>
</tbody>
</table>

With these buttons you set or undo the system status:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>System activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lock configuration folder</td>
<td>Set status CMSP</td>
</tr>
<tr>
<td></td>
<td>Unlock the configuration folder</td>
<td>Revoke status CMSP</td>
</tr>
<tr>
<td></td>
<td>Release configuration folder for Baselining</td>
<td>Set status CBER</td>
</tr>
<tr>
<td></td>
<td>Undo release for Baselining</td>
<td>Revoke status CBER</td>
</tr>
<tr>
<td></td>
<td>Close configuration folder</td>
<td>Set status CABG</td>
</tr>
</tbody>
</table>

Activities

To set a status, click on the symbol at the bottom of the Configuration folder tab page.
Creating a Successor Folder

Use
You use this function if you want to create a new configuration folder for a product or project for which a configuration definition already exists. In Configuration Management, all configuration folders, with the exception of the first folder in a configuration definition, are created as successor folders.

You then always create a configuration folder as a successor folder if a product or project from a life cycle phase is added to another life cycle phase.

Successor Folder in a New Life Cycle Phase

Furthermore, you can create several successor folders in the same life cycle phase in order to represent different versions of a product.

Successor Folders in the Same Life Cycle Phase

Prerequisites
You have already created a configuration definition.

If you create a configuration definition the system automatically creates the first configuration folder in the first life cycle phase. You create all other configuration folders for the same product or project as successor folders.
The permitted phase transitions for successor folders are defined in Customizing the life-cycle profile (Customizing Configuration Management work step Application control → Define life cycle profile).

**Features**

If you create a successor folder you use either an existing configuration folder or a Baseline as a template (predecessor folder). The system copies the following data from the preceding folder into the successor folder:

- The controlled object
- The structure
- The recipient list (only CEP)

See also:

Creating a successor folder [Page 44]
Creating a Successor Folder

Procedure

You create a configuration folder as a successor folder as follows:

You are in the CM Workbench.

1. From the worklist, open the configuration folder or Baseline that you want to use as a template.

2. Choose 📁

   The Creating a successor folder dialog box appears.

3. Select a life cycle phase and enter a key and a description for the new configuration folder.

4. Choose 📁.

Result

You have created a new configuration folder as a successor folder. The system displays the new configuration folder in the CM Workbench.
Creating a Baseline

Purpose

You create a Baseline when you want to fix the processing status of a product at a specific point in time. You can later reproduce this processing status at any time.

If you work with Collaborative Engineering (CEP) you do not need this process. This functions described here are therefore not available in the life cycle phases contained in the standard system in the life cycle profile CEP.

Prerequisites

Prerequisites for Materials and Documents

You have flagged the material master records and document info records that you want to fix in the Baseline, as relevant for Configuration Management.

See: Indicating the relevant objects [Page 46].

Prerequisites for BOMs

If you work with ECRs/ECOs, the system only gives a new change status to a BOM in the Baseline if you release the relevant ECO before the Baseline date.

Process Flow

1. You enter the controlled object in the configuration folder.
   As required, you cumulate additional objects in the structure of the configuration folder.
   See: Cumulating objects in the configuration folder [Page 50]

2. You create a Baseline.
   As a result, the system carries out the following steps:

3. The system copies the controlled object and if necessary the structure from the configuration folder into the Baseline.

4. From these objects, the system automatically looks for other objects that are relevant for the configuration. For this reason, the system evaluates the BOMs and object links of the document management system (CA-DMS). The system adds the found objects (BOMs, materials, documents) to the structure.
   See: Automatic completion of the structure [Page 51]

5. The system fixes the material master records and document into records that are contained in the Baseline structure and that are flagged as relevant for Configuration Management. The current processing status of the BOMs is also fixed in the Baseline. For an object to be fixed, certain prerequisites have to be met for each object type.
   See: Fixing Objects [Page 62]
Indicating the Relevant Objects

Use
You flag an object as relevant for Configuration Management if it plays an important role in the configuration of a product and you want to fix the processing status of the object in a Baseline.

For example, in the product "Turbine T-30" the configuration of the assembly "Pump P-100" has a decisive meaning. Therefore, you flag the material P-100 as relevant for Configuration Management.

For Baselining you use this indicator to determine whether the system:

- Fixes the master record (material master record or document master record)
- Looks for other objects that better describe the relevant object (BOMs and object links)

Features
In Release 4.6C you can flag the objects of the following object types as relevant for Configuration Management:

- Materials

  See: Maintaining the attributes relevant for Configuration Management [Page 47]

- Documents

  In Customizing the document types, you determine whether documents with a specific document type are relevant for Configuration Management. If you create a document info record, the system transfers the value of the relevancy indicator from the document type as the default value. You can assign this value in the document info record.

  No indicator is needed for BOMs. When a material is flagged as relevant, the system automatically copies its BOM into the Baseline, provided it has a BOM whose usage is planned for the current life cycle phase (see: Determining the Structure Information about BOMs [Page 52]).
Maintaining the Attribute *Configuration-Management-Relevant*

**Use**

By configuring the material master accordingly, you can specify in the material master whether a material is controlled in configuration management. For more information, see LO Configuration Management [Ext.].

**Prerequisites**

You have configured the material master in Customizing for the *Material Master* so that subscreen 3300 in function group MGD1 is included in a screen sequence [Ext.] of your own.

You are recommended including this subscreen in the user department *Basic Data* because the configuration management relevancy of the material is an attribute of the entire material. For more information, see the documentation for the following activities in particular:

- Configuring the Material Master [Ext.]
- Define Structure of Data Screens for Each Screen Sequence [Ext.]
Setting up Customizing for Material Masters

Use

In order to ensure that the Relevant for Configuration Management indicator can be seen in the material master you have to configure the material master. This is carried out in two steps:

1. In the first step, you create a new screen sequence that contains a subscreen with the Relevant for Configuration Management indicator.

   If you have already defined a screen sequence for your company, you can use this screen sequence instead and adapt it accordingly.

2. In the second step, you assign the new screen sequence to the responsible users for Configuration Management.

Procedure

Here only the steps necessary for Configuration Management are described. Extensive information about the configuration of screen sequences for material masters can be found in the Implementation Guide (IMG) under Logistics - General → Material master → Configuring material masters.

1. In Customizing select the step Logistics - General → Material master → Configuring material masters → Define the structure of the data screens per screen sequence.

2. Create a copy of the screen sequence. Use as a template screen sequence 21 for example (this is used in the standard).
   a. To copy a screen sequence, select it and click \textit{Copy}. You goto the screen Change ‘Screen sequences’ view: Overview selected set.
   b. In the first column, enter a two-character screen sequence number for the new screen sequence (such as Z1). If necessary also enter the description of the screen sequence.
   c. Choose \textit{Save}. The system copies the screen sequence.

3. Select the new screen sequence and double click left in the overview tree on the Data screen.

4. Select the data screen in which you want to copy the subscreen with the indicator Relevant for Configuration Management and double click left in the overview tree on Subscreens. You goto the screen Change ‘Subscreens’ view: Overview.

5. In an empty subscreen (0001) enter the subscreen 3300 in the program SAPLMGD1.

6. Save.
Assigning the screen sequence to the responsible users for Configuration Management

7. In Customizing select the step Logistics - General → Material master → Configuring material masters → Assign screen sequences to users/material types/transactions/branches.

Then define a user group that is responsible for the Configuration Management in the material master:

8. Left in the overview tree select Screen reference user.

9. Assign the responsible user for the Configuration Management to a new user group.

   You can freely define the name of the user group (such as CM).

10. Save.

Now assign that screen sequence defined in the first step to this user group:

11. Left in the overview tree select Control screen sequence.

12. Create a copy of an entry. Only the entries with screen references dependent on transaction 01 (Industry) are relevant for Configuration Management.

   
   If, for example, you created a copy of screen sequence 21 in the first step now create a copy of the entry for the screen reference transaction 01 and screen sequence 21.

   You goto the screen Change ‘Control screen sequence’ view: Overview selected set.

13. In the column ScrRef User (Screen reference dependent on user) enter the name of the user group and in the column ScrSeq (Screen sequence) enter the key for your new screen sequence (such as Z1).

14. Save.

   If necessary, repeat the entire process for additional screen sequences (such as manufacturer parts).

Result

The indicator Relevant for Configuration Management is displayed in the material master record for the responsible user.
Cumulating Objects in the Configuration Folder

If you want to create a Baseline, then in principal it is normally enough for you to just have entered the controlled object in the configuration folder. When creating the Baseline, the system automatically completes the structure provided you have flagged the relevant objects appropriately.

You can still enter other objects in the structure of the configuration folder, such as when you want to expand objects that are not part of a BOM and for which no object links exist.

When the controlled object is a material, assign a document info record with a specification to it for example.

Do **not** assign another material to a material that is a component it's BOM. The system automatically determines the components from the BOM.

*Indicating the relevant objects [Page 46].*

*Automatic Completion of the Structure [Page 51]*
Automatic Completion of the Structure

Use
The system automatically carries out this function if you create a Baseline.

Prerequisites
You have flagged all materials and documents that are relevant for Configuration Management in the material master records and document info records accordingly.

See: Indicating the relevant objects [Page 46].

In Customizing Configuration Management you have determined which BOM usages are scheduled for the current life cycle phase (work step Application control → Define life cycle profile → Life cycle phases → Selected usages).

Features

From the controlled object and from the end node of the structure from the configuration folder, the system looks for other objects that are relevant for the current configuration of the product. For this reason, the system evaluates the following objects:

- **BOMs**

  For materials in the structure that are flagged as relevant, the system looks for BOMs that are planned for the current life cycle phase and includes these in the structure.

  If an object in a BOM item (such as the material master record of an important assembly) is also flagged as relevant then the system carries out the search for other BOMs from this object. This operation is repeated over numerous levels of a multi-level BOM.

  For documents in the structure that are flagged as relevant, the system looks for document structures and likewise includes them in the structure.

- **Document management system object links (CA-CMS)**

  If an object (such as material) is in the structure and is flagged as relevant then the system also includes the linked documents in the structure.

In this way, the system ensures that the structure that you created in the configuration folder is protected against mechanical changes. The system expands the structure with other objects, however, under no circumstances does it overwrite an object that you have manually copied into the structure.

See also:

Determining the Structure Information about BOMs [Page 52]

Example 1: Automatic Completion of the Structure [Page 54]

Example 2: Automatic Completion of the Structure [Page 57]

Example 3: Automatic Completion of the Structure [Page 60]
Determining the Structure Information about BOMs

**Use**

Here the automatic completion of the structure with the help of BOMs is described in detail. The system carries out all the work steps.

**Prerequisites**

In Customizing for Configuration Management, you determine for each individual life cycle phase, which BOM usages [Ext.] are planned. You select the work step Application control → Define life cycle profile → Life cycle phases → Selected usages.

**Process Flow**

When you create a Baseline, the system carries out the following steps to complete the structure.

1. The system looks for BOMs for the controlled object as well as for the materials and documents in the structure that are flagged as relevant for Configuration. The system transfers the following BOMs into the structure of the Baseline:
   - BOMs that you have included in the structure of the configuration folder
   - Material BOMs with their usages that are planned in Customizing for the relevant life cycle phase
   - Document structures
     
     If you have made the settings in Customizing, you then only have to manually copy a BOM into the structure of the configuration folder if you want to fix the BOM to another usage in the Baseline that is not planned in Customizing of the life cycle phase.

2. For each BOM, the system creates a list of all released change numbers with which you have processed.

   If you have changed a BOM with reference to an ECR/ECO, then only the ECRs/ECOs that you have released up to the Baseline date are taken into consideration in the Baseline.

   ![Tip]

   By clicking on ![Tip] in the structure of the Baseline, you can display this list.

3. The system transfers the objects of all BOM items (such as materials, documents) into the structure of the Baseline.

   This happens irrespective of whether the object is flagged as relevant for Configuration Management or not. It does not mean that the object is also fixed.

4. For each material and document in a BOM item, the system checks whether it is flagged as relevant for configuration management.

   If the object is flagged as relevant,
   - the system fixes the master record (material master record or document info record) provided all other prerequisites for the fixing are met (see: Fixing Objects [Page 62]).
the system looks for all other objects (BOMs and object links). The process starts at step 2 again, but with one difference: in each subtree, the system only looks for BOMs with the same usage as in the superior BOM.

If the object is flagged as **not relevant**, 
- the object is not fixed
- the search for other dependent objects stops

**See also:**
*Fixing a BOM [Page 64]*
Example 1: Automatic Completion of the Structure

This example shows how the system completes the structure of a Baseline when you have entered a **material** as a controlled object in the configuration folder.

### Exit Situation

You have created a configuration definition for a new turbine T-30000. At a particular time in the design phase, you decide to fix the current processing status in a Baseline.

### Customizing of the Life Cycle Phase

In Customizing of the Configuration Management you determined that in the design phase (as designed) BOM usage 2 (engineering/design) is planned.

#### BOM

In plant 1000 you have created a BOM for turbine T-30000 with BOM usage 2 (engineering/design). At this point in time, this BOM has three items:

- Material P-100
- Material M-3
- Document DOC-03

### Object Links

You have written a specification for turbine T-30000 that is managed via the document info record SPEC-01. Via a document management system object link, you have assigned this document to the material master record T-30000.
Example 1: Automatic Completion of the Structure

**Configuration Folder**

In the design phase (as designed) you created the configuration folder T-30000_d01. In this configuration folder you have simply entered the material T-30000 as a controlled object. The structure of the configuration folder contains no other objects.

**Result**

When you create the Baseline, the system automatically completes the structure:

**Structure of the Baseline**
Example 1: Automatic Completion of the Structure

**Document SPEC-01**

The document SPEC-01 is linked to the material T-30000 via a document management system object link and is directly subordinated to it.

**Material BOM (header)**

This is the material BOM to material T-30000 in plant 1000 with usage 2 (engineering/design).

If a material is flagged as a controlled object or as relevant for Configuration Management the system looks for a material BOM and moves this into the structure of the Baseline. In this way, the system selects the BOM with the usage that is planned in Customizing.

For a material, several BOMs can be included in a Baseline.

**List of the Change Numbers**

Here, all change numbers with which the material BOM has been processed and that have been released prior to the Baseline key date are fixed.

**BOM items 10, 20 and 30**

The system includes all items for the BOM in the structure of the Baseline.

**Materials P-100 and M-3**

These materials are in the items of the BOM and are therefore included in the structure of the Baseline.

The material master records are then only fixed when they are flagged as relevant for Configuration Management (see: Locking material master records [Page 63]).

**Document DOC-03**

This document is in item 30 of the BOM from T-30000 and is therefore included in the structure of the Baseline.

The document info record is then only fixed when it is flagged as relevant for Configuration Management and is released (see: Fixing a document info record [Page 65]).
Example 2: Automatic Completion of the Structure

Examples 2 and 3 show the automatic completion of the structure with the help of BOMs and the meaning of the Relevant for Configuration Management flag in the material master record.

Exit Situation

Customizing of the Life Cycle Phase

In Customizing the life cycle phase, in which the configuration folder can be found, you have entered BOM usage 2 (engineering/design).

BOM

In plant 1000 you have created a BOM for turbine T-30000 with BOM usage 2 (engineering/design). At this point in time, this BOM has two items:

- Material P-100
- Material M-3

Pump P-100 is an assembly whose BOM only contains one item (spiral casing 100-100) at this point in time.

Multi-Level BOM for Turbine T-30000

![Multi-Level BOM Diagram]

In the configuration folder you have simply entered the material T-30000 as a controlled object.
Material Master
In the material master records, you have only flagged the controlled object as relevant.

<table>
<thead>
<tr>
<th>Material</th>
<th>Relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material T-30000</td>
<td>✓ relevant</td>
</tr>
<tr>
<td>Material P-100</td>
<td>✗ not relevant</td>
</tr>
<tr>
<td>Material M-3</td>
<td>✗ not relevant</td>
</tr>
<tr>
<td>Material 100-100</td>
<td>✗ not relevant</td>
</tr>
</tbody>
</table>

Process Flow
The system fixes the material master record of the controlled object.
The system checks whether a BOM with usage 2 (engineering/design) exists for the controlled object. The system
- includes this BOM in the Baseline.
- creates a list of all change numbers with which the BOM has been processed and that have been released. The system copies this list into the Baseline.
- includes BOM items 10 and 20 in the Baseline.
For each item, the system copies the relevant components into the Baseline (materials P-100 and M-3).
The system checks whether materials P-100 and M-3 are flagged as relevant. If this is not the case, then the system breaks off the search at this point. These materials are not fixed.

Result
The Baseline contains this structure:
T-30000 (controlled object) fixed

Material BOM (header)

List of change numbers

BOM item 10
  Material P-100 not fixed

BOM item 20
  Material M-3 not fixed
Example 3: Automatic Completion of the Structure

Examples 2 and 3 show the automatic completion of the structure with the help of BOMs and the meaning of the Relevant for Configuration Management flag in the material master record.

Exit Situation

The exit situation is identical to example 2 with the exception of the settings in the material master.

Material Master

Since the configuration of the pump P-100 plays a substantial role for the entire turbine T-30000 you have flagged material P-100 as relevant for Configuration Management.

Process Flow

First the system explodes the first level of the BOM as in example 2 (see example 2).

Material P-100 is flagged as relevant for Configuration Management. For this reason the system fixes the material master record. Then the system repeats the entire operation for pump P-100.

For pump P-100 a BOM with usage 2 (engineering/design) exists. The system

- includes the BOM in the Baseline.
- Creates a list of all change numbers with which the BOM has been processed and that have been released. The system copies this list into the Baseline.
- includes BOM item 10 in the Baseline.

Under BOM item 10 the system includes material 100-100 in the Baseline.

Materials 100-100 and M-3 not flagged as relevant. For this reason the system breaks of the search at this point. These materials are not fixed.

Result

The Baseline contains this structure:
Example 3: Automatic Completion of the Structure

T-30000 (controlled object)  
Material BOM (header)  
List of change numbers  
BOM item 10  
Material P-100  
Material M-3  
BOM item 20  
Material BOM (header)  
List of change numbers  
BOM item 10  
Material 100-100  
Material M-3  

April 2001  61
Fixing Objects

Use
When you create a Baseline, the system also fixes the master data along side the complete structure for specific object types. This ensures that the processing status of the fixed object can be reproduced later.

Prerequisites
Material master records and document info records are only fixed if the indicator Relevant for Configuration Management is set in the master record. However, in all cases the controlled object of a configuration folder is fixed.

Furthermore, various prerequisites apply for the different object types. For more information, see the documentation on fixing individual object types.

Features
In Release 4.6C objects can be fixed for the following object types:

- Material master record
- BOM
- Document info record

For all other objects, the system simply defines a reference for the object in the structure of the Baseline. However, the object itself is not fixed.

Processing Objects after Fixing
To process the object further after fixing the following features apply:

- Material master record
  In Release 4.6C the system locks all fields in the material master record that are flagged as relevant for fixing. No changes are possible to these fields.

- BOM
  For BOMs, fixing is controlled by Engineering Change Management. When a BOM is part of a Baseline, you can only change the BOM with reference to a change number that is not contained in the Baseline.

- Document info record
  After a document info record has been fixed you can make no changes to this document info record. If you want to process the document further, create a new document version.

See also:
Fixing a material master record [Page 63]
Fixing a BOM [Page 64]
Fixing a document info record [Page 65]
Locking Material Master Records

Use

If a material master record is locked, the fields defined in Customizing as lock-relevant can no longer be changed in material master maintenance. In dialog mode, these fields are not ready for input. (This does not apply to required fields in which an entry has not yet been made when you extend a material master record.) The lock takes effect when the material master record is saved.

Once locked, a material master record cannot normally be unlocked. However, it can be unlocked with a special authorization, provided the material is not used in configuration management. For more information, see Configuration Management (LO-CM) [Ext.].

Integration

A material master record can be locked only if there are no scheduled changes to lock-relevant fields.

Prerequisites

You have defined which fields are lock-relevant. You do this in Customizing for the Material Master in Define Lock-Relevant Fields [Ext].

Your system administrator has authorized you to lock (or exceptionally to unlock) material master records. This requires you to have the corresponding authorization for authorization object M_MATE_MAF.

Features

If you have the necessary authorization, the option Lock material (or exceptionally Unlock material) appears in the status bar in material master maintenance. A material that has been locked is indicated to all users by the icon Material is locked. It is also possible for all users to display which fields have been locked.
Fixing a BOM

Use

The system fixes a BOM if it is part of a Baseline. During fixing, it is determined that all BOM change statuses documented in the Baseline can be reproduced later.

Features

BOM fixing is controlled by Engineering Change Management. If you freeze a BOM in a Baseline, it has the following effects:

List of the Change Numbers

For each BOM, the system cumulates a list of change numbers. In this list, the system includes all change numbers that you have used to process the BOM and that you have released up to the point in time when you froze the Baseline.

You can display this list in the structure of a Baseline by clicking the right mouse button on the node with the symbol.

Indicators in Object Management Record

In each object management record that you have used in the processing of the BOM, the system sets the indicator Baselined. If this indicator is set, the BOM can no longer be processed with reference to this change number. Furthermore, in this change number, you can not carry out any more date shifts for the object contained in the Baseline.

Change Number is Obligatory

As long as a BOM is a part of a Baseline, it automatically requires a history. This means that you can only process this BOM with reference to a change number. Therefore, you can also not change the BOM without a change number if you use the authorization object C_STUE_NOH.

From the time you create a Baseline, you process all BOMs contained in the Baseline only with reference to the ECR/ECO.
Fixing a Document Info Record

Use
The system fixes a document info record if it is part of a Baseline and fulfills the prerequisites outlined below. During fixing, it is determined that the processing status of the document can be reproduced on the key date of the Baseline.

Prerequisites
A document info record is only fixed if it meets the following conditions:

- The document info record is flagged as relevant for Configuration Management.
  
  **See also:** Indicating the relevant objects [Page 46].

- The document info record is available in a document status for which the release flag has been set.

  **See also:** Customizing document management, work step Define document type, Navigation step Define document status.

Features
The system locks the document info record and sets the indicator fixed. You can make no more changes to this document info record. No changes can be made to the document status either.
Comparing Configuration Folders and Baselines

Use
You can compare the structures of two configuration folders or Baselines with one another. For example, you can:
- compare a configuration folder with a successor folder to see how the product has developed
- compare a configuration folder with a Baseline to see which components the system expanded when creating the Baseline

The system displays all changes in a separate screen area.

Procedure
1. Select up to six configuration folders and Baselines in the worklist in the CM Workbench.
   
   Hold down the CTRL key on your keyboard to select several folders or Baselines at the same time.

2. In the dropdown menu next to the button select either Folder → Compare or Baseline → Compare.
   
   The Comparison screen appears. The configuration folders that you selected in the worklist are displayed in the Object selection screen area.

3. Using Drag & Drop, select one folder or Baseline as a reference object, and one as a comparison object.

4. As soon as both folders to be compared are opened in your structure you can determine whether you want to compare only individually selected objects/subhierarchies, or both structures in their entirety with each other.

Result
The results are displayed on different tab pages in the Comparison screen area:
- Additional objects (Which objects were newly created in the successor folder?)
- Changed objects (Which object attributes were changed in the successor folder?)
- Objects that do not exist (Which objects do not exist in the successor folder / were deleted?)
- Changed hierarchy position (Which objects have changed their hierarchical position in the successor folder?)
Delete Configuration Folder

Use
You delete a configuration folder that you inadvertently created or that you no longer need.

Prerequisites
You can only delete a configuration folder provided you have not yet created a successor folder or Baseline for it.

Procedure
1. **Double click** to select the configuration folder in the worklist, or in the worklist click ![folder](image). The system displays the configuration on the right hand side of the CM Workbench (screen areas *Header* and *Details*).

2. Choose ![delete](image). The system deletes the configuration folder displayed on the right in the CM Workbench, not the one selected in the worklist.