

# Structures



HELP.PSST

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## Icons

Icon	Meaning
	Caution
	Example
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## Structures

### Purpose

To be able to carry out a project in its entirety, the project goals must be precisely described and the project activities to be carried out must be structured. A clearly and unambiguously structured project is the basis for its planning, monitoring, control and success.

Depending on the type of project and the emphasis in project monitoring, you structure your project in the Project System using the operative structures work breakdown structure (WBS) and/or networks. Standard structures, for example standard WBS and standard networks allow you to standardize and reuse structures and sequences of events in your projects.

## Organizational Assignments in the Project System

## Organizational Assignments in the Project System

## Use

The following gives you an overview of the organizational assignments in the project definition, WBS elements, network headers, network activities (and activity elements), and material components. The table shows the dependencies which exist between individual organizational units, where the default values come from, and whether and under what circumstances values can be changed.



The WBS elements belonging to a project definition, along with assigned networks and network activities, must be assigned to the controlling area for the project definition. In the same way, network activities and subnetworks must be assigned to the controlling area in the header for the network to which they belong. The company code(s) and business area in the WBS elements, networks, and network activities must be in the controlling area for the project definition and/or network header.

## Project Definition

The values for the project definition are copy from the template or project profile when you create a work breakdown structure. If you create a work breakdown structure using a template but enter a project profile different from the one in the template, you can choose whether to adopt the default values from the template or those from the project profile.

If you make later changes to the project profile, the changes have no effect on the values taken from the project profile and inserted into existing project definitions.

## Controlling Area

Type of field	Required
Default value	Inherited by any new elements your create or insert into the WBS.
Can be changed?	Yes, but only when you are creating the project definition. Once you have saved, you cannot change the controlling area (exception: standard WBS).

## (Object) Currency

Type of field	Required
Default value	Default value for new WBS elements If you do not fill this field, the system copies the company code into it.
Can be changed?	Only if the controlling area does not allow different company code currencies.

## Company Code

Type of field	Required
---------------	----------

## Organizational Assignments in the Project System

### Business area

Type of field      Required field, if business area balances are managed in the company code.

### Profit Center

Type of field      Optional

### Plant

Type of field      Optional

## WBS Element

When you create new WBS elements or incorporate them into a WBS, the values from the project definition are copied into the WBS elements.

If you change the project definition later, the changes have no effect on the values taken from the project definition and inserted into existing WBS elements.

### Controlling Area

Type of field      Display  
Can be changed?      No

### (Object) Currency

Type of field      Required  
Default value      When you create or incorporate new WBS elements, the value is taken from the project definition or derived from the company code in the WBS elements.  
Can be changed?      Only if the controlling area does not allow different company code currencies and if no plan/actual values, commitments, or budget exist for the WBS element.

### Company Code

Type of field      Required  
Operating conditions/check      The company code must belong to the assigned controlling area.  
Can be changed?      Different WBS elements can be assigned to different company codes.  
You cannot change the company code if plan/actual values, commitments, or budget exist.

### Business Area

Type of field      Required, if business area balances are managed in the company code.  
Can be changed?      You cannot change the business area if plan/actual values, commitments, or budget exist.

---

**Organizational Assignments in the Project System****Profit Center**

Type of field      Optional

**Plant**

Type of field      Optional  
Operating conditions/check      The plant must belong to the assigned company code.

**Further Dependencies****Statistical Key Figure**

Type of field      Optional  
Default value      When you create new WBS elements, the value is taken from the project definition.  
When you use a existing WBS elements as a template to incorporate new WBS elements, the system takes the value from the template.  
Can be changed?      You cannot change the statistical key figure if plan or actual values exist.

**Integrated Planning Indicator**

Type of field      Optional  
Default value      When you create or incorporate new WBS elements, the value is taken from the project definition.  
When you create a new WBS using a template, the system takes the value from the template.  
Can be changed?      Yes, until plan or actual values exist.

**Object Class**

Type of field      Required value for new WBS elements  
Default value      When you create new WBS elements, the system takes the value from the project definition.  
When you use a existing WBS elements as a template to incorporate new WBS elements, the system takes the value from the template.  
Can be changed?      Yes, until plan or actual values exist.

## Organizational Assignments in the Project System

### Network Header

#### Controlling Area

Type of field	Display
Default value	Inherited by activities and activity elements.
Can be changed?	No; determined when the plant is created.

#### Company Code

Type of field	Display
Default value	Inherited as default value by new activities and activity elements.
Operating conditions/check	The company code must belong to the assigned controlling area.
Can be changed?	No; determined when the plant is created.

#### (Object) Currency

Type of field	Required
Can be changed?	Yes, until the network is released in whole or in part, provided the controlling area does not permit different company code currencies. If it does, no changes are permitted. In such cases, the currency is taken from the assigned company code.

### Activities/Activity Elements in Header-Assigned Networks

The controlling area and company code are copied from the network header to the activity or activity element.

### Activities/Activity Elements in Activity-Assigned Networks

#### Plant

Type of field	Required
Default value	Default for components
Operating conditions/check	Must belong to the controlling area for the network header.
Can be changed?	Yes, but only within the company code and then not until (actual) costs or commitments exist for the activity.

#### Controlling Area

Can be changed?	No. Always the same as the controlling area in the network header.
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**Organizational Assignments in the Project System****Company Code**

Type of field	Display
Default value	Determined from the plant.
Can be changed?	No

**Object Currency**

Type of field	Required
Default value	The default value is the currency of the company code derived from the plant.
Can be changed?	Yes, until the network is released in whole or in part, provided the controlling area does not permit different company code currencies. If it does, no changes are permitted. In such cases, the currency is taken from the assigned company code.

**Material Component****Plant**

Type of field	Required
Default value	Default value from activity
Operating conditions/check	Any material specified must have a material master in this plant.
Can be changed?	No

## Work Breakdown Structure (WBS)

### Purpose

The work breakdown structure (WBS) is a model of the project that organizes project tasks into a hierarchy.

- It is the functional basis for further planning steps in a project, for example, for process planning, cost planning, scheduling, capacity planning or costing, as well as project control.
- It gives you a clear picture of the project and facilitates the coordination and implementation of the project from a management standpoint.
- It shows the work involved in a project.

## What Makes Up a Work Breakdown Structure (WBS)?

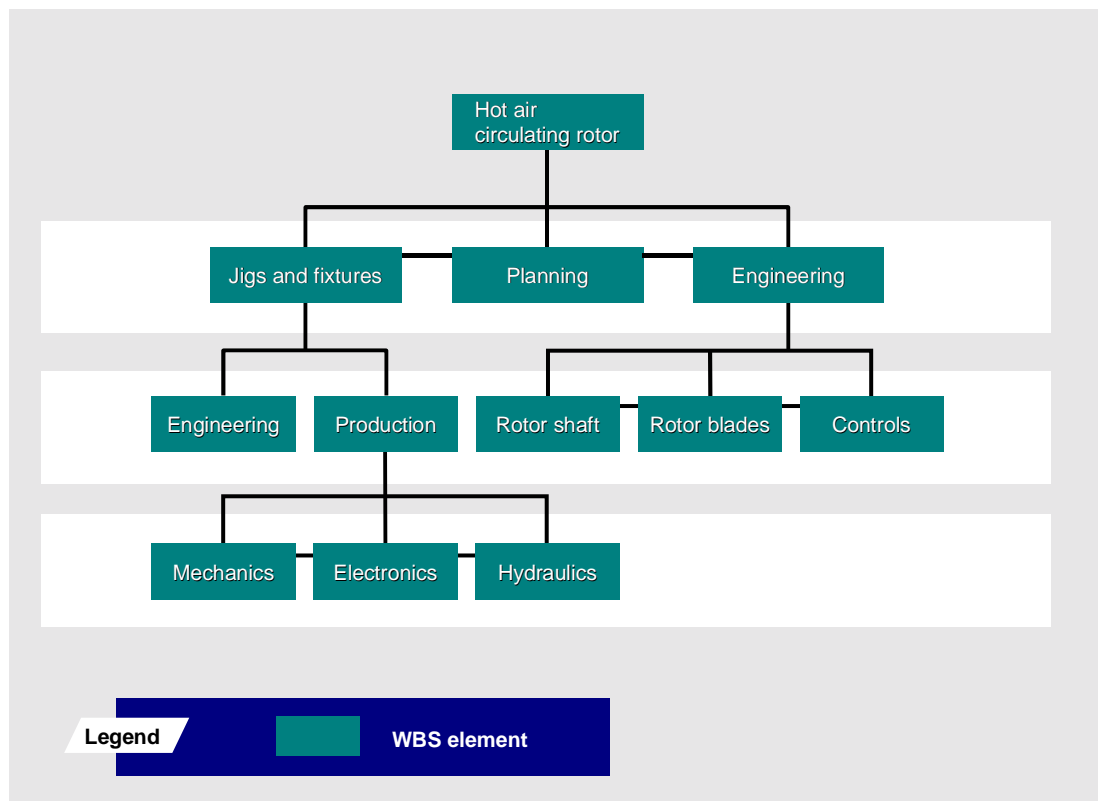
### What Makes Up a Work Breakdown Structure (WBS)?

The main objectives of the WBS are to split the project into manageable units, define basic dates, and determine its costs.

The WBS divides the project step-by-step into structure elements. The elements are called **work breakdown structure elements (WBS elements)** in the Project System.

You can structure the WBS from various viewpoints:

- By phase (logic or process oriented)
- By function (function-oriented)
- By object (object-oriented)



Creating WBS Elements

Creating Project Definitions

Project Profiles

Status Management

Subprojects



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## What Makes Up a Work Breakdown Structure (WBS)?

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WBS Elements

## WBS Elements

WBS elements are the only structural element in work breakdown structures. They describe either a certain task or a partial task that is subdivided further.



According to DIN 69 901 those elements in a work breakdown structure that are not subdivided are referred to as “work packages”.

In the Project System a work package is not a data object. A work package can be represented in the SAP System by a WBS element or an activity.

## Project Definition

The project definition is the binding framework for all organizational elements within a project. You can also define nonbinding start and finish dates for the project.

When you create a work breakdown structure, the corresponding project definition is created automatically.

In the project definition, you can maintain default values for a project such as the settlement rule. The default values are copied for new WBS elements that you create for this project.

---

**Project Profile**

## Project Profile

A project profile is necessary to create a work breakdown structure.

The project profile contains default values and parameters for managing your project, for example, the settlement profile, the factory calendar for scheduling, or settings for graphics.

You can maintain the values for the project profile in Customizing for the Project System.

When you create a work breakdown structure, you must enter a project profile the project definition. You can change default values from the project profile when you are working in the work breakdown structure.

## Status Management

[Systemstatus in Projektstrukturplänen \[Page 347\]](#)

The Project System uses the status management of the R/3 System. Depending on the business transaction that you carry out for a WBS element, the system status of the project changes, and in turn, influences the processing of other business transactions.

**See also:**

[Status Management \[Page 343\]](#)

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**Subprojects**

## Subprojects

[Transferpreisvereinbarungen \[Ext.\]](#)

Use subprojects when you have fixed price agreements between WBS elements.

You can create a subproject by dividing the work breakdown structure by sub-tree, that is, hierarchically-related groups of WBS elements.

Each subproject has an identifier which is stored in the WBS element. If you break down this WBS element further at a later date, the new subordinate WBS elements will be assigned to the same subproject..

## Data for WBS elements

This topic describes the data you can enter for WBS elements.

[Basic Data \[Page 24\]](#)

[Organization Data \[Page 26\]](#)

[Project Responsibilities \[Page 27\]](#)

[Control Data \[Page 28\]](#)

[Overall View \[Page 29\]](#)

[Documents \[Page 30\]](#)

[Project Summarization Data \[Page 32\]](#)

[Settlement Rules \[Page 34\]](#)

[Tax Depreciation Simulation Data \[Page 35\]](#)

[Assets Under Construction \[Page 36\]](#)

[Capital Investment Measures \[Page 37\]](#)

**Basic Data**

## Basic Data

Basic data is general data that is needed for a WBS element over a long period of time and contains information that is used repeatedly in the project:

### Project Type

You can use the project type to sort a WBS element according to particular categories, such as capital-investment project or customer project, and evaluate it in the information system. You maintain the project type key in the Project System Implementation Guide.

### Priority

You can maintain sort keys for a WBS element for information system evaluation. You define the priority key in Customizing.

### Project Summarization

See [Classifying WBS Elements for Summarization \[Page 59\]](#)

### Operative Indicators

With operative indicators, you specify the attributes of a WBS element and determine which tasks the WBS element can carry out in the project. Whether you can change the operative indicators in project planning depends on the system status.

You can assign the following operative indicators to WBS elements:

Operative indicator for...	Usage...
Cost planning	If you want to plan costs for a WBS element, you have to indicate that the WBS element is a planning element in the WBS.
Account assignment	<p>If you want to post actual costs and commitments to a WBS element, you have to indicate that the WBS element is an account assignment element in the WBS. All objects that can be assigned costs and commitments within a project (for example, orders, networks, or purchase orders) can only be assigned to a WBS element if you have set the account assignment indicator for the element.</p> <p>In Customizing for the Project System, you can set an indicator to specify that costs are planned for all WBS elements or only for specific WBS elements.</p>
Billing	If you want to post revenues to a WBS element, you have to indicate that the WBS element is a billing element in the WBS.

**See also:**

[Cost Planning \[Ext.\]](#)





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Organization Data

## Organization Data

[Organisatorische Zuordnungen im Projektsystem \[Page 10\]](#)

[Währungen im Projektsystem \[Ext.\]](#)

Some of the organizational data that you define for a project in the project profile also applies to all WBS elements. You can only partially change this data. The controlling area in the project definition is valid for the entire project and cannot be changed in a WBS element. However, WBS elements can be assigned to different plants, company codes or business areas.

In a WBS element you can also enter the following:

- For plant maintenance, for example, equipment or functional location
- Profit center
- Object class

The object class is used to categorize Controlling objects such as overhead costs (OC) or investment controlling (IV), according to their business purpose.

In reconciliation ledger reporting, you can obtain a cross-application display showing these cost flows within Controlling, sorted by object class.

- Change number
- Currency

A WBS element can have its own object currency, if you have not defined a different company code currency in the controlling area. The currency which you entered in the project definition is a default value for all new WBS elements. You can change the currency of a WBS element as long as no currency-related data has been saved, for example actual values or in cost planning.

### See also:

Ressourcen

## Project Responsibilities

You can maintain the following responsibility data in the WBS:

- Name and number of person responsible for project
- Name and number of project applicant
- Requesting cost center; area requesting or triggering the WBS element
- Controlling area for requesting cost center
- Responsible cost center, area responsible for executing the WBS element
- Controlling area of the responsible cost center



You can use the responsible cost center to control authorizations.

---

**Control Data**

## Control Data

The work breakdown structure contains the following control data:

- Costing key
- Overhead key
- Interest profile
- Capital-investment measure profile
- Results analysis key
- Statistical indicator: for example, earned value analysis
- Plan integration indicator

## Overall View

The overall view for the WBS elements combines the following data:

- [Basic Data \[Page 24\]](#)
- [Organization Data \[Page 26\]](#)
- [Project Responsibilities \[Page 27\]](#)
- [Control Data \[Page 28\]](#)

In addition, you can define values specific to your business in fields you define yourself. A customer enhancement enables you to have the fields checked per your own criteria.

See Project System customizing for more information.

user fields in

---

**Documents**

## Documents

You can enter documents for a WBS element or assign existing documents to it. The documents involved are:

- PS texts
- Documents from document management

You can later display these documents either in the information system or in the Intranet.

## Billing Plan

### Definition

A billing plan is a time schedule containing individual billing dates. It contains the dates as of which down payment requests and invoices are sent out and the amounts which appear in them.

### Use

To obtain detailed information on planned revenues and incoming payments, you can maintain a billing plan for a billing element. The billing plan automatically updates the revenue plan and, if project management is active, the payment plan for the WBS element.

#### See also:

[Billing Plans in WBS Elements \[Ext.\]](#)

[Planned Payment Flow \[Ext.\]](#)

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**Project Summarization Data**

## Project Summarization Data

[Verdichtungshierarchie \[Ext.\]](#)

[Projektverdichtung \[Ext.\]](#)

[Projektverdichtung über Klassifizierung \[Ext.\]](#)

[Projekt für die Verdichtung kennzeichnen \[Page 59\]](#)

You can classify WBS elements with the SAP class system to be used in cost or project summarization. Project summarization enables you to summarize and analyze several projects at the same time under an overall header.

In this way, you can combine and evaluate the costs for all projects in a:

- Controlling area
- Business area
- Cost center

For information on classification, read *CA Cross-Application Functions* in the *Classification and Characteristics* documentation.



## Defining a Summarization Hierarchy

[Verdichtungshierarchie \[Ext.\]](#)

You define the summarization hierarchy by identifying key WBS elements and their subordinate WBS elements. You assign characteristics and characteristic values to certain WBS elements. These values are “inherited” by the subordinate WBS elements.

**See also:**

[Classifying WBS Elements for Summarization \[Page 59\]](#)

Project Summarization.

---

**Settlement Rules**

## Settlement Rules

[Abrechnung \[Ext.\]](#)

You can settle a project to different cost objects, for example, to an asset, a cost center, or a sales order. You use the settlement rule to determine to whom and how the costs or revenues incurred for the WBS element are settled.

**See also:**

[Periodic Processing \[Ext.\]](#)

## Tax Depreciation Simulation Data

[Abschreibungen \[Ext.\]](#)

For a WBS element, you can enter the planned start-up, depreciation key (calculation method), and useful life. Based on cost planning of the WBS element and using this information, you can carry out a tax depreciation simulation in asset management (depreciation forecast).

For additional information about depreciation, refer to the FI *Asset Accounting* documentation..

---

**Assets Under Construction**

## Assets Under Construction

You can assign an asset under construction to a WBS element for capital investment measures. The cost information from the WBS element will simply be passed on to asset management.



You can only assign assets under construction to those WBS element which have account assignment.

## Capital Investment Measures

### Use

You can assign WBS elements to the position in a capital investment program. The WBS element will get its entire budget from the investment program position. The budget is distributed in the WBS (over time or over the hierarchy).

For more information, read [Assigning WBS Elements \[Page 38\]](#).

### See also:

[Capital Investment Measures \(Orders/Projects\) \[Ext.\]](#)

## Assignment of WBS Elements

## Assignment of WBS Elements

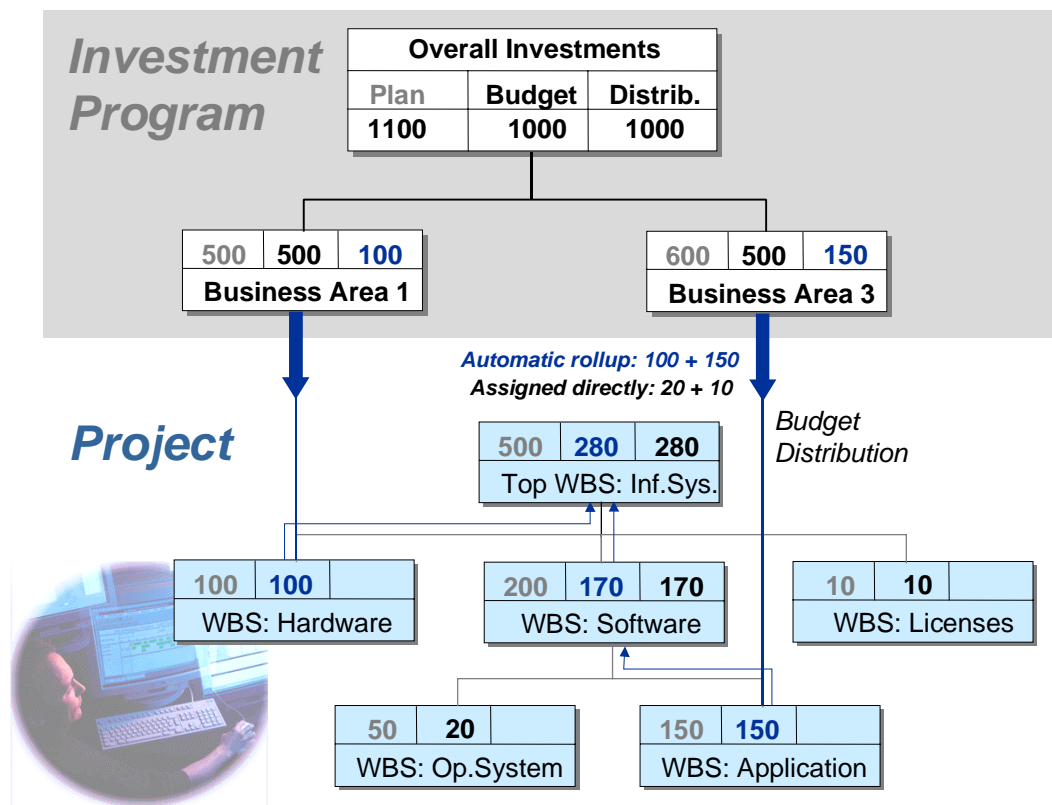
### Use

In most cases, an entire project is clearly assigned to one investment program position. In this case, the assignment to an investment program is made at the level of the top WBS element. Some projects, however, have a much broader scope within an enterprise. The WBS elements belonging to such a project receive their budgets from various sources. Therefore it is also possible to assign non-top WBS elements to different investment program positions.

### Features

You can make assignments to the investment program from all levels of the work breakdown structure. The individual WBS elements in a work breakdown structure can be assigned to different investment program positions.

The following graphic shows an example of possible assignments. The WBS elements for *Hardware* and *Application* are each assigned to one investment program position, respectively. None of the other WBS elements are assigned to an investment program position.



### Assignment to Different Program Positions

WBS elements that are assigned to program positions **do not** have to be at the same level in the work breakdown structure. It is also permissible for sub-trees of the work breakdown structure

## Assignment of WBS Elements

not to have any assignment at all to an investment program position (in the graphic, the *Licenses* sub-tree has no assignment).

The system guarantees the consistency of budget values within a work breakdown structure as follows:

- You can assign a WBS element to a program position only if the WBS elements directly above and below it in the hierarchy **are not** assigned to a program position.
- If the WBS element receives its budget from budget distribution from a program position, then the system automatically rolls up the budget received to the superior WBS elements in the work breakdown structure. If there are already budget values on the superior WBS elements, the system adds the rolled up budget to the existing budget.

---

**Editing the Work Breakdown Structure**

## Editing the Work Breakdown Structure

[Project Builder \[Page 221\]](#)

There is more than one way of creating and editing a work breakdown structure (WBS).

### If you only want to work with the WBS...

Go to the *Operative Structures* menu and choose *Work breakdown structure*.

Proceed as follows to create a work breakdown structure:

1. Create the project definition.
2. Create the WBS elements for the individual tasks or subtasks within the project.
3. Maintain the data for the individual WBS elements.
4. Maintain the project hierarchy.
5. Save your data by choosing *Project* → *Save*.

### If you want to work with an entire project...

Including all networks and activities assigned to the WBS, choose *Planning* → *Structure planning* from the Project System menu.

**See also:**

[Structure Planning \[Page 321\]](#)

### If you want to edit a project using the project planning board...

Choose *Planning* → *Project planning board*

**See also:**

[Project Planning Board \[Page 252\]](#)

The following sections describe how you can maintain WBS elements and the work breakdown structure under the menu options *Operative Structures* → *Work breakdown structure*

You can copy an existing WBS or a standard project to create a new one, or include WBS elements from an existing WBS or standard WBS in another work breakdown structure.

Creating Project Definitions

Creating WBS Elements

Maintaining Data for the WBS Elements

Creating WBS Elements in the Hierarchy Graphic

Maintaining the Project Hierarchy



## Creating Project Definitions

### Use

You can create and change the project definition independently of the work breakdown structure.

### Procedure

1. On the *Operative Structures* screen choose:
  - *Work breakdown structure* → *Create* or
  - *Work breakdown structure* → *Project definition* → *Create*

The initial screen appears.
2. Enter a new number for the project definition or let the system propose the [next free number](#) [\[Page 61\]](#).
3. Enter a project profile and choose *Enter*.
 

The *Create Project Definition* screen appears.
4. Enter the data for the project definition.
 

The data that is saved in the project profile is copied to the project definition automatically. You can change some of this data.
5. Save your data.

## Creating WBS Elements

## Creating WBS Elements

### Use

You can add WBS elements to an existing project.

### Procedure

To execute the functions in the following table, choose the corresponding menu path from the *Operative Structures* screen.

Function	Menu Path	Procedure
Create WBS Elements	<i>Work breakdown structure</i> → <i>Change</i>	<ol style="list-style-type: none"><li>1. Enter the project definition and choose <i>Enter</i>. The WBS element overview appears.</li><li>2. Create a new WBS element.</li></ol>
Create a single WBS element	<i>Work breakdown structure</i> → <i>Single element</i> → <i>Create</i>	<ol style="list-style-type: none"><li>1. Enter the project definition</li><li>2. Enter a number for the new WBS element and choose <i>Enter</i>. The detail screen for the new WBS element appears.</li></ol>

**See also:**

[Entering WBS Element Numbers \[Page 271\]](#)

[Maintaining Data for WBS Elements \[Page 44\]](#)

## Entering WBS Element Numbers

### Use

If you are working with very large projects and need to create a lot of elements with complex project numbers, the system can help you enter the numbers.

### Prerequisites

You have defined a special character in the Project System IMG to act as the input help.

### Features

If you enter the special character in the WBS element field in your project, the system copies the number of the higher-level WBS elements into the field. If the new WBS element is the first one in the project hierarchy, the system copies the project definition.

Then you only need to add to the number so that it is different from the one copied. You can also use the input help in conjunction with a project coding mask. In this case, you do not need to enter the separator when adding to the WBS element number.



You have specified the character @ as an input help. In the work breakdown structure, you insert another WBS element under the WBS element A-123-LDZ-10 and only type "20".

Type of Input Help	Your Entry
No project coding mask	@-20
Using project coding mask A-000-XXX-00-00	@20

The system automatically copies the identifier from the superior WBS element as follows: A-123-LDZ-10-20.

## Maintaining Data for the WBS Elements

## Maintaining Data for the WBS Elements

[Grunddaten \[Page 24\]](#)

[Zuordnungen \[Page 26\]](#)

[Steuerung \[Page 28\]](#)

[Meilensteinen \[Page 192\]](#)

[Dokumente \[Ext.\]](#)

[PS-Texten \[Ext.\]](#)

[Grunddaten \[Page 24\]](#)

[Zuordnungen \[Page 26\]](#)

[Steuerung \[Page 28\]](#)

[Fortschritt \[Ext.\]](#)

[Abrechnungsvorschrift \[Page 34\]](#)

[PS-Texte \[Ext.\]](#)

[Investitionsprogramm \[Page 37\]](#)

[Projektverdichtung über Klassifizierung \[Ext.\]](#)

[Projektverdichtung über Stammdatenmerkmale \[Ext.\]](#)

The following table provides you with an overview of where you can maintain detailed data for individual WBS elements.

Action	Edit
Choose <i>Goto</i> → <i>WBS element overview</i> .	All WBS elements in the WBS element overview
Choose <i>Details</i> → <i>WBS detail screen</i> or Double-click on the WBS element.	Just one WBS element on the detail screen.

The following table shows you where you can maintain data for the WBS elements.

Menu Path	WBS Element Data
<i>Goto</i> → <i>WBS element overview</i>	<ul style="list-style-type: none"> <li>• Basic data</li> <li>• Dates</li> <li>• Organization</li> <li>• Responsible person</li> <li>• Profile data</li> <li>• Total</li> </ul>
<i>WBS element</i> → <i>Milestone overview</i>	Basic data and dates for milestones
<i>WBS element</i> → <i>Document overview</i>	Documents allocated to the WBS element using document management
<i>WBS element</i> → <i>PS text overview</i>	Administrative data and text overview for PS texts

## Maintaining Data for the WBS Elements

<i>Details → General</i>	<ul style="list-style-type: none"> <li>• Basic data</li> <li>• Dates</li> <li>• Organization</li> <li>• Data from the project profile</li> <li>• User fields</li> <li>• Joint venture</li> <li>• Administration</li> <li>• Progress Analysis</li> <li>• Superior elements</li> <li>• Settlement rules</li> <li>• Long text</li> <li>• PS texts</li> </ul>
--------------------------	---



You change the description of the WBS element detail screens in Project System Customizing and WBS maintenance. For more information, read the [Layout of Detail Screens \[Page 330\]](#).

The overview which follows discusses the detail screens using the descriptions we deliver.

### See also:

Data for WBS Elements

## Changing the Project Hierarchy

# Changing the Project Hierarchy

## Use

The Project System distinguishes between changes to the hierarchy and additions to it.

You are **adding** to the project hierarchy when you do the following:

- Create new WBS elements
- Insert WBS elements
- Incorporate WBS elements

You are **changing** the project hierarchy when you do the following:

- Move WBS elements up
- Move WBS elements down
- Move WBS elements sideways
- Detach WBS elements

## Features

You can make additions or changes to the project hierarchy until one of the following system statuses is set for the project definition or the superior WBS elements:

- MDLK Master data locked
- LKD Locked
- CLSD Closed
- DLFL Deletion flag
- DLT Deleted

### Adding to the Project Hierarchy

You can add to the project hierarchy if the system or user status allows transaction *PSEI Expand structure*.

### Changing the Project Hierarchy

You can change the project hierarchy if the system or user status allows transaction *PSVE Change structure*.

You cannot move a WBS element if:

- A budget has already been entered for it
- There is a fixed price agreement between this WBS element and another

## Activities

You can change the project hierarchy in the WBS element overview or the hierarchy graphic.

---

Changing the Project Hierarchy

**See also:**

WBS element overview

[Creating WBS Elements \[Page 42\]](#)

[Including WBS Elements in the Project Hierarchy \[Page 48\]](#)

[Changing the Hierarchy in the WBS Element Overview \[Page 54\]](#)

Hierarchy graphic

[Creating WBS Elements in the Hierarchy Graphic \[Page 50\]](#)

[Maintaining the WBS in the Hierarchy Graphic \[Page 55\]](#)

## Including WBS Elements in the Project Hierarchy

# Including WBS Elements in the Project Hierarchy

## Use

You can copy WBS elements into a current project structure. As templates you can use WBS elements

- From the current project
- From another work breakdown structure
- From a standard work breakdown structure

## Procedure

1. Select the WBS element where you want to include the new WBS element.
2. Choose *Project* → *Copy from*.  
A dialog box appears.
3. Select either of the tab pages, *Standard WBS* or *Operative WBS*.  
If you want to copy a WBS element from the current project or a WBS element from another project, choose *Operative WBS*.
4. Enter
  - Which WBS element you want to include  
If the WBS element to be included has additional WBS elements subordinate to it, the system automatically copies these lower-level hierarchy elements.



- Whether you want to include the new WBS element at the same hierarchy level as the selected WBS element or below it.
- Which options to use when including the WBS element:

Option	Effect
Right/Left	The WBS element is positioned to the right or to the left of the selected WBS element in the hierarchy.
With/without root	With root: The selected WBS element is included. Without root: Only the subordinate WBS elements are included.

5. Choose *WBS element overview*.  
The *Copy structure* screen appears.
6. Select the WBS element(s) that you want to include.
7. Give the new WBS elements new numbers by using either the *Predefine* or *Replace* function.
8. Choose *Include*.  
The system includes the WBS element(s).





## Creating WBS Elements in the Hierarchy Graphic

# Creating WBS Elements in the Hierarchy Graphic

## Use

You can use the hierarchy graphic as a quick, easy way to create WBS elements.

## Prerequisite

You have first stipulated how the WBS elements are to be inserted by choosing *Edit → Default settings → Insert*.

## Procedure

### Creating WBS Elements

1. Call up the hierarchy graphic by choosing *Goto → Hierarchy graphic*.
2. Choose *Create*.  
The node area is opened under the display area. It contains a new WBS element.
3. Click the blank WBS element in the node area.  
The system moves the WBS element into the display area.
4. Drag the WBS element to the correct position in the hierarchy by holding down on the right mouse button and moving the mouse.
5. Release the mouse button at the desired place.  
The dialog box *Create WBS Element* is displayed.  
Here you can see which reference element you have chosen and the relationship between the reference element and the new WBS element.
6. Choose *Confirm*.  
The dialog box *Change WBS Element* appears.
7. Enter a number and other data for the WBS element.
8. Choose *Create WBS Elements* to create more elements.
9. Choose *Confirm*.  
The WBS element is inserted into the hierarchy.
10. Return to the WBS element overview.

### Maintaining Operative Indicators in the Hierarchy Graphic

You can maintain the operative indicators for individual WBS elements in the hierarchy graphic: To do this, double click the relevant fields below the WBS element description:

- Planning elements are flagged **Plan**
- Billing elements are flagged **Bill**
- Account assignment elements are flagged **AcAs**

You can cancel these flags by double clicking the relevant fields again.



## Adding WBS Elements

## Adding WBS Elements

### Use

You can add new WBS elements to an existing work breakdown structure with either the *insert* or *create* command.

- When you **insert WBS elements**, the system creates new lines above where the cursor is positioned in the WBS element overview.
- When you **create WBS elements**, the system adds new lines at the end of the WBS element overview.

### Procedure

1. Call up the work breakdown structure you want to add to by selecting the menu options *Operative structures* → *Work breakdown struc* → *Change*.
2. Choose *Edit* → *Object* → *Create* or *Insert*.

The system creates new lines.

3. Maintain the description and the level in the hierarchy for the WBS element and confirm your entries.

The system displays a dialog box which you can use to [search for the next free number](#) [\[Page 32\]](#) .

### See also:

Changing the Project Hierarchy

## Deriving the Hierarchy from the WBS Element Number

### Use

If you are working with very large projects and need to create a lot of elements with complex project numbers, the system can help you derive the hierarchy.

### Prerequisites

You have defined a coding mask for your projects in Customizing for the *Project System*. In this coding mask you entered enough dashes to model all the levels in the project hierarchy.

### Features

If you have defined a coding mask, you can enter all the WBS elements in a project after each other without worrying about the hierarchy level. You can, for instance, enter all WBS elements on level 1.

The system then derives the hierarchy level of each WBS element from the coding mask. The WBS element with the shortest number is created in level 1. Every further WBS element is placed on a subordinate level, depending on its number and the number of dashes.



You have defined a project coding mask P-000-XX-00. You have entered all WBS elements on the same level. The system derives the hierarchy levels as follows:

WBS Element Number	Level	Superior WBS Element
P-001	1	
P-001-AA	2	P-001
P-001-AA-01	3	P-001-AA

### Activities

After you have entered all the WBS elements, choose *Project* → *Derive structure* → *Derive*. The system places the WBS elements in the correct sequence in the project hierarchy.

If the system cannot derive the hierarchy, it prompts you to check the structure. To do this, choose *Project* → *Derive structure* → *Check*. The system then displays a message text, detailing the errors found.

## Changing the Hierarchy in the WBS Element Overview

## Changing the Hierarchy in the WBS Element Overview

### Use

Generally speaking, you enter the desired project hierarchy level directly when you create the WBS element. However, you can also change hierarchy levels of WBS elements afterwards.

**See also:**

[Changing the Project Hierarchy \[Page 46\]](#)

### Procedure

Select a WBS element and choose one of the functions listed in the table below. The functions also affect the WBS elements subordinate to the one selected.

Function	Menu Path	What You Should Know
Move WBS element down a level	<i>Edit → Object → Level down</i>	If you are working in a subtree, the top WBS element cannot be moved down a level.
Move WBS element up a level	<i>Edit → Object → Level up</i>	If you are working in a subtree, the top WBS element cannot be moved up a level.
Move the WBS element to another position.	<i>Edit → Object → Move</i>	Position the cursor on the WBS element <b>in front of</b> which you want to insert the WBS element.  You cannot insert a moved WBS element below WBS elements that are subordinate to it.  If you are working in a subtree, the top WBS element cannot be moved.
Detach WBS element from project hierarchy and insert it at level 1.	<i>Edit → Object → Cut</i>	If you are working with a subtree, it is not generally possible to detach WBS elements.

**See also:**

[Deriving the Hierarchy from the WBS Element Number \[Page 272\]](#)

## Maintaining the WBS in the Hierarchy Graphic

### Use

You can change the project hierarchy in the the hierarchy graphic. You can use the hierarchy graphic to change the project hierarchy, for example, you can add unassigned WBS elements to the project hierarchy or you can move subtrees.

#### See also:

[Creating WBS Elements in the Hierarchy Graphic \[Page 50\]](#)

[Changing the Project Hierarchy \[Page 46\]](#)

### Procedure

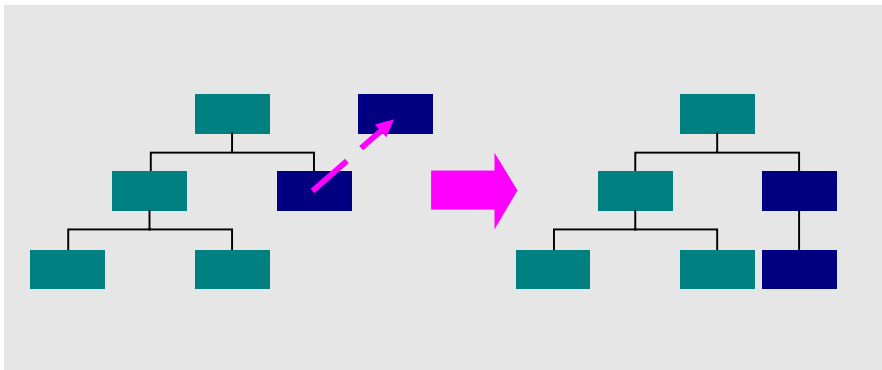
#### Adding WBS Elements to the Hierarchy

To add WBS elements to the project hierarchy, proceed as follows:

1. Choose *Connect*.  
The cursor becomes a pencil.
2. Click and hold down the left mouse button on the WBS element to be added in the project hierarchy. While holding down the mouse button use the pencil to draw a line to new WBS element.

When you release the mouse button, this WBS element is inserted into the project hierarchy.

The figure shows in which direction you must draw the line in order to add the WBS element to the hierarchy.



#### Changing the Project Hierarchy

You can change the project hierarchy, for example, by removing WBS elements or subtrees from the structure and inserting them at another level in the project hierarchy.

To remove WBS elements or subtrees from the project hierarchy:

1. Click the WBS element that you want to remove from the project hierarchy.  
The WBS element is selected.

---

**Maintaining the WBS in the Hierarchy Graphic****2. Choose *Split*.**

The WBS element and all subordinate elements are removed from the project hierarchy.

If you want to insert the split-off WBS elements or subtrees back in at another level in the project hierarchy, follow the steps described in the section "Adding WBS Elements to the Hierarchy".

You can change the sequence of WBS elements within a level as described below:

1. Place the cursor on the WBS element that you want to move.
2. Click and hold down either the middle (3-button mouse) or right (2-button mouse) button.
3. Use the mouse to move the WBS element to a new position.
4. Release the mouse button.

The WBS element is relocated.



Even if you have budgeted or planned costs for a WBS element, you can still move it within a level.



## Displaying and Viewing WBS Elements

### Display

Select *Extras* → *Settings* → *options...* to display the WBS elements in overviews as follows:

- Using numbers
- Using short IDs
- Using descriptions

### View

You can restrict the view of the WBS to a certain number of levels. For example, if you limit the view to the second level, the system displays only the WBS elements that are on the second level of the project hierarchy.

To display or suppress WBS elements, choose *Edit* → *View* → *Expand/Collapse*. The following functions are available:

- *Collapse* suppresses all WBS elements from the overview that are below the selected WBS element.
- *Collapse from level* suppresses all levels from the overview that are below the level of the selected WBS element.
- *Expand* shows all WBS elements.
- *Expand all shows* all WBS elements that are below the selected WBS element.
- *Set focus* shows only those WBS elements that are below the level of the selected WBS element.
- *Reset focus* shows all levels of the WBS hierarchy.

## Deleting WBS Elements

### Deleting WBS Elements

[Systemstatus in Projektstrukturplänen \[Page 347\]](#)

You can only delete WBS elements as long as there have been no postings or allocations to other objects, such as an activity being allocated to a WBS element, or a purchase order has been created. Subordinate WBS elements will also be deleted.

1. Select the WBS element you want to delete.
2. Choose *Edit* → *Object* → *Delete*.

The selected WBS element is deleted from the list.

For all other system statuses, you have to set a **deletion flag** for the WBS element. The WBS element will be deleted in the next archiving run.

1. Call up the WBS element overview.
2. Select the WBS element you want to delete.
3. Choose *Edit* → *Status* → *Deletion flag*.

The WBS element is now marked for deletion.

You can remove the deletion flag by choosing *Edit* → *Status* →



WBS elements which have been marked for deletion, that is, a deletion flag has been set, will not be displayed in budget management, cost planning or time scheduling.

### Displaying Deletion Flags

You can show or hide deletion flags by choosing *Edit* → *Object* → *Deletion flag* → *Display* or *Hide*.

## Marking a Project for Summarization

### Use

You can summarize your projects according to the summarization hierarchy using master data characteristics in the project information system. You can also continue to use the [Project Summarization Using Classification \[Ext.\]](#) that was used in the previous releases. However, this type of summarization will not be available in the short-term.



You can change projects which are summarized using classification to projects which are summarized using master data characteristics.

In order to summarize a project using master data characteristics you must mark the project definition for summarization. You can mark individual WBS elements in the network as summarization objects so that the WBS elements do not completely inherit the characteristics attributes of the higher-level WBS element during the inheritance run, but rather are supplemented by these characteristics.

#### See also:

[Summarization in Projects \[Ext.\]](#)

### Prerequisites

You have set the indicator for Summarization and Master Data in the project profile in *Project System* Customizing. This automatically marks the project definition for summarization. However, this indicator is not visible in the project definition.




You can make settings in the project profile which specify WBS elements as summarization objects by default, meaning they are marked automatically when you create them as summarization objects. If you decide to set this indicator be sure that the number of summarization objects in the project are kept to a minimum. A large number of summarization objects can negatively affect the performance of the inheritance and summarization runs.

### Procedure

1. Create a project definition with a project profile wherein the Summarization and Master Data (*Proj. summ.MastDa*) indicator is set.



If you create a project with a template, the project is marked for summarization according to the template, and furthermore independent of the settings in the project profile. For example, if you use a project or standard project as a template which is marked for summarization using classification, the new project will also be marked for summarization using classification.

2. Choose .
3. Create a WBS element.

---

**Marking a Project for Summarization**

4. If you want to mark a WBS element as a summarization object, set the project summarization indicator on the *Basic Data* tab page (as well as the indicator *Proj. summarization* on the corresponding detail screen).
5. Save your data.

## Finding the Next Available Number

### Use

When you create a project definition, WBS element, or project version you can have the system suggest the next free project number or project key.



If you are creating a new WBS element, you only need to enter its level and description in the WBS element overview. As soon as you confirm, a dialog box appears which you can use to find the next free number.

### Procedure

1. Choose *Free No.* or *Next free number*.  
A dialog box appears.
2. Enter a number range for the search.
3. Enter a strategy for the search (search from the beginning or the end of number range).
4. Choose *Find*.

Depending on the chosen search strategy, the next free number starting at either the start value or the finish value is suggested.

By choosing *Find next* you can have the system suggest further numbers.

5. Choose *Copy*.

The system adopts the number.



Projects P001, P123, and P126 exist in the system. If you select *Next open*, the system will propose P002. If you select *After last*, the system will propose P127.

## System Statuses in Work Breakdown Structures

### System Statuses in Work Breakdown Structures

The active system status determines which business transactions you can perform with work breakdown structures and WBS elements. System statuses are passed from the project definition to the WBS elements and from the WBS elements to the subordinate WBS elements. The system statuses *Locked* and *Final billing* are exceptions to this.

You can cancel certain statuses, for instance *Technically completed*, *Closed* and *Deletion Flag*. When you do so, the previous status is set. You cancel system statuses on by one, until you arrive at a status that cannot be canceled. You cannot cancel system statuses that are set automatically (in the background by the system), for example *Partially released*.

If you cancel the statuses *Technically completed* or *Closed*, the system automatically cancels this status in the **superior** WBS element. However, the system does **not** cancel the status in **subordinate** WBS elements.



The *Deletion Flag* status is not set automatically in superior WBS elements.

### Created (CRTD)

#### Use

This is the initial system status for new WBS elements. In this status you structure the project and plan dates, costs and revenues. The system sets this status automatically, when you create a new WBS element.

#### Prerequisites

The project and, if applicable, the superior WBS element must have *Created* status.

#### Features

In *Created* status, you can create new WBS elements and change the work breakdown structure.

The status

- Allows you to assign networks, which do not yet have *Released* status
- Allows you to plan costs and revenues
- Allows budgeting

### Released (REL)

#### Use

In this status you can assign costs and revenues to WBS elements.

#### Prerequisites

The *Created* status is set.

---

System Statuses in Work Breakdown Structures

## Features

In *Released* status you can create new WBS elements and change the project hierarchy. The status is passed on to subordinate WBS elements.

The status **allows**

- You from assigning networks, production orders or CO orders to the WBS element.
- You to post actual costs
- You to transfer actual costs

You cannot change the status from *Released* to *Created*, as actual values from, for instance, purchase orders or confirmations may have been posted

## Technically completed (TECO)

### Use

You use this status for WBS elements that are completed from a technical point of view, but where you still expect costs to accrue.

### Prerequisites

The *Created* or *Released* status must have been set. The completion indicator must be set for transfer price agreements.

## Features

In status Technically completed, you can create new subordinate WBS elements (with a warning). The status is passed on to subordinate WBS elements.

The status **allows**

- You from assigning networks, production orders or CO orders to the WBS element.
- You to post actual costs
- You to transfer actual costs

You can cancel the *Technically completed* status. In this case the system sets the *Released* status.



You can prevent the *Technically completed* status from being canceled. Create a user status that prohibits the *Revoke technical completion* business transaction.

## Closed (CLSD)

### Use

You use this status for a work breakdown structure or WBS element that has been completed from both a logistic and an accounting point of view.

### Prerequisites

You can only set the *Closed* status, if:

## System Statuses in Work Breakdown Structures

- The project definition or the WBS element have either the *Released* or the *Technically completed* status.

## Features

In the *Closed* status you can no longer make any changes to the project hierarchy. The status is passed on to subordinate WBS elements.

The status **allows**

- You to post actual costs to orders and networks that are assigned to the WBS element, as long as their status permit this

The status **prohibits**

- You from assigning networks, production orders or CO orders to the WBS element.
- You from posting actual costs to the WBS element

The status deactivates assets in construction that are assigned to the WBS element.

You can cancel the *Closed* status. In this case the system sets the *Technically completed* status.

## Deletion flag (DLFL)

### Use

The *Deletion flag* status designates work breakdown structures or WBS elements that have been flagged for deletion. This means that the objects are deleted logically, but not physically.

## Prerequisites

You can set the *Deletion flag* if

- The WBS element has been settled completely or is not relevant for settlement.



If you set the *Must not be settled* indicator in the settlement profile in Customizing for *Product Cost Controlling*, you can still set the *Deletion flag* status even if the actual costs are not balanced.

- Assigned orders and activities also have *Deletion flag* status.
- There are no commitments for the WBS element
- There are no reservations or purchase requisitions that are account assigned to the WBS element.
- All the goods issues have been posted in the assigned sales orders and the deliveries have been billed.
- A deletion flag has been set in the appropriation request on which the WBS is based.
- No associated reservations, planned independent requirements or planned orders exist
- The completion indicator is set in assigned transfer price agreement



## System Statuses in Work Breakdown Structures

### Features

The status is passed on to subordinate WBS elements. It prohibits all business transactions.

The status

- Deactivates assets in construction that are assigned to the WBS element.
- Is the prerequisite for setting a *deletion indicator*.

As long you have not set a *deletion indicator*, you can cancel the *Deletion flag* status.

**See also:**

[Archiving Operative Project Structures \(PS-ST-OPR\) \[Ext.\]](#)

### Final Billing (FNBL)

#### Use

With this status you can prevent further billing for this WBS element. However, you can still post costs (for instance, due to warranty claims).

You can set the *Final Billing* status in addition to every other status except *Deletion flag*. The *Final Billing* status is **not** passed on to subordinate WBS elements.

### Prerequisites

The WBS element is a billing element.

### Features

The status prohibits

- Creation of a billing document
- Creation of a quotation
- Creation of an inquiry

You can cancel the status.

### Locked

#### Use

You can either lock individual business transactions or all the data in a work breakdown structure or WBS element. You can set the following statuses:

- *Date definition locked* (DDLK)
- *Planning locked* (PLLK)
- *Budget management locked* (BMLK)
- *Account assignment locked* (AALK)
- *Master data locked* (MDLK)

You can set these statuses in addition to every other status except *Deletion flag*. The statuses are **not** passed on to subordinate WBS elements.

---

**System Statuses in Work Breakdown Structures****Features**

The *Master data locked* (MDLK) status prohibits

- Setting of another system status
- Changing and extending the project hierarchy

You can cancel these statuses.

## Setting the System Status

### Procedure

1. Select the WBS elements for which you want to set a system status or call up the project definition.
2. Choose *Edit* → *Status* and the corresponding status.

The system sets the chosen status.

To view the system status for the selected WBS elements, choose *Edit* → *Status* → *System/User status*. See [Status Overview in Transactions \[Page 345\]](#).

---

Creating a Work Breakdown Structure By Copying

## Creating a Work Breakdown Structure By Copying

### Use

When you create a new work breakdown structure, you can use an existing work breakdown structure, part of a project hierarchy, or a standard work breakdown structure as a template.

If you have already created a work breakdown structure, you can use WBS elements from other project or a standard work breakdown structure as a template to be included as new WBS elements. For more information, see [Including WBS Elements in the Project Hierarchy \[Page 48\]](#)

When you create a work breakdown structure (project) by copying an existing one, the project definition and the following master data are copied:

- Organization Data
- Calendar
- Time unit
- Operative indicators

### Procedure

1. From the *Operative structures* menu choose *Work breakdown structure* → *Create*.  
The initial screen appears.
2. Enter the relevant data on the initial screen.  
Enter a new number for the work breakdown structure or let the system propose the [next free number \[Page 61\]](#)  
If you enter a project profile, it will override the project profile in the WBS that was copied.
3. Choose *Goto* → *Project definition*.  
The *Create Project Definition* screen appears.
4. Check the data that was copied to the project definition and make any necessary changes.
5. Choose *Goto* → *WBS*.  
The *Create Project: Include WBS Elements* screen appears.
6. Select the WBS elements you want to include.
7. Enter new numbers for these WBS elements.
  - Choose *Edit* → *Key* → *Predefine* to give all WBS elements the same new number, which you can use to form new WBS element numbers.
  - Choose *Edit* → *Key* → *Replace* to replace part of each WBS element number with a common character string.
8. Choose *Edit* → *Include*.  
You receive an error message if the selected WBS elements could not be included. In this case, choose *Edit* → *Key* → *Check*. An error log appears. Correct the numbers of the WBS elements that the system could not include and then choose *Edit* → *Include*.

### Creating a Work Breakdown Structure By Copying

The system includes the WBS elements in the project The *Create Project Definition* screen appears.

9. Enter other data for the work breakdown structure as required.
10. Save the project.

## Determining the Project Number from the Sales Document

### Determining the Project Number from the Sales Document

When you create a sales document using assembly processing, the system automatically creates a project. The project number contains the sales document number.

In assembly processing, the sales document is linked to a standard network which in turn is assigned to a standard work breakdown structure. When you save the sales document, the system creates an operative project in the background by copying from the predefined standard structures.

#### See also:

[Assembly Processing in the Project System \[Ext.\]](#)

How the system determines the project number from the sales document number, depends on whether a single structure or several sub-trees are to be created when the work breakdown structure is created.



You use the *SD/PS assignmt* indicator in the standard WBS to specify that the operative work breakdown structure should be created with several sub-trees. You can only set this indicator, if a project editing mask has been maintained for standard work breakdown structures in Customizing.

Since the WBS element number always has to be unique, the system uses a search and replace technique which takes the first WBS element at level one and uses its number as the basis for creating the number of all other WBS elements in the new project.



To ensure a one-to-one match between the project and its related sales document, the number of the standard WBS element should always be longer than ten characters.

If you work with a single structure in the operative structure, the sales document number is used to generate WBS element numbers. How the system determines the project number from the ten-character sales document number, depends on whether you specified project number editing in Customizing of the Project System. SAP recommends that you use project number editing if you are going to be replacing the project number with the sales document number.

In the case of an operative project with several sub-trees, as well as the sales document number, the sales item number is also used, so that the WBS elements in the different sub-trees have different numbers.

#### With Project Number Editing

The area between the first and the second special character in the number of the standard WBS is replaced by the corresponding number of positions from the sales document number, starting from the right-hand side of the sales document number. The existing spaces are filled from right to left starting with the last digit in the sales document. If there are not enough spaces available, the sales document number is shortened by the first digits. To ensure agreement between the project and sales document, the area between the first and second special character of the number should always be at least ten characters long.

## Determining the Project Number from the Sales Document



Std. Proj. def. / WBS element	Sales document number	New number in operative project
M/12345-001	0066778899	M/78899-001
M/123456789-001	0066778899	M/066778899-001

If several sub-trees are to be generated for a project, the area between the second and third special characters in the standard WBS number is replaced by the relevant item number of the sales document number.



Std. WBS element	Sales document number	Sales document item	New number in operative project
M/1234567890-0000-001	0066778899	1101	M/0066778899-1101-001
M/1234567890-0000-001	0066778899	1102	M/0066778899-1102-001

### Without Project Number Editing

#### Project number is less than ten characters long

When the sales document number is longer than the project number, the system replaces the entire standard WBS number with part of the sales document number, starting from the right of the sales document number. The length of the standard WBS number remains the same.



Std.proj. def.	Sales document number	New number in operative project
M12345	0066778899	778899

Std. WBS element	Sales document number	New number in operative project
M12345 (at level one)	0066778899	778899
M12345-1 (at level two)	0066778899	778899-1

#### Project number is more than ten characters long

The system replace the first ten characters of the standard WBS number with the sales document number. Any remaining characters from the original standard WBS number are tacked on to the end of the new project number.

---

Determining the Project Number from the Sales Document

Std. Proj. def. / WBS element	Sales document number	New operative project definition
M123456789ABC	0066778899	0066778899ABC
M123456789ABC-1	0066778899	0066778899ABC-1



## Using ALE to Distribute the Work Breakdown Structure

### Use

You can use the ALE business process to distribute work breakdown structures which you create in a (master) system to various R/3 (receiver) systems.

### See:

[Distributing Work Breakdown Structures or Internal Orders \[Page 74\]](#)

---

**Work Breakdown Structure or Internal Order Distribution**

## Work Breakdown Structure or Internal Order Distribution

### Use

To carry out actual postings in distributed systems for internal orders and work breakdown structures, you can distribute the master data and status information of internal orders and work breakdown structures to more than one system.

### Integration

#### Functions in the Master System

All functions for internal orders and work breakdown structures are available. However, in the master system you cannot call up the corresponding line items from line item reports if the line items all come from one receiving system.

You create the internal orders or the work breakdown structures in the master system. When you save them, the R/3 System distributes them automatically to one or more receiving systems. Through the filter objects Controlling area and order type or project profile, you control whether, and in which system, the internal orders or work breakdown structures are to be distributed.

You can also send released internal orders and work breakdown structures at a later date.

#### Functions in the Receiving System

- Master data and status information display  
You can only make changes in the original master system. These changes are transferred to the receiving systems.
- Postings from other R/3 components (such as, FI, MM)
- Assessment
- Distribution
- Periodic reposting
- Manual reposting (costs, revenues, line items)
- Direct and indirect activity allocation
- Reposting internal activity allocation
- Accrual calculation
- Settlement debits
- Line item reports

#### Restrictions with Distributing Internal Orders and Work Breakdown Structures

- WBS elements cannot be distributed individually. Only complete work breakdown structures are distributed.
- If a WBS element is assigned to an internal order, the system does not automatically distribute this WBS element to the receiving system. This means that the assignment of the WBS element to the internal order is not known in the receiving system.

## Work Breakdown Structure or Internal Order Distribution

If required, you can distribute the work breakdown structure first to the receiving system and then later on distribute the internal order.

- If you settle activities of cost centers that do not exist in the master system, you can only settle the internal order or work breakdown structure using settlement type FUL.

The following business transactions are not possible in the receiving system:

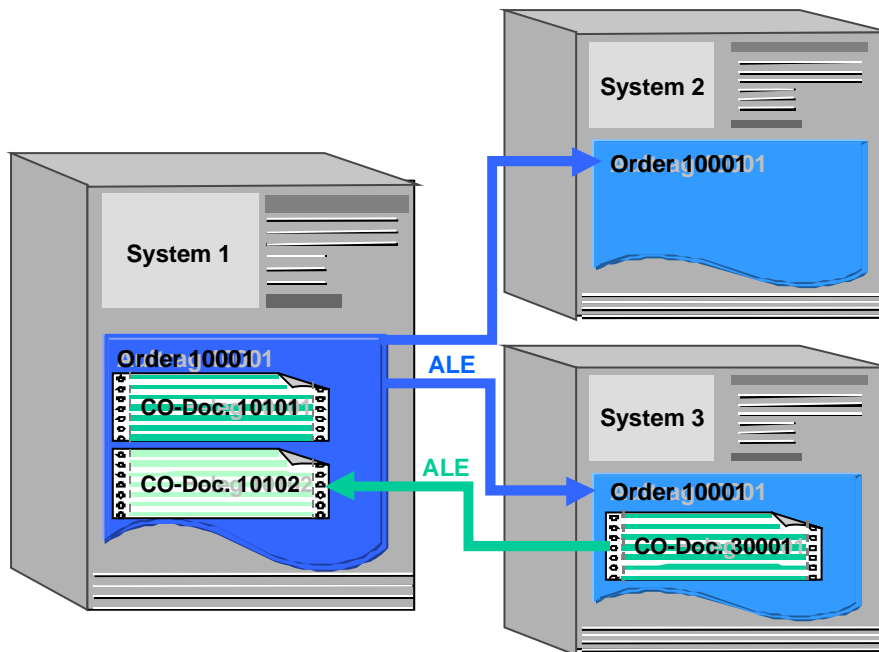
- Planning of internal orders, costs, and appointments on work breakdown structures
- Budgeting and availability control
- Commitment postings
- Overhead costing
- Settlement of internal orders and WBS elements
- Assignments of orders and networks to the work breakdown structure



If you set the deletion indicator in the master system for an internal order or a work breakdown structure and this change was adopted in the receiving system, the R/3 System also deletes the given internal order or work breakdown structure in the receiving system. To ensure that in the receiving system you cannot make postings to deleted objects, you should choose a time period corresponding to the setting of the deletion flag and the setting of the deletion indicator (for example, for internal orders by setting residence time 1). You must make sure that the *Deletion flag* status has been adopted in all receiving systems **before** you set the deletion indicator in the master system.

## Work Breakdown Structure or Internal Order Distribution

## Data Flow



The data flow between distributed systems is identical for internal orders and work breakdown structures. This is described using the example of an internal order:

If you create or change internal order 10001 in system 1, it is automatically distributed to the receiving systems (in this case: system 2, system 3) and created or changed there using the same order number. System 1 is the master system of internal order 10001.

- Postings made in the master system are only available in the master system (CO document 10101 in this case).
- Postings made in other receiving system (in this case, system 3) are sent via ALE to the master system. They are available in both the receiving system and in the master system (in this case, CO doc. 30001 from system 3 is given its own number CO doc. 10102 in the master system).

## Prerequisites



Whenever possible, you should carry out all cross-system Customizing settings in **one** system.

- The **organizational units** (e.g. controlling area, company code) are defined **identically** in the master system and the receiving systems.
- The **order type** or the **project profile** are defined **identically** in the master system and in the receiving systems.
- The **status selection profiles** are defined **identically** in the master system and in the receiving system.

## Work Breakdown Structure or Internal Order Distribution

- For internal orders: The **number ranges** are defined **separately** in the master system and in the receiving system. This is because a distributed internal order in the receiving system is given the same number as in the master system.  
 or work breakdown structures: The **project edit screens** are defined **identically** in the master system and in the receiving systems. In the receiving systems you should include a lock indicator for the project edit screens, so that these project numbers cannot be used for new projects.

## Activities

In the Implementation Guide (IMG), choose *Basis Components → Distribution (ALE) → Predefined ALE Business Processes → Accounting → Master Data Distribution → [Distribution of Internal Orders \[Ext.\]](#) or [Distribution of Work Breakdown Structure \[Ext.\]](#)*.

Use the following objects:

<b>Business object</b>	<i>Work Breakdown Structure</i>	<i>Internal Order</i>
<b>Distribution method</b>	<i>SaveReplica</i>	<i>SaveReplica</i>
<b>Message type</b>		<i>INTERNAL_ORDER</i>

To send internal orders and work breakdown structures at a later time, choose *Tools → ALE → Master data distribution → Accounting → Internal Order or Projects → Send*.

For more information about ALE see the SAP Library under *Basis → Middleware → ALE-Introduction and Administration*.

---

**Network**

## Network

### Purpose

A network represents the flow of a project or of a task within a project. You can graphically display various structural elements of a project and their interdependencies in the Project System.

During the life of a project, networks are used as a basis for planning, analyzing, controlling and monitoring schedules, dates and resources.(such as people, machines, PRTs, materials, documents and drawings). You can assign networks to a project or a sales document, such as a sales order.

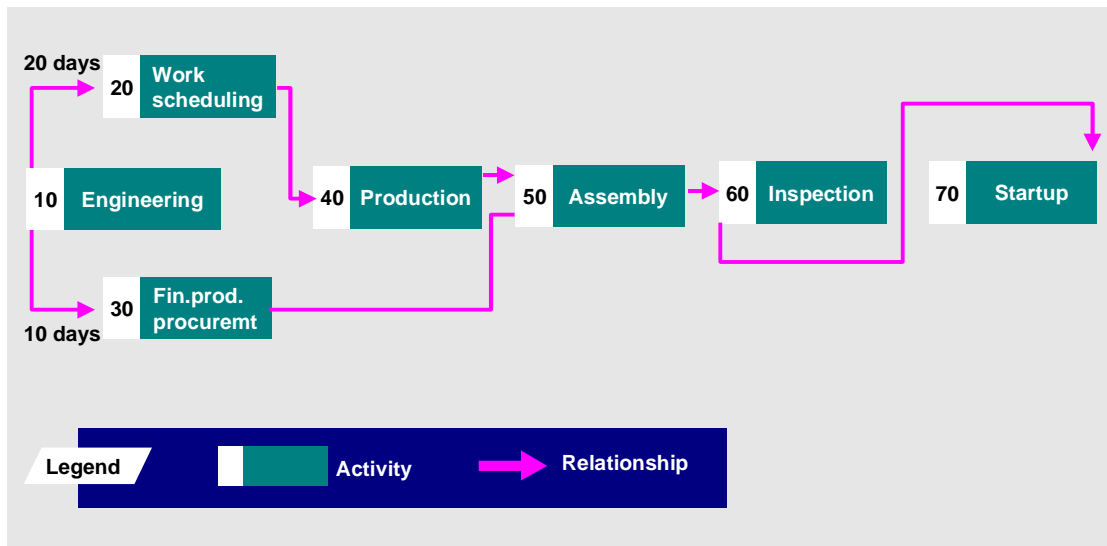
A network is a special type of work order that has the same structure as production orders, maintenance orders, and inspection orders in the R/3 System.

## How Is a Network Structured?

A network consists of the following:

- Activities
- Activity elements
- Relationships

The following graphic shows you a network with activities and the different types of relationships.



For more information on activities and activity elements, see [activities \[Page 132\]](#) and [relationships \[Page 174\]](#)

## Network Headers

In the network header you can enter the following data, which are used as default values for the entire network:

- Assignments to other objects, for example, project definition, WBS element or sales document
- System status
- Basic start and finish dates of the network as well as indicators for scheduling
- Release and scheduled dates
- Assignments of organizational data, such as profit center and business area
- Costing data, for example, costing sheet and results analysis key
- Administrative Data

## How Is a Network Structured?



In header-assigned networks the values in the *Costing* section of the *supplementary data* screen of the network header are not default values, but are binding for the whole network. Even if you overwrite them in the activities, the values from the header are used.

## Execution Factor

The network header also contains an execution factor that determines how often network activities should be repeated. If the network activities themselves have execution factors, these are multiplied by the factor in the header. For more information, see [Execution Factors \[Page 134\]](#)



## ***Network Type and Network Parameters***

In Customizing for the Project System you can define the network type and the network parameters.

The **network type** specifies how a network is actually used for certain tasks and processes in the project, for example:

- Number range assignments and intervals
- How the estimated costs, which are incurred for materials or services in the network, are updated as commitments.
- The status profile for status management

For more information on the status profile, refer to [Status Administration \[Page 343\]](#).

You can enter additional data and control parameters per plant in the **parameters for the network type**, such as:

- Whether costs incurred in the network are assigned to individual activities or to the network header,
- The objects for which change documents are written
- The costing variants used for planned and actual costs
- The reduction strategy for scheduling
- Strategy for determining the settlement rule

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**Network Profile**

## Network Profile

When you create a network, you must also enter a network profile for the network.

The network profile contains default values and parameters for working with a network, for example, the plant, units, control keys for the different activities, or graphic settings.

You can maintain the values for the network profile in Project System Customizing.

The data from the network profile is automatically copied into the network when you create a new network. You can change the default values from the profile in the network.

## Status Management

[Systemstatus in Netzplänen \[Page 353\]](#)

The Project System uses R/3 status management. Depending on which business transaction you carry out in a network or for an activity, the system sets a new status for the network or activity. Which in turn influences whether or not you can carry out other business transactions.

**See also:**

For more information on status management, see [Status Management \[Page 343\]](#).

---

**Settlement Rule**

## Settlement Rule

[Periodische Arbeiten \[Ext.\]](#)

[Abrechnung \[Ext.\]](#)

You can settle a network to various objects, for example, to a project, a cost center or a sales order. The settlement rule determines the objects where the network costs are to be settled and how they are settled.

If you assign the network to other objects, for example a sales order or a WBS element, you can use the strategy you defined in Customizing to determine whether and how the settlement rules are taken from other objects, or whether a standard rule is used.

**See also :**

For more information on settlement, read CO - Settlement

## Organizational Data

[Organisatorische Zuordnungen im Projektsystem \[Page 10\]](#)

[Währungen im Projektsystem \[Ext.\]](#)

The system determines the controlling area and company code when you create a network and enter a plant on the initial screen. These values can not be changed.

If you want to assign a network or an activity in an activity-assigned network to a WBS element, you must make sure that the plant of the network or the activities and the plant of the WBS element belong to the same controlling area.

- For networks with **header account assignment**, all activities and activity elements must belong to the same company code as the plant in the network header.
- For networks with **activity account assignment**, every plant in every activity and activity element must belong to the same controlling area as the plant in the network header.

In addition, you can specify the following organizational data for the network:

- profit center
- business area
- jurisdiction code
- object class

The object class is used for the business classification of controlling objects, for example, overhead cost management (Overhead Costs OC), investment controlling (Investment - IV).

In reconciliation ledger reporting within Controlling these cost flows can be displayed across all applications according to object class.

## Currency in Networks

You can only change the object currency up to the partial release or release of the network, if the currencies in the company codes are not different from the currency in the controlling area. Otherwise, the system uses currency in the company code as the object currency and you cannot change it.

---

**Classification**

## Classification

Classification is used to describe object using characteristics. You can freely definable selection criteria to form groups of similar objects for various purposes. The following class types are used for the network in classification:

- Class type 14 for project summarization
- Class type 13 for order summarization of production orders, maintenance orders, and networks
- Class type 21 (networks) for general classification in the SAP System

## Network Maintenance

This topic describes:

- [Creating a Network \[Page 88\]](#)
- [Creating a Network by Copying \[Page 90\]](#)
- [Link Between Standard and Operative Structures \[Page 92\]](#)
- [Creating Networks by Copying Standard Networks \[Page 94\]](#)
- [Including Standard Networks in a Network \[Page 97\]](#)
- [Setting the System Status for Networks \[Page 103\]](#)

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Create Network

## Create Network

1. [Netzplan mit Standardnetz als Vorlage anlegen \[Page 94\]](#)
2. In the menu options *Accounting / Logistics* choose *Project management* → *Operative structures*.
3. Choose *Network* → *Create*.  
The initial screen appears.
4. Enter the relevant data on the initial screen.  
You can copy from either a standard network or another network when creating the new network.
5. Choose *Enter*.  
The network header appears.
6. Enter general data in the network header:
  - Enter a description  
You can branch to word processing and enter another description by selecting the menu options *Details* → *Activity/Element* → *Long text*.
  - The current status of the network is displayed on the *Scheduling* tab page. When you create a network, the system automatically sets the status created (CRTD) for this new network.
  - You can assign the network header to a WBS element, a project definition, or a sales document on the tab page *Assignments*. For more information, refer to [Network Assignments \[Page 118\]](#).  
On this tab page you can also maintain organizational data for the network header, such as profit center or business area.
  - The dates you have to maintain on the *Scheduling* tab page depend on the scheduling type. For example, if you choose forward scheduling, you must enter a start date.
6. Choose *Enter*.  
If you have not assigned the network to a WBS element or to a sales document, or if you have not yet maintained a strategy for determining the settlement rule for the network type, the system branches automatically into the *Maintain settlement rule* screen.
7. Enter the data relevant for the settlement rule.  
You can also maintain the settlement rule later.  
Return to the network header by choosing *Back*.
8. Maintain data for the network.
9. Save your data by choosing *Network* → *Save*.

**See also:**

[Maintaining Activities: Overview \[Page 162\]](#)

[Maintaining Relationships \[Page 181\]](#)





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## Creating a Network by Copying

# Creating a Network by Copying

You can copy from a standard network or an operative network to create a new operative network. When you copy a standard network, all data is automatically copied into the new operative network. When you copy an operative network, you can select which data you want to have copied into the new network.

### See also:

[Standard Network \[Page 203\]](#)

### Copying an operative network

When you create a network by copying another network, you can choose which of the following objects are copied:

- Activities
- Components
- Relationships
- Milestones
- PS texts
- Settlement rule
- Production resources/tools (PRT)

### Copying a standard network with relationships to other standard networks

If you use a standard network that has relationships to other standard networks, as a source for copying to an operative network, the system checks whether operative networks have been created for the other standard networks.

If operative networks exist for these standard networks, the system asks you whether you want to copy these relationships. If you reply yes, the system lists these operative networks in the following order:

- Networks assigned to the project
- Networks assigned to the sales order
- All the networks in the system.

If you want to copy one or more of the predefined relationships to the operative network, select the corresponding networks in the list. If you do not select a network, the new operative network is created without relationships.

### Copying a standard network with a link to a standard WBS

When copying a standard network to create an operative network, the system can create an operative work breakdown structure from the linked standard WBS. You can, however, create an operative network from a standard network linked to a standard WBS **without also** creating an operative WBS.

[Link Between Standard and Operative Structures \[Page 92\]](#)

## Link Between Standard and Operative Structures

### Link Between Standard and Operative Structures

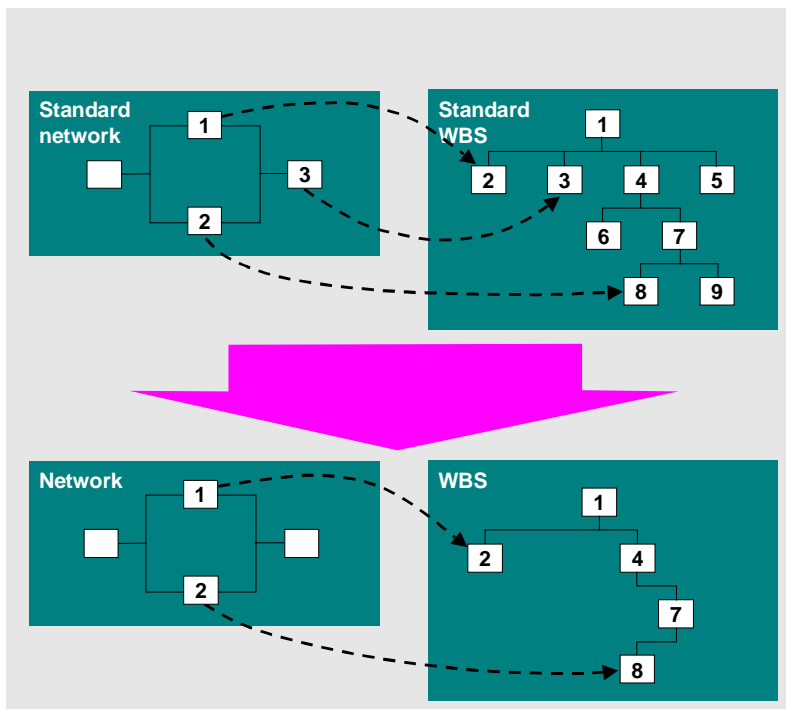
If you have assigned a standard network to a standard WBS, you can create an operative WBS at the same time that you create an operative network. Before you copy a standard network linked to a standard WBS, read the following information.

#### Do you want to create a operative WBS at the same time that you create an operative network? If yes:

Create a new project definition and choose *Create* in the *Create Network: Project Assignment* dialog box. This dialog box is displayed when you save a new network or when you execute the *Replace Standard WBS* function.

A new operative work breakdown structure is created with the project name you entered. The system copies those standard WBS elements which have assignments to the standard network as well as their superior elements.

The following graphic shows you the result of copying a standard network assigned to standard WBS elements, as well as the operative work breakdown structure and operative network.



#### Do you want to create a operative network and assign it to an existing operative work breakdown structure? If yes:

Enter an existing project definition in the network header or in the *Create Network: Project Assignment* dialog box. This dialog box is displayed when you save a new network or when you execute the *Replace Standard WBS* function.

---

### Link Between Standard and Operative Structures

The system assigns the network to the existing project in the same manner as the standard network is assigned to the standard WBS.

If the standard network has an assignment to a standard WBS element that is not currently in the existing operative WBS, the system will expand the WBS to include this WBS element.

#### **Do you want to create an operative network and assign it to an existing operative WBS element? If yes:**

Enter an operative WBS element either in the header or in the activity of the new operative network. The header or activity will be assigned to that WBS element. Once you have entered the WBS element, the system will ignore all assignments that may exist to the standard WBS



When you copy from a standard network, the assignments to a standard WBS are only created in the first generation operative WBS.

### **Procedures for Copying Networks:**

[Creating Networks by Copying Standard Networks \[Page 94\]](#)

[Creating Networks by Copying Other Networks \[Page 96\]](#)

[Including Standard Networks in a Network \[Page 97\]](#)

## Creating Networks by Copying Standard Networks

# Creating Networks by Copying Standard Networks

When you create a network from a standard network, the system distinguishes whether or not a standard WBS is assigned to the standard network.

## Procedures

### Copying Standard Networks Without a Standard WBS

1. In the *Operative structures* menu choose *Network* → *Create*.  
The initial screen appears.
2. Enter the network type, plant, MRP controller and profile.
3. Enter the standard network and the alternative (if known) that you want to copy in the *Std network* field.  
If you do not know the alternative, you can choose from a list of alternatives after you have maintained data for the network header.
4. Choose *Enter*.  
The network header appears.
5. Enter the relevant data in the network header.
6. Choose *Enter*.  
The standard network is copied into the network.
7. Enter or change the data for the network.
8. Save your entries by choosing *Network* → *Save*.

### Copying Standard Networks With a Standard WBS

When you copy a standard network that is assigned to a standard WBS, you can let the system create a new operative work breakdown structure.

1. In the *Operative structures* menu choose *Network* → *Create*.  
The initial screen appears.
2. Enter the network type, plant, MRP controller and profile.
3. Enter the standard network and the alternative (if known) that you want to copy in the *Std network* field.  
If you do not know the alternative, you can choose from a list of alternatives after you have maintained data for the network header.
4. Choose *Enter*.  
The network header appears.
5. Enter the relevant data in the network header.



If the system is to automatically create an operative work breakdown structure, do **not** enter either a **project definition** or a **WBS element** in the network header.

## Creating Networks by Copying Standard Networks

Otherwise, enter the an existing operative project definition or WBS element to which you want to assign the network.

6. Choose *Enter*.

The standard network is copied into the network.

7. Enter or change the data for the network.



If you want an operative work breakdown structure to be created automatically, do not create any assignments from the network to operative WBS elements.

8. Save the network.

If you have not entered a project definition or a WBS element, the *Create network* dialog box appears. *Project Allocation*

You an now create a new operative work breakdown structure from the standard WBS to which the standard network is linked.

9. Enter an ID for the new WBS and choose *Create*.

The *Create project* dialog box appears.

10. Enter or change the data for the project definition and choose *WBS structure..*

The WBS element overview appears.

11. Change the WBS numbers and choose *Include*.

You return to the dialog box *Create network: Project allocation*

12. Choose *Copy*.

The new operative work breakdown structure is created.

13. Save the network.

### See also:

[Link Between Standard and Operative Structures \[Page 92\]](#)

---

Creating Networks by Copying Other Networks

## Creating Networks by Copying Other Networks

When you create a network by copying another network, you can also specify which objects are to be copied.

### Procedure

1. From the *Operative Structures* menu choose *Network* → *Create*.

The initial screen appears.

2. Enter the relevant data and the network to be copied in the *Network* field.
3. Choose *Objects*.

A dialog box appears.

4. Select the objects to copy and then *Continue*.

The network header appears.

5. Enter or change the data for the network.
6. Save your data by choosing *Network* → *Save*.



No relationships to other networks are copied.



## Including Standard Networks in a Network

### Procedure

1. Call up the activity overview.
2. Select the menu options *Network* → *Include std. network*.  
A dialog box appears.
3. Enter a standard network, an alternative and the activities between which the standard network should be inserted.
4. Choose *Continue*.  
A dialog box appears.
5. Enter the number for the activities/activity elements or change them.
6. Choose *Copy*.

The standard network is included. The relationships are copied.

You can also include a configurable standard network in a network. For details about prerequisites for doing so, refer to [Including Standard Networks Using Configuration \[Page 108\]](#).

---

Classifying Networks

## Classifying Networks

[Projektverdichtung über Klassifizierung \[Ext.\]](#)

[Verdichtung auf dem Projekt \[Ext.\]](#)

You can classify networks with the SAP class system. For doing so, you use class type 21

### Procedure

1. Call up the activity overview.
2. Select the activity that you wish to classify.
3. Choose *Extras* → *Classification* → *Classification*.  
A dialog box appears.
4. Select the class type.  
The *Change: Classification* screen appears.
5. Edit a class and the corresponding status.  
You can create further classes by choosing *Environment* → *Class*.
6. To return to the activity overview screen, choose *Back*.

#### See also:

Classification

## System Statuses in Networks

The active system status determines which business transactions you can perform with network headers, activities, and activity elements. The system status is passed from the network header to the activities and from the activities to the activity elements. Exceptions are the *Account assignment locked* and *Locked* statuses.

### Created (CRTD)

#### Use

This is the initial system status for new networks, activities, and activity elements. The system sets this status automatically, when you create a new network.

#### Features

In the *Created* status, you can create new activities and activity elements and change the network header.

The status, for example,

- Allows you to directly (physically) delete activities and activity elements
- Prohibits you from posting actual costs

### Released (REL)

#### Use

The *Released* status is necessary before you can post actual costs.

#### Prerequisites

The network header or the activity must have the *Created* status.

#### Features

In the *Released* status, you can create new activities and activity elements and change the network header. If a network has *Released* status, new activities and activity elements also have *Released* status.

The status

- Allows you to post actual costs
- Allows you to confirm activities and activity elements
- Allows you to create reservations or purchase requisitions for all components, depending on settings elsewhere.

If the corresponding Customizing setting have been made, the system triggers an availability check for material and capacities.

You cannot cancel the *Released* status.

## System Statuses in Networks

### Technically completed (TECO)

#### Use

You use this status for networks, activities, and activity elements that are completed from a technical (logistics) point of view.

#### Prerequisite

The network header or the activity must have the *Released* status.

#### Use

If the status is set in a network header, you cannot change the header data or create new activities. If it is set in an activity, you cannot change activity data.

The status

- Allows actual postings, for example confirmations
- Sets a deletion flag for the material components
- Removes capacity requirements, provided a final confirmation has not been made
- Deletes purchase requisitions and requirements for material components, if any exist.
- Prohibits changes to the characteristic value assignment
- Prevents you setting a user status
- Prevents you from changing dependent data such as material and PRT allocations.

You can cancel the *Technically completed* status. In this case the system sets the *Released* status.



If you cancel the *Technically completed* status in the network header, the status is not automatically canceled in the activities and activity elements. You can cancel the status in individual activities or in all activities.

### Closed (CLSD)

#### Use

The *Closed* status closes a network or an activity from both a logistics point of view and an accounting point of view.

#### Prerequisites

You can set the *Closed* status, if the network header, activity, or activity element has the *Released* or *Technically completed* status, and

- No balance exists
- All activities that require confirmation have been confirmed.

#### Use

If the status is set in the network header, you cannot change the header data or create new activities. If it is set in an activity, you cannot change activity data.

## System Statuses in Networks

The status

- Prevents you from changing dependent data such as material and PRT allocations.
- Prevents you making actual postings, for instance, confirmations
- Removes capacity requirements, as long as a final confirmation has not been made
- Deletes purchase requisitions and requirements for material components, if any exist.

You can cancel the *Closed* status. The system then set the previous status (*Released* or *technically completed*).



If you cancel the *Technically completed* status in the network header, the status is not automatically canceled in the activities and activity elements. You can cancel the status in individual activities or in all activities.

## Deletion flag (DLFL )

### Use

The *Deletion flag* status designates networks and activities that have been flagged for deletion. This means that the objects are deleted logically, but not physically.

### Prerequisites

You can the *Deletion flag*, if

- The actual costs of the network are balanced.



If you set the *Must not be settled* or *Can be settled* in the settlement profile in Customizing for *Product Cost Controlling*, you can still set the *Deletion flag* status, even if the actual costs are not balanced.

- Assigned orders also have the *Deletion flag* status
- There are only relationships to networks that have a *Deletion flag*.
- No commitments exist for the network
- No purchase requisitions or purchase orders exist that are account assigned to the network.

### Use

If the status is set in the network header, you cannot change the header data or create new activities. If it is set in an activity, you cannot change activity data.

The status

- Removes capacity requirements, as long as a final confirmation has not been made
- Sets an internal deletion indicator for existing material reservations
- Can also be set (after a warning is issued), if an activity requires confirmation but has not been finally confirmed.
- Is the prerequisite for setting a *deletion indicator*.

## System Statuses in Networks

You can set the *Deletion flag* status in addition to every other system status. The status is passed on to activity elements. As long you have not set a *deletion indicator*, you can cancel the *Deletion flag* status.

### See also:

[Archiving Operative Project Structures \(PS-ST-OPR\) \[Ext.\]](#)

## Locked (AALK or LKD)

### Use

You can prohibit account assignment to a network or lock all data in a network or activity. The following statuses are available:

- Account assignment locked (AALK)  
Depending on the network type, you can set the *Account assignment locked* status either only in the network header or only in the activity
- Locked (LKD)  
You can only set the *Locked* status in the network header. The status is passed on to all activities.

You can set the *Account assignment locked* and *Locked* statuses in addition to every other status except *Deletion flag*. The *Account assignment locked* and *Locked* statuses are **not** passed on to activity elements.

You can cancel these statuses.

## Setting the System Status for Networks

[Systemstatus in Netzplänen \[Page 353\]](#)

You can only carry out business transactions for a network, if the corresponding system status which allows this business activity has been set. For example, if you want to confirm an activity, that activity must have the system status *released*.



When you release a network, all activities, activity elements and production resources/tools are also released.

### Procedure

1. Create a network or open an existing network.
2. Choose *Edit* → *Status* and then the required status, for example *Released*.

The system sets the system status in the network header.

## Configuration

## Configuration

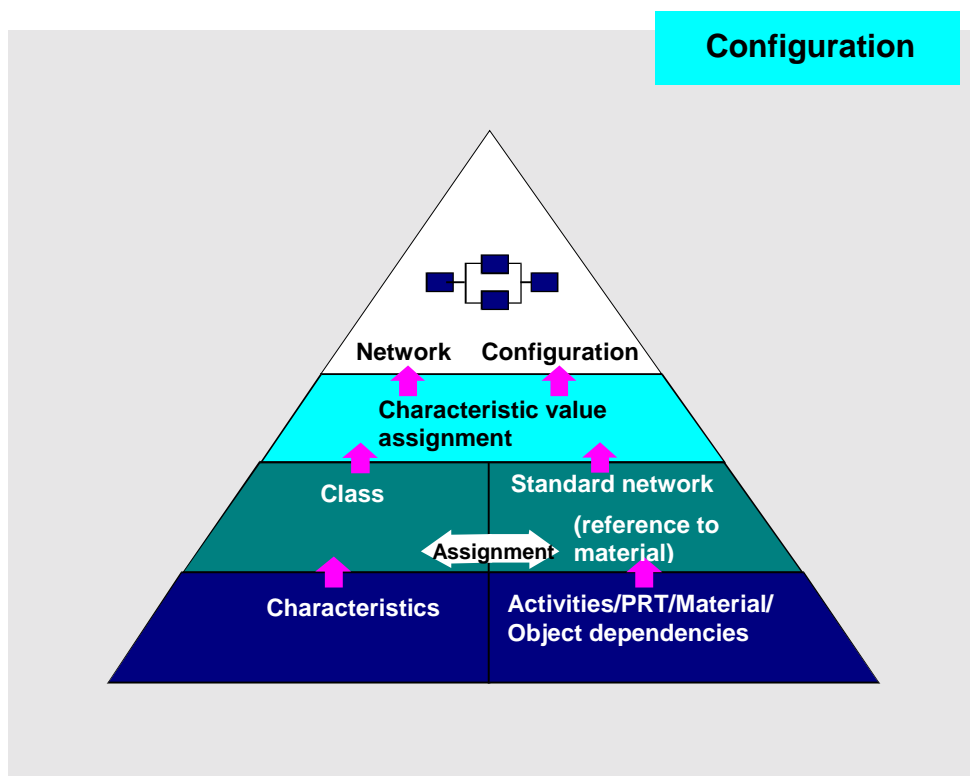
### Use

You can use configuration, if you use the Project System to manufacture products with different features or options. The planning instruments, such as networks and work breakdown structures, must be basically the same, but can have characteristics specific to the different variants, such as additional activities or different material components.

When you use configuration, you assume there is a maximum standard structure which contains all the data. That means, the standard network and the standard WBS contain all activities, activity elements, materials, etc. that are necessary for any conceivable variation of the product.

### Prerequisites

You differentiate between the variants using characteristics. Object dependencies in the standard structures form a link between the characteristics or their values and the activities and activity elements that are selected during configuration.



For more information about this subject and its prerequisites see [Characteristic Value Assignment \[Page 106\]](#).



## Features

When you create an operative network by copying a configurable standard network the configuration determines which activities, activity elements, PRTs and components are transferred from the standard network. This applies irrespectively of whether you are working in the Project System or from a sales document, a customer order for example.



If an activity is not selected in the configuration, the objects that are assigned to this activity, for example relationships, activity elements or milestones, are not copied.

You can indirectly configure a work breakdown structure while creating it by assigning activities in the standard network to standard WBS elements. Only those standard WBS elements are copied that have been assigned to activities selected in the configuration. Superior elements in the hierarchy are also copied.

For information about including a configurable standard network in an existing network or replacing an activity with a configurable subnetwork, refer to Including [Standard Networks Using Configuration \[Page 108\]](#) [Creating Subnetworks using Configuration \[Page 191\]](#)

You can change the characteristic value assignment for a network later. For information on this, refer to [Configuration Changes in Networks \[Page 110\]](#).

For more information about variant configuration and how you maintain data for configuration, see the R/3 Library for *Logistics General* by choosing *LO-Variant Configuration Guide*.

## Characteristic Value Assignment

# Characteristic Value Assignment

## Use

You use characteristic value assignment to specify various variants while you are creating an operative network by copying from a configurable standard network.

## Prerequisites

### Variant classes

You can only configure a standard network, if it is assigned to a class whose class type allows configuration. In the standard system this is **class type 300**. By defining a configuration profile you assign a standard network to a variant class, which contains the characteristics you need to for specifying a variant.

### Object dependencies

You must additionally maintain the object dependencies (selection criteria, actions and constraints) for the objects that can be selected in configuration (activities, activity elements and PRTs).

### Characteristics

You edit characteristics and their possible values in classification, which you can find in the SAP menu *Logistics → Central functions*.

## Activities

### Characteristic Value Assignment

The following distinction is made during the assignment of characteristic values:

- Networks created from a sales document, such as a sales order.
  - If you assign a characteristic value for the sales document item to the same variant class as the standard network, then the system copies this characteristic value assignment into the network created from the standard network.
  - If you want the characteristic values to be assigned separately, the variant classes must be different.
- Networks created in the Project System.
  - After you have maintained the network header data, the system will prompt you to assign the characteristic values.

### Displaying and Changing Characteristic Value Assignment

You can display the characteristic value assignment in networks by choosing *Extras → Configuration → Characteristic value assignment*.

If the characteristic value assignment was carried in the network, you can change it in the network, if it was carried out in a sales document, you can only change it in that sales document.

---

**Characteristic Value Assignment**

If the [configuration is changed \[Page 110\]](#), a [change comparison \[Page 112\]](#) is carried out, in which the objects affected by the change are deleted, added or changed.

## Including Standard Networks Using Configuration

### Use

You can also use configuration when including a configurable standard network in a network.

### Prerequisites

- The network in which the standard network should be included, must have been created using configuration.
- The variant class used for assigning characteristic values and that of the network to be included, must be the same.

The configuration is then carried out using the network characteristic value assignment.



Both conditions have to met, otherwise the complete standard network will be included. No separate characteristic value assignment is carried out.

### See also:

[Including Standard Networks in a Network \[Page 97\]](#)

## Subnetwork Creation with Configuration

### Use

As with networks, configuration is carried out, when you create a subnetwork using a configurable standard network as a template.

### Activities

If the network that is superior to the subnetwork was created using configuration, the following is valid for characteristic value assignment:

- If the variant class of the superior network is the same as the variant class of the standard network that is being used as the template for the subnetwork, the characteristic value assignment of the superior network is used.
- If different variant classes are used, the characteristic value assignment has to be repeated for the subnetwork.
- If a configuration profile has not been maintained for the subnetwork, the characteristic value assignment of the superior network is used.

#### See also:

[Configuration \[Page 104\]](#)

[Characteristic Value Assignment \[Page 106\]](#)

# Configuration Changes in Networks

## Purpose

You can adapt a network to changes in configuration, if for instance, a network has links to a sales order and the characteristic value in this sales order changes.

## Prerequisites

In Customizing the Project System you have to **define change profiles** (in *Structures* → *Operative structures* → *Network*) Here you determine how the system show react if there are conflicts arise in the change comparison (for example what happens if a component is to be deleted but a purchase order already exists for it).

## Process flow

### 1. Changing the Characteristic Value Assignment

The [characteristic value assignment \[Page 106\]](#) can be changed in the network header by choosing *Extras* → *Configuration* → *Characteristic value assignment*

If the characteristic value assignment has been copied from a sales document, you can only change it in the sales document. It can only be displayed in the network.

### 2. Change Comparison

In order to determine which change steps are necessary as a result of a change in configuration, a [change comparison \[Page 112\]](#) is carried out.

This is done immediately.

- If the value assignment of a network that was created by assembly processing is changed in the sales document.
- If the network itself was directly configured, and the value assignment is changed in the network.

If the characteristic value assignment is changed in a sales document that was assigned to the network manually, the change comparison can be created in the network.

The change comparison produces the necessary change steps for the objects that are affected by a change in configuration (which objects have to be deleted, added or changed).

### 3. Executing the Change Steps

These change steps are executed automatically as long as no [conflicts \[Page 114\]](#) occur. The change steps that have been executed and those that are to be executed are listed in an overview together with conflicts that have arisen.

Her you can - after the causes of the conflicts have been removed if necessary - [trigger the change steps \[Page 116\]](#) that are not executed automatically.

---

**Configuration Changes in Networks****4. Concluding the Change in Configuration**

As long as not all the change steps have been executed or if some change steps have the status *Do not execute*, the network header has the status *Manual adjustment necessary*. This status does not allow another change to the configuration or scheduling of the network.

If all the change steps have been processed, you can close the change comparison. As a result the *Manual adjustment necessary* status is removed.

**Result**

All change comparisons are saved with the corresponding administrative data (change date, user, change comparison status as well as the old and new characteristic value assignment): To go to change management from the network header choose *Extras → Configuration → Change management*.

---

Change Comparison

## Change Comparison

### Use

After a configuration [change \[Page 110\]](#) the operative network is compared with a temporary network, which contains the current configuration. As a result the necessary change steps are determined. During this process, the manual changes to the operative network are taken into account whenever possible.

### Integration

A change comparison is started automatically if the characteristic value assignment is changed in the sales document (assembly processing) or in the network (network was the object originally configured)

If the value assignment is changed in a sales document that the network has been manually assigned to, you can trigger the change comparison in the network header by choosing *Extras* → *Configuration* → *Change management* and then *Change management* → *Create change comparison*.

### Features

You can use configuration to select activities, activity elements, material components and production resources/tools via object dependencies. During a change comparison the following changes steps are executed for these objects:

**Delete:** The system tries to delete all objects that exist in the operative network and have a reference to a standard network, but do not exist in temporary network. Activities that have the status *Created* are deleted physically, from status *Released* on a deletion flag is set. Objects that were created manually without reference to standard networks remain in the operative network according to the settings in the change profile.

**Add:** The system tries to add all the objects in the temporary network that do not have a counterpart in the operative network. If activities are to be added, all the subordinate objects (activity elements, milestones, component allocation) are also added from the temporary network.

**Change:** The field values of objects that exist in both the operative and the temporary network are copied from the temporary network to the operative network. This affects data fields that can be changed by the configuration via object dependencies as well as dependent fields. Scheduled dates and actual dates are not changed on principle. Deletion flags for activities in the operative network are reset.

If a [conflict \[Page 114\]](#) occurs during a change step, and this has error or warning character, the change step is not automatically executed in the background together with the change comparison.

All change steps are logged with their processing status and information about the cause of the conflict (error, warning or information message) in a change step overview. Here you can [manually trigger \[Page 116\]](#) change steps in which conflicts with warnings have occurred, in the case of conflicts with errors, you have to resolve the cause of the error first.



**Constraints**

Manually deleted objects and manual changes to fields are not recognized and are not upheld after a change to the configuration.

Subnetworks cannot be deleted automatically. A subnetwork has to be deleted manually or have a deletion flag set manually before the corresponding activity can be deleted or have a deletion flag set. Subnetworks are also not compared automatically during change comparison for a network.

## Conflicts in Change Comparisons

# Conflicts in Change Comparisons

## Definition

Conflicts can occur when a [change comparison \[Page 112\]](#) is run to determine the change steps for adapting a network to a new characteristic value assignment.

Certain conflict situations have been pre-defined in the system. In addition you must **define change profiles** in Customizing by choosing *Structures* → *Operative Structures* → *Networks*. In these profiles you define the conflict character of further change steps. If steps cannot be executed automatically because of conflicts, you have to [trigger execution manually \[Page 116\]](#) in the change step overview after removing the cause of the conflict, if required.

The system reacts as follows:

- Conflicts with information character: The change step is executed automatically and you receive a message in the change step overview.
- Conflicts with warning character: The change step is not executed automatically. You receive a message in the change step overview, from where you execute the step manually.
- Conflicts with error character: The change step is not executed. You receive a message in the change step overview, from where you execute the step manually after you have **remedied the cause of the conflict**.

The status *Manual adjustment necessary* and the business transactions *Delete automatically* and *Change automatically* are used to control the system behavior during [configuration changes \[Page 110\]](#).

## Pre-Defined Conflict Situations with Error Character

### Delete Activity/Activity Element

- Status management (set deletion flag) negative
- Commitments/balance not balanced
- Subnetwork exists
- Business transaction *Delete automatically* forbidden at header or activity level.

### Add/Change Activity/Activity Element

- Activity/element with the same activity number already exists
- Business transaction *Change automatically* forbidden at header or activity level.
- Activity has status *Technically completed* or *Completed*

### Delete. Add and Change Material Components or PRTs

- Superior activity has status *Technically completed* or *Completed*

## Conflicts in Change Comparisons

- Business transaction *Change automatically* forbidden at header or activity level.

## Executing Change Steps

## Executing Change Steps

1. In the network header choose *Extras* → *Configuration* → *Change management*.




An overview of the change comparisons appears together with the administrative data for the network configuration changes. From this list you can display the old and new characteristic value assignment for every change comparison as well as the change steps and their status.


2. If the characteristic value assignment was changed in a sales document that was assigned to the network manually, the change comparison cannot be created automatically.

In this case first choose *Change management* → *Create change comparison*

3. To display or edit change steps, select the required change steps and choose *Change management* → *Overview change steps*.


The overview displays all the necessary change steps together with their status and information about existing conflicts.


 /  /  Object to be added / deleted / moved


 Field(s) to be changed


 Execute change steps


 Change steps have been executed

 Change steps can be executed

 Conflict with warning character, change step can be executed

 Conflict with error character, change step cannot be executed (remove cause of error first)

 Change step has been set to "Do not execute".

 Object depends on a superior object (for instance component allocations that are created or deleted with an activity).


 Message log for the conflicts

4. By choosing *View* → *Filter*, you can specify that only certain object types or comparison results are displayed, for instance only objects to be deleted.

5. Edit the individual change steps:

If you have removed the causes of the [conflicts \[Page 114\]](#) (for errors) that occurred, you can execute the relevant change steps in the overview. To update the status display, choose *Edit* → *Check all change steps*.

To execute all the change steps, choose *Edit* → *Execute all change steps*

To execute a single change step, click on  in the relevant row.

If you do not want to execute a change step, choose *Edit* → *Status* → *Set to Do not execute*. You can reset this status later.

6. To leave the processing of change steps, choose *Goto* → *Back*.

## Executing Change Steps

If there are still change steps to be executed, the status of the change comparison is *open*. It is *complete*, if all the change steps have either been executed or have been set to "Do not execute".

7. If the status is *complete*, you can close the change comparison. To do so, choose *Change management* → *Close change comparison*.

The status *Manual adjustment necessary* is removed from the network header.

---

**Network Assignments**

## Network Assignments

You can link different structures within your project in the network header. This can be necessary, for instance, if you want to link process structures to hierarchical structures or if you have to plan dates and costs in relation to other objects in the project.

The network can be assigned to

- a project definition or a WBS element
- a sales document, such as a sales order or

Project Definitions/WBS Elements Assignments

Sales Document Assignment

# Assigning Networks to Project Definitions/WBS Elements

## Procedures

### Assigning a Network to a Project Definition

If you assign the network header to a project definition, you can copy the dates from the project definition into the basic dates of the network.

1. Call up the network header.
2. On the Assignments tab page maintain a project definition key.
3. Choose *Enter*.

The *Date transfer* dialog box appears.

4. If you want to copy the basic dates from the project definition, choose Yes.

The project definition dates are copied into the network as basic dates.

### Assigning a Network to a WBS Element

If you assign a network header to a WBS element and have not yet specified a project definition, the project definition will be copied automatically when the assignment is made.



To be able to assign a network to a WBS element, you must first identify the WBS element as an account assignment element.

The WBS element is copied into all activities and activity elements as a default value. You can also assign activities to other WBS elements in the activity overview.



The WBS element is only copied into all activities if you create the network or activities.

1. Call up the network header.
2. On the *Assignments* tab page maintain a project definition key.
3. Choose *Enter*.

The *Date transfer* dialog box appears.

4. If you want to copy the basic dates from the project definition, choose Yes.

The project definition dates are copied into the network as basic dates.

### Dates From the Project Definition/WBS Element

The dates from the project definition or the WBS element are copied into the network header as follows.

If you entered a project definition **and** a WBS element the date from the WBS element are used.

If the WBS element does not have a start or finish date, the system copies the dates from the

**Assigning Networks to Project Definitions/WBS Elements**

superior WBS element or the project definition into the network header.



## Sales Document Assignment

[Umsetzung von Angeboten in Kundenaufträge \[Ext.\]](#)

[Kopieren von Belegen \[Ext.\]](#)

You can only assign a sales document, such as a sales order, when you create or change a network, before it is released.

If a sales document (follow-up document) originates from another sales document, for example a sales order from a quotation and/or a request for quotation, the account assignment is to the original document. The same is valid for inventory management

During assignment you can enter the number of every document in the chain; the system automatically determines and displays the original document and the last document in the chain

The following applies to the assignment

- If you assign a sales order, that is settled to a project, you maintain a WBS element in the network header simultaneously. The WBS element must have the same project definition as the WBS element which is maintained for account assignment in the sales order.

In this case, the system automatically creates the settlement rules for the network.

- If you assign a sales order, that is not settled to a project, you cannot maintain any WBS elements in the network header.

### See also:

Sales

---

**The Network Structure Graphic**

## The Network Structure Graphic

In the network structure graphic you have all the functionality for creating a network at your disposal, such as inserting new activities or creating new relationships.

To be able to work with the network structure graphic, you must have first defined a graphic profile in the network profile in Customizing.

You can access the network structure graphic from the network header and the individual overviews, such as the activity overviews or the relationship overview, by choosing *Goto* → *Graphics* → *Network structure*.

You will find more detailed information on the network structure graphic in the following sections:

[Graphic Mode \[Page 123\]](#)

[Network Structure Graphic Menu \[Page 124\]](#)

## Graphic Mode

When you call up the network structure graphic, the screen is normally divided into two sections:

### Display Area

The display area shows the active portion of the navigation area.

- You can enlarge or reduce the size of the active portion with the function keys F5 and F6.
- You can collapse either the activities inside a frame or the frame itself.

### Navigation Area

In the navigation area you can see the entire network or standard network.

- The active portion shown in the display area is enclosed by a frame.
- To view another section of the network in the display area, move the frame within the navigation area.
- Change the size of the display frame by dragging the frame to the required size in the navigation area.
- Subnetworks or standard network alternatives are displayed in another frame.

There is a toolbox above the display area containing the most important functions for working in the network structure graphic.

### See also:

[BC SAP Graphics: User's Guide \[Ext.\]](#)

---

Network Structure Graphic Menu

## Network Structure Graphic Menu

The following section gives you a brief overview of the functions available in the network graphic menu.

### Edit

Under the menu option *Edit* you will find all functions for editing activities and their relationships, as well as all settings that you could need for the activities, such as the set of dates.

You can check the (standard) network for loops by selecting the menu options *Edit* → *Functions* → *Loop*.

### See also:

[Loop Analysis \[Page 186\]](#).

To obtain different views of activities, you can group them according to network or WBS element by selecting the menu options *Edit* → *Settings* → *Grouping* → *Network* or *WBS element*:

- When you group according to network, the activities are displayed in a frame by network or subnetwork. The network or subnetwork number is displayed in the frame and the WBS element is displayed in the activity.
- When you group according to WBS element, the activities are displayed in a separate frame for each WBS element. The name of the WBS element to which the activities are assigned is displayed in the frame and the network number is displayed in the activity.

In both cases you can change the display and the relationships but not the assignments to WBS elements.

### Goto

You can call up the different activity overviews by selecting the menu option *Goto*.

### Details

You can call up the detail screens for activities and relationships by selecting the menu option *Details*.

### Settings

Under the menu option *Settings* you can make all the settings relevant to the graphic, as well as for displaying graphic elements, for example, hiding the navigation area. You can open another window by choosing *View* → *New view*.

For ease in editing activities, you can further limit the display area by choosing *Settings* → *Restrict area* → *On*. The display of the selected activities does not change. Activities that are linked to the selected activities by relationships are displayed as circles.

### Extras

From the *Extras* menu option you can display error logs.

See also:

[BC SAP Graphics: User's Guide \[Ext.\]](#)

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**Printing Network Graphics**

## Printing Network Graphics

There are the following ways of directly printing graphics in the *Project System*:

- You can print directly on a local PostScript printer by choosing *Print*.
- You can use the R/3 Spooler to choose any Postscript printer you want.
- You create a print file in the graphic and print externally -for example, on a plotter.

**See also:**

[BC - Printing Guide \[Ext.\]](#)

### Creating Print Files

You can create the following print files for graphics in the *Project System*:

- GRANEDA metafile for output on plotter
- Postscript, Format DINA4, and 1:1 on laser printer
- HPGL format in DINA4 to DINA0 for output on plotter

## Sending the Network Structure Graphic via Mail

You can send another user a “snapshot” of the network graphics via mail.

### Procedure

1. Call up the network.
2. Choose *Goto* → *Graphic* → *Network structure*.  
The network graphic appears.
3. Choose *Network* → *Send...*  
The *Send document* screen appears
4. Enter a tittle and /or a note and send the graphic.

## Printing Shop Papers for Networks

### Use

In the SAP System, the printing of shop papers for networks is carried out in the form of lists.

Lists created and printed by the system refer to all activities, activity elements, components and production resources/tools in a network.

### Features

You can print shop papers [directly from the network \[Page 129\]](#) or [in the background \[Page 131\]](#).

There are three print types in the SAP R/3 System:

- **Original printout**, that is, the first printout of the shop papers.
- **Reprint**, that is, the subsequent printing of shop papers that have already been completely printed.
- **Partial print**, that is, the print of partially released networks.  
This print type is useful if you want to release the individual activities in a network consecutively. The system prints lists for activities that are released but not yet printed.



If you are in the display mode, you can only reprint lists.

### Activities

In order to print shop papers for networks, you must define in Customizing, who can print which lists using which transaction, the appearance of these lists and which data they should contain.

For details refer to the Implementation Guide for the Project System.



## Printing Directly from Networks

All list types defined in Customizing for the corresponding network type, plant, and MRP controller can be printed within network processing.

### Prerequisites

The following prerequisites must be met, to **print lists for activities and activity elements**:

1. If the parameters have been set in Customizing so that the **control key** for the activities is checked when lists are being printed, then you must check the control key for each activity to see whether it allows you to print activities, time tickets and confirmation slips.



If the Customizing parameters do not specify a check on the control key, neither the control key nor the status is checked. In this case, the system does not set any print statuses.

2. The **status** of the network and the activity must allow printing of lists.

Printing of lists is allowed, if the network is:

- either **released** or **partially released**
- neither **technically complete** nor **deleted**.

The printing of individual activities in a network is allowed if:

- the network is either **partially released** or **released**
- the activity is **released**, but not **deleted**.

If the network status does not allow printing, no lists are printed. If the network status allows printing, lists are printed. However, if the network contains activities whose status does not allow printing, these activities are omitted from the list.

3. If you want to print time tickets or confirmation slips, the number of time tickets or confirmation slips in the activity must be larger than zero.

The number of time tickets or confirmation slips is a default value you defined in the work center. It can also be entered by choosing *Details* → *Activity/Element* → *General* and the tab page *additional data*.

Whether **components** or **production resources/tools** are printed on a list depends on the status of the activity to which they are allocated. If the activity can be printed, the allocated components can also be printed.



Phantom assemblies cannot be printed.

### Procedure

To print from a network, choose:

- *Network* → *Print* → *Shop papers* in the network header or

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### Printing Directly from Networks

- *Network* → *Print* → *Object overview* in the object overview.

If you do not want to print all the list types allowed, you can limit the number of lists to be printed for a network by selecting the menu options: *Network* → *Print* → *Print settings* → *List control*.

### Results

- In **create mode** and **change mode**, printing is carried out after you save the network.
- In **display mode** printing is carried out immediately.

## Printing Shop Papers in the Background

You can print shop papers in the background by creating **print indicators** for networks. Within background job scheduling, you can specify that a background printing report is to be started at regular intervals. This report initiates the printing of lists.

In Customizing, you can set up the parameters for printing in the background by creating print jobs for activating print indicators.

### Prerequisites

The same prerequisites as for [directly printing shop papers \[Page 129\]](#) must be met.

### Procedure

To create a background printing indicator, proceed as follows:

1. Call up the network header.
2. Select the menu options *Network* → *Print* → *Print settings* → *Print mode*.  
A dialog box is displayed in which you can select a print mode.
3. Select background processing. Choose *Continue*.  
The system automatically creates a print indicator when you save the network.



The system only prints **one** original printout **per network**, even if you have created several print indicators.

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**Activities**

## Activities

### Definition

The German standard DIN 69 900 describes activities as "components of a process " with the following characteristics:

- They have a duration.
- They have a defined start and a defined finish.
- They are processed without interruption.
- Resources are needed to execute them.
- They incur costs.

The Project System distinguishes between the following types of activity:

- Internally processed activities
- Externally processed activities
- General costs activities

You can break down the activities into activity elements for more detail.

## Control Keys

### Definition

Control keys stipulate the type of activity and activity element.

### Use

You can use the control key to determine:

- Which business functions can be carried out for the activity, for example, whether costs can be calculated.
- How the activity is handled when processed, for example, whether it is costed or whether it can be confirmed.

You define the control key in Project System customizing. You can enter the defined control key in the network profile or standard network profile where it acts as a default value for new activities and activity elements. However, under certain conditions, you can change the control key in the detail screens for activities and activity elements.



You cannot change the control key for general costs activities or services.

Once the activity has been released, no further changes to the control key are possible.

This is useful if you discover that you cannot carry out an activity in your own organization (internally) because of capacity or time constraints, and want to have it performed externally.

You can change the following activity types using the control key:

- Internally processed activities into externally processed activities
- Externally processed activities into internally processed activities

If you change the control key for an externally processed activity, for which a purchase requisition has already been created, into an internally processed activity, the system deletes the purchase requisition.

**Execution Factor**

## Execution Factor

### Definition

Determines how often an activity or activity element is executed and refers to:

- Work
- Duration
- Quantity of material
- Costs

The execution factor of an activity is also the execution factor of the activity elements.

### Use

#### The Effects of an Execution Factor in the Network Header

If an execution factor larger than 1 is entered in the header, you can only enter a multiple of this factor in the activities.

If the factor in the header changes, the factors in the activity change correspondingly. An execution factor in the header only effects operations that themselves have an execution factor (even it is 1).

#### Execution Factors in Standard Networks

When you enter an execution factor in a standard network, it is a default value for networks that are created from this standard network.

#### Execution Factors in Networks

When you copy a standard network to create a network, the values are multiplied by the execution factor. Example:

	Standard network	Network
Execution Factor	3	3
Activity duration	2 hours	6 hours
Work	4 hours	12 hours
Material quantity	1 pieces	3 pieces
Costs	\$ 150	\$ 450

#### Changing the Execution Factor

When you change the execution factor, the system automatically calculates new quantities. Example:

	Old value	New value
Execution Factor	3	2
Activity duration	6 hours	4 hours
Work	12 hours	8 hours
Material quantity	3 pieces	2 pieces
Costs	\$ 450	\$ 300

## Execution Factors in Assembly Processing

If, during assembly processing, you enter a value larger than 1 for the quantity in a sales order item, the system calculates the quantity to be produced and multiplies this number by the execution factor of the standard network, when it creates an operative network. Example:

Quantity in sales order item = quantity to be produced = 2

	Standard network	Network
Execution Factor	3	6
Work	10 minutes	60 minutes
Material quantity	4 pieces	24 pieces
Costs	\$ 150	\$ 900

## Activity Elements

### Activity Elements

You can break down activities into activity elements for more detail. For example, the activity "Production" can be subdivided into the elements "Produce power unit" and "Produce housing". Or you can create an external element for the activity "Engineering/Design", if for instance a detailed design is to be performed by an external company.

There are the same categories for activity elements as for activities themselves in the Project System:

- General costs elements
- External processing elements
- Internal processing elements

You can create activity elements for every activity.

Activity elements contain the same information as activities:

- A work center can be assigned to them.
- They can be assigned to WBS elements
- The operative level for costing and confirmations is determined by the control key.
- The dates for the activity elements are calculated with respect to the start date or the finish date of the corresponding activity. Enter an offset to the start or finish of the activity to specify the start/finish of the activity element.



You cannot allocate materials, or assign milestones, documents or production resources/tools to activity elements. Activity elements do not have relationships.



## Resources

[Work Resources \[Page 138\]](#)

[External Resources \[Page 156\]](#)

[Services \[Page 151\]](#)

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**Work Resources**

## Work Resources

To plan the work involved in your project as well as provide the basis for calculating the costs incurred, you specify in the network activities, for example:

- how much work must be done to carry out the activity.
- which capacities (for example, labor or machines) will perform the work.
- which qualifications are necessary to perform the activity
- which individual capacities or people are necessary to perform the activity

[Work Centers \[Page 139\]](#)

[Work Data in the Activity \[Page 144\]](#)

[Maintaining Work Data in Activities \[Page 146\]](#)

## Work Centers

[PP - Arbeitsplätze \[Ext.\]](#)

A work center is a physical unit within a company where an activity is performed. For example, a work center may be an individual, a group of people, a single machine, or a production line.

The data stored in the work center is required for the following business functions:

- costing
- scheduling
- capacity planning

**See also:**

For more information on work centers, refer to *PP - Work Centers Guide*.

## (Standard) Networks Without Work Centers

You can also create activities without work centers, for example, when you are not sure where the activity is to be performed, or if you only want to use the (standard) network to determine the dates on which the activities should be performed.

When you do not enter any work centers in the activities, the system only calculates the basic start and finish dates and does not calculate capacity requirements or costs.

[Costing Data in the Work Center \[Page 140\]](#)

[Scheduling Data in the Work Center \[Page 143\]](#)

[Capacity Data in the Work Center \[Page 141\]](#)

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Costing Data in the Work Center

## Costing Data in the Work Center

Using the costing application, you can calculate the costs for activities performed with work resources in the network.

To be able to cost a network, each work center has to be assigned to a cost center, and activity types (so called “CO activities”) have to be planned for the cost center. The cost rates in the activity types specify how work in an activity is valued.

The system determines the costs for internal network activities using the **formula** you maintained during work center maintenance. On the *Cost Center Assignment* screen enter the formula in the field *Other activity type*. Generally, the system uses the value you entered for **work** in the network activity in the formula, however, you can specify other formula parameters.

**See also:**

For more information on how the plan and actual costs are determined for networks, refer to [Planning Costs in Networks \[Ext.\]](#)

## Capacity Data in the Work Center

Capacity data in the work center and available capacity together tell you what your people and machines can handle in a certain period of time. Available capacity tells you how much work the capacity category can perform per work center.

Capacity categories include:

- a machine on the shop floor
- a group of people working on a production line
- a group of engineers

You can have several capacities per capacity category.

The system calculates the capacity requirements for networks using the formula entered in work center maintenance. This formula is maintained on the *Overview of Capacity Allocations* screen in the field *Other formula*. Generally, the system uses the value you entered for **work** in the network activity in the formula, however, you can specify other formula parameters.



If you do not enter a formula to calculate the capacity requirements of internal activities, the system will not generate capacity requirements during scheduling.

Capacity planning compares the capacity requirements of activities that were calculated in scheduling with the available capacity defined in the work center.

## Capacity Splits

To carry out detailed resource and resource commitment planning, you can divide capacity categories into individual capacities, for example, into single machines, for which you can enter specific capacity data.

In the network activity, you can split the capacity requirements into individual capacities ("capacity splits").

## People

You can assign individual people to a work center or a capacity category. To be able to do this, you must first enter them in personnel administration.

In the network activity, you can split the capacity requirements among the people necessary to perform the activity. You can confirm the work that these people have performed as well as their attendance or absence in a confirmation of the activity.

## Positions

By assigning a work center or a capacity category to a position, you can use the position to select people for their qualifications. You must first have defined the positions in the Personnel Planning & Development System (PD).

If you enter qualifications for the activities in a network, you can reference them later via the position.

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**Capacity Data in the Work Center****Qualifications**

To guarantee a selection among suitable employees, you can enter the qualifications to be “met” in the work center or the capacity category. Later, in resource planning you can reference this information via the position.

Qualifications which you enter for activities in a network will be compared with the qualifications in the work center or the capacity category when you create a ranking list. From this list you can select the people who best meet the requirements for the activity. The ranking list is created from the total requirements profile, taking the qualification requirements from the work center, capacity and activity all into consideration.

**Distribution of Capacity Requirements**

With the distribution key for capacity requirements you can specify how much of the capacity is required for a certain percentage of the duration. This distribution is taken into consideration in capacity planning. You can enter the distribution key in the work center, in the activity or in capacity planning. In the work center, networks are considered one of the “other types of internal processing”. In Customizing of capacity planning you can determine which distribution key will be used in capacity planning.

## Scheduling Data in the Work Center

In scheduling, the system calculates the start and finish dates of activities, the float times and the capacity requirements. Scheduling uses the following data from the work center:

### Operating Time

If you specify a unit smaller than "day" for the duration in the activity, scheduling uses the operating time you maintained in the work center.

### Scheduling Formula for Other Types of Internal Processing

The system calculates the actual duration of the activity using the **formula** entered on the scheduling screen of the work center and the duration you specified in the network activity. In the work center, networks are considered to be one of the "other types of internal processing", so on the *Scheduling* screen, in the section *Execution Time* the formula is maintained in the field *Other formula*. Generally, the system uses the value which you entered for *Duration* in the network activity, however you can specify other parameters in the formula.



When you enter a work center for an activity, but do not enter a formula for other types of internal processing in this work center, the system will schedule using the duration you entered in the activity.

### Calendar

If you do not specify a calendar in the work center, the factory calendar is used in scheduling.

## Work Data in the Activity

### Work Data in the Activity



You can enter more detailed work data for the activity in the “work” activity element. Work elements contain the same information for planning work as the data for work in the internally processed activities.

### Activity Types (CO Activities)



In activity-based accounting, **activity types** are used to calculate the costs in production orders, networks etc. Within the Project System they are referred to as “**CO activities**” to reflect the controlling view of the activity.

If you want to cost networks, you have to enter an activity type in the field *other activity type* and a formula key for calculating costs. In work centers, networks are considered one of the “other types of internal processing”. You can use the activity type to, add another cost rate for special qualifications, or weekend work, for example.

What you enter in the field *other activity type* in the work center is what will be proposed as a default value in the activity in the network. You can also enter a different activity type during planning or a confirmation.



You can only enter a different activity type in the network activity, if the new activity type is assigned to the same cost center as the work center.

### Work

Here you specify the planned amount of work involved in carrying out the activity. For example, you can specify the engineering activity in hours or energy requirements in kilowatt hours. Using the value for work and the formula for calculating capacity requirements entered the work center, the system determines the capacity requirements during scheduling.

You can enter basic and forecast data for work in network activities.

### Number of Required Capacities

Here you specify the how much capacity is required to do the work in the activity - for example, two people or three machines. This *number* refers to the capacity category, which is entered on the scheduling screen in the work center.

You should to enter a number in this field if you want to determine the duration of, or the work in the activity using the calculation key.

### Percentage

With this value you specify the percentage of the operating time that is used in the activity.

The percentage is only used when you let the system calculate duration, work or the number of capacities using the calculation key.

If you do not enter a percentage, the system will assume 100%.



## Work Data in the Activity

If you enter a work center in the activity, the system calculates duration using the operating time defined in the work center.

### Calculation Key

You can maintain the data for work, duration, and number of capacities required manually, or, you can let the system determine it using the calculation key.

Depending on the calculation key you entered in the activity, the system calculates:

- work
- duration
- number of required capacities

The following table lists which data you have to maintain for which calculation key.



You can also use the calculation key to calculate work and duration without entering a value for the number of capacities. The system automatically sets the number to one and 100 percent for the operating time.

Calculation key for...	You must enter...
Duration	Number of capacities Percentage for operating time Work
Work	Number of capacities Percentage for operating time Activity duration
Number of capacities	Percentage for operating time Work Activity duration

### Distribution of Capacity Requirements

The key for the distribution of capacity requirements specifies how much capacity requirements are accrued (in percent) after a certain percentage of activity duration. The resulting distribution is included in capacity planning based on the distribution key you specified in Customizing.

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Maintaining Work Data in Activities

## Maintaining Work Data in Activities

You maintain work data in the standard network and in the network:

- for **internally processed activities** on the basic data overview and the work overview screen as well as on the respective detail screens.
  - for **work elements** on the work element overview and the respective detail screen.
1. Select *Goto* → *Internal proc. overv* → *Work*  
The *Work Overview* screen is displayed.
  2. Enter the work data.  
You can enter additional work data on the detail screen.
  3. Select the activities for which you want to maintain further work data.
  4. Select *Details* → *Activity/Element* → *Work*. The detail screen for selected activity is displayed.
  5. Enter the required data on the detail screen or change the existing default values, if necessary.
  6. Return to the basic data overview screen with F3.
  7. Save your data..

## Capacity Splits

You can split the capacity requirements among activities and activity elements.

1. Select the menu options *Goto* → *Internal act. overv.* → *Work*

The *Work Overview* screen is displayed.

2. Select the activities whose capacity requirements you want to split.

3. Select the menu options *Details* → *Activity/ Element* → *Capacity Splits*.

The *Capacity Splits* screen is displayed.

4. Maintain the data.

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Assigning Qualifications

## Assigning Qualifications

You can assign qualifications to activities and activity elements.

1. Select the menu options *Goto* → *Internal act. overv.* → *Work*. The *Work Overview* screen is displayed.
2. Select the activities to which you want to assign qualifications.
3. Select the menu options *Details* → *Activity/Element* → *Qualifications*. The *Qualifications* dialog box is displayed.
4. Maintain qualifications in the requirements profile. You can view them here.
5. Click on the *Rnk.list* (ranking list) pushbutton to select the people who are best suited for the activity.



In order for the system to be able to make a suitable match with a specific person, you must have maintained qualifications in PD.

## Replacing Work Centers in Standard Networks

You can replace work centers used in standard networks.

1. From the SAP main menu, select the menu options *Project management* → *Basic data* → *Standard network* → *Replace functions* → *Work center*. The *Replace Work Center: Selection* screen is displayed.
2. Enter the old and new work centers on the selection screen as well as any other relevant data. Click on *Proceed*.

You will get a list of all standard networks and activities which contain the work center.

3. Select the activities, in which the work center should be replaced, and then click on *Replace work center*. The work centers are replaced and the standard network is saved.

## Where-used List for Work Centers in Standard Networks

### Where-used List for Work Centers in Standard Networks

You can create lists showing the standard networks in which specific work centers are used.

This list can be displayed online in an object overview. Once you have displayed the list you can choose from several overview variants for different displays.

From the list of the selected standard networks, you can, for example, branch to one particular standard network and display the detail screens for the various activities.

To display where a work center is used in standard networks, proceed as follows:

1. Select the menu options *Logistics /Accounting → Project management → Information system*.
2. Now select the menu options *Information system → Structure/Schedule → Where-used lists → Wrk cntr in std. net*.
3. Enter the data for the where-used list.
4. Click on *Proceed*.
  - If you have **not yet** entered an overview variant in the profile for standard networks, the system will display a dialog box where you can choose one.
  - If you have entered an overview variant in the profile for standard networks, the system will automatically call up the correct object overview.

With the menu options *Settings → Object overview* you can select other overview variants.

The system displays a list of all standard networks where the work center is used.

5. To display a detail screen for an activity or activity element, select the object and click on *Goto → Detail*.
6. To get more information on the standard network, click on *Goto → Overview*.

The system branches to the alternate overview. On this screen you can access other standard network functions.

## Services

### [Dienstleistung \(MM-SRV\) \[Ext.\]](#)

## Definition

You can also plan services which are to be performed by an another company using externally processed activities and external elements. These activities are the link to the SAP application MM Services (MM-SRV). This application supports the entire cycle in contracting services: from proposals and awarding contracts to the acceptance of services.

Using the data you have entered for the service, the system automatically creates a purchase requisition in which all services for an externally processed activity are summarized into the sub-items.

There are two ways to enter a service in the system:

- As a **planned** service

With planned services, you can refer to services that have been entered as a service master. You can however just enter a text and an amount for services.

The service master is a source of default data. You can reference it for services you want for your external activity.

- As an **unplanned** service

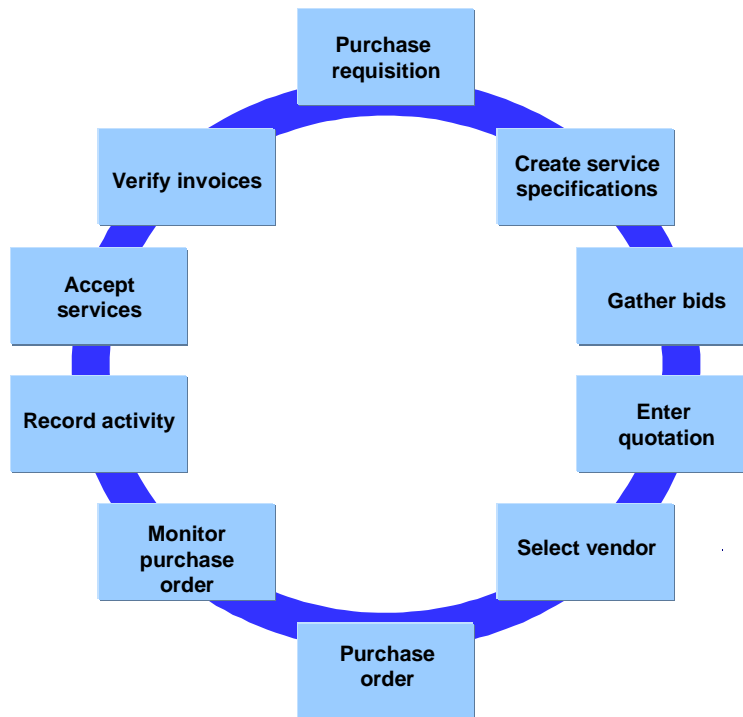
Unplanned services are those tasks which cannot or should not be specified because it is still unclear what exactly the task involves, for example, the translation of technical drawings which do not yet exist.

For unplanned services you can only enter a description and an amount. You can set a value limit for the amount that should not be exceeded. In addition, you can reference existing contracts in Purchasing.

After the services have been performed, you can record them on service entry sheets and then accept them. Accepted entry sheets form the basis of invoice verification for services.

In the following graphic you can see the individual steps involved in the procurement cycle from the solicitation of bids for specific services to invoice verification.

## Services

**See also:**

MM - Services

**When are Purchase Requisitions Created?**

You can create purchase requisitions:

- When you release a network
- Manually in networks using the menu options *Edit → Functions → Activate PReq/resrv.*

You can use this function if, for example, your project is still in the proposal stage and you do not want any purchase requisitions to be created yet.

On the external processing detail screen, you can:

- See the number the system assigned to the purchase requisition
- Branch to the purchase requisition itself
- See whether a purchase requisition exists

**Changes to Quantities and Dates**

If quantities and dates in the activity change, the purchase requisition is automatically corrected, if it has **not yet** been converted into a purchase order. Depending on the release procedure in Purchasing, quantities and changes will be corrected automatically.

If quantities and dates in the activity change and the purchase order has already been created, a workflow is started. The purchasing agent receives a message in the mail system regarding the changes that need to be made. This person can then make the necessary changes to the purchase order directly from the mail system.



### Costs of Services

The system determines the costs of the service from the price you have entered for the service. With the cost element in the activity, you can determine how the activity should be valued.



Pricing using conditions is possible in the network.

## Maintaining Data for Services

[Leistungsgliederung pflegen \[Ext.\]](#)

[Leistungsverzeichnis \(LV\) \[Ext.\]](#)

### Prerequisites

In order to plan services for an external activity, you must

- Enter the relevant control key, or
- Set the *Service* indicator on the *External processing* tab page of the activity overview.

You can also maintain data for services in standard networks.

### Maintaining Data for Services

1. In the activity overview choose the *External processing* tab page.
2. Enter the data for the activity and set the *Service* indicator.
3. Choose *Enter*.

You may have to enter some additional data for external processing, for example the material group and the purchasing group.

The *Service Specifications Maintain* screen is displayed

4. Enter the services required for the activity.

### Outlining Service Specifications

You can break down the services you enter further and enter additional services for each level in the outline.

1. On the *Service Specifications Maintain* screen, select the menu options *Goto → Outline*.

The *Service Specifications Outline* screen is displayed.

2. Position your cursor on the service and click on *Edit → New Subgroup*.

The *Maintain Outline Level* screen is displayed.

3. Enter a new outline level, a short text and then choose *Continue*.

A new subgroup is created.

4. If necessary, create more outline levels.
5. Position your cursor on the service and choose *Goto → Services*.
6. Enter the services.
7. Choose *Back*.

The service outline reappears.

8. By choosing *Extras → Total values* you can cumulate the planned values on the top outline level.

## Maintaining Data for Services

9. You can also view the structure or the service values graphically by selecting the menu options *Goto → Graphic → Hierarchy graphic*.

## External Processing

## External Processing

[Einkauf \(MM-PUR\) \[Ext.\]](#)

### Definition

You can create externally processed activities in your network - for example, if you award the contract for designing a machine to an external design agency.

The system takes the data in the activity and creates a purchase requisition which is processed by the purchasing department. For external processing purposes, you can refer to data from the purchasing department - for example, to a purchasing info record. This contains the prices and delivery times applying to external processing.

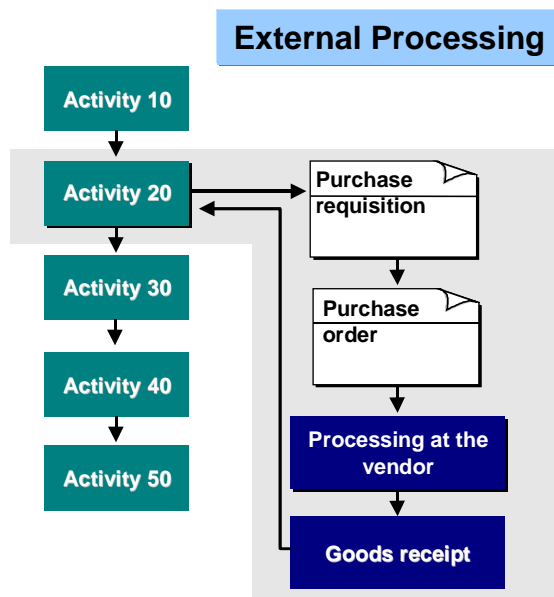
#### See also:

For more information on purchase requisitions and purchasing info records, refer to *MM Purchasing*.



Activities and activity elements are processed in the same way in external processing. The following describes only the functions for externally processed activities. Where there are differences, these are mentioned specifically.

The graphic illustrates how the purchase requisition from an externally processed activity is processed.



### When are Purchase Requisitions Created?

You can create purchase requisitions:

1. When you release a network
2. Manually in networks by choosing *Edit* → *Functions* → *Activate PReq/resrv.*

## External Processing

You can use this function if, for example, your project is still in the proposal stage and you do not want any purchase requisitions to be created yet.

In the external processing detail screen, you can:

- See the number the system assigned to the purchase requisition
- Branch to the purchase requisition itself
- See whether a purchase order exists

### Changes to Quantities and Dates

If quantities and dates in the activity change, the purchase requisition is automatically corrected, if it has **not yet** been converted into a purchase order. Depending on the release procedure in Purchasing, quantities and dates are corrected automatically.

If quantities and dates in the activity change and the purchase order has already been created, a workflow is started. The purchasing agent receives a message in the mail system regarding the changes that need to be made. This person can then make the necessary changes to the purchase order directly from the mail system.

### External Processing in Standard Networks

You can also maintain data for external processing in standard networks. If you use the standard network as a template for creating a network, the system copies the purchasing date into that network.

### External Processing Costs

The system calculates the costs from external processing using one of the following:

- The net price, which you enter
- The data stored in the purchasing info record

## Maintaining External Processing Data

### Maintaining External Processing Data

You usually maintain data for external processing for activities outside of your organization. However, you can also enter data for the external processing in internal activities. For example, if you do not yet know whether the activity is to be processed internally or externally.

If you realize in the course of the project that an activity will have to be performed externally to keep on schedule, then you only have to change the control key on the detail screen. The internal activity then automatically becomes an external activity. When you save the network, the system generates a purchase requisition for the external activity.

You can record the following data for external processing in the network profile:

- control key
- purchasing organization
- cost element

### Data for Externally Processed Activities

You enter the activity data on the *External Processing Overview* and on the detail screens.

If you maintain data for an external activity, you must also specify a cost element. The cost element determines how the external activity is to be valued.

You can also define a work center for an activity performed externally. For example, if a vendor frequently performs the same activity for your company, and you have promised this vendor a certain quota of work. You can then track this vendor's capacity in the Project System through the work center and by entering a control key in the external activity which allows capacity requirements planning.

If you change an external activity to an internal activity by changing the control key, this affects external processing as follows:

- If a purchase requisition has already been created for the activity, the requisition gets marked for deletion.
- If a purchase order already exists, you receive a warning. The purchase order is not deleted automatically.



You can no longer change the control key once the activity has the status "released".

### Data for the Purchase Requisition

You maintain the data for the purchase requisition on the *External Processing Overview* and the detail screen.

### Purchasing Info Record

The purchasing info record is a source of information for the purchasing department. It contains quotation and purchase order data, which are copied into the purchase order.

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**Maintaining External Processing Data**

When entering the data for an external activity, you do **not** have to reference an existing info record, rather you can also enter the data for the purchase requisition manually.



Purchasing info records used for external activities cannot be allocated to a material.

If you enter a purchasing info record, the following data is copied from and cannot be changed:

- sort string
- price unit
- price
- currency
- planned delivery time
- activity quantity
- material group

---

**Activity Data**

## Activity Data

### Work

For internally processed activities you determine how much work is needed to conduct the activity, which capacities are required and which qualifications the personnel should have.

**See also :**

[Work \[Page 138\]](#)

### External processing

Activities and activity elements can also be performed outside of your company. The system takes the data in the activity and creates a purchase requisition which is processed by the purchasing department.

**See also :**

[External processing \[Page 156\]](#)

### Material

You can allocate materials to all activities in standard networks and networks.

### Production Resources/Tools (PRT)

You can assign production resources/tools (PRT) to each activity. Unlike machines and fixed assets, production resources/tools (PRTs) are movable (non-stationary) operating resources, that are required to perform an activity and can be used repeatedly.

### Documents

There are several ways to assign a document to an activity.

- In the Document Management System you can create a document for an activity.
- You can assign the document to an activity as a production resource/tool (category: document).
- Long texts describing an activity. On the screen, you usually see only the first line of the long text.
- Standard texts are text modules used for descriptions of procedures and other documentation of how to perform the work in an internally processed activity.
- PS texts are texts which you can define any way you like and which have text types for activities and WBS elements.

### Classification

You can use the SAP Class System to classify activities. Within the Class System you can determine the values that are used to value an activity. Classification is also used for cost summarization.





When you create a network by copying from a standard network with classification attributes, the classification attributes are **not** copied. They are only used for classifying the standard network.

## Organizational Data in Activities

The following is valid for activity organizational data :

- **Material components** must belong to the same company code as the activity to which they are allocated.
- The plant for the work centers used in **internally processed activities** must belong to the same company code and controlling area as the plant in the network header.
- Purchasing organization and plant must belong to the same company code in **externally processed activities**.
- You can enter the plant on the detail screen for a **general costs activity**. The system determines the company code from the plant you entered and checks it against the controlling area in the network header.

## Maintaining Activities: Overview

[Project Builder \[Page 221\]](#)

There are several ways of maintaining activities and their data in the Project System.

### Activities in (Standard) Networks

In standard networks and networks you can maintain the data for the activities:

- On the activity overview
  - You can maintain the data of **internally processed activities** on two overviews:
- The basic data overview shows the general data for the activity such as its duration, control key and description.
- The work overview shows the work-related data for the activity such as the work center, CO activity type, number of required capacities and work percentage.
- On the activity **detail screens**

You can maintain various data for activities on the detail screens: You can enter data for external processing on the detail screen of an internally processed activity. This is useful if at some point you can no longer perform the activity in-house and have to have it performed externally.

You can maintain all other activity data under the menus *Activity*, *Details* and *Extras*.

### Activities in the Graphic

You can maintain activities in the network graphic, Gantt chart and in the [project planning board \[Page 252\]](#).

### Maintaining Activities and WBS Elements Together

You can edit WBS elements and activities at the same time, for example when you already know as you are setting up your project which WBS elements will be broken down in more detail with activities.

To do so, use [structure planning \[Page 321\]](#), if you want to work in list format, or the [project planning board \[Page 252\]](#), if you want to work graphically.

## Deleting Activities

### Use

Under certain prerequisites you can delete activities and activity elements directly, that is, delete physically.



You cannot undo the physical deletion of activities and activity elements.

You can give activities, and activity elements that cannot be deleted directly the *Deletion flag* status. They are deleted from the project logically.

### Prerequisites

You can only directly delete activities and activity elements when they have the status *Created* or *Released*.



When deleting activities and activity elements, any residence time that may have been set up is taken into account. If a residence time has been entered in the network type, no deletion is carried out as from the *Released* status and a corresponding message is issued.

If material components are assigned to an operation with the status *Released*, the activity cannot be deleted. First delete the material components.

**See also:**

[System statuses in networks \[Page 353\]](#)

### Features

Set the *Deletion flag* status for activities, and activity elements if they have any other status than *Created* or *Released*. As long as the activities and activity elements have the status *Deletion flag* and deletion indicators have not been set, you can cancel the deletion flag.

### Activities

The following table contains the functions with which you can delete or mark for deletion the activities or activity:

Function	Menu Path
Delete activity or activity element directly	<i>Edit</i> → <i>Object</i> → <i>Delete</i>
Give activity or activity element the status <i>Deletion flag</i>	<i>Edit</i> → <i>Status</i> → <i>Deletion flag</i>
Canceling Deletion Flags	<i>Edit</i> → <i>Status</i> → <i>Revoke deletion flag</i>



To be able to revoke the deletion flag, you must first show the activities or activity elements that have been flagged for deletion. To do this, choose *Edit* → *Object* →

---

**Deleting Activities**

*Display deleted* → *Disp.* The activities or activity elements that have been flagged for deletion are underlined in grey. You can now cancel the deletion flag for the required activities or activity elements.

## Maintaining Activities on the Activity Overview

You can create additional activities and activity elements in a network or standard network that already exists.

### Procedures

#### Creating Activities

1. In the initial screen for networks or standard networks choose *Activities*.  
The activity overview appears.
2. Enter the data for the activities.
3. Select an activity.
4. Choose *Detail → Activity/Element → General*.  
The detail screen for the activity appears.
5. Enter the necessary data.
6. Choose *Continue*.
7. Save the network.

#### Creating Activity Elements

1. Call up the activity overview.
2. Select an existing activity and choose *Activity → Element overview*.  
The overview for activity elements appears.
3. Enter the data for the activity elements.
4. Select an activity element.
5. Choose *Detail → Activity/Element → General*.  
The detail screen for the activity element appears.
6. Enter the necessary data.
7. Choose *Continue*.
8. Save the network.

#### Inserting Activities or Activity Elements

You can create additional activities or activity elements for an existing standard network and network.

1. Call up the overview for either activities or activity elements.
2. Position the cursor on an activity or an activity element.
3. Choose *Edit → Object → Insert*.  
The system creates a new line above where the cursor is.
4. Enter the necessary data.

---

**Maintaining Activities on the Activity Overview**

5. Save your data.

**Deleting Activities**

After you delete an activity and save the (standard) network, the system automatically deletes all activity elements, milestones, production resources/tools, and material allocations for the activity.

Always proceed as follows when deleting:

- First delete the relationships for this activity
- Then delete the activity itself

**... In a Standard Network**

To delete activities from a standard network, proceed as follows:

1. Call up the activity overview.
2. Select the activity or the activities you want to delete.
3. Choose *Edit* → *Object* → *Delete*.

The activity is deleted.

**... in a Network**

Before you delete activities from a network, you should pay attention to the following:

- If the network does not yet have the system status "Released", the activity is deleted from the data base immediately.
- If the network already has the system status Released, the system sets the system status to *Deletion flag*.

To show or hide the activities with the status *Deletion flag* in the respective activity list, choose *Edit* → *Object* → *Display deleted* → *On/Off*.

To delete activities from a network, proceed as follows:

1. Call up the activity overview.
2. Select the activity or the activities you want to delete.
3. Choose *Edit* → *Object* → *Delete*.
4. Save your data.

## Maintaining Activities in the Network Graphic

When you create activities in graphic mode, you can insert them in the precise location you want in the network structure.. The system uses the type of relationship that you defined in the Settings menu for the new activity.

### Procedures

#### Creating Activities

1. In the standard network or network, choose *Goto → Graphic → Network structure*.  
The network graphic appears.
2. Choose *Insert activity*.  
The node area is opened under the display area.
3. Click on an activity in the node area that you want to create.  
The cursor in the display area changes shape.
4. Move the activity to the desired position in the network.  
The activity is inserted.
5. Double click the activity.  
The detail screen for the activity is displayed.
6. Maintain the data for the activity on the detail screen. Choose *Continue* to return to the network graphic.
7. Create additional activities.
8. To return to the standard network or network, choose *Back*.
9. Save your data.

#### Deleting Activities

1. Call up the activity overview.
2. Choose *Goto → Graphic → Network structure*.
3. Click an activity in the node area that you want to delete. The activity is selected.
4. Choose *Delete*.  
A dialog box appears.
5. Choose *Continue*. The activity is deleted.
6. Choose *Back* to return to the standard network or network.

#### Displaying Activities in the Network Graphic

Activities are displayed in the network graphic as follows:

- Activities from external networks have a dashed black border
- Activities in the network you are currently editing have a solid black border
- Activities which are partially confirmed have a diagonal line through them

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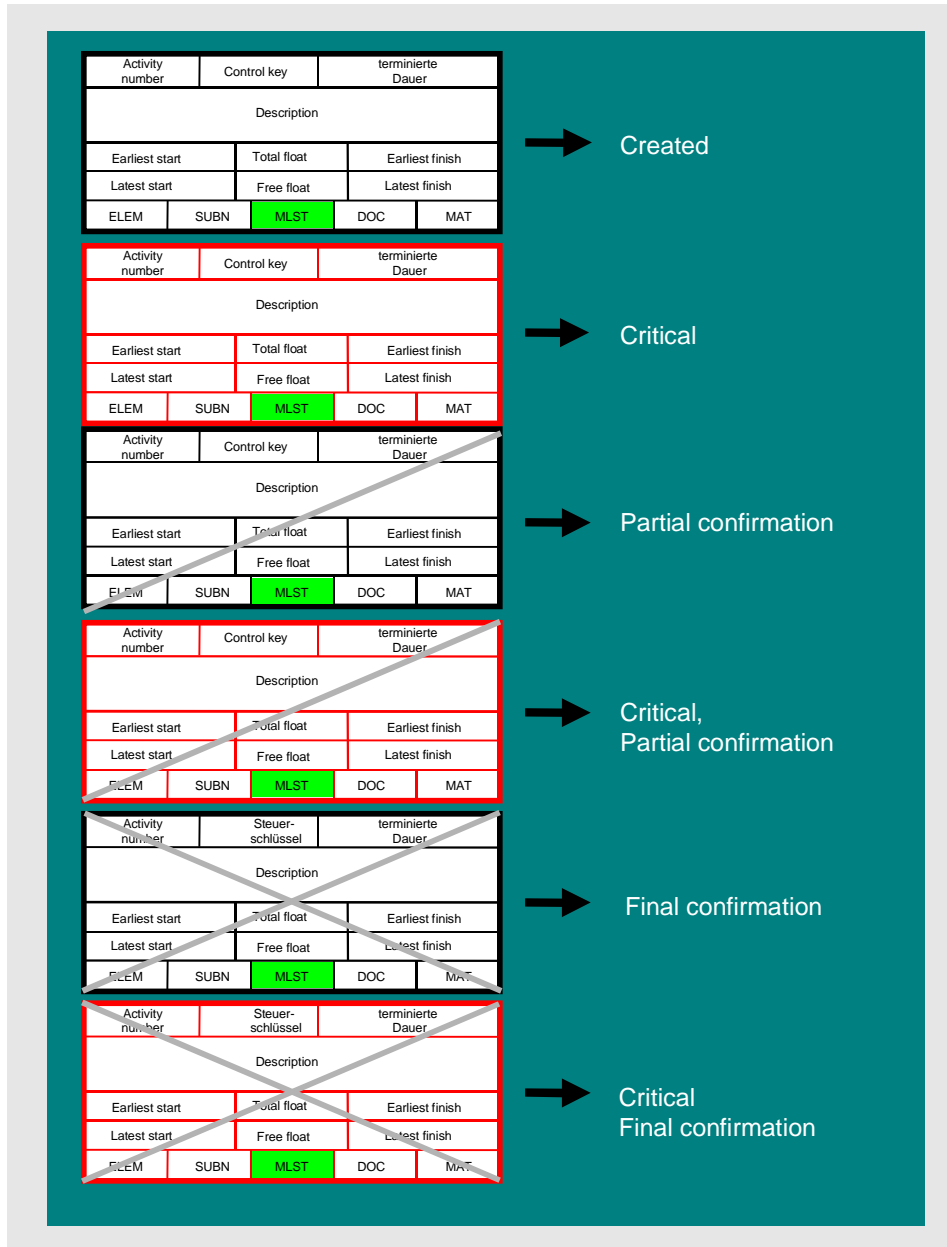
**Maintaining Activities in the Network Graphic**

- Activities which have final confirmations are crossed out
- Activities which have milestones, materials, subnetworks, documents and activity elements assigned to them, are identified by a color border. In the standard configuration, all indicators are the same color. You can change the colors in customizing.
- Activities in a subnetwork or a standard network alternative are displayed in a frame.
- Subnetworks or standard network alternatives are displayed in a frame.
- You can collapse the activities inside a frame or the frame itself.

The following graphic shows how the various activity statuses are displayed in the network graphic.



## Maintaining Activities in the Network Graphic



---

**Maintaining Activities in the Gantt Chart**

## Maintaining Activities in the Gantt Chart

To create new activities in the project planning board, proceed as follows:

1. Select the WBS element for which you want to create the activity.
2. Select the menu options *Edit* → *Activity* → *Create*.  
A dialog box appears.
3. Edit the data for the activity.
  - Choose *New activity*, to create additional activities.
  - Choose *Continue* if you do not want to create a new activity.

The activity is inserted.

4. Double click on the activity in the project planning board to call up the detail screen for work data.

## Maintaining Activities in the Object Overview

If you use the object overview to maintain activities you do not have to maintain each activity overview individually.

1. Select the menu options *Goto* → *Object overview*.
  - If you have specified an overview variant in the profile, the system uses this object overview.
  - If you did not specify an overview variant, the system displays a dialog box where you can select one.
2. Select the activities on the object overview that you want to maintain.
3. To go to the corresponding detail screen, choose *Details* → *Activity /Element*
4. Enter the required data in the detail screen or change the existing default values, if necessary.
5. Goto the next detail screen by clicking on *Prev. act.* or *Next activity* and maintain the data.
6. Save your data.

---

**Setting the System Status for Activities**

## Setting the System Status for Activities

[Systemstatus in Netzplänen \[Page 353\]](#)

You can set a system status for a single activity. For example, the settings you make in Project System Customizing for the material availability check, determine whether the system checks material or PRT availability when you release activities.

If you release activities individually, the system sets the status "Partially released" in the network header.



You can only release an activity which is assigned to a WBS element if the WBS element has the status "Partially released" or "Released".

1. Select the relevant overview for the activity from the *Goto* menu or click on the corresponding function key.
2. Select the activity or the activities you want to release.
3. Choose *Edit* → *Status* → *Release actvty/elem*.

The activity is released. In the network header, the system status is set to "Partially released".

## WBS Elements in Activities and Activity Elements

If you create a (standard) network and assign it to a WBS element in the header, the system copies that WBS element into all activities and activity elements as a default value.

- You can assign the activities to different WBS elements by selecting the menu options *Goto* → *WBS assign.-activity*.
- You can assign activity elements to different WBS elements by selecting the menu options *Activity* → *WBS assign.-element*.

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**Relationships**

## Relationships

### Definition

Relationships determine the chronological sequence of activities in a network or a standard network.

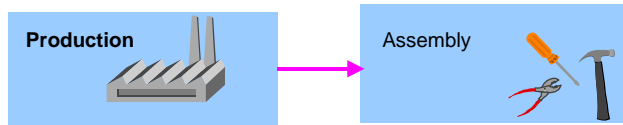
There is usually a reason for a specific sequence of activities in a network. For example, there may be technical dependencies between individual activities. These dependencies are represented by relationships in which one activity is the predecessor or the successor of another activity.

## Types of Relationships

The type of the relationship determines how the individual activities are linked with each other.

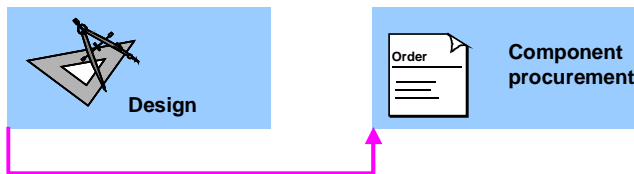
### Finish - Start (FS) Relationship

This is the relationship between the end of an activity to the beginning of the following activity. In the graphic, the “assembly” activity cannot start before the “production” activity has finished.



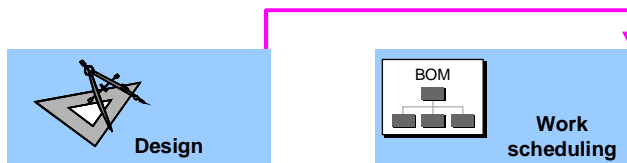
### Start - Start (SS) Relationship

This is the relationship between the beginning of an activity to the beginning of the following activity. In the figure, the “component procurement” activity cannot start before the “design” activity has started.



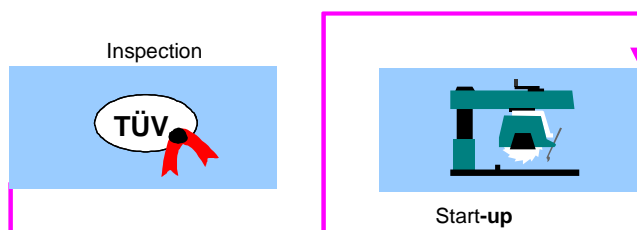
### Finish - Finish (FF) Relationship

This is the relationship between the end of an activity to the end of the following activity. In the figure, the “work scheduling” activity cannot finish before the “design” activity has finished.



### Start - Finish (SF) Relationship

Relationship from the beginning of an activity to the end of the following activity. In the figure, the “start-up” activity “start-up” cannot finish before the “inspection” activity has started.



---

**Types of Relationships**

SF relationships are seldom used in practice. You can usually change SF relationships to FS relationships by changing the sequence of the activities.



## Time Interval

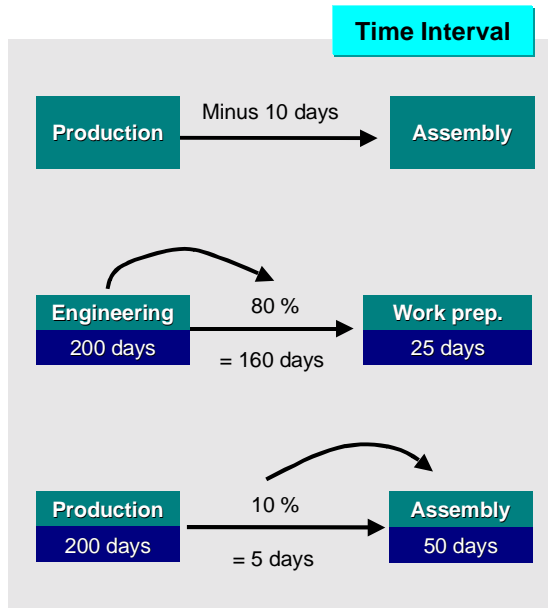
The time interval determines the chronological interval between two activities that are linked by a relationship.



The activity "assembly" is linked to an activity "production" through an FS relationship with a time interval of two days. Assembly starts at the earliest two days after the activity "production" has finished.

You can define the time interval in the Project System in several ways:

- With positive or negative values
- With absolute values or as a percentage



### Positive or Negative Time Interval

You can maintain the time interval with positive or negative values.



The time interval between an activity "assembly" and an activity "production" is **minus** 10 days. The activities are linked to each other by an FS relationship. The activity "assembly" starts 10 days before the activity "production" is finished.

### Absolute or Percentage Time Interval

You can determine the time interval with absolute or percentage values:

- Absolute values: In the standard version, the system expects absolute time intervals: for example, two days or five hours.

---

**Time Interval**

- Percentages: The percentages for the time interval refer to the duration of the predecessor or the successor.

[Example: Percentage Time Interval \[Page 179\]](#)



If you enter a percent for the time interval, you must specify whether it is a **percentage** of the preceding activity or succeeding activity's duration.

## Example: Percentage Time Interval

### Percentage of the Predecessor's Duration

Suppose the activity "engineering/design" takes 200 days and is the predecessor of the activity "work scheduling". The time interval is defined as 80% of the duration of the predecessor. When 80% of the duration of the activity "engineering/design" has been reached, the activity "work scheduling" starts. Thus, the time interval between the two activities is 160 days.

### Percentage of the Successor's Duration

Suppose the activity "assembly" takes 50 days and is the successor of the activity "production". The time interval is defined as 10% of the duration of the successor. Thus, the time interval between the two activities is five days.

---

**Relationships Across Networks**

## Relationships Across Networks

Cross-network relationships enable you to spread the tasks to be performed over several individual and smaller networks thereby creating an overall network.

You link several (standard) networks with each other when you create a relationship from an activity in one (standard) network to an activity in another (standard) network.

You use cross-network relationships to link:

- standard networks with standard networks

When you edit a standard network with cross-network relationships, you lock up all other standard networks.

When you create operative networks from standard networks with cross-network relationships, the system will ask you if you want to create the same relationships between the operative networks.

- networks with networks

When you edit a network with cross-network relationships, you lock up all the relationships to all of the linked networks.



Even if you defined a level of detail of "one" in the standard network profile, you can still create relationships between several standard networks.

**See also:**

[Creating Networks by Copying Standard Networks \[Page 94\]](#)

## Relationships Maintenance

### Use

You can create relationships for

- Internally processed activities
- Externally processed activities
- General costs activities



You cannot create relationships for activity elements.

### Activities

You can edit relationships in several ways:

- In table form
  - on the [relationship overview \[Page 182\]](#) in networks, in structure planning, and in the project planning board.
- In graphic form
  - in the [network graphic \[Page 184\]](#)
  - in the [project planning board \[Page 286\]](#)
  - in the Gantt chart in network maintenance
    - To process relationships in the Gantt, proceed as described in the [project planning board \[Page 286\]](#).

## Editing Relationships in the Overview

## Editing Relationships in the Overview

### Use

You can create, edit and delete relationships in a tabular overview.

### Prerequisites

You have created activities in a network or standard network.

### Procedures

#### Create relationships

1. Call up the activity overview in a network or standard network.
2. Select the activities for which you wish to create relationships.
3. Choose *Activity* → *Relationship overv.*


The relationship overview for the first selected activity appears. All the activities of the current network are displayed in the *Activity selection* section (lower list) of the dialog box. If activities in the current network are linked by relationships to other networks, these activities are also displayed.

You can thus link the current activity with an activity from another network via activity selection.

You can edit relationships between activities in several ways:

Edit Relationship	Procedure
As <b>predecessor</b>	<ol style="list-style-type: none"> <li>1. In the relationship overview choose the <i>Predecessor</i> tab page.</li> <li>2. In the activity selection list select the activity that should immediately proceed the selected activity.</li> <li>3. Choose <i>Create relationship</i>.</li> </ol>
As <b>successor</b>	<ol style="list-style-type: none"> <li>1. In the relationship overview choose the <i>Successor</i> tab page.</li> <li>2. In the activity selection list select the activity that should immediately follow the selected activity.</li> <li>3. Choose <i>Create relationship</i>.</li> </ol>

## Editing Relationships in the Overview

Mixed (predecessors and successors)	<ol style="list-style-type: none"> <li>1. In the relationship overview choose the <i>Mixed</i> tab page.</li> <li>2. In the activity overview select an activity as a predecessor or successor.</li> <li>3. Choose <i>Create relationship</i>.</li> <li>4. Set the <i>Scs</i> indicator for successors in the relationship overview.</li> </ol> <div style="text-align: center;">  </div> <p>If you do not set this indicator, the relationship is a predecessor relationship</p>
-------------------------------------	--

4. Select the relationship and choose *Details → Detailed information for object*.

The detail screen for the relationship appears.

5. Enter the detailed data for the relationship and choose *Back*.

The relationship overview appears again.

6. Choose the *Next* arrow for the next selected activity and repeat steps 2 to 4.
7. When you have created all the required relationships, save.

## Delete Relationships



When you delete relationships, you change the structure of the network. This can affect scheduling and the capacity load.

1. Call up the activity overview.
2. Select the activity whose relationships you want to delete.
3. Choose *Activities → Relationship overv.*

The relationship overview for the selected activity appears.

4. In the relationship overview select the relationship to delete.
5. Choose *Edit → Object → Delete* and confirm the message.
6. Save your data.

---

Editing Relationships with Network Graphics

## Editing Relationships with Network Graphics

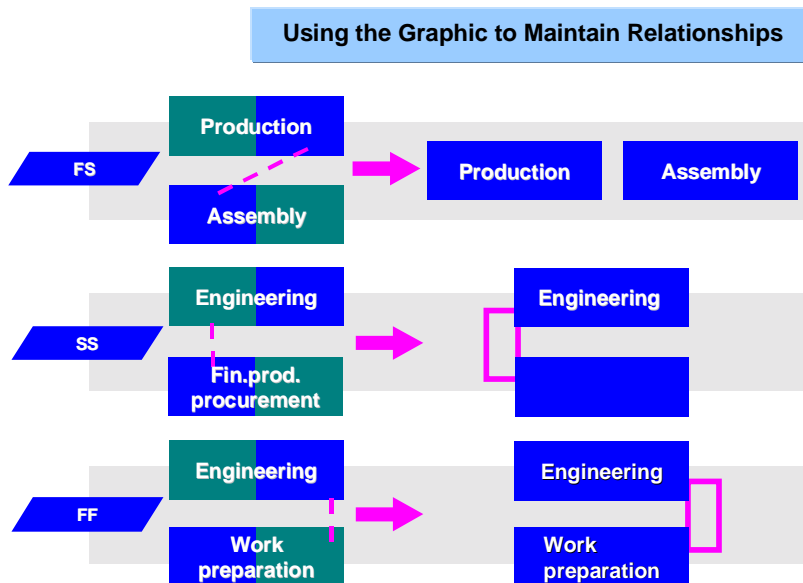
### Procedures

#### Creating Relationships with Network Graphics

1. To access the network graphic in a standard network or network, choose *Goto → Graphic → Network structure*.  
The network graphic appears.
2. Choose *Connect*.  
The mouse pointer takes the form of a pencil.
3. Select the activity from which you want to create a relationship and hold down the mouse button.  
A dashed line is shown on the screen.
4. Draw a line to the other activity in the relationship and release the mouse button.  
The system connects the two activities with a line and records the relationship type.  
The graphic below illustrates how you draw the line to create the different types of relationships.
5. To change the pencil back to the normal cursor, click on the left mouse button.
6. To enter detailed data for the relationship, select the relationship and choose *Detail → Relationship*.
7. To create more relationships, repeat steps 3 - 7.
8. To return to the standard network or network, choose *Back*.
9. Save your data.



## Editing Relationships with Network Graphics



## Deleting Relationships in the Network Graphic



When you delete relationships, you change the structure of the network. This can affect scheduling and the capacity load.

1. In the standard network or network, choose *Goto → Graphic → Network structure*.  
The network graphic appears.
2. Select the relationship you want to delete.
3. Choose *Edit → Object → Delete* and confirm the message displayed.  
The relationship is deleted.
4. To return to the standard network or network, choose *Back*.
5. Save your data.

---

Executing Loop Analysis

## Executing Loop Analysis

### Use

A loop exists, if relationships lead from an activity via other activities back to the same activity.



Networks and standard networks containing loops cannot be scheduled.

The system automatically checks standard networks and networks for loops when you schedule them.

### Prerequisites

You execute loop analysis for a network structure in the network graphic.

### Procedure

1. Call up a network or standard network in create or change mode.
2. Select the menu options *Goto → Graphic → Network structure*.  
The network graphic appears.
3. Select the menu options *Edit → Functions → Loop analysis → Proceed*.  
Relationships that cause a loop are highlighted in color.
4. Select the relationship that causes the loop.
5. Choose *Delete*.  
The relationship is deleted.
6. To deselect a loop, select the menu options *Edit → Functions → Loop analysis → Reset*.
7. To return to the network or standard network, choose *Enter*.

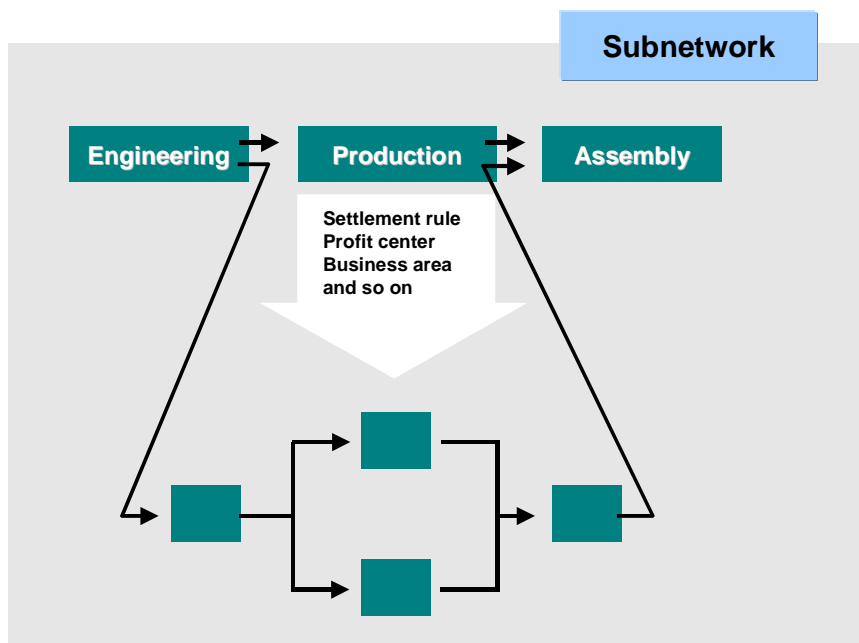
## Subnetworks

### Definition

A subnetwork is a network which covers only part of a project and is linked in relationships with other subnetworks in the same project.

### Use

You can use subnetworks to refine and detail your networks as planning progresses. The system treats subnetworks and networks the same, that is, you can plan dates, capacities, costs, materials and production resource/tools also with a subnetwork.



### Structure

When creating a subnetwork, you can copy the following data from the superior network and from the activity to which the subnetwork adds detail:

Taken Over from the Superior Network	Data	What You Should Know
From the network header	WBS element	
	Sales order	The sales order can be assigned to the network or the relevant WBS.
	Configuration characteristics	Prerequisite: The network was created using configuration

**Subnetworks**

From the activity	<ul style="list-style-type: none"> <li>• Earliest/latest dates 0 or</li> <li>• Earliest start and latest finish date</li> </ul>	Depends on the settings in Customizing for the Project System
	Profit center	
	Business area	
	Jurisdiction Code	
	Long texts in activities	The long texts are copied into the header for the subnetwork.
	Relationships	



The network profile for the superior network is not copied into the subnetwork. Materials and PRTs remain assigned to the activity in the superior network.

**Control Keys**

Among other things, the control key regulates whether dates, capacity requirements, and plan costs are determined and recorded. In Customizing for the *Project System*, you set the relevant indicators in the control key.

For example, if you want to add detail to the dates, capacity requirements, and planned costs for the superior activity by means of the activities in the subnetwork, set the indicators in the control key as follows:

Indicator in Control Key	For Activities in Subnetwork	For The Activity in the Superior Network
Scheduling	Set	Not set
Costing	Set	Not set
Determining capacity requirements	Set	Not set

When you create a subnetwork, the activity in the superior network receives a control key which you have defined in *Define Parameters for Subnetworks* in the Project System IMG. If the activity already had a control key, the new one overwrites it. The activities in the subnetwork receive their control keys from the network profile.



In the Project Information System you can analyze the dates of the subnetwork together with the dates of the superior network.

## Integration

### Notes on Using Plant Maintenance Orders as Subnetworks

You can also use plant maintenance orders to add detail to an activity. You make the assignment to the superior network and its activity in the plant maintenance order itself. Note the following:

- The dates for the activity are copied into the order.
- Relationships from the order are not copied.
- Plant maintenance orders are not taken into account during WBS scheduling.
- You can only display plant maintenance orders as subnetworks in the structure/date Project Information System.

**See also:**

[Plant Maintenance Orders \[Ext.\]](#)

## Creating Subnetworks

## Creating Subnetworks

### Prerequisite

The network to whose activity you want to add detail using subnetworks should already exist. You must have defined the subnetwork parameters in Customizing for the *Project System*.

### Procedure

1. From the *Sap Easy Access*, choose *Logistics/accounting* → *Project System* → *Basic data* → *Project* → *Special maintenance functions* → *Network* → *Create*.
2. Enter the required subnetwork data in the initial screen for the network.
3. Choose *Enter*.

The network header for the subnetwork appears.

4. Choose the *Assignments* tab page.
5. In the *Subnetwork* field, specify the numbers of the superior network and the appropriate activity from it.

This is the activity to which you want to add detail using the subnetwork you are now creating.



The activity in the superior network must not have status *Closed* or *Technically complete*.

6. Enter the other data in the network header.
7. Complete the data for the subnetwork - for example, activities, components, and so on.
8. Save your data.

If detail has been added to an activity by means of a subnetwork, the *Subnetwork exists* indicator in the detail screen for the activity is active.

To switch between the superior network and the subnetwork, choose *Goto* → *Subnetwork* → *Subnetwork overview* or *Superior network* in the network header of the relevant network.

## Subnetwork Creation with Configuration

### Use

As with networks, configuration is carried out, when you create a subnetwork using a configurable standard network as a template.

### Activities

If the network that is superior to the subnetwork was created using configuration, the following is valid for characteristic value assignment:

- If the variant class of the superior network is the same as the variant class of the standard network that is being used as the template for the subnetwork, the characteristic value assignment of the superior network is used.
- If different variant classes are used, the characteristic value assignment has to be repeated for the subnetwork.
- If a configuration profile has not been maintained for the subnetwork, the characteristic value assignment of the superior network is used.

### See also:

[Configuration \[Page 104\]](#)

[Characteristic Value Assignment \[Page 106\]](#)

---

Milestones

## Milestones

### Purpose

In general milestones are used to mark the transition between various phases or departments. You can also use *Milestones* for other tasks and functions in the *Project System*.

You can create milestones for activities and WBS elements. They can be used for the following tasks:

- [Milestone Trend Analysis \(MTA\) \[Ext.\]](#)  
Milestone trend analysis is a simple and effective method of controlling dates in a project. The milestone dates on different report dates are compared. In the graphical MTA chart you recognize trends and delays immediately.
- Conducting earned value analysis using the [milestone technique \[Ext.\]](#)  
The milestone technique is one of the measurement techniques for determining the earned value in earned value analysis. Each milestone represents the portion of the work that is completed in an activity or in a WBS element.
- Determining [Dates in the Billing Plan \[Page 201\]](#)  
A milestone is linked with a date in the billing plan. When the milestone is reached, the actual date of the milestone is copied into the billing plan.
- Triggering predefined [Milestone Functions \[Page 195\]](#)  
You trigger a series of events to process a particular business process with milestone functions.



## Creating Milestones

[Anlegen von Projektelementen \[Page 264\]](#)

### Procedure

You can create milestones in networks, standard networks, work breakdown structures (WBS) and standard work breakdown structures (standard WBS). You can also create milestones for activities and WBS elements together in the project planning board and structure planning.



You cannot create milestone for activity elements.

### Creating Milestones in Networks, Standard Networks, WBS or Standard WBS

1. Call up a network or WBS.
2. Goto the activity or WBS element overview.
3. Select an activity or a WBS element, and then choose *Activity* → *Milestone overview* or *WBS element* → *Milestone overview*.

You can use the function keys *Std. milestone* and *Mile. group* in the milestone overview to insert a [standard milestone \[Page 218\]](#) or a [milestone group \[Page 218\]](#).

4. Maintain the milestone data.

The system will automatically assign a number to the milestone.



If you enter a key in the field *Usage* that was also maintained for the standard milestone, you can copy the standard milestone data directly.

5. Select the milestone and choose *Details* → *Milestone*.
6. Maintain the data on the details screen.

For instance, you can set the [Sales document date \[Page 201\]](#) indicator or [Trend analysis indicator \[Ext.\]](#) here.

You can also maintain data for [milestone functions \[Page 197\]](#) for activity milestones here.

7. Choose *Back*.
8. Save your data.

### Creating milestones in the project planning board

1. Call up the project planning board for an existing project.
2. Select an activity or a WBS element, and then choose *Edit* → *Create* → *Milestone*.
3. Maintain the milestone data.

If you want to create more milestones for the activity or WBS element, choose...*Milestone*

**Creating Milestones**

4. Choose *Continue*.
5. Save the project planning board.

**Creating milestones in structure planning**

1. Call up the structure planning for an existing project.
2. Select an activity or WBS element.
  - For activities choose the *Activity data* tab page.

The network activity overview appears. Create milestones as in network maintenance.
  - For WBS elements choose the *WBS basic data* tab page.

The work breakdown structure WBS overview appears. Create milestones as in WBS maintenance.
3. Save the structure plan.

## Milestone Functions

### Use

Predefined milestone functions are used in networks, to trigger a sequence of events for a particular business process.



You are planning the construction of a glass elevator using a network. After the activity *approval* is released, the network will be automatically updated to include a standard network *procurement* containing all activities related to purchasing.

### Features

The following milestone functions are available:

- Release the activities that follow directly
- Release to release milestone
 

If no release stop indicator has been defined, all the remaining activities in the network are released.
- Include standard network
 

If you enter both a preceding and successive ending for the network, the system will automatically create FS relationships from the preceding activity to the first activity in the standard network and/or from the final activity in the standard network to the successive activity.
- Create Network
 

You can create a new network by copying an existing standard network.

If the standard network, which is being used to copy the network from, has relationships to another standard network that has already been used to create another network, the relationships between the two networks have the same structure as those between the two standard networks..
- Include subnetwork
 

Creates a [subnetwork \[Page 187\]](#) from an existing standard network. The activity in the network you enter in *Parameters* is given extra detail by the subnetwork.
- Start workflow task
 

You can use this milestone function to activate one of your own workflow tasks or one of SAP's standard workflow task.

**See also:**

[SAP Business Workflow \[Ext.\]](#)

[User-defined Standard Tasks and Workflow Tasks in Milestones \[Ext.\]](#)

## Milestone Functions

### Triggering Milestone Functions

A milestone function can be automatically triggered by a change of the system or user status of an activity.

If you enter both a system status and a user status for a milestone function, the system triggers the function both when the system status changes and when the user status changes. If the function is only to be triggered once, then the first status to change will be the one which triggers the function.

You can trigger a milestone manually during [confirmation \[Ext.\]](#) of an activity. In this case you decide when making the confirmation, whether the function is triggered or not.

#### See also:

[Example: Triggering a Milestone Function \[Page 198\]](#)

# Entering Data for Milestone Functions

## Prerequisite

You have created a milestone for an activity.

**See:**

[Creating Milestones \[Page 193\]](#)

## Procedure

1. Select the milestone and choose *Details* → *Milestone*
2. Choose the *Functions* tab page.
3. Set the *Functions* indicator.
4. Select one or more milestone functions and determine the parameters for triggering them.

You can enter additional parameters for triggering milestone functions by choosing *Parameters* In the following table those functions are listed for which you have to maintain additional parameters.

Milestone Functions	Necessary Parameter
Include standard network	Standard network and alternative, predecessor and successor activities
Create Network	standard network, alternative and network type
Include subnetwork	Standard network, alternative and activity
Start workflow task	(standard) workflow task

5. Choose *Back*.
6. Save your data.

**See also :**

[Example: Triggering a Milestone Function \[Page 198\]](#)

---

**Example: Triggering a Milestones - Function**

## Example: Triggering a Milestones - Function

The activities which immediately follow activity 0040 in network 40000906 should be released when the activity is confirmed.

### Procedure in Milestone Maintenance

Create a milestone for activity 40. You maintain the following fields on the *Functions* tab page of the *Milestone detail* screen

1. Set the *Functions* indicator.
2. Select the function *Release following activities*.
3. Enter the system status CNF for confirmed in the *Syst.Sts* field.
4. Set the *Change Status* indicator to +.  
The function is then triggered, when the status is set.
5. Set the *Once* indicator.  
The function is then only executed once.

You leave the field *Activa (Activate)* blank, since the function is to be triggered by the status change.

### Procedure during Confirmation

If you set the *Final Confirmation* indication when you are confirming activity 40, you receive a message, when you save, stating that functions are assigned to the operation via milestones. The system asks you if you want to execute the function. Confirm this.

A dialog box appears in which the milestone function, the network and the corresponding activity are listed. The function is executed after you have confirmed this question..

## Dates in Milestones

### Features

You can maintain basic dates and forecast dates for milestones. The following is an overview of dates that you can define for milestones

#### Actual dates

Actual dates can be either:

- Manually entered, once a milestone is met, or
- Automatically copied from the confirmation, if the degree of processing is greater or equal to the percentage of completion in the milestone.

The confirmed actual date is the default value, however, you can overwrite it.

#### Fixed Dates

A fixed date is a manually entered finish date on which the milestone should be reached.



To be able to use the [milestone technique \[Ext.\]](#) for WBS elements in earned value analysis, you must use fixed dates for the milestone.

#### Dates

As an alternative to fixed dates, you can also specify the following for a milestone:

- Whether the offset should be for the earliest or latest set of dates for the activity (only for activities)
- Whether the offset should be to the start or finish of the activity or WBS element
- How long the offset to the scheduled start or finish of the activity or WBS element is You enter the offset as either a time or a percentage. When the offset is a percentual value, it is a percentage of the duration.



The activity has a duration of 50 days and an offset of 20% to the start. The milestone date is 10 days after the activity start.

#### Scheduled Dates

Scheduling calculates the scheduled dates in the following manner:

- If the milestone has a fixed date, this date is automatically copied as a scheduled date.
- If an offset date was entered for the milestone, the system uses this information in determining the scheduled date.

Dates in Milestones



## Dates in the Billing Plan

### Use

In customer projects, for instance made-to-order production, the customer is usually charged for services, as soon as certain phases of the project have been finished.

You add dates to billing plans by using milestones in activities or WBS elements. When the milestone event is reached, the system copies the actual dates of the milestone to the billing plan and starts the billing process.

There are two principally different ways of copying dates from milestones to the billing plan:

- Billing with assembly processing

The dates from all milestones, which have the *Sales document date* indicator set, are copied from the network, which is automatically created during assembly processing, to the billing plan for the assembly item in the sales document.

- Billing without assembly processing

You can manually define milestones and consequently dates to be copied to the billing plan. In this case the milestones must also have been chosen for the billing plan previously, the sales order must have the item category *TAO*.

#### See also :

[Milestone billing \[Ext.\]](#)

[Billing plans \[Ext.\]](#)

### Prerequisites

You have linked the milestone in the activity or WBS element with a date in the billing plan by using the *Sales document date* indicator and entering 01 in the *Date key* of the milestone.

---

**Standard structures**

## Standard structures

### Purpose

By defining standard projects and networks you can standardize project management in your company by referring back to data that has been derived from existing projects.

Standardization is one method of ensuring in the initial phase that projects are structured efficiently and economically.

A further advantage of standardizing project structures is that it makes the processing of projects more transparent, enables the comparison of projects and subsequently facilitates project controlling.

In the Project System there are several different standard structures that you can use as templates to create operative structures.

- [Standard networks \[Page 203\]](#) for creating networks
- [Standard project definitions \[Page 213\]](#) for creating project definitions
- [Standard work breakdown structures \[Page 214\]](#) for creating work breakdown structures
- [Standard milestones \[Page 218\]](#) for creating milestones in networks

## Standard Networks

[Montageabwicklung im Projektsystem \[Ext.\]](#)

[Schnittstellen des Projektsystems \[Ext.\]](#)

Standard networks are neutral network structures that can be used as templates to create other standard networks or operative networks.

### Time Saver

Creating networks from standard networks can save you time and help ensure consistency of your business processes when different projects have the same activities, for example, in the engineering phase.

### Template Projects

You can link standard networks to standard work breakdown structures to create a template project which contains both the project structure and the activities assigned to the project. When you copy a standard network that is linked to a standard WBS, you create an operative WBS at the same time that you create an operative network. For information on standard work breakdown structures, refer to [Standard Work Breakdown Structure \(Standard WBS\) \[Page 214\]](#).

### Assembly Processing

A standard network is necessary when you want use assembly processing to create an operative network from a sales order. The network that is created in the background from a sales order is always copied from the standard network to which you have allocated the material in the sales order. For more information on assembly processing, refer to *LO- Assembly Processing*

### Milestone Functions

In addition, when you create operative networks through milestone functions, the system copies the standard network you specified in the milestone parameters. For more information on milestones, refer to [Milestones \[Page 192\]](#).

### Decentralized Planning

You can also exchange standard networks with PC software such as Microsoft® Project using the MPX interface. For more information see MPX Interface (Microsoft Project).

## More on Standard Networks

Creating Standard Networks

Standard Network Alternatives

Creating Standard Network Alternatives

Material Allocation to Standard Networks

Relationships Across Networks

Standard Settings for Standard Structures



## Creating Standard Networks

1. [Materialkomponenten zum Standardnetz zuordnen \[Ext.\]](#)
2. [Vorgängen Vorlagentexte zuordnen \[Page 216\]](#)
3. From the main menu select the menu options *Accounting or Logistics* → *Project management* → *Basic Data*.
4. Select *Standard structures* → *Standard network* → *Create*  
The initial screen is displayed.
5. Enter:
  - Alphanumeric key for the standard network (optional)  
If you do not enter a key, the system generates a number for the standard network.
  - Standard network profile
  - Key date  
The key date determines when the standard network becomes valid. The default value is today's date.  
If you enter a key date that lies in the future, you must enter this date, or a later one, every time you change the standard network. The changes only come into effect as of the key date.
4. Choose *Enter*.  
The system displays the standard network header, which contains data that is valid for the entire standard network.
5. Enter relevant data, such as a standard WBS element, to create a link between the standard WBS and the standard network.
6. Use the *Goto* menu to enter data for the standard network.  
[Activities \[Page 132\]](#)  
[Maintaining Relationships Between Activities \[Page 174\]](#)  
Allocating Materials to Activities  
For information on enhancements for customer-specific fields in standard networks, refer to Project System Customizing.
7. Save.



You can use an existing standard network to create other standard or operative networks. All data from this standard network is copied into the new (standard) network, which you can overwrite. However, once you have saved your new (standard) network any subsequent changes to the original will **not** be copied.

**Standard Settings for Standard Structures**

## Standard Settings for Standard Structures

In Customizing for the Project System you define profiles for standard structures. These profiles contain defaults for functions, subprofiles, graphics, and settings, which are automatically copied when you create a standard structure. You can overwrite these defaults.



Functions such as graphics or the Microsoft MPX interface require a certain level of detail. The level of detail determines how many standard networks are displayed in the graphic or are transferred to the PC using the MPX interface. You may want to temporarily change the profile to display several standard networks in the graphic, for example.

**Changing Profile Data in Standard Structures**

Standard Structure	Menu path
Standard project definition	<i>Control</i> tab page
Standard work breakdown structure	<i>Control</i> tab page
Standard network	<i>Edit</i> → <i>Settings</i> → <i>Profile</i> .

## Standard Network Alternatives

A standard network can have several alternatives. You can create alternatives for different usages or validity dates.

You can use an alternative to:

- Define different network structures for planning your processes. You can create different activities or other relationships in the alternative, for example.
- Specify a certain type of usage or processing. For example, if changing directives will alter the process of your standard network on a specific date, you can define an alternative.

Each time you create an alternative to a standard network the system automatically assigns it a number. You can overwrite this with an alphanumeric key.

---

Creating Standard Network Alternatives

## Creating Standard Network Alternatives

1. Choose *Standard structures* → *Standard network* → *Create*  
Specify an existing standard network and confirm your entry. The system then displays the alternative overview is displayed.
2. Select *Edit* → *Object* → *Create*.  
The standard network header is displayed. The system automatically assigns a new number for the alternative. You can overwrite this.
3. Enter data for the standard network.
4. Save.



## Deleting Standard Network Alternatives

1. Call up a standard network by selecting *Standard structures* → *Standard network* → *Change*.
2. From the standard network header, select *Goto* → *Alternative overview*.  
The alternative overview is displayed.
3. Choose the alternative that you want to delete and select *Edit* → *Object* → *Delete*.
4. *Save*.  
The standard network alternative is physically deleted from the database.

## Deleting Standard Networks

## Deleting Standard Networks



Deletion without archiving can lead to loss of data. You should only use this type of deletion for standard networks you have created for test purposes.

### To delete standard networks from the database:

1. In the R/3 main menu choose *Project management* → *Basic data* → *Standard structures* → *Standard network* → *Delete*.

You reach the initial screen Deletion of standard networks without archiving.

2. Maintain selection criteria.



If you do **not** explicitly enter the selection criterion *Deletion flag* then the standard networks are deleted regardless of whether they have a deletion flag.

3. Select the option:

- *Objects deleted online*

If you want to archive the standard network activities or standard networks online in the maintenance transaction.

- *Complete standard networks*

If you only want to archive complete standard networks from the database

- *Check task list indicator*

If you have maintained the customer enhancement CPRE0001 and want the check the standard networks to be deleted according to your own criteria.

- *Log*

If you want the archiving run to be completed before you see the information messages. The information for all standard networks that have not been deleted because of the customer enhancement check CPRE0001 are then collected in a log.

If this indicator is **not** set the archiving run terminates as soon as a standard network is still being used according to your criteria.

4. Choose *Create job*.

The standard networks are deleted online.

### See also:

For more information on deleting and archiving standard networks, refer to *BC- Archiving of Application Data*

## Assigning Standard Networks to Standard Work Breakdown Structures

### Assigning Standard Networks to Standard Work Breakdown Structures

When you create assignments between a standard network and a standard work breakdown structure, you can create an operative WBS at the same time that you create an operative network.

The system only creates the WBS elements to which activities from the standard network are assigned, along with the WBS elements superior to them in the hierarchy.



You cannot assign a standard network directly to a standard project definition; you must do this indirectly, using a standard WBS.

#### Assigning a Standard Network to a Standard WBS Element

You can link both the header and the activities of a standard network to a standard WBS element. When you enter the standard WBS element in the header, this WBS element will be proposed for the activities as well. You can overwrite it.

1. From the main menu select the menu options *Accounting or Logistics → Project management → Basic Data*.
2. Select *Standard structures → Standard network → Change*.
3. Enter the identifier of the standard network, and an alternative if required, and confirm.  
The standard network header is displayed. If you did not specify an alternative, the system first displays the overview of alternatives.
4. Enter the standard WBS element in the *Std. WBS element* field on the header of the standard network.
5. Save.

#### Assigning Activities in Standard Networks to Standard WBS Elements

You can link the activities in a standard network with one or more standard WBS elements from one or more projects. Proceed as follows:

1. From the main menu select the menu options *Accounting or Logistics → Project management → Basic Data*.
2. Select *Standard structures → Standard network → Change*.
3. Enter the identifier of the standard network and confirm.  
The standard network header is displayed.
4. Choose *Activity*.
5. In the activity overview, enter the standard WBS element(s) for the activities.
6. Save.

When you create an operative network by referencing a standard network, the system also creates work breakdown structures with the WBS elements to which network activities have been assigned (along with the part of the structure superior to these elements).

---

**Assigning Standard Networks to Standard Work Breakdown Structures****See also:**

For detailed information on the various ways that linked standard networks and standard WBS can be copied into operative structures, refer to [Creating Networks by Copying Standard Networks \[Page 94\]](#)

## Standard Project Definition

Standard project definitions are neutral definitions of projects that can be used as a template to create standard or operative project definitions. A project definition forms the outline of the project because it contains the basic organizational data which is valid for the entire project, such as:

- Controlling area
- Business area
- Company code
- Plant
- Factory calendar

[Standard Settings for Standard Structures \[Page 206\]](#)

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**Standard Work Breakdown Structure (Standard WBS)**

## **Standard Work Breakdown Structure (Standard WBS)**

### **Definition**

Neutral work breakdown structure that can be used more than once and serves as a template for creating operative work breakdown structures.

### **Use**

For future projects with the same structure, you can use standardized work breakdown structures as a template to create operative work breakdown structures or other standard work breakdown structures. This not only saves time when creating a project in the system, but also in the design phase.

A standard work breakdown structure contains the individual elements (WBS elements) that structure the standard project as well as general organizational data.

You can link standard networks with standard work breakdown structures and so create templates not only for the organization of a project but also for its processing.



When you use a standard network that is assigned to a standard WBS to create an operative network an operative WBS is also created. However if you create an operative WBS from a standard WBS to which a standard network is assigned, an operative network is **not** created.

## Creating Standard Work Breakdown Structures



Before you create a standard work breakdown structure, you should plan the work carefully since it is not possible to delete or archive standard project definitions. You can only delete or archive individual standard WBS elements.

The procedure for creating a standard work breakdown structure is basically the same as for creating a normal work breakdown structure, however some functions such as document management, progress analysis or settlement rules are not available. When you create a standard WBS a standard project definition is automatically created. We recommend that you read the information in [Work Breakdown Structure \(WBS\) \[Page 15\]](#) before you create a standard WBS.

1. From the R/3 main menu choose *Accounting or Logistics → Project management → Basic data*.
2. Choose *Standard structures → Standard WBS → Create*.  
The initial screen appears.
3. Enter the following:
  - The key for the standard project  
or choose *Open number* to have the system suggest a key.
  - The project profile
4. Choose  to enter the organizational data for the project definition.  
The *Create Std. WBS: Project Def. Basic Data* screen appears.
5. Enter the relevant organizational data.
6. Choose . The WBS element overview screen appears. Here you can enter details of the WBS elements.
7. You can go to the detail screen for individual WBS elements by double-clicking on the WBS element key. Here you can also enter detail data.
8. Save your data.

### See also:

[Creating Standard Work Breakdown Structures by Copying \[Page 216\]](#)

For information on user fields in standard project definitions and standard WBS elements, refer to the IMG for the Project System.

---

Creating Standard Work Breakdown Structures by Copying

## Creating Standard Work Breakdown Structures by Copying

You can use an existing standard WBS to create other standard or operative WBSs. The data from this standard WBS is copied into the new standard WBS, where you can overwrite it if you wish. Any subsequent changes to the original will **not** be copied to the new standard WBS.

Read [Work Breakdown Structure \(WBS\) \[Page 15\]](#) for detailed information before creating a standard WBS.

1. From the main R/3 menu, select *Accounting or Logistics* → *Project management* → *Basic data*.
2. Select *Standard Structures* → *Standard WBS* → *Create*.  
The initial screen is displayed.
3. Enter

- The key for the standard project, or have the system propose the project identifier by clicking *Open number*
- The project definition of the WBS you want to copy.

You do not have to enter a project profile.

4. Confirm.

The system displays the *Create Standard WBS: Project Definition Basic Data* screen. Note that the organizational data cannot be changed. You must first include the structure before you can change this data.

5. Choose *WBS Structure*.

The system displays the *Create Standard WBS: Include Standard WBS Element* screen. Note that the WBS elements of the standard WBS you copied are displayed.

6. Select all standard WBS elements that are relevant for your new standard project.
7. Choose *Replace* to rename the standard WBS elements you selected.
8. Choose *Include* to copy the structure.

The *Create Standard WBS: Project Definition Basic Data* screen is displayed. Note that you can now change the organizational data.

9. Change the organization data if necessary.
10. Click *Structure* to return to the WBS element overview and maintain any additional data.
11. *Save*.



## Deleting Standard WBS Elements



Standard WBS elements deleted using this procedure **cannot** be retrieved.

You cannot delete or archive standard project definitions.

1. From the main R/3 menu, select *Accounting or Logistics* → *Project management* → *Basic data*.
2. Select *Standard Structures* → *Standard WBS* → *Change*.

The initial screen is displayed.

3. Enter the identifier for the standard WBS and choose *Structure*.
4. Select the standard WBS element(s) that you want to delete.
5. Choose *Edit* → *Object* → *Delete*

The selected standard WBS elements are physically deleted from the database.

6. *Save*.

## Standard Milestones

### Purpose

Standard milestones are used exclusively in the *Project System* as a source for creating milestones and other standard milestones.

You can combine different standard milestones in a milestone group. For example, you can group together all milestones that are relevant for earned value analysis.

#### See also:

[Milestones \[Page 192\]](#)

### Integration

You copy standard milestones to create milestones in activities and WBS elements. You do this in (standard) network maintenance, (standard) work breakdown structure maintenance as well as in the project planning board and structure planning.

## Creating Standard Milestones

### Procedure

1. From the R/3 main menu choose *Accounting or Logistics → Project management → Basic data*.
2. Choose *Standard structures → Standard milestone → Create*.  
The initial screen for standard milestones appears.
3. Enter a name for the standard milestone.  
You can also enter the name of an existing standard milestone to copy from.
4. Choose *Enter*.  
The milestone detail screen appears.
5. Enter the data for the standard milestone.
6. Choose *Functions*, if you want to use [milestone functions \[Page 195\]](#) with the standard milestone.
7. Select one or more milestone functions and determine the parameters for triggering them.



You can only maintain [user statuses \[Page 357\]](#) for standard milestones, if you enter a status profile.

The status profile or the user status that you have maintained is copied from the standard milestone, if the network has the same status profile as the standard milestone.

You can enter additional parameters for triggering milestone functions by choosing *Parameters*. In the following table you can see those functions where you have to maintain additional parameters.

Milestone Functions	Necessary Parameter
Include standard network	Standard network and alternative, predecessor and successor activities
Create Network	standard network, alternative and network type
Include subnetwork	Standard network, alternative and activity
Start workflow task	(Standard) workflow task

8. Choose *Back*.

---

**Creating Standard Milestones**

## Project Builder

### Purpose

The Project Builder is a user-friendly method of accessing the Project System, which enables you to edit your projects quickly and efficiently.

Its clear screen structure, split into three, and the ease with which you can use it, combine to provide you with a comfortable working environment that facilitates your daily work in the Project System. It also provides you with an overview of all the projects that interest you.

Context sensitive menus, Drag & Drop, and the capability to define your own worklist and templates pool, further accelerate your work with projects.

### Integration

The Project Builder integrates all the application-specific functions necessary for processing your projects:

- It contains almost the entire functionality of structure planning, and is the basis for all planning steps in a project. It thus facilitates consistent project coordination and execution.



You schedule projects in the project planning board, which you can call up directly from the Project Builder.

- All the editing transactions for work breakdown structures and networks can be executed in the Project Builder. In the Project Builder, you can process WBS structures and networks individually or integrated in other structures

### Features

In the Project Builder

- You can create, change or display all project structure data in one transaction.
- All the overview and detail screens from structure planning are available. You can also go to:
  - Graphic views (hierarchy and network graphic)
  - The [project planning board \[Page 252\]](#) with all its overviews (capacity, costs, component, and maintenance order overviews)
- You can define a user-specific worklist and a user-specific templates pool, which you can then use to process your projects.
- The hierarchy of your current project is displayed in a separate screen area, while you are editing it.
- You can make user-specific changes to the settings, to suit your way of working.

#### See also:

[Structure of the Project Builder \[Page 223\]](#)

[Executing Functions in the Project Builder \[Page 227\]](#)

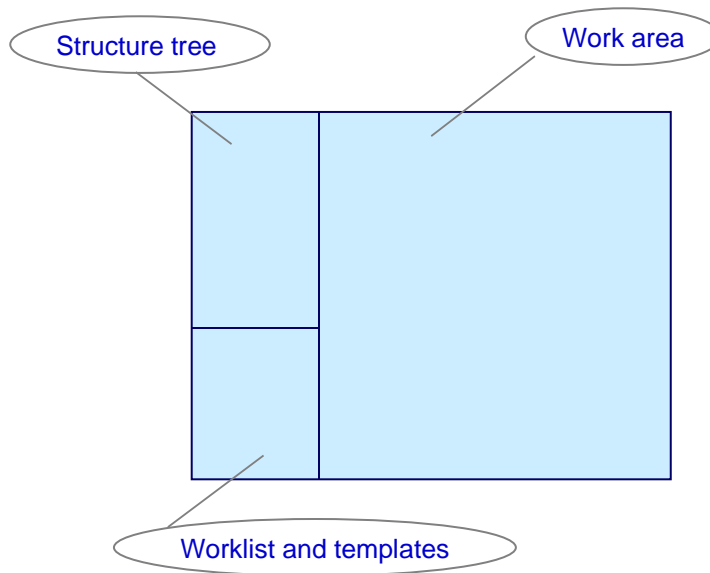
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**Project Builder**

[Changing Settings \[Page 225\]](#)

## Structure of the Project Builder

The following screen areas are available for working in the Project Builder:



### Structure tree

The *structure tree* displays the project object (project definition, WBS element, activity, activity element, milestone, document) that you have selected in its hierarchical context. You can change the dependencies and assignments of individual project objects in the structure tree manually (using *Drag & Drop*). You can also create or delete project objects. In the user-specific options you can specify how many hierarchy levels are displayed expanded in the structure tree. Additionally you can choose whether you want to see a preview of the last project you have processed, when enter the Project Builder. (see [User-Specific Settings \[Page 225\]](#))



In the structure tree itself, you can only carry out tasks that change the structure of the project, that is create, move and delete objects. Business transactions are not possible.

For more information, see [Functions in the Structure Tree \[Page 230\]](#).

### Worklist/Templates

In this screen area you have access to both the worklist and the templates

You can store user-specifically frequently used project data (project definitions, networks, and WBS elements) in the **worklist**, so that you can access them quickly later. Furthermore, a list of the last five projects that you have worked on is always displayed in the worklist.

## Structure of the Project Builder

The **templates** are available during processing to create new objects or structures in the current project by.

- Adding new project objects
- Copying existing project structures
- Copying from standard project structures

You can also change the *templates* screen area user-specifically (see [User-Specific Settings \[Page 225\]](#)). When you start the Project Builder, the worklist is displayed. However, when you open a project, the system automatically switches to the *Templates* screen area. When you are working on a project, you can switch between the worklist and the templates by choosing the relevant pushbutton. When you are working on a project, you can switch between the worklist and the templates by choosing the relevant pushbutton.

## Work Area

In the work area, you see the details view of the object selected in the structure tree. You can also directly access overviews of subordinate objects. Here you can execute all the business transactions for project coordination and execution. You can always move between the detailed view of the selected object and the overviews of the subordinate objects.



You can change the size of the three screen areas to suit your own requirements. When you leave the Project Builder these settings are saved automatically.



## User-Specific Settings

### Use

You can make various personal settings for working with the Project Builder. These are saved user-specifically and can be changed at any time. If you do not make any user-specific settings, the system works with preconfigured standard settings.

### Features

There are two ways of maintaining user-specific settings:

- The first time you call up the Project Builder, a dialog box appears informing you about the settings that you can make. You can then go to the *User-specific settings* dialog box or leave this dialog box without changing the standard settings. If you do not change the settings, the dialog box appears next time you work with the Project Builder. If you do not want this to happen, select the *Never display again* indicator.
- To access the *User-specific settings* dialog box where you can define or change your individual settings, choose *Settings* → *Options*.

The following options are available:

Option	What You Should Know	Default Setting
Open project with <ul style="list-style-type: none"> <li>• Structural display</li> <li>• Project planning board</li> <li>• Display last used</li> </ul>	You choose the display variant for opening the Project Builder.	Structural display
Editing mode <ul style="list-style-type: none"> <li>• Change</li> <li>• Display</li> </ul>	If you usually only look at project data without changing it, you load the data for display only. In this case, the database is not locked and the project can be edited (changed) by another user. If you do not have change authorization, the system automatically selects display mode.	Change mode
Hierarchy levels (possible number: 1 - 99)	You determine how many hierarchy levels are expanded in the structure tree. If you do not enter a number, the system displays all hierarchy levels.	Two hierarchy levels
Preview last project	If you select this indicator, the last project you worked with is automatically displayed in the structure tree the next time you call up the Project Builder.	Not active

**User-Specific Settings**

Display deleted objects	If you select this indicator, the system displays objects flagged for deletion (logically deleted objects), highlighting them in color.	Not active
Templates <ul style="list-style-type: none"><li>• New objects</li><li>• Projects</li><li>• Standard templates</li></ul>	With these indicators you determine which object are contained in the <i>Templates</i> screen area: <ul style="list-style-type: none"><li>• 'Empty' objects for copying (e.g. WBS, network etc.)</li><li>• Existing projects as templates for copying from</li><li>• Standard templates (standard project definitions, standard WBS elements, standard networks)</li></ul>	All active
Processable objects	With these indicators you determine which objects can be edited in the Project Builder. Objects that are not to be edited are not displayed in the screen areas.	All active

## Executing Functions in the Project Builder

In the Project Builder, you can execute most functions using several methods.

Execute Function via	What You Should Know
Drag & Drop	<p>This technique enables you to move or copy objects from one screen area to another. Simply select an object and drag it, keeping the mouse button pressed, to the position where you want to insert it. (The prerequisite is that it is possible to insert the object at the relevant position.)</p> <p>It is possible to use Drag &amp; Drop in the following directions:</p> <p><i>Worklist → Structure tree</i></p> <p><i>Templates → Structure tree</i></p> <p><i>Structure tree → Worklist</i></p> <p><i>Structure tree → Templates</i></p>
Pushbuttons	<p>The pushbuttons in the work area are context sensitive, which means that are only those pushbuttons are displayed that are required at the present stage of processing.</p> <p>Above the structure tree, again only those pushbuttons are active whose functions can be executed at the current point of time.</p> <p>For more information and an overview of the pushbuttons, see <a href="#">Working with the Project Builder [Page 228]</a>.</p>
The context menu	<p>You can call up the context menu, for example, by clicking with the right-hand mouse button on an object. This menu is object-specific in all screen areas, which means, that only the functions that you can execute for that type object are displayed.</p>
Click/double-click on an object (Structure tree, worklist)	<ul style="list-style-type: none"> <li>Click in the structure tree: The detail screen for the selected object is opened in the work area.</li> <li>Double-click in the worklist: The selected project data are loaded in the structure tree and work area.</li> </ul>
The menu bar	<p>The menu functions only apply to work area and <u>not</u> to the structure tree, worklist, or templates. Exception: The moving of object up and down in the hierarchy also affects the structure tree. .</p>

## Working in the Project Builder

## Working in the Project Builder

You access the Project Builder as follows:









In SAP *Easy Access* choose *Logistics or Accounting* → *Project system* → *Basic data* → *Project* → *Project Builder*.

### Overview of Pushbuttons in the Project Builder

In the Project Builder several pushbuttons are available for displaying and editing projects. In this topic the general pushbuttons are discussed that are important for working in the Project Builder. For an explanation of the pushbuttons in the structure tree, see [Functions in the Structure Tree \[Page 230\]](#).




### General Function Pushbuttons

You can access or execute the following functions using pushbuttons:








Pushbutton	Function	Effect
	Back	You return to the screen you processed last in the work area.
	Forward	If you have used the <i>Back</i> icon, you go forwards again by clicking on this icon.
	Project planning board	You go directly to the project planning board. From here you can return to the Project Builder by choosing  .
	Network structure graphic	The network structure graphic appears.
	Hierarchy graphic	The hierarchy graphic for WBS elements appears.
	Display<>Change	You can switch between change and display mode. This is also possible, if you chosen the display mode as the standard setting in the user-specific settings. If you do not have change authorization or if the project is currently being processed by another user, the system remains in display mode. When you switch to change mode, the relevant objects are locked in the database automatically.
	Mass change	The system goes to the field selection screen for <a href="#">Mass Changes [Page 342]</a> .

### Project Object Icons

In all three screen areas the following icons are used to depict project objects.

Icon	Description
	Project definition
	WBS element
	Network

Working in the Project Builder

	Activity
	Activity elements
	Material
	Milestones
	PS texts
	Relationship
	Documents



In the work area, these icons are also used to call up overviews and detail screens for the corresponding project objects.

## Functions in the Structure Tree

## Functions in the Structure Tree

### Use

In the structure tree you can change the structure for planning and executing a project. Business transactions are not possible.

You can display the following objects in the structure tree:

- Project definition
- WBS element
- Network headers
- Activity
- Activity elements
- Milestones
- PS texts
- Material components
- Production resources/tools (PRT)
- Documents




Relationships are not displayed in the structure tree.









See also: [User-Specific Settings \[Page 225\]](#)

### Features




You can execute functions in the structure tree using icons or the context menu (right-hand mouse button). There is a separate tool bar above the structure tree.

Function	Icon	Context menu	What You Should Know
Open		<i>Open</i>	<p>A dialog box appears in which you enter the relevant project definition, WBS element, or network. You can decide by push-button whether you</p> <ul style="list-style-type: none"> <li>• Only open the project</li> <li>• Only copy the project to the worklist</li> <li>• Open the project and copy it to the worklist</li> </ul> <p>You can only call up the context menu for this function, if you click using the right-hand mouse button on the <b>empty</b> background of the structure tree.</p>

Functions in the Structure Tree

Create		<i>New → Project/ Network / Simulation</i> or  <i>Create → WBS element, network, etc.</i>	You can use this function to: <ul style="list-style-type: none"> <li>Create a new project / network / simulation (You can only call up the context menu for this function, if you click using the right-hand mouse button on the <b>empty</b> background of the structure tree.)</li> <li>Create a new project object for the object selected in the structure tree (the new object always appears <b>below</b> the selected object). It is also possible to create a network by copying.</li> </ul>
Create by copying		<i>New → Copy Project/ Copy Network / Copy Simulation</i>	With this function you can create a new project / network /simulation by copying a template. You can only call up the context menu for this function, if you click using the right-hand mouse button on the <b>empty</b> background of the structure tree.
Include		<i>Include</i>	You can include existing WBS elements or standard networks in the structure.
Move WBS element up or down a level in the hierarchy		<i>Hierarchy → Level up/ Level down</i>	The selected WBS element is moved up or down a level in the project hierarchy.
Copy		<i>Copy</i>	You can copy project objects (and their subordinate objects) and insert them at another position in the project hierarchy. All the objects subordinate to the selected object are highlighted in color.
Cut		<i>Cut</i>	The selected objects are cut out of the structure tree and are copied to the clipboard.
Undo cut		<i>Undo cut</i>	The objects that were cut out are restored to their former position in the structure tree (undo function).
Paste		<i>Paste</i>	Objects that have been cut out or copied are inserted from the clipboard in the structure <b>below</b> the selected object.
Delete		<i>Delete</i>	The selected object is deleted from the structure tree.
Find		<i>Find in tree</i>	A dialog box appears in which you enter an object or its description to be found in the structure tree. When the object is found, it is selected in the structure tree.

## Functions in the Structure Tree

Find next		<i>Find next</i>	If there are several project objects that have the search term, you can use this function to find all the other objects
Expand		<i>Expand / collapse</i>	<p>The following options are available in the second level of the context menu:</p> <ul style="list-style-type: none"> <li>• <i>Expand</i>: All the subordinate project objects on the next level below the selected object are displayed.</li> <li>• <i>Expand all</i>: All the project objects below the selected node are displayed.</li> <li>• <i>Collapse</i>: All the project objects subordinate to the selected object are no longer displayed.</li> <li>• <i>Collapse from level</i>: All the project objects on the same level are collapsed.</li> <li>• <i>Collapse all</i>: All the project objects below the selected node are no longer displayed.</li> </ul> <p>Using the icons in the tool bar, you can only expand or collapse all.</p>
Collapse			
Transfer data to worklist/ templates		<i>Copy to → Worklist/ Templates</i>	The selected project objects are copied to the worklist or the templates.



## Working with the Worklist

### Use

In your personal worklist,

- You can store project definitions, WBS elements, and networks so that you can quickly access these objects later.
- The five projects you processed last are displayed. You can open them directly from the worklist by double-clicking and continue processing.

All these project objects remain in the worklist after you have left the Project Builder and are available when you start work again.

### Features

If you copy data to the worklist, this is automatically assigned to the relevant category:

- Project definitions
- WBS elements
- Networks

This helps organize the project data in your worklist and gives you a better overview.



You cannot copy other project objects (for example, activities, activity elements, milestones, documents) individually to your worklist. You can only copy them to the worklist as part of a substructure (WBS elements, networks).

The following table lists how to execute various functions in the worklist:

Function	Action	Note
Open an object (in the worklist)	<ul style="list-style-type: none"> <li>• Double-click on the required project object in the worklist</li> <li>• In the context menu choose <i>Open</i>.</li> </ul>	<p>Opens the project object in the structure tree and the work area.</p> <p>If you have processed data in the work area and not yet saved it, a warning query appears.</p>
Copy objects to the worklist	<p>Select a project object in the structure tree and</p> <ul style="list-style-type: none"> <li>• Drag and drop it in the worklist</li> <li>• In the context menu, choose <i>Copy to → Worklist</i></li> </ul>	<p>The system automatically makes the assignment to the relevant group (<i>Project definition, WBS element, or Network</i>)</p>
Remove objects from worklist	<p>Select a project object in the worklist and choose <i>Remove from worklist</i> in the context menu.</p>	<p>The project object is removed from the worklist. It is not deleted from the project structure.</p>

**Working with the Worklist**

Empty worklist	In the context menu, choose <i>Empty worklist</i> .	All the project objects in the worklist and the history are deleted. The system asks you to confirm this action before it empties the worklist.
Change display sequence	In the context menu, choose <i>Display sequence</i> and then the required sequence.	<p>You can specify the following sequences for the presentation of the worklist:</p> <ul style="list-style-type: none"><li>• Description/Identification</li><li>• Identification/Description</li></ul> <p>Changing the sequence here also changes the sequence in the <i>Templates</i> screen area and in the structure tree.</p>

## Use of Templates

### Use

'Empty' templates that you can use to copy from when creating a new project or project object are available in the *Templates* screen area. In this screen area, you can store existing projects, WBS elements and networks in your personal templates and use them to create new projects. As templates you can use projects, WBS elements, and activities that come from

- The current project
- Another project
- A standard project or a standard network

### Features

The *Templates* screen area consists of three groups of templates:

- *Individual objects*  
Here you can find all possible project objects (Project definitions, WBS elements, networks, activities etc.). If you want to create a new project object, you can copy the new project object from this group to the existing project structure. For more information, see [Creating Project Objects \[Page 236\]](#)
- *Projects*  
Here you store existing project objects (project definitions, WBS elements, networks) that you want to use as templates for creating new projects.
- *Standard templates*  
Here you store standard project definitions, standard WBS elements and standard networks that you want to use as templates for new project structures.

For information on how to save project structures and standard structures in the *Templates* screen area, see [Saving Project Objects as Templates \[Page 241\]](#) and [Creating Project Objects by Copying \[Page 238\]](#).



In the user-specific settings you can determine which template groups you want to use.

**See:** [User-Specific Settings \[Page 225\]](#)

## Creating Project Objects

## Creating Project Objects

### Use

In the Project Builder, you can create project objects in different ways. You can

- Create completely new project objects or
- Use existing project structures or standard structures as templates to copy from.

In the following, only creating completely new objects is described. We recommend that you use *Templates* as described below. For information on how to create WBS elements and activities using templates, see [Creating Project Objects by Copying \[Page 267\]](#).

### Procedure

There are several ways of creating new project objects in the Project Builder:

#### Using Drag & Drop

1. In the *Templates* screen area, select the project object to create (for instance WBS element, activity (external), or milestone) in the *Individual objects* group.
2. To create a new project or network, drag and drop the template *Project definition* or *Network* to an empty structure tree. If you have already opened a project in the structure tree, drag the new project object to the required position in the structure tree. If it is possible to assign the new object to an object in the structure tree, a plus sign appears besides the mouse cursor.

#### Using double-click

In the *Individual objects* group of the *Templates* screen area, double-click on the new project object to be created.

#### Using the context menu

It is possible to create new project objects using the context menu either in the structure tree or in the *Templates* screen area.

1. In the *Templates* screen area, select the project object to create (for instance WBS element, activity (external), or milestone) in the *Individual objects* group, or select the object to which the new object is to be assigned in the structure tree.
2. In the context menu choose *Create*.

#### Using the toolbar

1. Choose .

The system opens a list box and displays the project objects that you can create for the object selected in the structure tree. If you have not yet opened a project, you can create a new project or a network.

2. Click in the list box on the project object that you want to create.

## Creating Project Objects

**Result**

In the work area, the system opens the detail screen for the newly created project object. Here you can enter the necessary project data. After you have saved the data, the project object appears in the structure tree.



If you create a project object within an existing project structure, the new object is always subordinate to the object selected in the structure tree.

You can also create several objects, one after another, without having to enter the details for each object or save. In this case, the system uses the pre-defined settings and the new objects appear in the structure without you saving. In this case, the system uses the pre-defined settings and the new objects appear in the structures without you saving. You save the data after you have created the last object.

## Creating Project Objects by Copying

## Creating Project Objects by Copying




### Procedure

In the Project Builder there are several ways of creating project objects by copying:

- You can create a new project or network directly by copying, that is without using the *Templates* screen area. In this case, after you have called up the function, a dialog box appears in which you enter the project or network to be copied. I
- You can store frequently used projects or project objects in the *Templates* screen area, and use this templates to create new objects by double-clicking on them or using Drag & Drop.

For information on how to copy project objects to the *Templates* screen area, see [Saving Project Objects as Templates \[Page 241\]](#).

### Creating a Project or Network Directly by Copying

Function	Action	Result
<b>Creating a project by copying</b>	Choose  and then in the list box <i>Copy project</i> . or In the (empty) structure tree choose <i>New</i> -> <i>Copy project</i> from the context menu.	<b>A dialog box appears in which you enter the name of the project or the standard project that you want to use as a template for the new project.</b>   <b>You can use F4 help to display all the project that are saved in the database.</b>  <b>If you have already opened a project in the Project Builder, a warning appears before you close this project.</b>
<b>Creating a network by copying</b>	Choose  and then in the list box <i>Copy network</i> . or In the (empty) structure tree choose <i>New</i> -> <i>Copy network</i> from the context menu.	<b>A dialog box appears in which you enter the name of the network or the standard network that you want to use as a template for the new project.</b>

### Create by Copying from the *Templates* Screen Area

#### Using Drag & Drop

1. In the *Templates* screen area, select the project object (for example, standard WBS element or an activity in a simulation version).

## Creating Project Objects by Copying

- Keeping the left-hand mouse button pressed, drag the project object to the required position in the structure tree.



If you use drag & drop to create project objects, the new object is always subordinate to the object it is positioned after in the project hierarchy.

### Using Double-Click or the Context Menu

The following table informs you how to use double-clicks and the context menu to create new projects and networks..

#### From the *Projects* group

Function	Prerequisite	Action in <i>Templates</i> Screen Area	Result
Create WBS element by copying	WBS element has been selected in the structure tree	Double-click on the WBS element that is to serve as the template  Or select a WBS element and choose <i>Create</i> in the context menu	Copies the WBS element and inserts the copy at the selected position. You can insert the new WBS element at the same level as the selected WBS element or below it in the hierarchy. Assignment to the WBS element (for example, long texts, Ps texts, milestones etc.) are copied with the WBS element. Assignment to the WBS element (for example, long texts, Ps texts, milestones etc.) are copied with the WBS element.
Creating a network by copying	WBS element or network has been selected in the structure tree	Double-click on the network that is to serve as the template or  In the context menu choose <i>Create</i> .	Copies the network and inserts the copy at the selected position. The new network is subordinate to the selected WBS element or network in the hierarchy.

#### From the *Standard templates* group

Function	Prerequisite	Action in <i>Templates</i> Screen Area	Effect
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## Creating Project Objects by Copying

<b>Create standard WBS element by copying</b>	<b>WBS element has been selected in the structure tree</b>	<b>Double-click on the standard WBS that is to serve as the template</b>  <b>Or select the standard WBS element and choose <i>Create</i> in the context menu</b>	<b>Copies the standard WBS element and inserts the new WBS element at the selected position. You can insert the new WBS element at the same level as the selected WBS element or below it in the hierarchy. Assignment to the WBS element (for example, long texts, Ps texts, milestones etc.) are copied with the WBS element. Assignments to the WBS element are also copied.</b>
<b>Creating a standard network by copying</b>	<b>WBS element has been selected in the structure tree</b>	<b>Double-click on the standard network that is to serve as the template</b>  <b>Or select the standard network and choose <i>Create</i> in the context menu</b>	<b>Copies the standard network and inserts the new network at the selected position.</b>



If you have not stored project data in the templates or require more templates, you can access other templates from the database by choosing *Create with other template* in the context menu.

**See also:**

[Working in the Templates Screen Area \[Page 235\]](#)



## Saving Project Objects as Templates

### Use

If you want to use WBS elements, networks or activities (from operative projects, standard projects or simulations) as templates to create other projects, you can store them in the *Templates* screen area. This enables you to retrieve the data from your templates quickly.

### Procedure

You can copy project objects from your currently open project as well as other project objects that have been saved in the database, to your personal *templates*:

#### Copying project objects from the current project to the *Templates* screen area

You have opened a project in the Project Builder.

1. In the structure tree, select the project object that you want to copy to the *Templates*.
2. Drag and drop the object to the *Templates* screen area.

or

1. In the structure tree, select the project object that you want to copy to the *Templates*.
2. In the context menu, choose *Copy to → Templates*.


#### Copying other project objects to the *Templates* screen area

1. In the *Templates* screen select the group or the category in which you want to copy the new template.

Example: For instance if you want to store a standard WBS element as a template, select *Standard templates* or *Standard WBS elements*.

2. In the context menu, choose *Include in Templates*.

A dialog box appears.

3. Enter the necessary data.
4. Choose .

### Result

The project object appears in the corresponding category in *Templates* and can now be used to [Create by Copying \[Page 267\]](#).

These templates are kept here until you remove them. To do so, choose *Remove from templates* or *Empty templates* in the context menu.



If you have not stored project data in the templates, you can access other templates by choosing *Create with other template* in the context menu.

---

**Saving Project Objects as Templates**

## Material Management in the Project Builder

### Use

As well as creating and editing material assignments (see for example [Creating Project Objects \[Page 236\]](#)) in the Project Builder, you can also trigger several material management functions

### Features

After you have selected a material component in the structure overview or the component overview the following functions are available:



Some of these functions are only available from particular screens, for example the component overview

Function	Menu Path	Comments
Availability check	Edit → Availability -> Material	If you have set availability checking for the Project System in Customizing, this starts an availability check for the selected component.  For more information, see <a href="#">Material Availability Check [Ext.]</a> .
Reset availability check	Edit -> Availability ->Reset material	Resets the confirmed dates and quantities from the availability check.
Capacity availability check	Edit -> Availability -> Capacity	If capacity requirements are generated for an activity, this checks whether the capacity is available (no overload) at the required time.  For more information, see <a href="#">Capacity Requirements in Projects [Ext.]</a> and <a href="#">Capacity Availability Check [Ext.]</a> .
Change procurement type	Edit -> Component -> Procurement	If applicable, you can change the procurement type (e.g. reservation for network or reservation for WBS element).  See, <a href="#">Managing Stocks of Material Components [Ext.]</a> .
Display purchase requisition	Edit > Component -> Purchase Requisition	Displays a purchase requisition if one exists.

**Material Management in the Project Builder**

Change delivery address	Edit > Component -> Delivery Address	Changes the delivery address for third-party orders only.
Change invoicing plan	Edit > Component -> Invoicing plan	Changes the invoicing plan for externally procured components.  For more information, see <a href="#">Invoicing Plans in Networks [Ext.]</a> .
BOM explosion	Edit > Component -> Explode BOM	You can only execute this function from the component overview. For more information, see <a href="#">Exploding the Bill of Material [Ext.]</a> .
Reassign a component to another activity	Edit > Component -> Reassign	You can only execute this function from the component overview. You can only reassign components within the same network.
Set the duration of the activity to the component lead time	Edit > Component -> Transfer delivery time -> duration	You can only execute this function from the component overview. For more information, see <a href="#">Aligning Activity Duration with Material Lead Time [Ext.]</a> .
Align requirement date with activity finish date	Edit > Component -> Align with finish date	You can only execute this function from the component overview.  If you want to set the duration to the component lead time, you have to align the requirements date with the finish date.
Copy component data	Edit > Component -> Copy component data	Copies the data from one component to another in the same network.  See <a href="#">Copying Component Data [Ext.]</a> .
Batch management	Edit -> Component -> Batch management	Various batch management functions are available under this menu point. You can only execute these functions from the component overview.  For more information, see <a href="#">Batch Management [Ext.]</a> .

**Material Management in the Project Builder**

Assign PS text	Edit -> Component -> Assign PS text	If a PS text has been assigned to the activity, you can also assign it to the selected component.
Delete PS text assignment	Edit -> Component -> Delete PS text assignment	Deletes the above PS text assignment.

---

**Scheduling in the Project Builder**

## Scheduling in the Project Builder

### Use

In the Project Builder you can schedule a project based on the network activities in the project.


### Integration

The scheduling settings are taken from the profile for WBS scheduling. You can change the scheduling type, method, and parameters in the project planning board that you can call up from the Project Builder.

### Prerequisites

To carry out scheduling in the Project Builder, you must have entered a start and finish date for the project definition.

### Activities

In the structure tree select the project definition of the current project and choose *Edit -> Dates -> Schedule*. To change the scheduling parameters switch to the project planning board by choosing .

For more information on the various dates in the Project System, refer to [Dates \[Ext.\]](#).


## Executing Mass Changes

### Prerequisites

You are in a project in the project planning board or the Project Builder.

### Procedure

1. Select all the objects that you want to change.

Choose in the	Pushbutton/Menu Path
Project Builder	
Project planning board	<i>Goto → Mass change</i>

The *Mass changes: Field view* screen appears.

2. Select the fields whose values you want to change. Proceed as described in [Executing Mass Changes Directly \[Page 336\]](#).



You can go from the field view to the table view by choosing *table view*. For more information on the table view, see [Executing Mass Changes with Table View \[Page 339\]](#).

3. Choose *Execute*.

### Result

The system checks the changes and executes them. A log appears. If the system could execute the changes, you can see information in the log about every object that was changed. You can display the log with one line for each entry, which is a simple confirmation, or with two lines with more details for each entry.

If the system could not execute some changes, because fields did not meet the prerequisites, the entries are highlighted in red.



You cannot save this log.

The system saves the changes when you save the project.

---

**Evaluating Data in the Project Planning Board**

## Evaluating Data in the Project Planning Board

In the project planning board and the Project Builder, you can branch to the complete reporting functionality of the Project System in the *Extras* menu. The following are available:

- Cost reports (Report Writer reports)
- Capacity load reports
- Structure/Date reports from the information system.

You can also branch to graphics to evaluate your project hierarchy or network structures by choosing either *Goto → Network graphics* or *Goto → Hierarchy Graphics*

**See also:**

[Cost Element Reports \[Ext.\]](#).

[Technical Project Reports \[Ext.\]](#)



## Confirmations

### Prerequisites

You are in a project in the project planning board or the Project Builder.

You can only confirm activities and activity elements, if


- They have been released
- The confirmation indicator has been set in the control key
- They have been saved on the database

You must have defined certain confirmation parameters in Customizing for the Project System previously.


For more information, see [Confirmation Directly in the Project System \[Ext.\]](#).

### Procedure

1. Select the activity to be confirmed.

Choose in the	Pushbutton/Menu Path
Project Builder	<i>Edit -&gt; Activity -&gt; Confirm</i>
Project planning board	

The *Create Network Confirmation: Actual Data* screen appears.

2. Enter the necessary confirmation data.
3. Choose .



Before you leave the confirmation, you can go to a separate dialog box to enter goods movements.

### Result

According to your settings in Customizing, the system executes the confirmation immediately or later in a background job.

## Deleting Project Objects

## Deleting Project Objects

### Use

Under certain prerequisites you can delete WBS elements, activities, and activity elements directly, that is, delete physically. You can always delete relationships and milestones directly.



You cannot undo the physical deletion of project objects.

You can give WBS elements, activities, and activity elements that cannot be deleted directly the *Deletion flag* status. They are deleted from the project logically.

### Prerequisite

You can only delete WBS elements, activities, and activity elements directly, if they have the status *Created* and no postings or assignments to other objects exist.



Integrated planning WBS elements can be deleted as long as no planned costs or revenues have been posted.

### Features



Set the *Deletion flag* status for WBS elements, activities, and activity elements if they have any other status than *Created*. As long as the project objects have the status *Deletion flag* and deletion indicators have not been set, you can cancel the deletion flag.

#### See also:

[Archiving Operative Project Structures \(PS-ST-OPR\) \[Ext.\]](#)

If you delete activities or set a deletion flag for them, the subordinate activity elements, relationships, milestones, allocations to material components etc. are also deleted or have a deletion flag set. If you delete WBS elements or set a deletion flag for them, subordinate WBS elements, and assignments are also deleted or have a deletion flag set

### Activities

Function	In the Project Builder	In the project planning board
Directly delete project object	Choose  or <i>Delete</i> in the context menu of the structure tree.	Choose  or <i>Edit</i> → <i>Delete</i> → <i>Delete object</i> .
Set deletion flag for project object	<i>Edit</i> → <i>Status</i> → <i>Deletion flag</i> → <i>Set</i> .	<i>Edit</i> → <i>Delete</i> → <i>Deletion flag</i>
Canceling Deletion Flags	<i>Edit</i> → <i>Status</i> → <i>Deletion flag</i> → <i>Undo</i> .	<i>Edit</i> → <i>Delete</i> → <i>Cancel deletion flag</i>



## Deleting Project Objects

To cancel deletion flags in the project planning board for project objects, you must first display the objects with deletion flags. Choose *Edit* → *Show/Hide* → *Object with deletion flag*. The objects with deletion flags are highlighted in gray. You can now cancel the deletion flag for the required objects. In the Project Builder objects that are flagged for deletion are highlighted in gray.

---

**Project planning board**

## Project planning board

### Purpose

The project planning board has a central position in the Project System. It simplifies planning and controlling projects. The project planning board allows integrated processing of your project, giving you a graphic overview of the project objects. In the graphic interface you can create, edit and evaluate all the data for a project. You can change the appearance of the project planning board to suit your individual needs and taste.

### Features

With the project planning board

- You obtain an overview about the hierarchy and progress of your project
- You can see interrelationships in the organization and the schedule.
- You can access all the important data in your project, and for example
  - Calculate costs
  - Plan and check dates
  - Plan and schedule resources
  - Define and distribute work
  - Level capacities
  - Make assignments

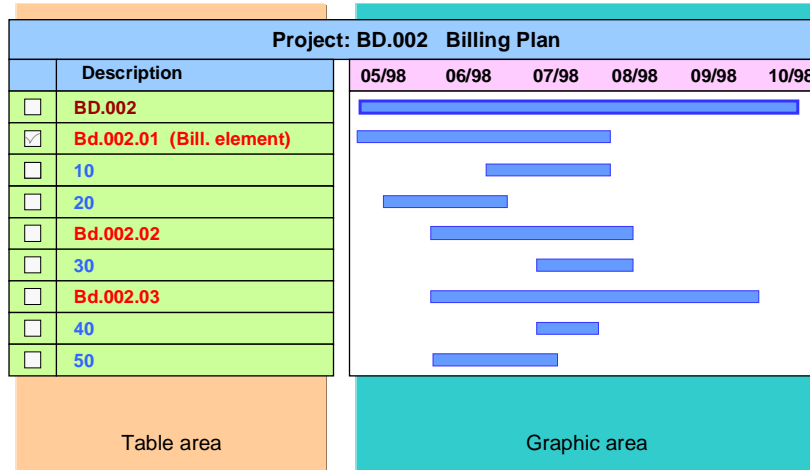
Furthermore with the project planning board you can:

- Simulate changes
- Branch to
  - Further graphics, for instance network structure graphic, hierarchy graphic etc.
  - Further planning boards in capacity planning
  - Costs and capacity reports in the Project Information System
- Call up logs and additional overviews (capacity, costs/revenues, component, and order overviews)

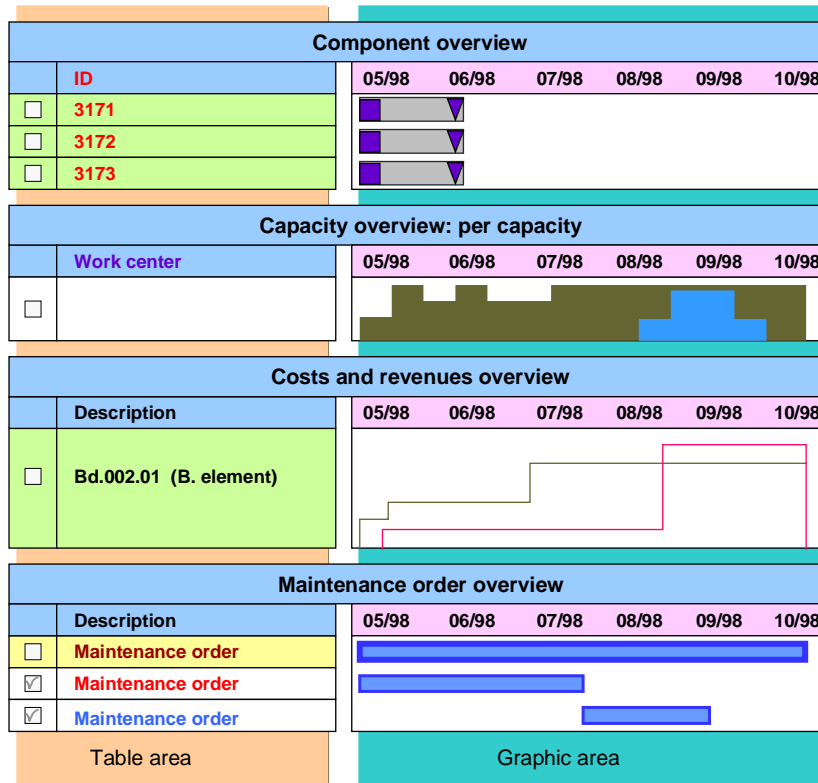
## Layout of the Project Planning Board

## Layout of the Project Planning Board

The Gantt chart is the basis of the project planning board. The project planning board consists of a table area and a graphic area. It displays the hierarchical structure of the project and the corresponding dates. You edit your project in the Gantt chart:



You can also display the following charts for WBS elements and activities in the lower part of the screen:



## Layout of the Project Planning Board

- Component overview

In the component overview you can see the requirements dates and delivery dates as well as the last goods movement dates for material components. You can also go to an additional window to see all the goods movement dates for the selected components.

- Capacity overview

The capacity overview presents the available capacity, the capacity requirements and the overload for each work center as bars or as curves. You can also go to an additional window to see the capacity requirements for a work center from which ever source, sorted according to dates.

- Cost overview

The cost overview displays the cumulative distribution of costs and revenues (in the controlling area currency) as the project progresses. You can also go to an additional window to see the period drilldown for a selected WBS element or activity.

- Maintenance order overview

The maintenance order overview displays the dates of the maintenance orders based on the scheduled dates. With the help of the field selection, you can display detailed information on your maintenance orders.

**See also:**

[Working in the Overviews \[Page 309\]](#)

[Displaying Detail Lists for Overviews \[Page 312\]](#)

## Layout of the Gantt Chart and the Overviews

The Gantt chart and the overviews consist of a table and a graphic area.

There is a legend for the Gantt chart and each overview. This explains what the various colors and symbols in the table and graphic areas mean. To display the legend for the Gantt chart, choose *Extras* → *Legend*. To display the legends for the overviews, use the context menu (right-hand mouse button) and choose *Display legend*.

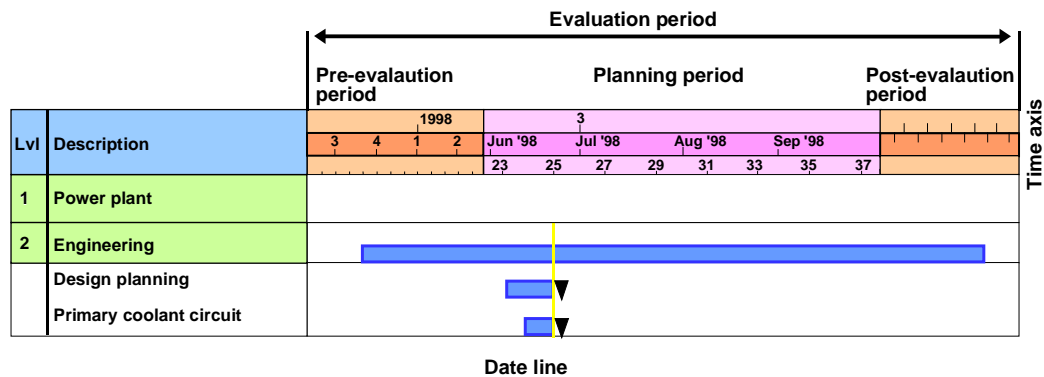
### Table Area

The table area on the left-hand side of the Gantt chart and the overviews contains information that describes the objects in the graphic area. You can display up to 16 columns (fields), for more information about these objects.

### Graphic Area

The graphic area presents the schedule of the project and the dates for individual objects.

## Layout of the Project Planning Board



The time axis consists of several time scales:

- Planning period  
The planning period refers to the start date of the project. If the start is in the past, the planning period is offset to the current date.
- Evaluation period  
The whole period that you can see in the planning board. The evaluation period is always based on the project period.
- Pre-evaluation period  
The time interval from the start of the evaluation period to the start of the planning period.
- Post-evaluation period  
The time interval from the end of the planning period to the end of the evaluation period.

The date line represents the current date.

**See also:**

[Settings for Time Display \[Page 320\]](#)

## Executing Function in the Project Planning Board

In the project planning board, you can execute most functions using several methods.

Execute Function via	What You Should Know
The menu	The menu functions only apply to the Gantt chart and not the overviews.
Icons	The icon functions only apply to the Gantt chart and not the overviews.  For an overview of the icons in the Gantt chart, see <a href="#">Working in the Gantt Chart [Page 260]</a>
A double-click on an object	The detail screen for the object appears.
Drag & Drop	To <a href="#">create project objects [Page 264]</a> , you can drag and drop a object from the <i>Templates</i> screen area to the table area. Simply select an object and drag it, keeping the mouse button pressed, to the position in the table area where you want to insert it.

**Layout of the Project Planning Board**

The context menu	There is a context menu for the Gantt chart and each overview. You can call up the context menu, for example, by clicking with the right-hand mouse button on an object in the table area. This menu is object specific. Only those functions are displayed that you can execute with the relevant object in the Gantt chart or overview. For example, if you select a WBS element and call up the context menu, only those functions relevant for WBS elements are in the menu.
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## Accessing the Project Planning Board

### Use


You can access the project planning board by:


- Creating a project, changing or displaying an existing project
- In the [Project Builder \[Page 221\]](#), choosing the relevant push-button to switch to the project planning board

### Procedure

On the SAP R/3 main screen choose *Logistics or Accounting → Project system → Basic data → Project → Project planning board*.

You now have the following options:

Function/Menu Path	What You Should Know
<i>Create project</i>	<p>Creates a new project.</p> <p>You can use another project, a standard project, or a simulation as a template for the new project. Use the <i>With activities</i> indicator to determine whether activities are copied from the template. You can also determine which objects that are assigned to activities (such as material components, relationships, PS texts and milestones) are also copied to the new project.</p> <p style="text-align: center;"></p> <p>If you always use the <i>With activities</i> indicator, set the <i>Show activity</i> indicator in the project planning board profile. Activities are then displayed as a default when you call up the project planning board.</p>
<i>Change project</i>	The <a href="#">initial screen of the project planning board [Page 258]</a> appears.
<i>Display project</i>	

If you want to access the project planning board from the Project Builder, choose  in the Project Builder. The system goes directly to the project planning board and displays the project data that you have already opened.

## Initial Screen of the Project Planning Board

# Initial Screen of the Project Planning Board

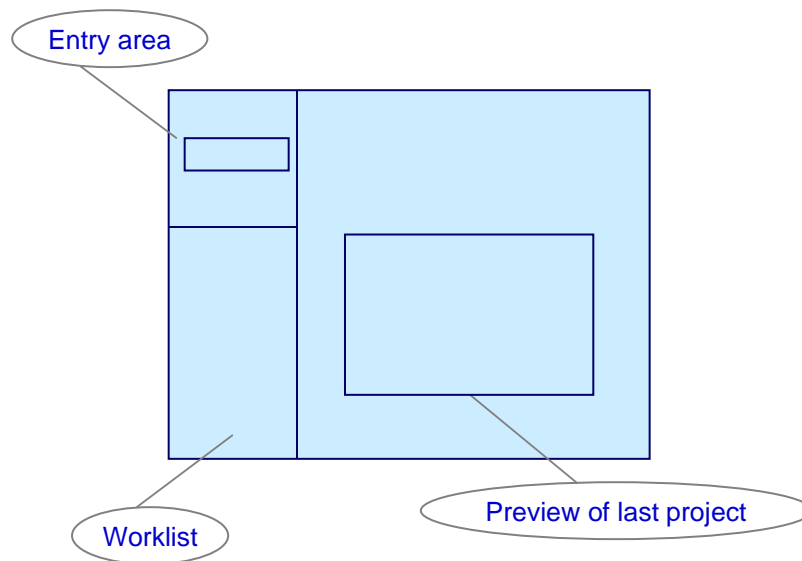
## Use

On the initial screen you can see an overview of the projects that you are involved with. You can quickly access projects that you have recently processed or that you have stored in your personal worklist.

You access the initial screen of the project planning board by choosing *Project planning board* → *Change project* or *Display project*.

## Features

There are the following screen areas on the initial screen:



### Preview last project

In the right-hand screen area you always see in the preview the project that you called up last in the project planning board. The project definition of this project is automatically copied into the entry area. You can thus start work immediately with the last project you worked on.

### Worklist

You can store frequently used project data (project definitions and WBS elements) in the worklist, so that you can access them quickly later. On the initial screen, you can open project elements from the worklist and include new project objects in the worklist.



## Initial Screen of the Project Planning Board

### Entry area

The project or the substructure (WBS element) to be opened is displayed in the entry area. If you select project data from the preview or the worklist, the system automatically copies the data to the entry area. If you want to open a project or the substructure (WBS element) that is not in either the preview or the worklist, enter the data manually in the relevant field in the entry area.

You can also temporarily change the [project planning board profile \[Ext.\]](#) and determine whether subordinate activities are loaded as well.

The following table lists how to execute various functions on the initial screen:

Function	Action	What You Should Know
Open the project in the preview	Choose  <i>Open project</i> .	The project definition for the project in the preview always appears automatically in the entry field, when the system loads the initial screen.
Open a project from the worklist	The following alternatives exist: <ul style="list-style-type: none"> <li>• Double-click on the project in the worklist</li> <li>• Select the project in the worklist and choose <i>Open</i> in the context menu.</li> </ul>	The system opens the project in the project planning board.
Open another project	Enter the project definition on the entry field and choose  <i>Open project</i> .	You can find existing project definitions by using F4 help.
Copy projects to the worklist	<ul style="list-style-type: none"> <li>• To copy projects from the entry field to the worklist, choose <i>Include in worklist</i>.</li> <li>• To copy project data from another project to the worklist, choose <i>Include in worklist</i> from the context menu. A dialog box appears in which you enter a project definition or a WBS element to copy to the worklist.</li> </ul>	The system automatically makes the assignment to the relevant group ( <i>Project definition</i> or <i>WBS element</i> )





























## Working in the Gantt Chart

## Working in the Gantt Chart

















## Overview of the Icons in the Gantt Chart

Several frequently used functions are available in the form of icons on the standard toolbar above the Gantt chart.

These functions apply only to the Gantt chart and not to the other charts.

Icon	Function	Icon	Function
	Select all		Open/close left-hand window
	Deselect all		Open/close bottom window
	Move WBS element level up		Filters
	Move WBS element level down		Grouping
	Create		Sorting
	Copy		Highlight project objects
	Cut		Position on highlight
	Paste		Switch connect mode on/off
	Undo		Scheduling comparison
	Connect selected activities		Zoom in on graphic
	Edit relationships (tabular)		Adapt graphic area
	Delete object		Adapt time scale
	Detailed information for object		Planning board assistant
	Confirm activity		Time scale assistant

Working in the Gantt Chart

	Schedule		Set of dates/view
	Calculate costs		Options
	System/User status		Field selection
	Component overview		Logs and lists
	Capacity overview		Undo user settings
	Maintenance orders		
	Cost overview		
	Milestone trend analysis		
	Predecessor/successor		
	Show all dependent objects		
	Hide all dependent objects		



The icons *Undo*, *Paste*, and *Position on next highlighted element* are context sensitive. This means that they appear as soon as the relevant function can be performed.

## Selecting Objects

## Selecting Objects


### Use

To execute functions in the project planning board, you must first select objects in the table area. The system then knows which objects the function refers to.

The selection functions in the menu of the project planning board always refer to the Gantt chart. To select objects in the overviews, use the relevant functions in the context menu.

### Procedure

#### Selecting Objects

Select in the Gantt Chart	Action
Single project object	Click the selection field for that object
Several project objects	<ul style="list-style-type: none"> <li>Select several individual objects: Keep the Shift key pressed and click in the selection fields of the objects</li> <li>Select as block: Click in the selection field of the first object, keep the CTRL key pressed and click in the selection of the last object. All the objects between are selected too.</li> </ul>
All project objects	Choose <i>Edit → Select → Select all</i>
Only certain project objects	Choose <i>Edit → Select → Objects → WBS element, activity etc.</i>
A sub-tree	Select a WBS element and choose <i>Edit → Select → Sub-tree.</i>
Highlighted objects	<i>Edit → Select → Highlighted objects.</i>  The system selects all objects that were previously highlighted. For more information, see <a href="#">Highlighting Project Objects [Page 282]</a>

Selecting the Overviews	Action
Single project object	Click in the first column of the object
Several project objects	Keep the Shift key pressed and click in the first column of the objects
All objects in an overview	Choose <i>Select all</i> in the context menu.

#### Deselecting objects

Deselect in the Gantt Chart	Action
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Selecting Objects

Several project objects	Keep the Shift key pressed and click in the first column of the objects
All project objects	Choose <i>Edit</i> → <i>Select</i> → <i>Deselect all</i>

Deselect in the Overviews	Action
Single project object	Keep the Shift key pressed and click in the first column of the objects
All objects	Choose <i>Deselect all</i> in the context menu.



If you have set the *Add.Sel. Acts* indicator in the options profile for the graphics profile in Customizing for *Basis*, you can select or deselect several objects without pressing the Shift key.

## Creating Project Objects

## Creating Project Objects


### Use

There are various methods of creating project objects in the project planning board. You can

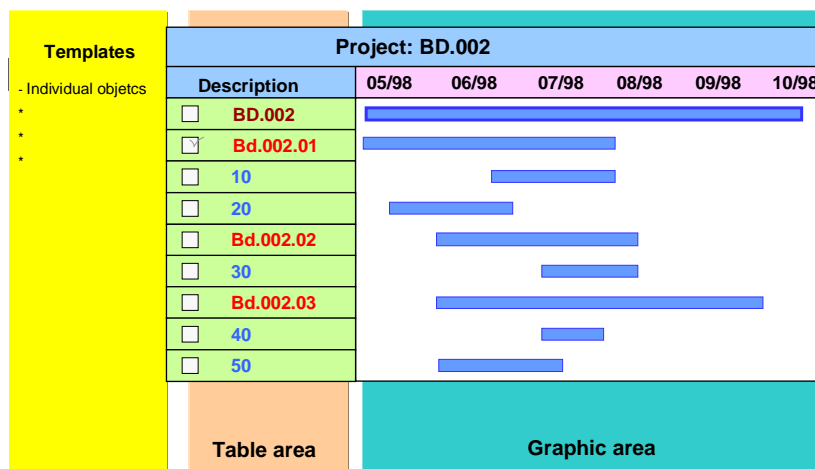
- Create completely new project objects or
- Use other project objects, standard templates, or simulations as templates.

In the following, only creating completely new objects is described. For information on how to copy or create WBS elements and activities using templates, see [Creating Project Objects by Copying \[Page 267\]](#).

### Features

To create project objects, choose  or *Create* in the context menu in the table area. On the left-hand side of the screen a separate *Templates* window appears, in which there is the *Individual objects* group.

Under *Individual objects* you can find all possible project objects (WBS elements, activities etc.).



If you want to create a new project object or insert a new object in an existing structure, copy the object in question from the *Templates* to the selected position in the table area.

There are various ways of doing this:

#### Using Drag & Drop

3. In the *Individual objects* of the *Templates* screen area, select the project object to create (for instance WBS element, activity (external), or milestone).
4. Keeping the left-hand mouse button pressed, drag the project object to the required position in the table area. If it is possible to assign the new object to an object in the table area, a plus sign appears besides the mouse cursor.



Creating Project Objects



If you use drag & drop to create project objects, the new object is always subordinate to the object it is positioned after in the project hierarchy.

**Using Double-Click or the Context Menu**

The following table describes how you create project object with a double-click or using the context menu.

Function	Prerequisite	Action in <i>Templates</i> Screen Area	Effect
Create WBS element		Double-click on <i>WBS element</i>  Or select <i>WBS-element</i> and choose <i>Create</i> in the context menu	The new WBS element is always placed on the top level of the project. The WBS elements are numbered automatically.
	WBS element has been selected in the table area	Double-click on <i>WBS element</i>  Or select <i>WBS-element</i> and choose <i>Create</i> in the context menu	Assigns the new WBS element in the project hierarchy to the selected WBS element.
Create activity	WBS element or activity has been selected in the table area	Double-click on the activity category ( <i>internal, external, costs, or service</i> )  Or select an activity category and choose <i>Create</i> in the context menu	Creates an activity for the selected WBS element or below the selected activity.
Create activity element	Activity has been selected in the table area	Double-click on the activity element ( <i>work, external, costs, or service</i> )  Or select an activity element and choose <i>Create</i> in the context menu	Creates an activity element for the selected activity.
Create subnetwork	Activity has been selected in the table area	Double-click on <i>Subnetwork</i>  Or select <i>Subnetwork</i> and choose <i>Create</i> in the context menu	Enables you to add more detail for an activity by creating a subnetwork. Enter a standard network as a template.  <b>See also:</b> <a href="#">Subnetworks [Page 187]</a>

## Creating Project Objects

Create component allocation	Activity has been selected in the table area	Double-click on <i>Material component</i> Or select <i>Material component</i> and choose <i>Create</i> in the context menu	Creates an material component allocation for the selected activity.  <b>See also:</b> <a href="#">Material [Ext.]</a>
Create milestones	WBS element or activity has been selected in the table area	Double-click on <i>Milestone</i> Or select <i>Milestone</i> and choose <i>Create</i> in the context menu	Creates a milestone for the selected activity or WBS element  <b>See also:</b> <a href="#">Milestones [Page 192]</a>
PS texts	WBS element or activity has been selected in the table area	Double-click on <i>PS text</i> Or select <i>PS text</i> and choose <i>Create</i> in the context menu	Creates a PS text for the selected activity or WBS element
Documents	WBS element or activity has been selected in the table area	Double-click on <i>Document</i> Or select <i>Document</i> and choose <i>Create</i> in the context menu	Assigns a document to the selected activity or WBS element



You can make entries for various project objects (project definitions, WBS elements, milestones, activities, activity elements) directly in the table area. You can thus change your entries in the table area without having to go to the corresponding detail screen. Click on the relevant field. For example, the following fields can be changed in this way: *Description* , *ID* , basic dates, forecast dates, actual dates, *Duration* , *Work* , *Work center* , long text.

## Create by copying

### Use

You can use existing WBS elements and activities as templates to create other WBS elements and activities. You can store project elements that you use as templates frequently in the *Templates* screen area. As templates you can use WBS elements and activities that come from

- Your current project
- Another project
- A standard project or a standard network
- A simulation version

For information on how to copy project objects to the *Templates* screen area, see [Saving Project Objects as Templates \[Page 270\]](#).

### Features

Choose  or *Create* in the context menu of the table area.

On the left-hand side of the screen a separate *Templates* window appears, in which there are the groups.

- Individual objects  
Here you can find all possible project objects (Project definitions, WBS elements, networks, activities etc.). For information on how to create new objects, see [Creating Project Objects \[Page 236\]](#).
- Projects  
Here you store existing operative project elements (WBS elements and activities) that you want to use as templates.
- Standard templates  
Here you store standard project definitions, standard WBS elements and standard networks that you want to use as templates.
- *Simulations*  
Here you store WBS elements and activities from simulation versions that you want to use as templates.

There are various options for copying objects from the templates to the current project:

#### Using Drag & Drop

5. In the *Templates* screen area, select the project object (for example, standard WBS element or an activity in a simulation version).
6. Keeping the left-hand mouse button pressed, drag the project object to the required position in the table area.




**Create by copying**

If you use drag & drop to create project objects, the new object is always subordinate to the object it is positioned after in the project hierarchy.

**Using Double-Click or the Context Menu**

The following table describes how you create project objects by copying with a double-click or by using the context menu.

**From the *Projects* group**

Function	Prerequisite	Action in <i>Templates</i> Screen Area	What You Should Know
Create WBS element	WBS element has been selected in the table area	Double-click on the WBS element that is to serve as the template  Or select a WBS element and choose <i>Create</i> in the context menu	Copies the WBS element and inserts the copy at the selected position. You can insert the new WBS element at the same level as the selected WBS element or below it in the hierarchy. Assignment to the WBS element (for example, long texts, Ps texts, milestones etc.) are copied with the WBS element.  <a href="#">See also: Including WBS Structures [Page 275]</a>
Create Network	WBS element or activity has been selected in the table area	Double-click on the network that is to serve as the template or  In the context menu choose <i>Create</i> .	Copies the network and inserts the copy at the selected position. The new network is subordinate to the selected WBS element or network in the hierarchy.    You can choose whether assignments to activities (such as long texts, PS texts, milestones etc.) are copied with the network. However relationships are not copied.

**From the *Standard templates* group**

Function	Prerequisite	Action in <i>Templates</i> Screen Area	Effect
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**Create by copying**

Create WBS element by copying standard WBS element	WBS element has been selected in the table area	Double-click on the standard WBS that is to serve as the template or  Or select the standard WBS element and choose <i>Create</i> in the context menu	Copies the standard WBS element and inserts the new WBS element at the selected position. You can insert the new WBS element at the same level as the selected WBS element or below it in the hierarchy. Assignment to the WBS element (for example, long texts, Ps texts, milestones etc.) are copied with the WBS element.  <a href="#">See also: Including WBS Structures [Page 275]</a>
Create network by copying standard network	WBS element has been selected in the table area	Double-click on the standard network that is to serve as the template  Or select the standard network and choose <i>Create</i> in the context menu	Uses the standard network as a template to create new activities for the selected WBS element.

**From the *Simulations* group**

Function	Prerequisite	Action in <i>Templates</i> Screen Area	Effect
Create WBS element from simulation	WBS element has been selected in the table area	Double-click on the WBS element that is to serve as the template  Or select a WBS element and choose <i>Create</i> in the context menu	Copies the WBS element from the simulation and inserts the copy at the selected position. You can insert the new WBS element at the same level as the selected WBS element or below it in the hierarchy. Assignment to the WBS element (for example, long texts, PS texts, milestones etc.) are copied with the WBS element.



If you have not stored project data in the templates or require more templates, you can access other templates from the database by choosing *Create with other template* in the context menu.

---

Saving Project Objects as Templates

## Saving Project Objects as Templates

### Use

If you want to use WBS elements, networks, or activities (from operative projects, standard projects or simulations) as templates for other projects, you can store them in the *Templates* screen area. This enables you to retrieve the data from the templates quickly.

### Procedure

You have opened a project in the project planning board.

1. Choose .

The *Templates* subscreen appears in the left-hand screen area.

2. Here select the group or the category in which you want to copy the new template.

Example: If you want to store a standard WBS element as a template, select *Standard templates* or *Standard WBS elements*.

3. In the context menu, choose *Include in Templates*.

A dialog box appears.

4. Enter the necessary data.

5. Choose .

### Result

The project object appears in the corresponding category in *Templates* and can now be used to [Create by Copying \[Page 267\]](#).

These templates are kept here until you remove them. To do so, choose *Remove from templates* or *Empty templates* in the context menu.



If you have not stored project data in the templates, you can access other templates by choosing *Create with other template* in the context menu.

## Entering WBS Element Numbers

### Use

If you are working with very large projects and need to create a lot of elements with complex project numbers, the system can help you enter the numbers.

### Prerequisites

You have defined a special character in the Project System IMG to act as the input help.

### Features

If you enter the special character in the WBS element field in your project, the system copies the number of the higher-level WBS elements into the field. If the new WBS element is the first one in the project hierarchy, the system copies the project definition.

Then you only need to add to the number so that it is different from the one copied. You can also use the input help in conjunction with a project coding mask. In this case, you do not need to enter the separator when adding to the WBS element number.



You have specified the character @ as an input help. In the work breakdown structure, you insert another WBS element under the WBS element A-123-LDZ-10 and only type "20".

Type of Input Help	Your Entry
No project coding mask	@-20
Using project coding mask A-000-XXX-00-00	@20

The system automatically copies the identifier from the superior WBS element as follows: A-123-LDZ-10-20.

## Deriving the Hierarchy from the WBS Element Number

# Deriving the Hierarchy from the WBS Element Number

## Use

If you are working with very large projects and need to create a lot of elements with complex project numbers, the system can help you derive the hierarchy.

## Prerequisites

You have defined a coding mask for your projects in Customizing for the *Project System*. In this coding mask you entered enough dashes to model all the levels in the project hierarchy.

## Features

If you have defined a coding mask, you can enter all the WBS elements in a project after each other without worrying about the hierarchy level. You can, for instance, enter all WBS elements on level 1.

The system then derives the hierarchy level of each WBS element from the coding mask. The WBS element with the shortest number is created in level 1. Every further WBS element is placed on a subordinate level, depending on its number and the number of dashes.



You have defined a project coding mask P-000-XX-00. You have entered all WBS elements on the same level. The system derives the hierarchy levels as follows:

WBS Element Number	Level	Superior WBS Element
P-001	1	
P-001-AA	2	P-001
P-001-AA-01	3	P-001-AA

## Activities

After you have entered all the WBS elements, choose *Project* → *Derive structure* → *Derive*. The system places the WBS elements in the correct sequence in the project hierarchy.

If the system cannot derive the hierarchy, it prompts you to check the structure. To do this, choose *Project* → *Derive structure* → *Check*. The system then displays a message text, detailing the errors found.










## Copying Project Objects

### Use



In your current project you can use WBS elements, activities, activity elements, and milestones as templates for new project objects and copy them in the project.

### Features


The various options for copying are listed below:

Function	Action	What You Should Know
Copy WBS elements	<p>Select a WBS element in the table area and choose </p> <p>or in the context menu choose <i>Copy</i>.</p> <p>Then choose .</p> <p>In the context menu choose <i>Paste</i>.</p>	<p>Copies one or more WBS elements from the current project as new WBS elements to a new position. To insert a WBS element, select another WBS element.</p>
Copy activities	<p>Select an activity in the table area and choose </p> <p>or in the context menu choose <i>Copy</i></p> <p>Then choose .</p> <p>In the context menu choose <i>Paste</i>.</p>	<p>Copies one or more activities in the current project to a new position. To insert an activity, select a WBS element.</p> <p></p> <p>You can also copy assignments to an activity with the activity (e.g. long texts and milestones). However relationships are not copied.</p>
Copy activity elements	<p>Select an activity element and choose </p> <p>or in the context menu choose <i>Copy</i>.</p> <p>Then choose .</p> <p>In the context menu choose <i>Paste</i>.</p>	<p>Copies one or more activity elements in the current project to a new position. To insert activity elements, select an activity.</p>

**Copying Project Objects**

Copy milestones	Select a milestone and choose  or in the context menu choose <i>Copy</i> .  Then choose  In the context menu choose <i>Paste</i> .	Copies one or more milestones in the current project to a new position. To insert a milestone, select a WBS element or activity.
-----------------	--	--



After you have inserted copied project objects, you can delete them from the project structure by using the *Undo* function. Choose  or *Undo* in the context menu.

## Including WBS Structures

### Procedure

1. Select the WBS element where you want to include the new WBS element.
2. Choose *Edit → Copy → WBS structure*.  
A dialog box appears.
3. Select either of the tab pages, *Standard WBS* or *Operative WBS*.
4. Enter
  - Which WBS element you want to include  
If the WBS element to be included has additional WBS elements subordinate to it, the system automatically copies these lower-level hierarchy elements.
  - Whether you want to include the new WBS element at the same hierarchy level as the selected WBS element or below it.
  - Which options to use when including the WBS element:

Option	Effect
Right/Left	The WBS element is positioned to the right or to the left of the selected WBS element in the hierarchy.
With/without root	With root: The selected WBS element is included. Without root: Only the subordinate WBS elements are included.
With/without activities	The WBS element is includes either with or without its assigned activities

5. Choose *WBS element overview*.  
The *Copy structure* screen appears.
6. Select the WBS element(s) that you want to include.
7. Give the new WBS elements new numbers by using either the *Predefine* or *Replace* function.
8. Choose *Include*.

### Result

The system includes the WBS element(s). If you have selected With activities, the corresponding activities are also included.

#### See also:

[Copying Project Objects \[Page 273\]](#)

---

Moving Project Objects

## Moving Project Objects

### Use

You can change the assignments of objects in a project by moving the objects to another position in the project.

### Features

You can move project objects

- By using drag and drop

You can only move one project object at a time with drag and drop. These objects can be WBS elements, activities or activity elements.

- By using cut and paste

You can cut and paste several project objects at once. You can use cut & paste for WBS elements and activities. As of Release 4.5B, you cannot use cut & paste for activity elements.

### Activities

When you move activities, you reassign these activities together with their activity elements and milestones to another WBS element.

If you move a WBS element, you reassign this WBS element together with its subordinate WBS elements within the project hierarchy. The WBS element is inserted in the table area **above** the target WBS element and in the project hierarchy to the **left** of the target WBS element.

## Deleting Project Objects

### Use

Under certain prerequisites you can delete WBS elements, activities, and activity elements directly, that is, delete physically. You can always delete relationships and milestones directly.



You cannot undo the physical deletion of project objects.

You can give WBS elements, activities, and activity elements that cannot be deleted directly the *Deletion flag* status. They are deleted from the project logically.

### Prerequisite

You can only delete WBS elements, activities, and activity elements directly, if they have the status *Created* and no postings or assignments to other objects exist.



Integrated planning WBS elements can be deleted as long as no planned costs or revenues have been posted.

### Features



Set the *Deletion flag* status for WBS elements, activities, and activity elements if they have any other status than *Created*. As long as the project objects have the status *Deletion flag* and deletion indicators have not been set, you can cancel the deletion flag.

#### See also:

[Archiving Operative Project Structures \(PS-ST-OPR\) \[Ext.\]](#)

If you delete activities or set a deletion flag for them, the subordinate activity elements, relationships, milestones, allocations to material components etc. are also deleted or have a deletion flag set. If you delete WBS elements or set a deletion flag for them, subordinate WBS elements, and assignments are also deleted or have a deletion flag set

### Activities

Function	In the Project Builder	In the project planning board
Directly delete project object	Choose  or <i>Delete</i> in the context menu of the structure tree.	Choose  or <i>Edit</i> → <i>Delete</i> → <i>Delete object</i> .
Set deletion flag for project object	<i>Edit</i> → <i>Status</i> → <i>Deletion flag</i> → <i>Set</i> .	<i>Edit</i> → <i>Delete</i> → <i>Deletion flag</i>
Canceling Deletion Flags	<i>Edit</i> → <i>Status</i> → <i>Deletion flag</i> → <i>Undo</i> .	<i>Edit</i> → <i>Delete</i> → <i>Cancel deletion flag</i>



---

**Deleting Project Objects**

To cancel deletion flags in the project planning board for project objects, you must first display the objects with deletion flags. Choose *Edit* → *Show/Hide* → *Object with deletion flag*. The objects with deletion flags are highlighted in gray. You can now cancel the deletion flag for the required objects. In the Project Builder objects that are flagged for deletion are highlighted in gray.





## Presentation of Data

### Use

In the Gantt chart you can limit which objects are presented. This makes the required information more manageable and easy to understand.

### Features

In the following table you can see the various methods of presenting the data:

Function	Icon	What You Should Know
<a href="#">Highlight [Page 282]</a>	Choose  .	The project elements that have the corresponding assignments or characteristics are highlighted.
<a href="#">Filters [Page 284]</a>	Choose  .	Only those project objects that meet the filter criteria are displayed. All other project objects are hidden.
<a href="#">Sort [Page 285]</a>	Choose  .	The project elements are grouped according to particular selection criteria in ascending or descending order.
<a href="#">Grouping [Page 285]</a>	Choose  .	The project elements are grouped according to particular selection criteria in ascending or descending order. The sum of the objects in the group is displayed in a total bar.

## Displaying Project Objects

## Displaying Project Objects

### Use

In the Gantt chart you can show or hide objects in your project and thus decide on the degree of detail you display.

### Procedure

Project Object	Prerequisite	Menu Path	What You Should Know
Activity	Select WBS element	<i>Edit → Show/hide → Show activity or Hide activity</i>	The system also shows or hides the assigned activity elements and milestones. You show or hide sub-networks and project objects with deletion flags separately.
Activity elements	Select activity	<i>Edit → Show/hide → Show activity element or Hide activity element</i>	
Milestones	Select WBS element or activity	<i>Edit → Show/hide → Show milestone or Hide milestone</i>	You can display the milestones for an activity in several lines or grouped together in one line. To do so, choose <i>Settings → Display → Milestone → Display individually or Display grouped</i> .
Subnetwork	Select activity	<i>Edit → Show/hide → Show network or Hide network</i>	
Sub-tree	Select WBS element	<i>Edit → Object → WBS element → Collapse/expand</i>	The system shows or hides all the subordinate project objects in a sub-tree.
Relationship	Select WBS element or activity	<i>Edit → Show/hide → Show relationship or Hide relationship</i>	The system shows or hides the relationships in the graphic area.



Displaying Project Objects

Project object with deletion flag	Select WBS element or activity	Choose <i>Edit</i> → <i>Show/Hide</i> → <i>Object with deletion flag</i> in the relevant menu section	The system displays the project object with a deletion flag and highlights it in color.  For more information, see <a href="#">Deleting Project Objects [Page 277]</a>
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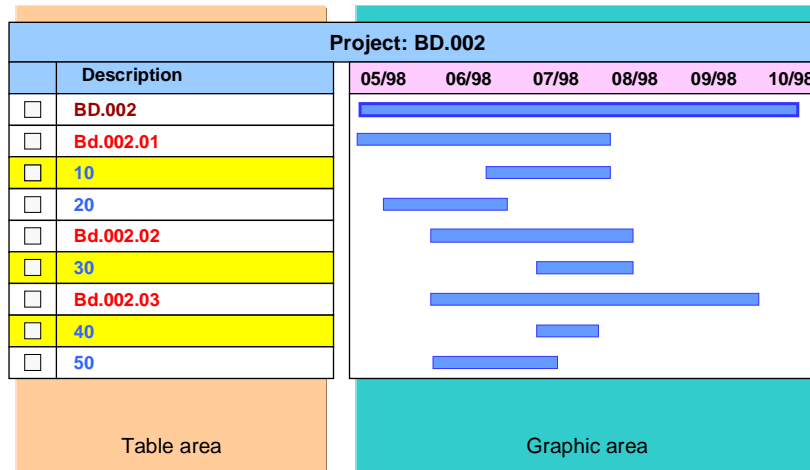
If you want to display all the project objects assigned to a project object, select the object and choose *Show all dependent objects*. However sub-networks and objects with deletion flags are not displayed. Display these objects separately.

## Highlighting project objects

## Highlighting project objects

### Use

You can use highlighting to obtain an overview of project objects that have particular assignments, characteristics, and states. The system highlights those project objects that meet your selection criteria. You can always highlight an assignment, characteristic or state in the table area.



The following selection options are available in a separate subscreen:

#### Object with Assignment

You can use these selection criteria to highlight objects that have assignments, for instance, maintenance orders, assets under construction, or activities.

#### WBS Element With Attribute

You can use these selection criteria to highlight WBS elements that are, for instance, account assignment elements, billing elements, or statistical elements.

#### Activity with Attribute

You can use these selection criteria to highlight activities that are, for instance, internal processing activities, external processing activities, or general cost activities.

#### Object with State

You can use these selection criteria to determine, for example, for which project objects the scheduled dates are no longer current, maintenance orders are running late, or for which material components purchase requisitions and reservations have not been activated.

You can then use the relevant function to update the scheduling, or activate purchase requisitions and reservations etc.. For more information see [Functions in the Gantt Chart \[Page 292\]](#).


### Prerequisite

The system can only highlight those project objects that are displayed in the table area. Project that are hidden are not taken into account.

## Highlighting project objects

## Procedure

### Highlight project objects


1. Choose .

A selection subscreen appears on the left-hand side of the screen with an overview tree containing all four selection categories.


2. Open the node of the relevant category and select the required selection criterion.

The system highlights in color those project objects that meet your selection criteria.

### Closing the Selection Subscreen

To close the selection subscreen and return to the project planning board, choose  above the table area. The highlighting in the table area is kept.

### Undoing Highlighting

If you want to undo the highlighting, open the list box to the right of  and choose *Undo highlighting*. The highlighting disappears.



Highlighting cannot be saved by the system.

## Example

You are an MRP controller and want an overview of all the activities that are assigned material components. By using highlighting you can select all the relevant activities, and then process the information further by going to the relevant detail screens.

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Using Filters

## Using Filters

### Use

In the Gantt chart you can use filters to display only those objects that are of interest. For instance you can display objects that have a budget of more than USD 10,000.



### Procedure

1. Choose .
2. The *Select Conditions* dialog box appears.
3. Copy the required selection criteria for project objects from the right-hand column to the left-hand column.
4. Choose *Continue*.

The *Set User-Defined Conditions* dialog box appears.

5. Enter the conditions for your selection criteria.  
You can also save the conditions as a variant for later use.
6. Choose *Set conditions*.

Only those project objects are displayed that meet your conditions.



7. To return to the complete project, open the list box to the right of  and choose *Undo*.
8. If you want to use the same filter later, for instance after you added more project objects, open the list box to the right of  and choose *Apply*. (You cannot use this function after *Undo*.)

## Sorting and Grouping Project Objects

### Use

The result of sorting and grouping project objects is basically the same in both cases. The system sorts the project objects according to the selection criteria in ascending or descending order. In both cases the system sorts the project objects according to the selection criteria in ascending or descending order. In grouping a totals bar is also displayed that separates different values or groups similar values.

### Procedure

1. Choose  (sort) or  (group).

The *Select Sort Criteria* or *Select Grouping Criteria* dialog box appears.



2. Copy the required selection criteria for project objects from the right-hand column to the left-hand column.

Here you can select fields that are not displayed in the table area.



3. For each criterion also select *Ascending* or *Descending*.
4. After you have defined the selection criteria, choose *Continue*.

The project objects are sorted according to the selection criteria. In the case of grouping, colored total bars are also displayed.

If you want to display the original project hierarchy, choose

- *Undo* in the list box for the sort icon 
- *Undo* in the list box for the group icon 

If you want to use the sort or group criteria again later, choose

- *Apply* in the list box for the sort icon 
- *Apply* in the list box for the group icon 

## Relationships Maintenance

## Relationships Maintenance

### Use


You can edit relationships in the table area or in the graphic area of the Gantt chart using the mouse.

**See also:**



[Relationships \[Page 174\]](#)

### Features

The following table shows which functions maintain which relationships.

Function	Icon/Menu Path	What You Should Know
Show/hide relationships	<i>Edit → Show/hide → Show relationship or Hide relationship</i>	Grays out/in the relationships in the diagram area.
Select relationships	<i>Edit → Select → Relationships</i>	The relationships must be displayed in the Gantt chart.
Delete relationships	<i>Edit → Delete → Delete Object</i>	Deletes a relationship that you have selected in the graphic area.
Display predecessor/successor	<i>Goto → Predecessor/successor</i>	Displays the predecessor/successor of the selected activity.
Display the detailed data of a relationship	Double-click on the relationship in the graphic area	
Redraw relationships after changes to subnetworks	<i>Edit → Object → Activity → Create subnetwork relationship</i>	When you change the successor or the predecessor of an activity replaced by a subnetwork, you can have the system recalculate and redraw relationships.
Create relationships in the graphic area	Choose  .	You can use the pencil cursor to create any relationship in the graphic area. <b>See also:</b> <a href="#">Creating Relationships in the Graphic Area [Page 289]</a>

Relationships Maintenance

Edit relationship in the relationship overview	Choose  .	<p>You can create, edit or delete the relationships of one or more selected activities in the relationship overview.</p> <p><b>See also:</b></p> <p><a href="#">Editing Relationships in the Overview [Page 290]</a></p>
Automatically create relationships (as FS relationships)	Choose  .	<p><b>See also:</b></p> <p><a href="#">Automatically Creating Relationships [Page 288]</a></p>

## Automatically Creating Relationships

# Automatically Creating Relationships

## Use

You can let the system create relationships automatically.

## Features

If you execute this function,


- The system creates all relationships between the selected activities as **FS relationships**.
- The activities are linked according to their order in the table area.



You can change the order of activities before you create relationships (for instance by sorting according to work center, status or duration). The relationships are then created in this new order.

## Activities

To automatically create relationships, you must carry out the following activities:


1. Select all the activities that you want to link with relationships.
2. Choose .

The system displays the relationships in the graphic area of the Gantt chart.

There are the following methods of **changing** or **deleting** relationships that have been created automatically:

### All Relationships

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1. Select at least one activity.
2. Choose . The *Relationship Overview* appears. Here you can change or delete all the settings for the relationships.

or

1. Select at least one activity.
2. From the context menu choose *Relationships list*. The *Relationship Overview* appears. Proceed as above.

### Individual Relationships

---

Double-click on a relationship in the graphic area of the Gantt chart to call up the detail screen for the relationship. Here you can change all the settings for this relationship.

To delete individual relationships click on a relationship in the graphic area and choose *Delete* in the context menu.




## Creating Relationships in the Graphic Area

### Use

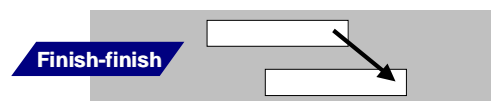
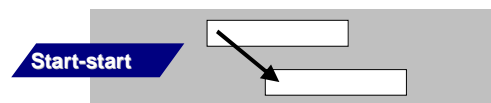
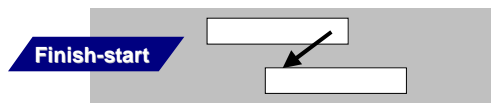
You can create relationships between network activities in the graphic area of the project planning board.


### Procedure

1. Choose  to activate the connection mode.  
All relationships are displayed in the graphic area and the mouse pointer takes the form of a pencil.
2. Position the pencil on the activity, from which you want to draw a relationship. Press the left mouse button and move the mouse pointer on the activity to which you want to link.

The activities are connected by a line.

Deactivate the connection mode by clicking outside the graphic area. The following figure shows you the way to draw the line to create the different types of relationships.



3. After you have created the relationship, choose  again.  
The connect mode is switched off.

## Editing Relationships in the Overview

## Editing Relationships in the Overview

### Use

You can create, edit and delete relationships in a tabular overview.

### Procedure

#### Create relationships

1. Select the activities for which you wish to create relationships.
2. Choose *Edit* → *Create* → *Relationship*.

The relationship overview for the first selected activity appears. All the activities of the current network are displayed in the *Activity selection* section (lower list) of the dialog box. If activities in the current network are linked by relationships to other networks, these activities are also displayed.




You can thus link the current activity with an activity from another network via activity selection.

You can edit relationships between activities in several ways:

Edit Relationship	Procedure
As <b>predecessor</b>	<ol style="list-style-type: none"> <li>1. In the relationship overview choose the <i>Predecessor</i> tab page.</li> <li>2. In the activity selection list select the activity that should immediately proceed the selected activity.</li> <li>3. Choose <i>Create relationship</i>.</li> </ol>
As <b>successor</b>	<ol style="list-style-type: none"> <li>1. In the relationship overview choose the <i>Successor</i> tab page.</li> <li>2. In the activity selection list select the activity that should immediately follow the selected activity.</li> <li>3. Choose <i>Create relationship</i>.</li> </ol>

## Editing Relationships in the Overview

Mixed (predecessors and successors)	<ol style="list-style-type: none"> <li>1. In the relationship overview choose the <i>Mixed</i> tab page.</li> <li>2. In the activity overview select an activity as a predecessor or successor.</li> <li>3. Choose <i>Create relationship</i>.</li> <li>4. Set the <i>Scs</i> indicator for successors in the relationship overview.</li> </ol> <div style="text-align: center;">  </div> <p>If you do not set this indicator, the relationship is a predecessor relationship</p>
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3. Select the relationship and choose *Relationship*.

The detail screen for the relationship appears.

4. Enter the detailed data for the relationship and choose *Back*.

The relationship overview appears again.

5. Choose the *Next* arrow for the next selected activity and repeat steps 2 to 4.
6. When you have created all the required relationships, save.

### Delete Relationships



When you delete relationships, you change the structure of the network. This can affect scheduling and the capacity load.

1. Select the activity whose relationships you want to delete.
2. Choose *Edit* → *Object* → *Activity* → *Relationship overview*.

The relationship overview for the selected activity appears.

3. In the relationship overview select the relationship to delete.
4. Choose *Delete* and confirm the message.
5. Save your data.




## Functions in the Gantt Chart

## Functions in the Gantt Chart

### Use

You can execute various functions for planning and executing projects from the Gantt chart.

### Features

Function	Icon or Menu Path	Effect
Schedule	Choose  or <i>Edit → Functions → Schedule</i>	Executes WBS scheduling for the selected WBS elements.
Calculate costs	Choose  or <i>Edit → Functions → Calculate costs</i>	Executes network costing for the selected networks. <b>See also:</b> <a href="#">Planning Costs in Networks [Ext.]</a>
Material availability	<i>Edit → Functions → Material availability (network)</i>	Checks material availability for all components allocated to networks, which are assigned to the selected WBS elements. <b>See also:</b> <a href="#">Material Availability Check [Ext.]</a>
Activate purchase requisition/reservation	<i>Edit → Functions → Activate PurcReq/Resv</i>	Activates purchase requisitions and reservations for the selected activities. <b>See also:</b> <a href="#">Activating Reservations and Purchase Requisitions [Ext.]</a>
Activate capacities	<i>Edit → Functions → Activate capacities</i>	Determines the capacity requirements for the activities assigned to the selected WBS elements, after scheduling has been executed.
Activate cost calculation	<i>Edit → Functions → Activate cost calc.</i>	Determines the costs for the activities assigned to the selected WBS elements, after costing has been executed.
Milestone trend analysis	Choose  or <i>Goto → Milestone trend analysis</i>	Executes milestone trend analysis for the selected WBS elements. The prerequisites for carrying out a MTA are listed in: <a href="#">Milestone Trend Analysis (MTA) [Ext.]</a>

Functions in the Gantt Chart

Mass change	<i>Goto → Mass change</i>	<p>Makes mass changes for the selected attributes of the selected project objects.</p> <p><b>See also:</b></p> <p><a href="#">Mass Change [Page 333]</a></p>
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You can let the system search and highlight activities, for which

- Reservations and purchase requisitions
- Capacity requirements
- Costs

have not been activated. For more information, see [Highlighting Project Objects \[Page 282\]](#)

## Executing Mass Changes


## Executing Mass Changes

### Prerequisites

You are in a project in the project planning board or the Project Builder.

### Procedure

4. Select all the objects that you want to change.

Choose in the	Pushbutton/Menu Path
Project Builder	
Project planning board	<i>Goto → Mass change</i>

The *Mass changes: Field view* screen appears.

5. Select the fields whose values you want to change. Proceed as described in [Executing Mass Changes Directly \[Page 336\]](#).



You can go from the field view to the table view by choosing *table view*. For more information on the table view, see [Executing Mass Changes with Table View \[Page 339\]](#).

6. Choose *Execute*.

### Result

The system checks the changes and executes them. A log appears. If the system could execute the changes, you can see information in the log about every object that was changed. You can display the log with one line for each entry, which is a simple confirmation, or with two lines with more details for each entry.

If the system could not execute some changes, because fields did not meet the prerequisites, the entries are highlighted in red.



You cannot save this log.

The system saves the changes when you save the project.

## Dates Maintenance

### Setting/Removing Time Constraints in the Graphic Area

When you move the time bar of the activities, the system automatically sets the constraints "no earlier than/no later than..."

1. Select the activity for which you want to set a time constraint.
2. Choose *Edit* → *Object* → *Activity* → *Set constraint start* or *Set constraint fin*. By choosing *start\_fin*, you can set both dates at the same time.

Choose *Edit* → *Object* → *Activity* → *Delete constraint start* or *Delete constraint fin*, to delete time constraints. By choosing *start\_fin*, you can delete both dates at the same time.

### Setting Dates for Project Objects (Inserting a Time Bar)

If you want to create a time bar for a project object press and hold the mouse button and draw a time bar. The time bar is inserted.



If you only create one date, that is, a start or a finish date, it is displayed as a circle not a time bar. You can create a time bar from it.

The default values from the planning board profile apply for the duration, work and unit in activities. You can change the default values by selecting *Settings* → *Options*.



If you select several sets of dates, you must specify when you insert the date bar for which set of dates it is valid for. However, you can shift existing date bars.

### Setting Milestone Dates

If you want to maintain a date or date and time for a milestone,

Hold the mouse button and draw a short time bar.

The position where you first positioned the mouse pointer is the date or date and time for the milestone. The system inserts the symbol for the milestone here.

### Shifting a Time Bar in the Graphic Area

1. Position the mouse pointer.
  - On the left half of the time bar, if you want to change the **start** of the project object.
  - On the right half of the time bar, if you want to change the **finish** of the project object.

The mouse pointer takes the form of a double arrow.

- On the middle of the date bar, if you want to change both the start and finish of the project object.

The mouse pointer takes the form of a double arrow.

2. Press and hold the mouse button, while you move the mouse to the left or to the right.

## Dates Maintenance

You can determine in Customizing whether the date is displayed in a dialog box and in the status line in the lower border of the screen when you move the time bar.

When you release the mouse button, the time bar is lengthened or shortened correspondingly.

When you shift dates, the system

- Use the dates in the WBS elements
- **Duration** of activities



Scheduled dates of WBS elements and activity elements cannot be shifted. If you make changes which affect dates, they receive the system status that rescheduling is necessary.





## Scheduling Functions

### Use

You can execute several scheduling functions in the Gantt chart.

### Features

You can start the following functions. for date scheduling from the *Edit* menu.

Function	Icon/Menu Path	What You Should Know
<b>Schedule</b>	Choose  or <i>Edit</i> → <i>Schedule</i>	This calls up <a href="#">WBS Scheduling [Ext.]</a> .
<b>Shift Dates</b>	Choose <i>Edit</i> → <i>Shift dates</i> → <ul style="list-style-type: none"> <li>Shift project</li> <li><i>Shift subtree</i> or</li> <li><i>Shift WBS element</i></li> </ul>	<p>You can enter a new start date for a project, a subtree or a WBS element. The system will calculate a new finish date from the difference between the “old start date” and the “new start date”.</p> <p>You can use the <i>shift dates</i> function for both basic and forecast dates, regardless of planning method.</p>
<b>Comparing Dates</b>	Choose  or <i>Edit</i> → <i>Compare dates</i>	<p>Use the <i>compare dates</i> function to compare the various types, for example basic dates with forecast dates.</p> <p>You can use the <i>Compare dates</i> function for all sets of dates regardless of planning method.</p>
<b>Reconciling Dates</b>	Choose <i>Edit</i> → <i>Reconcile dates</i> →	
	<ul style="list-style-type: none"> <li><i>Copy scheduled dates</i></li> </ul>	The scheduled dates are copied to the basic or forecast dates.

## Scheduling Functions

	<ul style="list-style-type: none"> <li>• <i>Copy top-down</i></li> <li>• </li> </ul>	<p>You can transfer the dates from one WBS element to all <b>subordinate</b> WBS elements.</p> <p>You can carry out this function for all sets of dates, regardless of planning method.</p>
	<ul style="list-style-type: none"> <li>• <i>Extrapolate dates</i></li> </ul>	<p>You can transfer the dates from one WBS element to all <b>superior</b> WBS elements, if these higher-level WBS elements do not yet have any dates.</p> <p>You can carry out this function for all sets of dates, regardless of planning method.</p>
	<ul style="list-style-type: none"> <li>• <i>Transfer forecast dates to basic dates or</i></li> <li>• <i>Transfer basic dates to forecast</i></li> </ul>	<p>The basic dates are transferred to the forecast dates and vice versa.</p>
<b>Checking Dates</b>	Choose <i>Edit</i> → <i>Check dates</i> →	
	<ul style="list-style-type: none"> <li>• <i>Within WBS</i></li> </ul>	<p>The dates of the WBS element are checked to see whether the basic or forecast dates are within the dates of superior WBS element.</p>
	<ul style="list-style-type: none"> <li>• <i>Activity dates for WBS element</i></li> </ul>	<p>The system checks whether the basic or forecast dates of the activities lie within the dates of the WBS element.</p>
	<ul style="list-style-type: none"> <li>• <i>Scheduled dates in project structure</i></li> </ul>	<p>The dates of the WBS element are checked to see whether the scheduled dates are within the dates of superior WBS element.</p>
	<ul style="list-style-type: none"> <li>• <i>Final confirmation WBS element</i></li> </ul>	<p>Makes a final confirmation for the selected WBS element.</p>
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Scheduling Functions



For actual dates, you can only use the *Final confirmation WBS* function in the *Check Dates* menu entry.

The system does **not** check whether the dates lie within the framework of the project definition.

---

**Leveling of Capacities**

## Leveling of Capacities

### Use

You can plan and evaluate the capacity load in the bar chart.

### Activities

Choose *Goto* → *Capacity leveling* to branch to the following views of the graphical capacity planning board::

- WBS element load  
This shows the load on the work center that is caused by the selected WBS element. Capacity requirements from other orders or networks will not be displayed.
- Total load  
This shows the load of the WBS elements, including the capacity requirements from other orders and networks.
- Individual capacity WBS element  
The load from the individual capacity, which is caused by the selected WBS element. Capacity requirements from other orders or networks are not displayed.
- Individual capacity overall load  
The load from the individual capacity of the WBS element, including the capacity requirements from other orders, networks and WBS elements.

**See also:**

[Graphic planning board \[Ext.\]](#)

To branch to the workforce planning graphical planning board, choose *Goto* → *Capacity leveling* → *Workforce planning*. Here you distribute the work from the selected WBS element amongst the people based on the corresponding period.

**See also:**

[Workforce Planning \[Ext.\]](#)

## Cost Planning

### Use

Costs and revenues are determined in the project planning board if you have selected the corresponding fields in the table area of the bar chart or cost overview.

### Prerequisites

You can specify in Customizing for the *Project System* whether fields with project costs and revenues are to be displayed in the table area of the bar chart or cost overview. If you then call up a project with the corresponding planning board profile, the costs are determined automatically.

If the cost fields have not be specified in the planning board profile, you can select these fields in the bar chart and/or cost overview.

### Features

You can determine and display costs:

- In the bar chart

You display the relevant fields in the table area of the bar chart.

- In the cost overview

The cost overview displays the cumulative distribution of costs and revenues as the project progresses. The cost overview refers to a selected WBS element or activity. Those costs are evaluated that were selected as fields in the cost overview, for instance planned and actual costs or planned costs and revenues.



In the graphic area of the cost overview chart up to three values can be displayed. If, for instance, five cost fields are displayed in tabular area, only the first three are displayed graphically.

- In the cost reports

You can access all the cost reports that are in the *Project Information System*. Choose *Extras → Run cost report*, to execute the required report.

---

**Evaluating Data in the Project Planning Board**

## Evaluating Data in the Project Planning Board

In the project planning board and the Project Builder, you can branch to the complete reporting functionality of the Project System in the *Extras* menu. The following are available:

- Cost reports (Report Writer reports)
- Capacity load reports
- Structure/Date reports from the information system.

You can also branch to graphics to evaluate your project hierarchy or network structures by choosing either *Goto → Network graphics* or *Goto → Hierarchy Graphics*

**See also:**

[Cost Element Reports \[Ext.\]](#).

[Technical Project Reports \[Ext.\]](#)

## Printing Directly from the Project Planning Board

[Seite einrichten \[Page 305\]](#)

[Seite einrichten \[Page 305\]](#)

[Seite einrichten \[Page 305\]](#)

### Use

If you are working in the project planning board, you can print the individual screen areas directly. The following options are available:

- You can print only the Gantt chart.
- You can print all the overviews (component, capacity, costs, and maintenance order overviews) individually.
- You can print the Gantt chart and all the overviews together in a general overview.


You can also write additional information in a print box, which you can integrate in the print-out.

For more information, see [Printing Additional Information \(Print Box\) \[Page 307\]](#)

### Procedure

#### Printing the General Overview (Gantt Chart and all Overviews)

Before you print the general overview, you must open all the overviews.

1. Choose  or *Project* → *Print* → *All*. A screen appears with a print preview of the general overview.
2. You can change the print settings by choosing *Page Setup...* and *Printer Setup...*
3. When you have completed the setup, choose *Print*.

#### Printing the Gantt Chart

1. Choose *Project* → *Print* → *Gantt chart*. A screen appears with a print preview of the Gantt chart.
2. You can change the print settings by choosing *Page Setup...* and *Printer Setup...*
3. When you have completed the setup, choose *Print*.

#### Print the Individual Overviews (Component, Capacity, Costs, and Maintenance Order Overviews)

Before you print an overview, you must open it in the project planning board.


1. Choose *Project* → *Print* → and the required overview. A screen appears with a print preview of the overview.

---

**Printing Directly from the Project Planning Board**

2. You can change the print settings by choosing *Page Setup...* and *Printer Setup...*
3. When you have completed the setup, choose *Print*.



If you choose , the current view of the project planning board is printed.



## Editing the Page Layout

### Use

With the help of the *Set up page* option, you can determine the page layout of the pages that are to be printed.

### Features

The following options are available:

Controlling the page distribution

Displaying the pages as individual pages

Setting cutting marks

Adjusting the time scale

Defining the margins

#### Controlling the page distribution

You can control the page distribution using the *adjust to page* indicator.

You predefine by which number of pages in width and height the display is to be divided when it is printed.

If necessary, the System does not take into account one of the two page specifications so that the individual displays can be reproduced as largely as possible but without distortion.

#### Displaying the pages as individual pages

Using the indicator *Individual pages*, you can display each page as an individual graphic with titles. A prerequisite for this is that the output of the display is divided between more than one page.

#### Setting cutting marks:

You can give the pages that are to be printed cutting marks using the *Cutting marks* indicator. This is also possible when you only want to print an individual page.



This function is only available when you activate the *Enlarge/reduce* option.

#### Adjusting the time scale

You can reduce the time axis with the *Adjust time scale* indicator so that it fits on one page.

#### Defining the margins:

Using the fields *Top*, *Bottom*, *Left* and *Right*, you can define the space between the paper edge and the display.



You cannot go below the minimum margins that result during printing because of technical reasons.

---

**Editing the Page Layout**

With printers that have predefined minimum margins, the values you enter for the margins are added to the minimum values. The result of this is that the actual margins are wider than those that you have defined.

## Printing Additional Information (Print Box)

### Use

When printing a project from the project planning board, you can also print additional information (properties, personal information). This information appears on the print-out underneath the selected project view (Gantt chart, overview etc.) in a print box.

The print box consists of a maximum of five display fields that you can choose yourself.


The following information is available in the print box:

- Project description
- Project identification
- Printed on (date)
- Printed at (time)
- Printed by (person)

This data is automatically read by the system and entered in the print box.



You can also replace up to three of the five fields with text fields, in which you can manually enter information (comments and other information). This data is only used for the current print-out and cannot be saved.

### Procedure

1. Choose *Project* → *Print* → *Fill print box*. The *Print box: Define* screen appears with your personal field selection. If you have not yet selected any fields, the list is empty.
2. If you want to enter fields or to change the selection, choose . The *Select fields* screen appears. Here you can select up to five fields for your print box.



The *Info text line 1 to 3* fields are empty lines for the manual entry of project-specific information.

3. Choose . The system returns to the *Print box: Define* screen and displays all the selected fields.
4. To save your settings, choose  again.



After you have left the project planning board, the field selection remains until you change it. Entries in the info text lines 1 to 3 are not saved.

## Confirmations

# Confirmations

## Prerequisites

You are in a project in the project planning board or the Project Builder.

You can only confirm activities and activity elements, if


- They have been released
- The confirmation indicator has been set in the control key
- They have been saved on the database

You must have defined certain confirmation parameters in Customizing for the Project System previously.

For more information, see [Confirmation Directly in the Project System \[Ext.\]](#).


## Procedure

2. Select the activity to be confirmed.

Choose in the	Pushbutton/Menu Path
Project Builder	<i>Edit -&gt; Activity -&gt; Confirm</i>
Project planning board	

The *Create Network Confirmation: Actual Data* screen appears.

4. Enter the necessary confirmation data.

5. Choose .



Before you leave the confirmation, you can go to a separate dialog box to enter goods movements.

## Result

According to your settings in Customizing, the system executes the confirmation immediately or later in a background job.

## Working in the Overviews

### Use





The component overview, the capacity overview, the costs and revenues overview, and the maintenance orders overview graphically present additional information about the project elements in the Gantt chart.

### Features

You can display the overviews for WBS elements or activities in addition to the Gantt chart. You can so obtain an overview on the planned material components, capacities, as well as costs and revenues.

### Activities

To show an overview, select a WBS element or activity and choose *Details* → and then the name of the required overview (for example, *Component overview*).

Overview	Icon	What You Should Know
Component overview		In the component overview you can use the context menu (e.g. right-hand mouse button) to execute all editing functions for component allocations.
Capacity overview		This overview displays the capacity load from four weeks before to four weeks after the period for the capacity is required for the selected WBS element or activity.
Costs and revenues overview		<p>In the costs and revenues overview up to three values can be evaluated. If, for instance, five cost fields are displayed in tabular area, only the first three are displayed graphically.</p> <p>It is important that the three fields have the same number format. The format of the first field determines the format for the evaluation. If the format of the other fields does not agree with this format, no evaluation takes place.</p> <p>Fields that are not displayed in the tabular area are not evaluated in the graphic area.</p>
Maintenance order overview		This overview displays the dates of service and maintenance orders based on the scheduled dates.

In each overview, you can execute functions by using the context menu (right-hand mouse button). For instance, you can select all object in an overview, display the legend, display an additional detail list, or close the overview.

#### See also:

[Displaying Detail Lists for Overviews \[Page 312\]](#)

## Material Management in the Project Planning Board

## Material Management in the Project Planning Board

### Use

You use the functions described here to manage your project material components directly in the project planning board.

### Features

#### Gantt Chart

In the Gantt chart you can carry out the following functions. These functions refer to a selected WBS element or network activity. It is not possible to select individual components in the Gantt chart. To do this, call up the component overview.

Function	Menu Path	Comments
Create component assignments	Edit → Create...	See <a href="#">Creating Project Objects [Page 264]</a>
Check material availability for the network	Edit → Functions → Material availability (network)	Carries out a material availability check for all the components in the network assigned to the selected WBS element.  See also: <a href="#">Material Availability Check [Ext.]</a> .
Activate purchase requisition/reservation	Edit → Functions → Activate Purc Req/Res.	Irrespective of the settings in the component detail screen, you can use this function to manually create purchase requisitions or reservations for a WBS element.  See also: <a href="#">Activating Requirements [Ext.]</a> .

#### Component Overview

Several more functions, for individual components, are available from the component overview. Apart from detail screen, which can also be called up by double-clicking on the component, all functions are called up from the context menu.

Function/Menu Entry	Comment
Available quantity	The system displays the component availability as a bar chart in the component overview.
Availability check	An availability check is carried out for the selected component. For more information, see <a href="#">Material Availability Check [Ext.]</a> .
Detail screen	Opens the component detail screen for the selected component. For more information, see <a href="#">The Component Detail Screen [Ext.]</a> .

**Material Management in the Project Planning Board**

GR/GI list	A further window opens with procurement details, such as document (purchase requisitions or reservations etc) details and details of goods movements etc.
Explode BOM	If the selected component has a bill of material, this is exploded, either level-by level or the whole structure (multi-level). For more information, see <a href="#">Exploding the Bill of Material [Ext.]</a> .
Dates overview	If you have maintained the requisite settings in Customizing for <a href="#">Monitoring Dates [Ext.]</a> , the systems displays the dates overview.
Reassign	You use this function to reassign a component from one activity to another in the same network.
Create document	You can create a document (document info record and if necessary original application file) that is assigned to the component Be sure to a document type that can be assigned to a material component. For more information, see <a href="#">Document [Ext.]</a> .
Document overview	Provides an overview of documents assigned to the component.
Delete	Deletes the component assignment, if this is allowed, that is if there are no open procurement documents such as purchase requisitions or reservations for the component.

## Displaying Detail Lists for Overviews

## Displaying Detail Lists for Overviews

### Use

For every overview in the project planning board you can display a list of details in a separate dialog box. In the details list the data for the relevant overview is displayed divided up in periods.

### Procedure

Display Detail List	Procedure	What You Should Know
Goods movement overview for component overview	<ol style="list-style-type: none"><li>1. Select a component in the component overview.</li><li>2. In the context menu choose <i>GR/GI list</i>.</li></ol>	The overview displays all the goods issue and receipts for the selected components.
Capacity load overview for the capacity overview	<ol style="list-style-type: none"><li>1. Select a work center.</li><li>2. In the context menu choose <i>Capacity load list</i>.</li></ol>	The capacity load overview (list) displays the capacity requirements of all requirement sources
Period drilldown	<ol style="list-style-type: none"><li>1. Select a WBS element or WBS element in the costs overview</li><li>2. In the context menu choose <i>Period drilldown</i>.</li></ol>	The list shows a period drilldown for the selected WBS element or activity.



## Settings for the Project Planning Board

### Use



You can change the graphic presentation of the project planning board to suit your requirements. There are following types of changes:

- You can change some settings temporarily, for the current session.
- You can save some changes user-specifically, the changes are saved for you till you change them again.
- Providing you have the necessary authorizations, you can generate a new project planning board profile in Customizing. Here you can change all of the settings that are listed below.

You can see whether temporary or user-specific changes are possible for individual functions in the following table.

### Features

The functions with which you can change settings are in the *Settings* menu.

Setting Options	Icon/Menu Path	Type of Change	Default values from Customizing for the Project System
<a href="#">Graphical Presentation [Page 317]</a>	Choose  or <i>Settings</i> → <i>Planning board assistant</i>	user-specifically	Project planning board profile
<a href="#">Graphical Presentation of the Time Scales [Page 320]</a>	Choose  or <i>Settings</i> → <i>Time axis assistant</i>	user-specifically	Profile for time scales Scale for time axis
<a href="#">Layout Detail Screens [Page 330]</a>	<i>Settings</i> → <i>Layout detail screens</i> → <i>For WBS element</i> or <i>For activity</i>	user-specifically	Layout for WBS element detail screens Layout for activity detail screens
<a href="#">Evaluation and Planning Periods [Page 320]</a>	<i>Settings</i> → <i>Time settings</i> → <i>Planning board</i> → <i>Planning period</i>	temporary (current session)	Time profile
Workforce Planning	<i>Settings</i> → <i>Options</i> → <i>Application</i> and then the <i>Workforce planning</i> tab page	temporary (current session)	Profile for workforce planning

**Settings for the Project Planning Board**

<a href="#">Field Selection for the Gantt chart and the Overviews [Page 315]</a>	Double-click on the column (field) in the table area  or <i>Settings → Field selection</i> (only for field selection in the Gantt chart)  or <i>Settings → Options</i> (enter another field selection profile on the <i>Table area</i> tab page)	user-specifically	Project planning board profile
<a href="#">Settings in the project planning board profiles [Ext.]</a>	<i>Settings → Options → Planning board</i> and then the <i>Templates</i> tab page	user-specifically	Project planning board profile
Default values for networks	<i>Settings → Options → Application</i> and then the <i>Workforce planning</i> tab page	temporary (current session)	Project planning board profile
Scheduling settings	<i>Settings → Options → Scheduling</i>	user-specifically	Scheduling Types Parameters for WBS scheduling

**Activities**

When you save a project, the user-specific settings are saved. Temporary settings are not saved.


## Table Area

### Use


You can change various settings in the table area of the Gantt chart and the overviews.

### Features

The settings that you can change in the table area are listed below:

Function	Action	What You Should Know
Select fields or columns in the Gantt chart or the overviews	Double-click on the column titles or for the Gantt chart choose <i>Settings</i> → <i>Field selection</i>	<p>The graphical evaluation is dependent on the displayed fields and their values.</p>  <p>You can select up to sixteen fields for the table area.</p> <p>The settings are saved with the project in the project planning board profile.</p>
Move columns	Move column with drag and drop or choose <i>Settings</i> → <i>Field selection</i>	The settings are saved with the project in the project planning board profile.
Change column width	Click on the line between fields and, keeping the mouse button pressed, move the line or choose <i>Settings</i> → <i>Field selection</i>	The settings are saved with the project in the project planning board profile.
Change title of Gantt chart and overviews	Double-click on title	<p>In the standard system the title of the Gantt chart is the project definition. For the overviews the system uses the name of the overview as the default, e.g. Component overview.</p> <p>These settings are not saved.</p>
Change column title	Double-click on title of Gantt chart or overview	<p>The column titles have the field labels as defaults.</p> <p>The changes you make are not saved.</p>

**Table Area**

Change the contents of fields in the table area	Choose <i>Settings</i> → <i>Edit</i> → <i>Change table</i>	<p>Switches on change mode for date fields (except actual dates) and the <i>Description</i> and <i>Identification</i> fields. You then overwrite the contents of these fields directly in the table area.</p> <p></p> <p>You cannot change the description of activities that have the network number displayed.</p>
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## Graphical Presentation

### Use

You can change the graphical presentation of the project planning board as required with the planning board assistant.




You can save the settings individually for each user, independently of the graphic profile. Your changes are **not** saved in the graphic profile.

### Features

You change the following settings in the **table area** of the Gantt chart and the overviews.

	What can you change?	Which settings can you change?
Gantt Chart Component overview Capacity overview Costs/revenues overview	<ul style="list-style-type: none"> <li>Title of the Gantt chart or overview</li> <li>Field or column heading</li> <li>Table lines (object dependent)</li> </ul>	<p>The pattern and the color for the foreground, background and the text, 3D effect, logo</p> <p>The font, the font style and the font size</p>

You change the following settings in the **graphic area** of the Gantt chart and the overviews.


	What can you change?	Which settings can you change?
Gantt Chart	<ul style="list-style-type: none"> <li>Symbols for dates</li> <li>Texts on the dates</li> <li>Relationships</li> </ul>	<ul style="list-style-type: none"> <li>Size and color/pattern of the symbols for the dates (e.g. date bars)</li> </ul> <p><b>See also:</b>  <a href="#">Changing settings for date symbols [Page 319]</a></p> <ul style="list-style-type: none"> <li>Font, effects and font size of the texts for the dates</li> <li>Background color</li> <li>Color of the relationships</li> <li>Logo (pre-set or company logo)</li> </ul>  <p>For more information on how to include you own company logo, see note no. 39258.</p>
Capacity overview	Vertical and horizontal bars	Color and size

**Graphical Presentation**


Component overview	Symbols for <ul style="list-style-type: none"> <li>• Goods receipt dates</li> <li>• Goods issue dates</li> <li>• Requirement dates</li> <li>• Delivery dates</li> </ul>	Color
Cost overview	Cost curves	Color

**Activities**

The Gantt chart and the overviews are displayed on the left-hand side of planning board assistant as nodes in a tree. When you expand on of these nodes the sections and objects in the Gantt chart or the overviews are displayed. You can then edit these sections. Depending on which sub-node you select, objects are displayed on tab pages on the right-hand side of the planning board assistant and can be edited here.

If you change settings, for instance color or font, you can see the effect of your changes in a small preview window immediately. You can also see the effects of your changes in the planning board itself without leaving the planning board assistant by choosing .

If you want to work with your own settings for the project planning board, choose *Save user settings*. These settings are then saved under your user and are used each time you call up the project planning board.

If you want to work with the standard settings from Customizing, choose . If you then want to work with these standard settings in future, choose *Save user settings*.

## Changing settings for date symbols

### Use

You can change the color, size and position of the date symbols in the graphic area of the Gantt chart using the planning board assistant.



You can change the symbols themselves in Customizing for *Basis*.

### Features

Dates are displayed in the Gantt chart as bars or the start and finish dates are represented by individual symbols. The system gives dates that belong together the same color. For instance,

- Start and finish dates
- Actual dates (WBS)
- The dates that belong together in the earliest and latest set of dates
- Actual dates (activity)

For example, if you change the color of the forecast start dates the system also changes the color of the finish date and the date bar.



The color, pattern, and values such as *Edge type* and *Edge width*, are used for the dates that belong together. *Vertical offset* and *Element height* are an exception to this. Here you can change the values for each date.

You can use a pattern and consequently a background color for most date symbols.



The date symbols for the start, finish, and actual dates are simple circles, whose line color (edge color) you can change. This means that the background and foreground color as well as the pattern have no effect.

### Activities

Define the colors for the dates in planning board assistant.

## Time Display

## Time Display

## Use

You can change various settings for time in the project planning board.

## Activities

Function	Menu Path	What You Should Know
Change the time interval for the graphic area	<i>Settings → Options → Planning board</i> and then <i>Increment</i> on the <i>Settings</i> tab page	If you change the time interval, for example from day to hour, the accuracy of your planning will also change. For instance if you create date bars for activities in the graphic area, these are accurate to an hour.
Changing the planning and evaluation time period	<i>Settings → Options → Planning board</i> and then the <i>Planning period</i> tab page	You can change the start and finish dates planning and evaluation periods. The planning period cannot be longer than the evaluation period.  For more information on the planning and evaluation periods, see <a href="#">Layout of the Project Planning Board [Page 253]</a>
Change the date line	<i>Settings → Options → Planning board → Settings</i> tab page → <i>Date line</i>	You can choose another date instead of the current date for the date line in the graphic area.
Change set of dates and the times of activities	<i>Settings → Options → Planning board → Settings</i> tab page → <i>Set of Dates</i>	You can specify which set of dates, for instance basic or actual dates, and whether these are the earliest or latest dates.
Graphic representation and scale of the time axis (only in bar chart)	<i>Settings → Time axis assistant</i>	You can use the time axis assistant to edit the time axes of the planning and evaluation periods.



The changes that you make here are only valid for the current session. An exception is the *time axis assistant*, where you can save the user-specific settings.



## Structure planning

If you want to create or process a project, you can use structure planning in addition to the work breakdown structure and the network. In structure planning, you can create WBS elements and activities together and maintain the data for them. You can use structure planning particularly when you have a more precise idea of the structure of the project - for example which WBS elements are detailed by activities.

This chapter demonstrates the scope of planning according to structure in the Project System. You will find further details for the individual functions in the respective chapters.

## Configuration

## Configuration

You enter the defaults for structure planning in the project profile. You can change the settings in structure planning for further processing.

### On the Dates tab pages in *Settings* → *Options ...*

You specify:

- The **scheduling scenario**: There are three different scenarios. *Top-down* and *Bottom-up* are predefined scenarios, whose parameters are determined by the system. These parameters cannot be changed. You do not have to edit or check the scheduling parameters. On the other hand you have to maintain all the scheduling yourself in the *Free Scheduling* scenario. For more information, refer to the Scheduling section under [Settings: Options \[Ext.\]](#)
- The **Scheduling method for WBS structure**: You must specify planning methods for planning using both basic and forecast dates. This only refers to the work breakdown structure and not to the activities. Changes apply only for the current session and are not saved in the project profile.
- **Scheduling parameters for activities**: You can change settings for the activities here, for example, the scheduling type. The activity parameters are taken from the network profile. Changes apply only for the current session and are not saved in the project profile.
- **Network default value**: Here you can change the settings for networks, for instance the network type. The parameters are originally taken from the network profile. Changes apply only for the current session and are not saved in the project profile.
- **Assign new activities to**: If you create an activity for a WBS element, the system creates a network in the background. In the control data, you specify how the activities that you create for the WBS elements are assigned to the network. Activities are assigned either to:
  - All networks assigned to the project. When you create an activity a list of networks in the project appears, from which you select one.
  - The network for the WBS element. The system creates a new network for each new activity entered for a WBS element.
  - In general to a new network. The system creates a new network for each new activity entered for a WBS element.

### In *Settings* → *Capacity leveling and Leveling of ind. cap....*

You maintain

- Profiles and parameters for calling up the planning table in both tabular and graphic form as well as for creating capacity reports.
- Dates for the evaluation period.

These menu paths are only available if capacity requirements exists for the selected WBS element.

In *Settings* → *View ...*

You specify how the WBS elements are to be displayed, for example by number or description.

## Views and Allocations

The structure overview displays the WBS elements, activities, and activity elements for your project. By selecting the menu options *Settings* → *View*, you can specify how the objects are displayed:

- Including objects flagged for deletion
- Superior objects when accessing via a subproject

### Indicator in the Structure Overview

The structure overview contains several indicators in addition to the objects.

#### For the WBS Elements

- The field *L* indicates the hierarchy level of the element.
- Field *S* indicates whether the object is subdivided further.
- Field *Ac* indicates whether activities exist for a WBS element.

#### For the Activities

- Field *IN* indicates activities carried out internally (in-house)
- Field *EX* indicates activities carried out externally
- Field *SE* indicates external services management
- Field *GCS* indicates general costs activities

The indicator *AI* indicates the allocations and characteristics for the WBS elements or activities. You can call up a specific allocation type or characteristic.

Select *Extras* → *Display allocation* to select the elements. The objects with a corresponding allocation are marked. The following allocation types can be displayed.

- PS texts
- Material components
- Subnetworks

Choose *Extras* → *Display char.*, to select the characteristics.

- Whether WBS elements are scheduled
- Whether the following business data exists for activities:
  - No capacity
  - No PReq / RES.
  - No costing

## Views and Allocations



You want to see whether material was allocated to an activity. By selecting the menu options *Extras* → *Display allocation*, you branch into a selection screen showing the possible allocations. Select *Material* and choose *Continue*. On the structure overview, the indicator *AI* is now selected for the activities to which material is allocated.

---

Creating Projects Using Structure Planning

## Creating Projects Using Structure Planning

To create a project using structure planning, proceed as follows:

1. From the *Planning* area menu, choose *Project* → *Structure planning* → *Create project*.

The *Create project* dialog box appears.

2. Maintain the data in the dialog box.

You can use an existing project or a standard project as a template.

3. Choose **CONTINUE**.

The screen *Change: Structure Planning* appears.

4. Maintain the data for your project.

- You maintain WBS elements using the *WBS basic data* tab page, which takes you to the WBS element overview.
- You maintain activities and activity elements using the *Activity data* tab page; this takes you to the activity overview.

5. Confirm your entries.

The WBS elements, activities, and activity elements are created.



You cannot create subnetworks in the WBS, though you can have the system indicate whether an activity has subnetworks.

**See also:**

[Work Breakdown Structure \(WBS\) \[Page 15\]](#)

[Network \[Page 78\]](#)

## Capacity Leveling

In structure planning, choose *Goto* → *Capacity planning* to access evaluations for the capacity loads and for the individual capacities in the tabular and graphical planning board.

The following evaluations are available:

### Capacity Leveling

Choose *Goto* → *Capacity planning* → *Capacity leveling* to see

- *WBS element load*  
The load which is **only** caused by the WBS element. Capacity requirements from other orders, networks, or WBS elements are not displayed.
- *Total load*  
The load of the WBS element, including capacity requirements from other orders, networks, and WBS elements.

### Leveling Individual Capacities

Choose *Goto* → *Capacity planning* → *Leveling of individual capacities* to see:

- *WBS element load*  
The load which is **only** caused by the WBS element. Capacity requirements from other orders, networks, or WBS elements are not displayed.
- *Total load*  
The load of the WBS element, including capacity requirements from other orders, networks, and WBS elements.

## Capacity Reports

Choose *Goto* → *Capacity planning* → *Capacity leveling* to access the following capacity evaluations:

- Per work center and capacity category  
The list shows the available capacity, the capacity requirements, and the utilization of all capacities for the selected WBS elements.
- Per WBS element  
The list shows the available capacity, the capacity requirements, and the utilization of all capacities for each WBS element.
- Cumulated for all WBS elements  
The list shows the available capacity, the capacity requirements and the utilization of all capacities cumulated over all selected WBS elements.





## Data for Earned Value Analysis

Choose *Goto* → *Earned Value Analysis* to maintain the following data for the earned value analysis:

- *Parameters*
- *Planned percentage of completion*
- *Actual percentage of completion*

### See also:

For more information on earned value analysis, refer to [Earned Value Analysis \[Ext.\]](#)

## Layout of Detail Screens

### Use

You can use this function to edit the layouts of the following detail screens:

- WBS elements
- Network activities

You edit the layout of the WBS element detail screens in WBS maintenance and the layout of the network activity detail screens in network maintenance. You can edit the layout of both WBS elements and activities in structure planning and in the project planning board.

### Features

In the standard system each detail screen is on a separate tab page. For your own view you can rearrange the detail screens on the tab pages as you like. You can place several detail screens on one tab page and only show the tab pages that you require. The finished set of tab pages is saved for each user and client as a layout.

You must assign every layout that you create to a project profile or network profile. You can edit both the current layout and other layouts, which you are not using at the moment.

You can also combine detail screens for all users in Project System Customizing.

### Activities

The available tab pages are numbered from left to right, starting with "TAB01" through to "TABnn". You can assign up to five detail screens to a tab page.



The contents of the detail screens delivered by SAP are defined in the system and cannot be changed. However you can develop your own detail screens and include them in Project System Customizing for later use.

You can make the following settings:

- Enter your own title for tab pages and put an icon on these pages.
- Hide tab pages that you do not need
- Determine which detail screens appear on which tab page and where
- Change the layout according to the transaction (create, change, display)

If you do not want to redefine all the tab pages, copy the SAP standard layout or the Customizing settings and change these settings to suit your needs.

## Editing the Layout of Detail Screens

### Prerequisite

The procedure described below is valid for network and work breakdown structure maintenance as well as for structure planning and the project planning board.

### Procedure

1. Choose:

- In work breakdown structure maintenance: *Extras* → *Settings* → *Layout detail screens*
- In network maintenance: *Edit* → *Settings* → *Layout detail screens*
- In structure planning or the project planning board:

*Settings* → *Layout detail screens* → *For WBS element* or *For activity*

If no user settings exist or there is only one setting for the current project or network profile, the *Change Detail Screens:Details* screen appears. In this case, continue with step 3. The settings that you make here are assigned to the current project or network profile.



In structure planning or in the project planning board there can be several networks in a project and therefore several network profiles. If there are no user settings for the layout of the activity detail screens and you want to create a layout, the profile of the first network activity is the current network profile.

If there are already user settings, the screen *Change Layout Detail Screens: Overview* appears.

2. Choose one of the following functions.

Function	Procedure
Create layout	<ol style="list-style-type: none"> <li>1. Choose <i>Edit</i> → <i>Create</i>.</li> <li>2. Specify the project profile or the network profile whose layout you want to define. Enter the activity type too.</li> </ol>
Change layout	<ol style="list-style-type: none"> <li>3. Select an entry in the list</li> <li>4. Choose <i>Edit</i> → <i>Display details</i></li> </ol>

The screen *Change Detail Screen: Details* appears . All the available tab pages are displayed.

If you are creating a new layout, these tab pages are empty at first. You can redefine them completely or enter values on the pages in one of the ways described below and then change these entries.

- By choosing *Edit* → *Copy standard*, you copy the standard SAP settings.

---

**Editing the Layout of Detail Screens**

- By choosing *Edit* → *Copy Customizing*, you copy the Customizing settings for the same profile to the tab pages.
3. Edit the tab pages as follows:
    - a. Enter a new title or change the existing title of a tab page. If required, also choose an icon to appear on the tab.
    - b. Set the *Active tab page* indicator on the tab page. If you want the tab page to appear on top as the first tab page, also set the *First tab page* indicator.
    - c. You can select the detail screens that you want to include on the current tab page one-by-one in the right-hand list and copy them to the left. You proceed in this manner with further detail screens.
  4. Save your data.



In networks some activity detail screens are required by the application. If you have not included them on the tab pages in your layout, they will be automatically included by the system on a separate tab page, called *Necessary fields*.

## Mass change

### Use

If you work with complex long-running projects, for instance in make-to-order manufacturing, it is often necessary to make large scale changes to master data or assignments. You can use mass changes the change projects and networks in a just a few steps.

### Prerequisites

Please note that the mass changes function is a very powerful tool, with which you can change projects and networks drastically. These changes cannot be undone. Therefore you must have the requisite knowledge, if you want to use mass changes.

The system only makes changes to projects and networks, if the corresponding prerequisites are met and the business transaction is allowed. For instance the system can only set the *Completed* status, if the network or work breakdown structure has the status *Released* or *Technically completed*.

You have to have the authorizations necessary for changing the objects in question.

### Features

You can make the following changes with mass changes.

- Change field values in the objects *network header*, *activity*, *project definition*, *WBS element* and *relationship*, for example:
  - Plant
  - Business area
  - Profit-center, etc.
- Change profile assignments, for instance:
  - Interest calculation profile
  - Budget profile
  - Project profile etc.
- Schedule and cost networks
- Change the system statuses *Released* and *Deletion flag*.



You cannot process the following objects with mass changes:

- Components
- Production resources/tools (PRT)
- PS texts
- Long texts

## Mass change

### Activities

You can call up mass changes

- Directly in the *Mass change* transaction in the *Project System*
- In the *Project Information System* from the structure overview or the corresponding individual overviews

In both cases you can either execute it online or schedule it as a background job.

You can select data for mass change in different ways:

- You can execute mass changes [without an optical check \[Page 336\]](#).

In this case you select the fields to change, **before** the system selects the projects and/or networks. The system displays all the objects that can be processed with mass changes, irrespective of the actual structure of the project or network. For instance the object *Relationships* is displayed even if there are no relationships in the network in question.



The system selects projects and networks, when you execute the mass changes.

- You can check the changes intended first in a [Table view \[Page 339\]](#) first and then execute the mass changes.

The system first selects the projects and/or networks. To select the fields, you can go to a table view and change fields there. In the table view you can see an overview of all the objects that can be changed in the selected projects and networks.

As long as you are in the table view, you can cancel the intended changes. You can also compare the old and new values. You can thus check individual changes, before executing them. You can also make individual changes, for instance by changing the MRP planner in just some of the selected networks.



The system executes the changes network by network and project definition by project definition. This means that the mass change treats each network and each project definition as a separate unit, independently of their assignments. If, for instance, the system cannot change field values in a network, the system does not make any changes to this network. However, if you have selected several networks or project definitions and no further error occur, the system makes the changes in these networks/projects.



You have selected projects, which have assignments to networks. In WBS elements you can generally change the business area and in the network activities the work centers. The system discovers during the check that one of the work centers, you have entered, does not exist. Consequently the system does not make any changes to the network activities. On the other hand, the system changes the business area in the WBS elements, as no errors were found.

**Mass change**

If you want to make mass changes for a single project, it is quickest and easiest to do this in the [project planning board or structure planning \[Page 342\]](#). When you save the project, the system saves the changes.

---

Executing Mass Changes Directly

## Executing Mass Changes Directly

### Prerequisites

You want to execute mass changes without an optical check.

If you do want to check the intended changes, proceed as described in [Executing Mass Changes with Table View \[Page 339\]](#).

### Procedure

#### Executing Mass Changes

1. From the *Operative Structures* menu choose *Tools* → *Mass change* → *Execute*.

The first time you call up the function, the *Enter Profile* dialog box appears. The next time you work with mass changes, this profile will be used automatically. For more information on the database profile, see [Profiles in the Information System \[Ext.\]](#).

2. Enter a data base profile and choose *Continue*.
3. On the selection screen enter selection criteria for the projects and/or networks that you want to change.
4. Choose *Enter field values for mass changes*.

The *Mass changes: Field view* screen appears.

5. Select the tab page of the object that you want to change, for example the tab page for *WBS elements*.

The field selection screen appears.



If the field selection does not appear automatically, choose *Select fields*.

6. Select the field that you want to change and choose *Continue*.

You return to the tab page.

7. Enter the new value in the selected field.

You can choose whether the system replaces all values of the field with the new value or [only replaces certain values \[Ext.\]](#) with the new value.



If you leave the field blank, the system deletes the contents of the field when the mass change is executed. You can use this feature, for instance, to delete assignments to other objects.

8. To select further fields, proceed as in steps 6 and 7.
9. For the objects, repeat steps 5 to 8.
10. At this stage there are the following options:



**Executing Mass Changes Directly**

Option	Procedure
Execute the mass changes in test mode (the system does not save the changes)	Choose <i>Test changes</i> .  A log appears. When you leave the log the <i>Mass changes</i> dialog box appears again.
Executing mass changes directly	Choose <i>Execute</i> or <i>Execute in background</i> .
Copy settings for mass changes and save as a selection variant	1. Choose <i>Copy</i> .  You return to the selection screen.  2. Save the selection variant by choosing <i>Goto</i> → <i>Variants</i> → <i>Save as variant</i> .  For more information on selection variants, see <a href="#">Working with Variants [Ext.]</a>

**Executing Mass Changes in the Project Information System**

You can execute mass changes in either the structure overview and or in one of the individual overviews. The following is the procedure for the structure overview:

1. From the *Project Information System* screen choose *Structure/dates* → *Structure overview*.
2. On the selection screen enter selection criteria for the projects and/or networks that you want to change.
3. Choose *Extras/environment* → *Mass change*  
The *Mass changes: Field view* screen appears.
4. Select the tab page of the object that you want to change, for example the tab page for *WBS elements*.

The field selection screen appears.



If the field selection does not appear automatically, choose *Select fields*.

5. Select the field that you want to change and choose *Continue*.  
You return to the tab page.
6. Enter the new value in the selected field.

You can choose whether the system replaces all values of the field with the new value or [only replace certain values \[Ext.\]](#) with the new value.



If you leave the field blank, the system deletes the contents of the field when the mass change is executed. You can use this feature to delete assignments, for instance

7. To select further fields, proceed as in steps 5 and 6.
8. For the objects, repeat steps 4 to 7.

---

**Executing Mass Changes Directly**

9. To execute mass changes in test mode, choose *Test changes*.

A log appears. When you leave the log the *Mass changes* dialog box appears again.

10. Choose *Execute*.

The mass changes are executed.

**Result**

When the system has finished the mass changes, a log appears. If the system could execute the changes, you can see information in the log about every object that was changed. You can display the log with one line for each entry, which is a simple confirmation, or with two lines with more details for each entry.

If the system could not execute some changes, because fields did not meet the prerequisites, the entries are highlighted in red.

You can save the log when you exit. You can then call it up again later. To do so, choose

- From the *Operative Structures* screen *Tools* → *Mass Change* → *Log*
- From the *Project Information System: Structure Initial* screen *Extras/environment* → *Logs* → *Mass change*

## Executing Mass Changes with Table View

### Prerequisites

- In the *Mass change* function itself:  
 You are in the selection screen for mass changes.  
 You have maintained the selection criteria for the required projects and/or networks, but have not yet selected any fields. There is **no** green checkmark in the *Enter field values for mass changes* field.
- In the Project Information System  
 You are in either the structure overview or an individual overview. For more information, see [Working with Overviews \[Ext.\]](#).  
 You have selected the objects you want to change.

### Procedure

1. Choose:
  - From the *Mass Changes in the Project System* screen *Program* → *Execute*
  - From the *Project Information System: Structure Initial* screen *Extras/environment* → *Mass change*
 The *Mass changes: Field view* screen appears.
2. Here you can select fields whose values are to be changed. You can also go directly to the table view and select the fields there.  
 For the field selection, proceed as described in [Executing Mass Changes Directly \[Page 336\]](#).
3. Choose *Table view*.  
 In the table view the system displays all objects for the selected projects and networks. If you have entered new values in the field overview, the system displays these values in the table view. The tab strips of the objects that have been changed have a green checkmark.  
 You can execute the following functions in the table view:

Function	Procedure	What You Should Know
Change individual field values (you can cancel these changes)	1. Position the cursor on the relevant field in the table. 2. Overwrite the value.	
Display original and new values in the table	Choose <i>View</i> → <i>Show old values</i> .	

**Executing Mass Changes with Table View**

Only replace a particular value by the new value	<ol style="list-style-type: none"> <li>1. Choose <i>Edit</i> → <i>With restrictions</i>  In the table header the line <i>Only replace</i> is available for entry.</li> <li>2. Enter the value that you want to replace.</li> </ol>	If you leave the Only replace field blank, the system only replaces the value if there was no entry in the field.
Add or remove fields from the table header	Choose <i>View</i> → <i>Select fields</i> .	
Copy field values from the table header to the table (you can cancel these changes)	<ol style="list-style-type: none"> <li>1. In the table, select the rows of the objects that you want to change.</li> <li>2. In the table header, select the column headers of the fields you want to copy.</li> <li>3. Choose <i>Edit</i> → <i>Execute changes</i></li> </ol>	The system executes the changes only on the active tab page. Repeat this procedure on the other tab pages.
Cancel changes	<ol style="list-style-type: none"> <li>1. In the table, select the rows of the objects whose changes you want to cancel.</li> <li>2. In the table header, select the columns of the fields in which the old value is to be entered.</li> <li>3. Choose <i>Edit</i> → <i>Undo changes</i></li> </ol>	The system cancels the changes only on the active tab page.
Execute mass changes in test mode	<ol style="list-style-type: none"> <li>1. Select the rows of the objects, whose changes you want to test.</li> <li>2. Choose <i>Edit</i> → <i>Test changes</i></li> </ol>	All the changes are executed that were made in the table, i.e. either with <i>Edit</i> → <i>Execute changes</i> or by overwriting values in the table. The changes are made for all tab pages.

4. Before you can save the changes, it is necessary to copy the new field values from the table header to the table by choosing *Edit* → *Execute changes*. Make sure you select correctly (see above in the function overview) Do this for all tab pages that are marked with a green tick.

The new field values are copied to the table. You can still cancel the changes.

5. Select the rows of the objects that you want to irrevocably change on all tab pages.
6. Choose Mass change → *Save* or *Save in the background*.

## Executing Mass Changes with Table View

The mass changes are executed and the projects are saved with the new values.

### Result

When the system has finished the mass changes (or test run) the log is displayed. If the system could execute the changes, you can see information in the log about every object that was changed. You can display the log with one line for each entry, which is a simple confirmation, or with two lines with more details for each entry.

If the system could not execute some changes, because fields did not meet the prerequisites, the entries are highlighted in red.

You can save the log when you exit. You can then call it up again later. To do so, choose

- From the *Operative Structures* screen *Tools* → *Mass Change* → *Log*
- From the *Project Information System: Structure Initial* screen *Extras/environment* → *Logs* → *Mass change*

## Executing Mass Changes


## Executing Mass Changes

### Prerequisites

You are in a project in the project planning board or the Project Builder.

### Procedure

7. Select all the objects that you want to change.

Choose in the	Pushbutton/Menu Path
Project Builder	
Project planning board	<i>Goto → Mass change</i>

The *Mass changes: Field view* screen appears.

8. Select the fields whose values you want to change. Proceed as described in [Executing Mass Changes Directly \[Page 336\]](#).



You can go from the field view to the table view by choosing *table view*. For more information on the table view, see [Executing Mass Changes with Table View \[Page 339\]](#).

9. Choose *Execute*.

### Result

The system checks the changes and executes them. A log appears. If the system could execute the changes, you can see information in the log about every object that was changed. You can display the log with one line for each entry, which is a simple confirmation, or with two lines with more details for each entry.

If the system could not execute some changes, because fields did not meet the prerequisites, the entries are highlighted in red.



You cannot save this log.

The system saves the changes when you save the project.

## Status Management

### Use

The current status of a project or an object in a project determines which business transactions can be executed. Statuses document the current processing stage of an object. Status management in R/3 differentiates between system statuses and user statuses.

**See also:**

[Business Transactions \[Page 344\]](#)

### Features

A project is not a static object. It has its own life cycle that begins when it is created and continues till completion. During this period various business transactions change the project. For instance you plan tasks, post costs and perform settlements.

Each project passes through various system statuses. One of which is always set. For example,

- *Created*

In this status you cannot, for instance, make actual postings.

- *Released*

In this status virtually all business transactions are permitted.

If you want to decide when certain business transactions are permissible, define user statuses. These enhance existing system statuses.



SAP does not provide an authorization check for setting system statuses.

**See also:**

[User status \[Page 357\]](#)

## Business Transactions

### Use

A business transaction is an action that you perform in the system, when you execute a transaction or function. Examples of business transactions include:

- Posting a G/L account
- Starting cost-center assessment
- Releasing a network
- Posting a goods receipt
- Making a confirmation

### Prerequisite

You can perform a business transaction, if

- At least one user status or system status permits the transaction
- No user status or system status prohibits the transaction

### Activities

A user status or system status can:

- Allow a business transaction
- Allow the transaction, but generate a warning
- Prohibit the transaction

In the second case, you see a warning message while you are carrying out the business transaction. The decision as to whether to proceed with the transaction, despite the warning, is left to you.



## Status Overview in Transactions

### Use

Use the status overview to inform yourself about the currently active user and system statuses in a work breakdown structure or network. You can display the status of project definitions, WBS elements, network headers and activities.

### Features

You can see the important statuses directly in the header of project definitions or networks as well as in the WBS element overview and activity overview.

You can also display a screen with details of user and system statuses for project definitions, WBS elements, network headers and activities. Here you can see which statuses are active together with their full name. There is also an overview of the business transactions that these statuses allow or prohibit. As long as a user status has not been set, you can also assign another status profile to the object and thus use other user statuses. In this case the assignment does not depend on the project profile or network profile used.



You can only change the status profile, if no user status has been set.

The system displays statuses as a:

- 30 character text
- As a four character abbreviation

Both display formats are language dependent.

**See also:**

[User status \[Page 357\]](#)

### Activities

You can obtain an overview of the important active user and system statuses:

- On the *Basic data* tab page in the project definition
- On the *Scheduling* tab page in the network header
- In the activity overview on the *Total* tab page, for instance (only system status)
- On the *Total* tab page, for instance, in the WBS element overview

You can call up the **detail screen** for user and system statuses as follows:

To call up the detail screen	
In the project definition	Choose <i>Edit</i> → <i>Status</i> → <i>System/user status</i>
In the network header	

**Status Overview in Transactions**

In the WBS element overview, select a WBS element and	
In the activity overview, select an activity and	

## System Statuses in Work Breakdown Structures

The active system status determines which business transactions you can perform with work breakdown structures and WBS elements. System statuses are passed from the project definition to the WBS elements and from the WBS elements to the subordinate WBS elements. The system statuses *Locked* and *Final billing* are exceptions to this.

You can cancel certain statuses, for instance *Technically completed*, *Closed* and *Deletion Flag*. When you do so, the previous status is set. You cancel system statuses on by one, until you arrive at a status that cannot be canceled. You cannot cancel system statuses that are set automatically (in the background by the system), for example *Partially released*.

If you cancel the statuses *Technically completed* or *Closed*, the system automatically cancels this status in the **superior** WBS element. However, the system does **not** cancel the status in **subordinate** WBS elements.



The *Deletion Flag* status is not set automatically in superior WBS elements.

### Created (CRTD)

#### Use

This is the initial system status for new WBS elements. In this status you structure the project and plan dates, costs and revenues. The system sets this status automatically, when you create a new WBS element.

#### Prerequisites

The project and, if applicable, the superior WBS element must have *Created* status.

#### Features

In *Created* status, you can create new WBS elements and change the work breakdown structure.

The status

- Allows you to assign networks, which do not yet have *Released* status
- Allows you to plan costs and revenues
- Allows budgeting

### Released (REL)

#### Use

In this status you can assign costs and revenues to WBS elements.

#### Prerequisites

The *Created* status is set.

## System Statuses in Work Breakdown Structures

### Features

In *Released* status you can create new WBS elements and change the project hierarchy. The status is passed on to subordinate WBS elements.

The status **allows**

- You from assigning networks, production orders or CO orders to the WBS element.
- You to post actual costs
- You to transfer actual costs

You cannot change the status from *Released* to *Created*, as actual values from, for instance, purchase orders or confirmations may have been posted

### Technically completed (TECO)

#### Use

You use this status for WBS elements that are completed from a technical point of view, but where you still expect costs to accrue.

#### Prerequisites

The *Created* or *Released* status must have been set. The completion indicator must be set for transfer price agreements.

### Features

In status Technically completed, you can create new subordinate WBS elements (with a warning). The status is passed on to subordinate WBS elements.

The status **allows**

- You from assigning networks, production orders or CO orders to the WBS element.
- You to post actual costs
- You to transfer actual costs

You can cancel the *Technically completed* status. In this case the system sets the *Released* status.



You can prevent the *Technically completed* status from being canceled. Create a user status that prohibits the *Revoke technical completion* business transaction.

### Closed (CLSD)

#### Use

You use this status for a work breakdown structure or WBS element that has been completed from both a logistic and an accounting point of view.

#### Prerequisites

You can only set the *Closed* status, if:

## System Statuses in Work Breakdown Structures

- The project definition or the WBS element have either the *Released* or the *Technically completed* status.

### Features

In the *Closed* status you can no longer make any changes to the project hierarchy. The status is passed on to subordinate WBS elements.

The status **allows**

- You to post actual costs to orders and networks that are assigned to the WBS element, as long as their status permit this

The status **prohibits**

- You from assigning networks, production orders or CO orders to the WBS element.
- You from posting actual costs to the WBS element

The status deactivates assets in construction that are assigned to the WBS element.

You can cancel the *Closed* status. In this case the system sets the *Technically completed* status.

### Deletion flag (DLFL)

#### Use

The *Deletion flag* status designates work breakdown structures or WBS elements that have been flagged for deletion. This means that the objects are deleted logically, but not physically.

### Prerequisites

You can set the *Deletion flag* if

- The WBS element has been settled completely or is not relevant for settlement.



If you set the *Must not be settled* indicator in the settlement profile in Customizing for *Product Cost Controlling*, you can still set the *Deletion flag* status even if the actual costs are not balanced.

- Assigned orders and activities also have *Deletion flag* status.
- There are no commitments for the WBS element
- There are no reservations or purchase requisitions that are account assigned to the WBS element.
- All the goods issues have been posted in the assigned sales orders and the deliveries have been billed.
- A deletion flag has been set in the appropriation request on which the WBS is based.
- No associated reservations, planned independent requirements or planned orders exist
- The completion indicator is set in assigned transfer price agreement

## System Statuses in Work Breakdown Structures

### Features

The status is passed on to subordinate WBS elements. It prohibits all business transactions.

The status

- Deactivates assets in construction that are assigned to the WBS element.
- Is the prerequisite for setting a *deletion indicator*.

As long you have not set a *deletion indicator*, you can cancel the *Deletion flag* status.

**See also:**

[Archiving Operative Project Structures \(PS-ST-OPR\) \[Ext.\]](#)

### Final Billing (FNBL)

#### Use

With this status you can prevent further billing for this WBS element. However, you can still post costs (for instance, due to warranty claims).

You can set the *Final Billing* status in addition to every other status except *Deletion flag*. The *Final Billing* status is **not** passed on to subordinate WBS elements.

### Prerequisites

The WBS element is a billing element.

### Features

The status prohibits

- Creation of a billing document
- Creation of a quotation
- Creation of an inquiry

You can cancel the status.

### Locked

#### Use

You can either lock individual business transactions or all the data in a work breakdown structure or WBS element. You can set the following statuses:

- *Date definition locked* (DDLK)
- *Planning locked* (PLLK)
- *Budget management locked* (BMLK)
- *Account assignment locked* (AALK)
- *Master data locked* (MDLK )

You can set these statuses in addition to every other status except *Deletion flag*. The statuses are **not** passed on to subordinate WBS elements.

## System Statuses in Work Breakdown Structures

### Features

The *Master data locked* (MDLK) status prohibits

- Setting of another system status
- Changing and extending the project hierarchy

You can cancel these statuses.

---

**System Status in Standard Work Breakdown Structures**

## System Status in Standard Work Breakdown Structures

Standard WBS elements do **not** have their own status. The status of the standard project definition is valid for all WBS elements.

### Released (REL)

#### Use

You use this status to activate standard work breakdown structures. If a standard work breakdown structure has *Released* status, you can use it as a template for creating work breakdown structures.

#### Prerequisites

*Released* status can be set after *Created* status.

#### Features

In this status you can change the structure.

You cannot cancel the status.

### Closed (CLSD)

#### Use

You use this status to indicate that a standard work breakdown structure is no longer required.

#### Prerequisites

You can only set the *Closed* status after *Released* status.



The *Technically completed* status does not exist for standard work breakdown structures.



## System Statuses in Networks

The active system status determines which business transactions you can perform with network headers, activities, and activity elements. The system status is passed from the network header to the activities and from the activities to the activity elements. Exceptions are the *Account assignment locked* and *Locked* statuses.

### Created (CRTD)

#### Use

This is the initial system status for new networks, activities, and activity elements. The system sets this status automatically, when you create a new network.

#### Features

In the *Created* status, you can create new activities and activity elements and change the network header.

The status, for example,

- Allows you to directly (physically) delete activities and activity elements
- Prohibits you from posting actual costs

### Released (REL)

#### Use

The *Released* status is necessary before you can post actual costs.

#### Prerequisites

The network header or the activity must have the *Created* status.

#### Features

In the *Released* status, you can create new activities and activity elements and change the network header. If a network has *Released* status, new activities and activity elements also have *Released* status.

The status

- Allows you to post actual costs
- Allows you to confirm activities and activity elements
- Allows you to create reservations or purchase requisitions for all components, depending on settings elsewhere.

If the corresponding Customizing setting have been made, the system triggers an availability check for material and capacities.

You cannot cancel the *Released* status.

## System Statuses in Networks

### Technically completed (TECO)

#### Use

You use this status for networks, activities, and activity elements that are completed from a technical (logistics) point of view.

#### Prerequisite

The network header or the activity must have the *Released* status.

#### Use

If the status is set in a network header, you cannot change the header data or create new activities. If it is set in an activity, you cannot change activity data.

The status

- Allows actual postings, for example confirmations
- Sets a deletion flag for the material components
- Removes capacity requirements, provided a final confirmation has not been made
- Deletes purchase requisitions and requirements for material components, if any exist.
- Prohibits changes to the characteristic value assignment
- Prevents you setting a user status
- Prevents you from changing dependent data such as material and PRT allocations.

You can cancel the *Technically completed* status. In this case the system sets the *Released* status.



If you cancel the *Technically completed* status in the network header, the status is not automatically canceled in the activities and activity elements. You can cancel the status in individual activities or in all activities.

### Closed (CLSD)

#### Use

The *Closed* status closes a network or an activity from both a logistics point of view and an accounting point of view.

#### Prerequisites

You can set the *Closed* status, if the network header, activity, or activity element has the *Released* or *Technically completed* status, and

- No balance exists
- All activities that require confirmation have been confirmed.

#### Use

If the status is set in the network header, you cannot change the header data or create new activities. If it is set in an activity, you cannot change activity data.

## System Statuses in Networks

The status

- Prevents you from changing dependent data such as material and PRT allocations.
- Prevents you making actual postings, for instance, confirmations
- Removes capacity requirements, as long as a final confirmation has not been made
- Deletes purchase requisitions and requirements for material components, if any exist.

You can cancel the *Closed* status. The system then set the previous status (*Released* or *technically completed*).



If you cancel the *Technically completed* status in the network header, the status is not automatically canceled in the activities and activity elements. You can cancel the status in individual activities or in all activities.

## Deletion flag (DLFL )

### Use

The *Deletion flag* status designates networks and activities that have been flagged for deletion. This means that the objects are deleted logically, but not physically.

### Prerequisites

You can the *Deletion flag*, if

- The actual costs of the network are balanced.



If you set the *Must not be settled* or *Can be settled* in the settlement profile in Customizing for *Product Cost Controlling*, you can still set the *Deletion flag* status, even if the actual costs are not balanced.

- Assigned orders also have the *Deletion flag* status
- There are only relationships to networks that have a *Deletion flag*.
- No commitments exist for the network
- No purchase requisitions or purchase orders exist that are account assigned to the network.

### Use

If the status is set in the network header, you cannot change the header data or create new activities. If it is set in an activity, you cannot change activity data.

The status

- Removes capacity requirements, as long as a final confirmation has not been made
- Sets an internal deletion indicator for existing material reservations
- Can also be set (after a warning is issued), if an activity requires confirmation but has not been finally confirmed.
- Is the prerequisite for setting a *deletion indicator*.

## System Statuses in Networks

You can set the *Deletion flag* status in addition to every other system status. The status is passed on to activity elements. As long you have not set a *deletion indicator*, you can cancel the *Deletion flag* status.

### See also:

[Archiving Operative Project Structures \(PS-ST-OPR\) \[Ext.\]](#)

## Locked (AALK or LKD)

### Use

You can prohibit account assignment to a network or lock all data in a network or activity. The following statuses are available:

- Account assignment locked (AALK)
  - Depending on the network type, you can set the *Account assignment locked* status either only in the network header or only in the activity
- Locked (LKD)
  - You can only set the *Locked* status in the network header. The status is passed on to all activities.

You can set the *Account assignment locked* and *Locked* statuses in addition to every other status except *Deletion flag*. The *Account assignment locked* and *Locked* statuses are **not** passed on to activity elements.

You can cancel these statuses.

## User Status

### Use

You can define and use user statuses in addition to system statuses.



User statuses are **not** passed on down a hierarchy. If you create a project by copying another project, the user status is not copied either.

### Prerequisite

You always define user statuses within a status profile. Therefore you first have to create a status profile for an [object type \[Ext.\]](#) before you can define a user status. You have to assign a status profile to a project profile or a network profile, before you can use a status profile in an application.

To use a user status in a work breakdown structure or a network, use the network or project profile to which the status profile has been assigned. You can also assign a status profile to a work breakdown structure or network in the status detail screen in the corresponding transaction. For more information, see [Status Overview in Transactions \[Page 345\]](#)

### Activities

You define status profiles and user statuses in Customizing for the *Project System*. You can define as many user statuses as you wish in a status profile.

In the status profile you make the necessary settings for defining user statuses.

- Short description of the user status with a long text describing its function in more detail.
- [Status number \[Page 358\]](#) that defines in which order the user statuses are set
- Initial status that the system sets automatically, when you create a new object
- Specify whether a matching user status is set automatically when you carry out a business transaction.
- Business transactions that are allowed or prohibited, if a user status is set

Status profiles and user statuses are language dependent. If you use status profile and user statuses in several, note the following:

- You can only edit user statuses in the language in which they were created.
- All of the user statuses in a status profile have to be translated. Otherwise all the statuses appear in the original language.

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Status Number

## Status Number

### Definition

Define the sequence in which [user statuses \[Page 357\]](#) can be set.

### Use

You can define status numbers for every user status. However only one user status with a status number can be active at one time in a work breakdown structure or network.

If you want to have several user statuses at the same time, define the additional user statuses in the status profile without status numbers. You can always set these user statuses.

When you assign a status number to a user status, you must also specify a **lowest** and **highest** status number for that user status.

You use the lowest and highest status number to define:

- Which user status must be set first
- Which user status can then be set
- Whether user statuses can be canceled and if so, which of the previous statuses is set.

### See also:

[Example: User Status with Status Number \[Page 359\]](#)

Example: User Status with Status Number

## Example: User Status with Status Number

In your status profile, you have defined the following user status with the status numbers shown:

Status Number	User Status	Lowest Number	Highest Number
	Planning locked		
1	Idea	1	2
2	Concept	1	3
3	Execution	2	4
4	Valuation	4	4

In this example

- You can activate the *Planning locked* status whenever you like, because it has no status number.
- The *Idea* status must always be activated first. If the *Idea* status is active, it is also possible to activate the *Concept* status.
- If the *Concept* status is active, you can activate either *Idea* or *Execution*
- The *Valuation* status cannot be canceled.

Filename: EXP\_OOOO.doc  
Directory: C:\TEMP\iwbprint0001  
Template: C:\Users\templates\sapkeeh.dot  
Title: Structures  
Subject:  
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