Capacity Evaluation (PP-CRP-ALY)

HELP.PPCRPALY

Release 4.6C

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Capacity Evaluation (PP-CRP-ALY)

Capacity Evaluation (PP-CRP-ALY)

Purpose

You can use capacity evaluations to analyze capacity loads in your company. You can adjust the analyses for each user according to the planning level, planning horizon and the area of responsibility. Available capacities and capacity requirements can be selected according to various criteria and cumulated using any period split you choose.

You can use work center hierarchies to cumulate the available capacities of production work centers and their capacity requirements to superior planning work centers.

Integration

The capacity evaluation is a part of the component *Capacity Planning.*

Features

- You can execute various evaluations in the capacity evaluation online or in batch.
  - You get an overview of the load situation of selected work centers using the standard overview [Page 8].
  - You can use the detailed capacity list [Page 9] to display the orders that cause the capacity requirements at work centers.
  - You can use the variable overview [Page 11] to display any capacity planning data you wish.

    The various evaluations can be displayed both in tabular and graphical form. The SAP Gantt diagram gives you an overview of the dates of the operations at a work center.
- From all of the evaluation lists you can either display or change work centers and capacities [Page 52]. From the detailed capacity list you can also process orders and confirmations [Page 52] and display stock/requirements lists [Page 52].
- You can use the EXCEL interface to export the evaluation lists and continue working with Microsoft Excel [Page 57].

Constraints

In the capacity evaluation you can display the planned capacity requirements and the remaining capacity requirements.

You cannot display the following capacity requirements in the capacity evaluation.

- Actual capacity requirements
- Split capacity requirements that are assigned to individual capacities of a capacity
- SOP requirements

You can display this data in the extended evaluation [Page 62]. However there are no change function available in the extended evaluation, for example changing work centers and orders.

Capacity Evaluation (PP-CRP-ALY)

Standard Overview

Definition

A lists predefined by SAP showing data on the capacity situation at work centers. For every capacity for the selected work centers the following information is displayed in columns:

- Period
- Capacity requirements in the period
- Available capacity in the period
- Capacity load (capacity requirements/available capacity in percentage terms) in the period
- Free available capacity in the period

Structure

- Contents, layout and format of the list

  The contents and the layout of the standard overview as well as the sequence and width of the columns are defined by SAP and cannot be changed.

- Format of capacity data

  You define the format of the capacity data such as the period split or the evaluation period in the options profile [Page 17]. You can change settings [Page 12] during the capacity evaluation at any time.

Integration

- Display and edit objects

  Depending on your settings in the options profile you can display or change work centers and capacities [Page 52]

- Graphical display

  You can graphically display [Page 54] data in the standard overview.

Detailed Capacity List

Definition

A list the user can alter in which the capacity requirements for selected work centers are arranged according to the pegged requirements and displayed per period. For every capacity at the work centers you can display the following information in columns:

- Period
- For each order the capacity requirements per period
- Other data for the pegged requirements and the capacities

Structure

- Contents, layout and format of the list

  The first column in the detailed capacity list is predefined by SAP and displays the period. In the rest of the columns you can display any fields you like from the order and the capacity in any sequence.

  You can also freely define the format of the list, for example:

  – The layout of the values (in percentage terms, in absolute terms)

  – Sorting of the list data

  Layout and format are defined by the list version of the detailed capacity list [Page 19] that is specified in the list profile. You can define list versions in Customizing for the *Capacity evaluation*. You can change the settings for the list layout [Page 12] at any time during the capacity evaluation.

- Format of capacity data

  You define the format of the capacity data such as the period split or the evaluation period in the options profile [Page 17]. You can change settings [Page 12] during the capacity evaluation at any time.

Integration

- Display and edit objects

  From the detailed capacity list, you can display or edit [Page 52] the following objects:

Object	Display	Edit	Setting in...
Work center, capacity	x	x	Options profile
Order	x	x	Options profile
Confirmation		x	
Goods receipt		x	
Material	x		
Pegged requirements	x		
Current stock/Requirements list	x		

  From the detailed capacity list you can also call up capacity leveling [Page 53].

Detailed Capacity List

- Graphical display

  You can graphically display [Page 54] data from the detailed capacity list.

Variable Overview

Definition

List that the user can format and in which capacity planning data is displayed per period. You can display the following information in columns:

- Period
- Capacity requirements in the period that are selected according to selection criteria laid down by the user
- Available capacities for the selected capacity requirements
- Values that are calculated from values in other columns, capacity requirements and constants

Structure

- Contents, layout and format of the list

  The first column is predefined by SAP and displays the period. Content, sequence and width of other columns are defined by the list version of the variable overview [Page 20] that is entered in the list profile. You can define columns and list versions in Customizing for the *Capacity evaluation*.

- Format of capacity data

  You define the format of the capacity data such as the period split or the evaluation period in the options profile [Page 17]. You can change settings [Page 12] during the capacity evaluation at any time.

Integration

- Display and edit objects

  Depending on your settings in the options profile you can display or change work centers and capacities [Page 52].

- Graphical display

  You can graphically display [Page 54] list data.

Specify and Change Settings

Use

You define all the settings for the capacity evaluation using an overall profile [Page 14] and its subprofiles. The capacity evaluation is configured with these settings when it is called up.

At any time during the capacity evaluation you can use menu options to select other profiles or change some of the settings directly.

Activities

- **Select other profiles**

  Choose *Planning* → *Profile* to select a new profile.

  If you select a new selection profile or a new overall profile then a new evaluation is started. The current values of the selection criteria are then deleted.

- **Change format of capacity load data**

  By choosing *Settings* → *General,* you can change the settings for the layout of capacity requirements and available capacities, such as the period split or the display period.

  With these menu options you can also:

  – Display the hierarchy graphic for a hierarchy

  – Change and display the standard distribution key for the capacity categories

  – Display time periods (for example, the database read period)

- **Changing the standard overview**

  By choosing *Settings* → *Evaluations*, you can filter the work centers to be displayed using the minimum and maximum loads.

- **Changing the detailed capacity list**

  By choosing *Settings* → *Detailed capacity list,* you can*:*

  – Change the layout (for example: field selection, column width)

  – Select a list version

  Changed settings can be saved as a list version [Page 21].

- **Selecting new list versions**

  By choosing *Settings* → *Evaluations*, you can select new list versions for the detailed capacity list and the variable overview.

- **Changing settings for the graphics**

  By choosing *Settings* → *Graphics*, you can change the settings for the graphics for the evaluation lists and the Gantt chart *Operations at the Work Center*.

- **Changing settings for the list export as EXCEL file**

  By choosing *Settings* → *EXCEL interface*, you can change the settings for the list export.

Overall Profile (Capacity Evaluation)

Definition

Profile containing all the settings for the capacity evaluation.

Use

When you call up the capacity evaluation it is configured by the system according to your settings in the overall profile. You can call up the capacity evaluation – according to the desired evaluation view – using different menu paths. For every menu path SAP has specified an overall profile. You can use the SET/GET parameters to define other overall profiles for the menu paths.

The following table shows the SAP overall profiles and the set-get parameters for the various menu paths.

Evaluation → Work center view →…	**The evaluation list shows:**	**SET/GET parameter**	**Profile**
Load	All remaining requirements for the next 60 calendar days in the weekly period split on the **standard overview**	CY1	SAPX911
Orders	All remaining requirements for the next 60 calendar days in the weekly period split on the **detailed capacity list**	CY2	SAPX912
Pool	All released orders for the next two weeks in the daily period split on the **standard overview**	CY3	SAPX913
Backlog	All orders in backlog	CY4	SAPX914
Overload	All work centers and capacities with overload in the next 60 calendar days	CY5	SAPX915

You can define overall profiles for the capacity evaluation in Customizing for the *capacity evaluation*.

Structure

The overall profile contains the following subprofiles:

- **Selection Profile**

  Defines the settings for the selection of capacity requirements and available capacities.

- **Options profile**

  Defines the settings for the presentation and display of capacity requirements and available capacities.

- **List profile**

  Specifies, for example:

  – The layout of the detailed capacity list and the variable overview

  – The settings for the list export with the EXCEL interface

- **Graphics profile**

  Defines the settings for graphics in the capacity evaluation.

Selection Profile

Definition

Profile containing the parameters for selecting data for the capacity evaluation.

Use

The selection profile is a subprofile in the overall profile for the capacity evaluation. During the capacity evaluation you can, at any time, select another selection profile [Page 12]. You can define selection profiles in Customizing for the *Capacity evaluation*.

Structure

The selection profile contains settings for the following areas:

- **Capacity requirements to be read from the database**

  When calling up the capacity evaluation the capacity requirements are read from the database that you have selected using the following parameters:

  – Read period

    All capacity requirements are read for which at least one date, for example the earliest start date, falls in this period.

  – Scheduling level (detailed-, rate-based, rough-cut)

  – Order category (works orders, planned orders)

  Only these capacity requirements are taken into account in the capacity evaluation.

- **Selection options during the capacity evaluation**

  In the capacity evaluation you select your data on selection screens [Page 29] according to various selection criteria, for example work centers, for which you want to see the capacity requirements. The selection criteria and entry options on the selection screens that are fixed in the menu are defined using multidimension sets [Page 33] that you have entered in the evaluation profile.

- **Relevant version of available capacity for capacities**

Options Profile

Definition

Profile containing the parameters for the presentation and display of capacity requirements and available capacities in the capacity evaluation.

It also controls whether you can change or display orders, work centers and capacities from the capacity evaluation.

Use

The options profile is a subprofile in the overall profile for the capacity evaluation.

At any time during the capacity evaluation you can:

- Choose another options profile [Page 12]
- Change settings [Page 12] depending on the evaluation list

You can define options profiles in Customizing for the *Capacity evaluation*.

Structure

You make the settings in the options profile for the following areas:

- Evaluation period and display period
- Period split
- Displaying planned capacity requirements and remaining capacity requirements
- Cumulated display of capacity requirements and available capacities
- Minimum and maximum capacity load of the work centers to be displayed in the standard overview and in the detailed capacity list
- Unit of measure
- Date of the loading of capacity requirements in the past that have not been processed (loading of backlog)

  Dispatching of the backlog is only carried out if remaining requirements are displayed.
- Distribution [Page 37] of capacity requirements of operations that stretch over several periods.
- Cumulation [Page 43] of the capacity requirements and available capacities using work center hierarchies

For further information, see Layout of data [Page 35].

List Profile

Definition

A profile in which you specify, for example:

- The parameters for the layout of the detailed capacity list and the variable overview
- The settings for the list export with the EXCEL interface

Use

The list profile is a subprofile in the overall profile for the capacity evaluation. During the capacity evaluation you can at any time select another list profile [Page 12].

You can define list profiles in Customizing for the *Capacity evaluation*.

Structure

The list profile contains the profiles for the list versions for the detailed capacity list and the variable overview.

List Version of the Detailed Capacity List

Definition

Defines the content and the layout of the detailed capacity list.

Use

For every list version, you define a profile containing all the list settings in Customizing for the *Capacity evaluation.* You specify this profile in the list profile for the capacity evaluation. During the capacity evaluation you can, at any time, select another list version [Page 12].

List Version of the Variable Overview

Definition

Defines the content and the layout of the variable overview.

Use

For every list version, you define a profile containing all the list settings in Customizing for the *Capacity evaluation.* You specify this profile in the list profile for the capacity evaluation. During the capacity evaluation you can, at any time, select another list version [Page 12].

Structure

You can develop a list version of the variable overview from the following column categories:

- You can define **columns for capacity requirements** using sets [Page 33].

  The sets specify which capacity requirements are selected for the column from the current selection of capacity requirements. With sets that contain variables you must specify the values of the selection criteria when you call up the variable overview or a list version of the variable overview.

- You can only define **columns for available capacities** with reference to a column for capacity requirements.
- **Columns for character strings** can be used to separate columns.
- **Other columns** can contain the results of evaluations.

  You link columns, sets and constants using a formula.

Saving a List Version of the Detailed Capacity List

Prerequisites

In the detailed capacity list you can change the list layout by choosing *Settings* → *Change detailed cap. list*. You can save the changed settings in a profile for the list version of the detailed capacity list [Page 19] or in its subprofile. All the profiles must first be defined in Customizing.

Procedure

1. In the detailed capacity list, choose *Settings* → *Detailed cap.list* → *Save list variants*.
2. Select the profile for the detailed capacity list and the subprofiles where you want to save the new settings.
3. If necessary, specify other profiles.
4. If necessary, protect the profiles or subprofiles against changes by other users.
5. Choose *Save*.

Graphics Profile

Definition

Profile containing the settings for the various graphics in the capacity evaluation.

Use

The graphics profile is a subprofile in the overall profile for the capacity evaluation. At any time during the capacity evaluation you can:

- Choose another graphics profile [Page 12]
- Change settings [Page 12]

You can define graphics profiles in Customizing for the *Capacity evaluation*.

Calling Up the Capacity Evaluation

Prerequisites

You define all the settings for the capacity evaluation in an overall profile [Page 14] for the capacity evaluation and its subprofiles. The capacity evaluation is configured accordingly when it is called up.

At any time during the capacity evaluation you can use menu options to select new profiles or change settings [Page 12].

Procedure

1. Choose *Logistics* → *Production* → *Capacity planning*

   The area menu for *Capacity Planning* appears.

2. Start the capacity evaluation:

   – If you select *Evaluation* → *Work center view* → *<Entry>,* the system starts the capacity evaluation with an overall profile specified by SAP.

   You can also save your own overall profiles for these menu paths using the appropriate SET/GET parameters [Page 14].

   – If you choose *Evaluation* → *Variable*, you can enter an overall profile online.

Result

The *Selection* screen appears and you can select data for the capacity evaluation [Page 24]. You can call up selection screens [Page 31] at any time.

By choosing *Goto,* you reach the desired evaluation list.

- In the standard overview [Page 8], you can select periods and then with *Cap.details/period* call up the detailed capacity list [Page 9] for the selected periods.
- When you have defined the columns of the variable overview [Page 11] using sets [Page 33] that contain variables, a selection screen appears when you call up the variable overview. On this selection screen you have to specify values for the selection criteria defined using the variables. These values must be contained in the current selection for the capacity evaluation. The current values are combined in the selection list [Page 32].

Selection of Data

Purpose

You can select your data for capacity evaluations according to different criteria and thus flexibly adjust the analyses to your needs.

Process flow

The selection process comprises the following steps:

1. **Database selection**

   In the selection profile [Page 16] you can use the read period, the planning level and the order category to define which capacity requirements are read from the database when calling up the capacity evaluation. Only these capacity requirements are taken into account in the capacity evaluation. You can also define the relevant version of available capacity in the selection profile.

   You can carry out a new database selection at any time during the capacity evaluation by selecting another selection profile or overall profile with other selection parameters [Page 12] and thus start a new evaluation.

2. **Specification of selection options on the selection screens**

   During the capacity evaluation you select your data on the selection screens [Page 29]. In the selection profile, you specify the following for the selection screens integrated in the menu:

   - Which selection criteria are grouped on the selection screens
   - What the possible entries are for the selection criteria

   You can define fixed values for the selection criteria. When calling up the capacity evaluation the relevant data is selected automatically. Fixed values are not displayed on the selection screen but only in the selection list [Page 32].

3. **Selection during the capacity evaluation**

   As described under point 2, you select your data during the capacity evaluation on selection screens. When you call up the capacity evaluation you automatically reach an initial selection screen (screen *Selection)*. You can at any time – even on the initial selection screen *Selection* – call up a selection screen [Page 31] on which other selection criteria are combined. The following is valid for the combination of selection criteria that you maintain whether on the same screen or on other screens:

   – Entries for the same selection criterion are combined.

     They are linked with a logical “or”.

   – Entries for the various selection criteria restrict the selection.

     They are linked with a logical “and”.

   The current values of the selection criteria are combined in the selection list [Page 32].

   On the selection screen for selecting by work center additional functions are available. You can use them to select individual work centers [Page 27] for the current selection or from a hierarchy.

For further information, see Selection of data [Page 26].

Selection of Data

In the capacity evaluation you can select your data on several selection screens [Page 31] according to various selection criteria. The following is a brief description for the SAP standard of which data is combined on the standard overview and on the detailed capacity list if you select by work centers or by orders.

Selecting by work center

In the SAP standard, the following selection criteria are grouped (for example, the work center name and the plant) on the screen *Selection,* on the initial selection screen for the capacity evaluation and on the screen for selecting by work centers. On the screen for selecting by work center additional functions are available. You can use them to select individual work centers [Page 27] from the current selection or from a hierarchy.

In the standard overview and in the detailed capacity list the total capacity loads for the capacities for the selected work centers are displayed. If for a specific work center there are no capacity requirements in the database read period [Page 24] or in the evaluation period [Page 35] then a zero is displayed in every period for the capacity requirements and the capacity load.

Selecting by order

In the SAP standard, the relevant selection criteria are grouped together on the screen for selecting by orders, for example order type and order number. In the standard overview and in the detailed capacity list, all the work centers are displayed at which the selected orders have a load.

Selecting by work center and by order

In the SAP standard, you must maintain the selection criteria on two selection screens: on the selection screen for selecting by work center and on the selection screen for selecting by order. In the standard overview and the detailed capacity list, you only get a list of the selected work centers that are loaded with the selected orders.

Executing Detailed and Hierarchy Selection

Prerequisites

On the Selection screen [Page 29] for selecting by work center you also have the following selection options:

- **Detailed selection** for selecting individual work centers from the current selection
- **Hierarchy selection** for selecting individual work centers from a hierarchy

  You can specify the desired hierarchy:

  – In the options profile

  – During the capacity evaluation by choosing *Settings → General.*

  – When calling up the hierarchy selection, if you have not specified a hierarchy in the options profile or by choosing *Settings → General.*

Procedure

To call up the selection screen for selecting according to work centers, choose *Planning → Selection → Work center*.

Executing detailed selection

1. In the selection screen for the selection by work centers choose *Detailed selection.*
2. Select the work centers that you want to choose.
3. Choose *Back*.

   The selection list appears in which the current values for the selection criteria are displayed.

   When you call up the selection by work centers again the system automatically displays only the selection of work centers that was current directly before the detailed selection. You cannot include any more work centers in the evaluation. If you want to select other work centers you must start a new evaluation by choosing *Planning → Other planning*.

Executing selection from a hierarchy

1. In the selection screen for the selection by work centers choose *Hierarchy selection.*

   – For example, if you have specified a hierarchy in the options profile or with *Settings → General* you automatically branch to the hierarchy graphic.

   – If you have not specified a hierarchy, enter the name and the plant for the hierarchy from which you want to select the work centers and choose *Continue*.

   You branch to the hierarchy graphic.

2. Select the work centers from the hierarchy graphic.

Executing Detailed and Hierarchy Selection

Select a single work center by clicking on it. To select several work centers or cancel the selection of an individual work center click on them while holding the SHIFT key pressed down.

3. Choose *Back*.

When you call up the selection by work centers again, you automatically branch to the hierarchy graphic until you have deselected all of the selected work centers. By choosing *Planning* → *Selection* → *Work center*, you can then branch back to the selection screen for selecting by work center, and then select other work centers.

Selection Screen

Definition

A screen or a dialog box where you can select your data according to specific selection criteria during the capacity evaluation, for example work centers by work center name and plant.

Use

In the capacity evaluation there are several selection screens available where you can group various selection criteria. When you call up the capacity evaluation you automatically reach the screen *Selection.* Besides this initial selection screen there are the following fixed selection screens that you can call up at any time:

- Selecting by work center
- Selecting by order
- Selecting by capacity category

You can also define and call up additional selection screens.

Structure

In Customizing you can define:

- Which selection criteria are grouped on the selection screens
- Which possible entries are offered for every selection criterion

You specify these qualities in multidimension sets [Page 33] or in combinations [Page 34]. You define multidimension sets for the screen *Selection* and for the selection screens that are integrated in the menu and you specify them in the Selection profile [Page 16]. For other selection screens you use combinations.

You can find information on calling up selection screens in Calling up selection screens [Page 31].

Possible entries

For every selection criterion in a selection screen you can:

- Combine entry fields for intervals or individual values as you like
- Define default values (for example, from the SET/GET parameters) or fixed values

  Default values are displayed in a selection screen and can be overwritten in contrast to fixed values. Fixed values are only displayed in the screen Selection list [Page 32] and cannot be changed in the evaluation.

Operators

On a selection screen where there is a field for an individual value there is also a field for an operator. Therefore, you can also define value ranges even if only one individual value can be specified for the selection criterion. You can use the following operators:

Symbols	Meaning

Selection Screen

=	eq	equal to
>	gt	greater than
>=	ge	Greater than or equal to
<	lt	less than
>=	le	Less than or equal to
<>	ne	not equal to

In the standard, the operator = is preset for the single value. However, it is not displayed in the operator field on the selection screen. Even if you have specified this operator yourself the system does not display it on the selection screen.

Generic specification

To specify the values for the selection criteria you can also use the wildcard character *. By specifying CENTER* for work centers you select all the work centers whose name starts with CENTER.

You have to enter leading zeros as with the order numbers.

Calling Up the Selection Screen

Prerequisites

On the selection screens [Page 29] you can select the desired data during the capacity evaluation.

Procedure

Calling up the initial selection screen

You reach this selection screen automatically:

- When calling up the capacity evaluation
- When you want to start a new evaluation with the same overall profile in the capacity evaluation by choosing *Planning* → *Other planning*.
- When you want to make a new selection or choose a new overall profile and start a new evaluation in the capacity evaluation with *Planning* → *Profiles*.
- If you want to leave the Selection list [Page 32] with *Back* or *Cancel*.

When you call up the screen *Selection* the current values of the selection criteria are deleted.

Calling up other selection screens (for example, selection by work center)

Choose the desired selection screen by choosing *Planning* → *Selection*.

To call up a selection screen that is not included in the menu, choose *Planning* → *Selection* → *Kombination* and enter a combination.

The selection screen for the selection by work center gives you the option of Detailed selection and hierarchy selection [Page 27].

Calling Up the Selection List

Prerequisites

The selection list displays the current values for the selection criteria.

Procedure

To call up the selection list, choose *Goto* → *Selection list*

Apart from calling up the menu specifically you also branch to the selection list automatically in some cases, for example if you leave an evaluation list such as the standard overview with *Back* or *Cancel.*

If you leave the selection list using *Cancel* or *Back,* the *Selection* screen appears. The current evaluation is finished and the current values of the selection criteria are deleted.

Set

Definition

Grouping of selection criteria. Based on these selection criteria you can choose your data in the capacity evaluation and capacity leveling, for example work centers by work center name and plant.

There are the following types of set:

- A **basic set** contains only one selection criterion; for example, the work center name.
- A **multidimension set** contains one or more selection criteria, for example the work center name and type of work center, and consists of several basic sets.

Use

Sets are used to define:

- The columns in the variable overview (basic sets and multidimension sets)
- The selection criteria on the selection screens [Page 29] in the capacity evaluation (multidimension sets)
- The selection criteria on the selection screen (initial screen) and the filter screen of capacity leveling (basic sets and multidimension sets)

Structure

Basic set

To define the selection criterion you link the basic set to the appropriate table field. You can specify fixed values and variables for the selection criterion.

The purpose of variables is so that during capacity planning you can enter individual values or intervals for the selection criterion on the selection or filter screens. Variables are also used to specify default criteria for the selection criterion on the selection screen (for example, with the SET/GET parameter) which you can overwrite.

Multidimension set

Multidimension sets comprise basic sets.

A multidimension set consisting of a basic set that refers to the selection criterion “operation status” is not permitted (and also does not make sense).

You can define variables, basic sets, multidimension sets and combinations in Customizing for the *Capacity evaluation* and *Capacity leveling*.

For further information, see the Implementation Guide.

Combination

Definition

Grouping of selection criteria.

Use

You use combinations to define selection criteria on Selection screens [Page 29] for the capacity evaluation. They are not defined in the menu but instead are called up by entering the combination.

Structure

Combinations are defined in Customizing for the *Capacity evaluation* and generated using basic- or multidimension sets [Page 33].

Layout of the Data

Use

In the capacity evaluation you can structure the layout of available capacities and capacity requirements according to your needs.

Prerequisites

You can enter the settings relevant to the layout in the options profile [Page 17].

At any time during the capacity evaluation you can:

- Change some of the settings [Page 12]
- Select a new options profile or settings profile with other settings [Page 12]

Features

You can make the following settings:

- Evaluation period and display period

  In the evaluation lists all capacity requirements are taken into account whose start or finish date is in the evaluation period. This evaluation period must lie within the database read period that is defined in the selection profile [Page 16].

- **Period split**

  For the period split, you can define fixed period durations or – using the PP planning calendar [Ext.] – you can define flexible period durations.

- **Requirements type**

  You can display target capacity requirements or remaining capacity requirements. The target capacity requirements are the total capacity requirements of an operation. The remaining capacity requirements are the capacity requirements for a partially confirmed operation that still have to be processed. This is equal to the target capacity requirements, if there is still no confirmation for the operation. If you want to process confirmations from within the detailed capacity list and want to see the current capacity requirements then you should choose the requirements type *Remaining requirements.*

- **Date for dispatching backlog**

  Capacity requirements from the past that have not been processed are loaded in the period containing this date. Dispatching of backlog only occurs if you display the requirement type *remaining requirements.*

- **Maximum and minimum load**

  You can use the capacity load to control which work centers are displayed in the standard overview and in the detailed capacity list.

- **Unit of measure in available capacities and capacity requirements**

- **Cumulated display**

  With this display the available capacity and capacity requirements for each period contain the available capacity and capacity requirements of all the preceding periods.

Layout of the Data

- Distributing capacity requirements [Page 37]

  Distribution is relevant for operations that extend over several periods.

- Cumulating capacity requirements and available capacities over work center hierarchies [Page 43]

  You use cumulation when you want to analyze the capacity load of production areas.

  Pool capacities can be assigned to several work centers. In the standard overview and in the detailed capacity list the whole of the available capacity of a pooled capacity is shown for each of these work centers. This is independent of whether the pooled capacity is also used by operations at other work centers. The evaluation also shows the overall capacity requirements that are assigned.

Distribution of Capacity Requirements

Use

You use a distribution to specify how the system distributes the capacity requirements of an operation that extends over several days; that is, how much capacity requirement is allocated to the affected capacity type in the work center on each of the days.

You use the distribution for setting capacity requirements *according to periods*, for example:

- In the capacity evaluation
- In the extended evaluation
- In the planning table for capacity leveling
- In repetitive manufacturing (REM)
- In sales and operations planning (SOP)

Here, the relevant information for capacity requirements is per period. The system determines the daily capacity requirement using the distribution and cumulates this periodically to the capacity requirements in the periods.

Lead time scheduling can determine operation dates, operation duration and capacity requirements for the operations in an order. It does not determine a distribution for the capacity requirements. In the planning table with a continuous display, the system assumes that the capacity requirement of each operation is distributed evenly over the working time of the affected capacity type in the work center. In the case of the applications with capacity requirements displayed over periods, you must define the distribution of the capacity requirements explicitly.

Features

A distribution is described by a distribution function and a distribution strategy.

Distribution function

You define the distribution function using basic values. The basic values specify after what percentage of operating time a particular percentage of the capacity requirement for the operation is loaded to the affected capacity type. The system-internal default basic value for a distribution function defines that after 0% of operating time, 0% of the capacity requirements are loaded.

Distribution strategy

You use the distribution strategy to specify:

- Whether the system is to distribute the capacity requirements between the earliest or the latest start and finish dates of an operation
- Whether the distribution of the capacity requirements is to be discrete or continuous

  The difference in capacity requirements between two basic values of a distribution function that immediately follow one another defines a partial capacity requirement that can be discretely or continuously distributed:

Distribution of Capacity Requirements

  - In the case of the **discrete distribution**, the later basic value defines the day on which the partial capacity requirement is loaded.
  - In the case of the **continuous distribution**, the partial capacity requirement is distributed over the days between the two basic values.

- Whether the distribution is based on the Gregorian calendar, the factory calendar or the operating time of the affected capacity type

Based on the distribution function and the distribution strategy, the system determines the operating time that is relevant for the distribution and the dates on which the basic values for the distribution function fall.

Distribution based on the Gregorian calendar

Here, all the days onto which the operation extends are relevant for the distribution of the capacity requirements, including the days on which the operation starts and finishes. In the case of continuous distribution, the system distributes the partial capacity requirement, which has to be loaded between two basic values, evenly over *all* the days that lie between the basic values. In the case of discrete distribution, the system loads the partial capacity requirement on the day on which the later basic value falls.

An operation extends over 10 days. You defined for the first basic value of the distribution function that after 50% of the operating time, 50% of the capacity requirement should be loaded.

Therefore, using the distribution based on the Gregorian calendar, 50% of the capacity requirements must be loaded after 5 days. In the case of continuous distribution, the system distributes this partial capacity requirement evenly over the 5 days, that is, 10% of the total capacity requirement is loaded on each day. In the case of discrete distribution, the system loads the partial capacity requirement on the fifth day.

Distribution based on the factory calendar

Here, only those working days onto which the operation extends are relevant for the distribution of the capacity requirements, including the working days on which the operation starts or finishes. In the case of continuous distribution, the system distributes the partial capacity requirement, which has to be loaded between two basic values, evenly over *all the working days* that lie between the basic values. In the case of discrete distribution, the partial capacity requirement is loaded on the day on which the later basic value falls.

An operation extends over 10 days. According to the factory calendar, there are 2 non-working days during this time. You defined for the first basic value of the distribution function that after 50% of the operating time, 50% of the capacity requirement should be loaded.

Therefore, using the distribution based on the factory calendar, 50% of the capacity requirements must be loaded after 4 *working days*. In the case of continuous distribution, the system distributes this partial capacity requirement evenly over these 4 working days, that is, 12,5% of the total capacity requirement is loaded on each working day. In the case of discrete distribution, the system loads the partial capacity requirement on the fourth working day.

Distribution based on the operating time of the capacity category.

Here the daily operating times of the affected capacity category are relevant for the distribution of capacity requirement. In the case of continuous distribution, the system distributes the partial capacity requirement, which has to be loaded between two basic values, over the working days that lie between the basic values, proportional to the *daily operating time* of the capacity category. The discrete distribution is not relevant for the distribution based on the operating time.

The operation duration determined during lead time scheduling is 80 hours. The affected capacity category has a daily operating time of 8 hours. On the start date, the operation is processed in 2 hours of operating time. The operation finishes on the eleventh day, after 6 hours of operating time. You defined for the first basic value of the distribution function that after 50% of the operating time, 50% of the capacity requirement should be loaded.

Therefore, with a distribution on the basis of the operating time, 50% of the capacity requirements must be loaded after 40 hours of operating time, that is, on the sixth working day after 6 hours of operating time. On the first working day, the system loads 2.5% of the capacity requirement; and 10% on each day from the second to the fifth working day. On the sixth working day, 7.5% are loaded, plus a proportion that comes from the next basic value of the distribution.

Activities

You define distributions, for example, in Customizing for *Capacity Planning* by choosing *Operations* → *Capacity requirements*. They are identified using distribution keys.

You enter distribution keys:

- In the options profile [Page 17] for the capacity evaluation
- In the evaluation profile [Ext.] for capacity leveling and the extended evaluation

You can also specify in the profiles that the system uses the distribution key that you enter in the capacities for the work center or in the operations/activities in networks, maintenance orders and process orders.

If you do not specify a distribution key, the system uses the distribution key SAP000. With this distribution key, all of the capacity requirements for an operation are loaded on the start day for the operation.

During the capacity evaluation, you can specify by choosing *Settings* → *General* that the distribution keys are to be taken from the capacities or from the operations/activities in networks, process orders and maintenance orders.

Continuous and Discrete Distribution

The distribution of capacity requirements for an operation that extends over several periods is carried out on the basis of a distribution function. Based on this distribution function, the capacity requirements can be distributed continuously or discretely over the periods [Page 37].

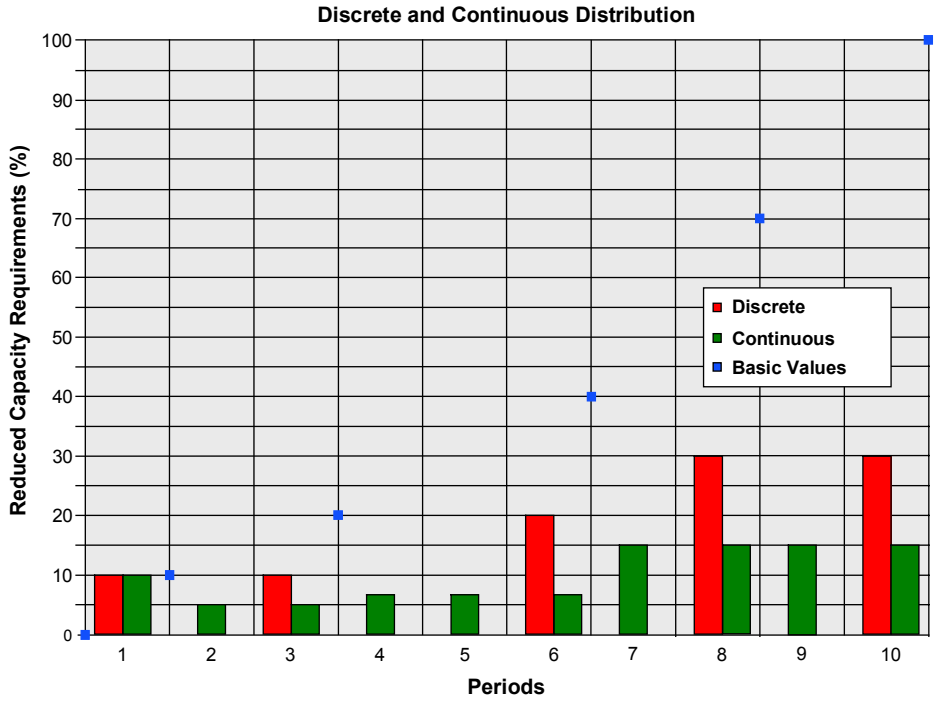
The following table shows the basis values of a distribution function. The basic values specify after what percentage of the operating time a particular percentage of the total capacity requirements have to be loaded.

Operation duration (%)	Cumulated loaded capacity requirements (%)
0	0
10	10
30	20
60	40
80	70
100	100

Basic values of the distribution function

The following graphic shows how the capacity requirements are distributed over the operating time of 10 periods using the distribution function.

Continuous and Discrete Distribution



Distribution of Remaining Capacity Requirements

Use

After the partial confirmation the remaining capacity requirements are redistributed between the date of the last confirmation, the actual finish date, the scheduled finish date or the forecast date.

Features

The distribution of the remaining capacity requirements is carried out based on a distribution function that is determined by the distribution function and the remaining capacity requirements.

If the actual finish date is later than the scheduled finish date then all of the remaining capacity requirements are loaded in the period of the confirmation date (actual finish date).

Determining the distribution function for the remaining capacity requirements

The system derives the degree of completion from the actual capacity requirements (that is, the total confirmed capacity requirements to date) and the remaining capacity requirements.

Degree of completion = Actual capacity requirements/(actual capacity requirements + remaining capacity requirements)

The system uses the degree of completion expressed as a percentage and using the distribution function determines the proportion of the operation duration that should in theory have elapsed. If necessary, linear interpolation between the basic values of the distribution function is possible.

The system places the zero point of the distribution function for the remaining capacity requirements on the basis of this percentage operation duration and the degree of completion. The remaining capacity requirements and the remaining operation duration now correspond to 100%. The basic values of the distribution function are converted accordingly.

For forward scheduling, the actual finish date functions as a fixed date and in this way also overrides the basic start date of the order. For partially confirmed operations, a remaining duration is calculated using the remaining quantities and the standard values or the forecast values via the formulas of the work center. In the network you can also specify a forecast value for the remaining duration. Alternatively the system can calculate the remaining duration using a forecast finish date in scheduling.

Cumulation of Available Capacities and Capacity Requirements

Use

If you want to look at the capacity situation of groups of work centers or production areas instead of the capacity situation of individual production work centers you must cumulate available capacities and capacity requirements.

Prerequisites

The cumulation of available capacities and capacity requirements takes place using work center hierarchies. You can use hierarchies to represent areas of a company according to your planning needs. You can define work center hierarchies in the area menu *Work centers*. You can find detailed information on work center hierarchies in the documentation *PP - Work Centers*.

Features

There are different cumulation functions available in capacity planning and in the work center:

- Dynamic cumulation [Page 48]

  This is the cumulation function in capacity planning. You can use this function to cumulate both capacity requirements and available capacities.

- Static cumulation [Page 44]

  This is the cumulation function in the work center. You can only use this function to cumulate available capacities. Of course, you can maintain “cumulated” available capacities manually in superior hierarchy work centers.

Activities

For performance reasons, it is recommended that for large hierarchies you statically cumulate available capacities in the work center at an early stage in capacity planning. Then you can access the previously cumulated available capacities in capacity planning and only have to dynamically cumulate the capacity requirements.

If the available capacities change then dynamic cumulation of available capacity during capacity planning is more up-to-date. You can also update the statically cumulated available capacities by carrying out the static cumulation again after a change in the available capacities.

Static Cumulation

Use

You can use static cumulation in work center maintenance to cumulate available capacities from hierarchy work centers to a superior hierarchy work center.

The meaning of cumulated available capacities for capacity planning is described in the section Cumulation of available capacities and capacity requirements [Page 43].

You can find an example of a work center hierarchy and of the cumulation of available capacities in the section Cumulation of available capacities [Page 50].

Features

You execute a static cumulation in the work center when processing a version of available capacity. This is how you determine the available capacity of this version of available capacity. The available capacity maintained to date is overwritten with the available capacity that was generated by the cumulation function.

You cannot carry out a cumulation in a work center that references a capacity since its available capacity can only be changed by changing the reference capacity.

You can specify on what level of the hierarchy in the branch of the hierarchy under the work center the available capacity is to be cumulated. On this hierarchy level the system groups together the available capacities of the active versions of available capacity with the same capacity category. The operating times of the work centers on the hierarchy level can be different; the longest operating time is used as the operating time.

The system carries out the cumulation per period for the period of time in question. You define this period of time using the start date and the period pattern key [Page 46]. The available capacity per period in the period split results from the averaging and addition of the available capacities of the subordinate work centers in this period.

The cumulation function also generates an available capacity for the period before and after the cumulation period.

- Before the cumulation period the standard available capacity of the capacity category that you are maintaining is valid.
- Following the cumulation period the cumulated available capacity of the last day of the cumulation period is valid.

Explosion stop

If the indicator Explosion stop [Ext.] is set for a work center in the hierarchy then its subordinate work centers are not taken account of in the cumulation. The hierarchy is exploded in the branch affected only as far as this work center.

Activities

You call up the static cumulation when maintaining the version of available capacity of a work center capacity with *Extras → Avail.cap via hier.*

If a work center belongs to several hierarchies then you can store the cumulated available capacities using the various hierarchies in various versions of available capacity in the work center.

If the available capacity of a subordinate hierarchy work center changes, the cumulated available capacity does not change automatically. If necessary, carry out a static cumulation again.

In capacity planning you can use dynamic cumulation [Page 48] to cumulate both available capacities and capacity requirements.

Period Pattern Key

Definition

A **period pattern key** identifies a length of time that comprises of any number of consecutive time segments. Each of these time segments consists of **periods**. The duration of a time segment is determined by the period type and the number of periods. Typical period types are calendar days or weeks

Use

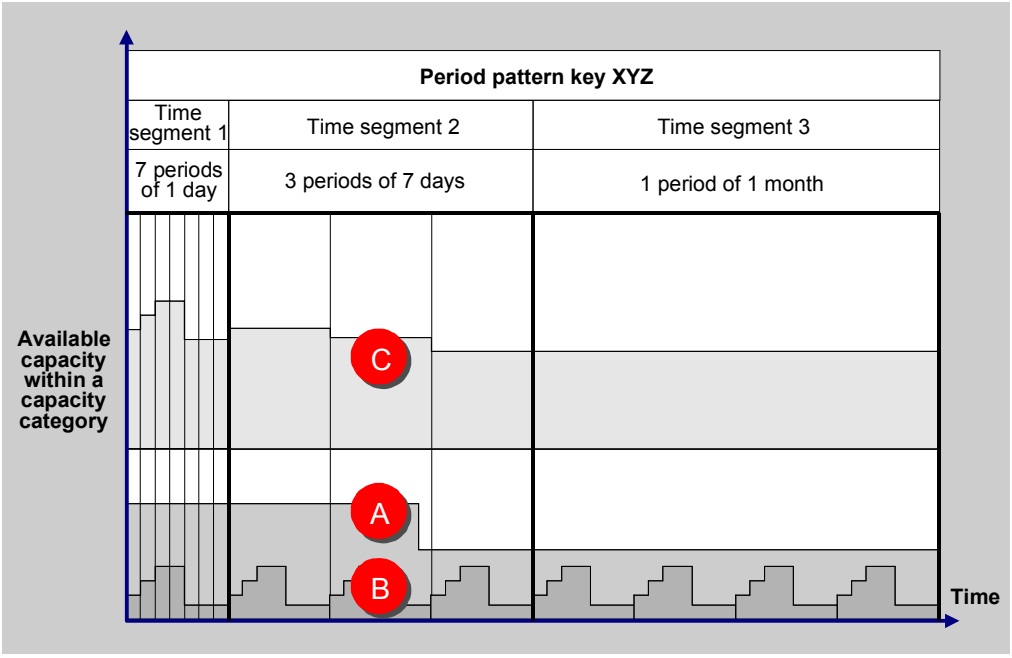
The period pattern key is used for

- displaying available capacities graphically [Ext.]
- Cumulation [Page 44] of available capacities using work center hierarchies in work center maintenance

It is created in Customizing for *Work centers* by choosing *Define period pattern key*.

Structure

In the following graphic you can see an example of a period pattern that has been defined using a period pattern key.



Cumulating available capacities using the period pattern key

Period Pattern Key

In work center maintenance the available capacities of different capacities are cumulated in the work center hierarchy using the period pattern key. For each period in the time segment defined by the period pattern key, the he available capacities are averaged and added together

In the graphic the available capacities A and B are cumulated in the available capacity C.

You are recommended to use shorter times for the first segments and longer ones for segments that are further in the future. Then you only need a limited number of periods, but have detailed information for the near future.

Dynamic Cumulation

Use

You can use dynamic cumulation in capacity planning to cumulate available capacities from hierarchy work centers to superior hierarchy work centers.

You can only carry out a dynamic cumulation in those parts of capacity planning where capacity requirements and available capacities are represented per period, for example in the capacity evaluation or in the tabular version of the planning table in capacity leveling.

The meaning of cumulated available capacities and capacity requirements for capacity planning is described in the section Cumulation of available capacities and capacity requirements [Page 43].

You can find an example of a work center hierarchy and of the cumulation of available capacities in the section Cumulation of available capacities [Page 50].

Features

In a dynamic cumulation the system cumulates the available capacities and the capacity requirements for all capacity categories of the work centers that you have selected for capacity planning and that belong to the hierarchy specified. The cumulation is carried out for the whole of the evaluation period on the basis of the period pattern specified.

The cumulated available capacity and the cumulated capacity requirements for a capacity category at a work center are a result of the combination of available capacities and capacity requirements for the same capacity category at the lowest level in the relevant part of the hierarchy branch.

If the indicator Explosion stop [Ext.] is set for a work center in the hierarchy then its subordinate work centers are not taken account of in the cumulation. The hierarchy is exploded in the branch affected only as far as this work center.

Cumulating available capacities

When cumulating the available capacity, the system summarizes the available capacities in the *active* capacity version into one available capacity and writes it to the *active* version of the corresponding capacity category in the superior work center. The operating times of the subordinate work centers can be different; the longest operating time is copied to the capacity version for the superior work center as the operating time.

Cumulating capacity requirements

If capacity requirements have already been assigned to a capacity at a hierarchy work center, in which capacities are cumulated, then these are added to the cumulated capacity requirements.

If you have assigned a pooled capacity to several hierarchy work centers the total capacity requirements for the pooled capacity for every hierarchy work center.

Distribution according to operating time when cumulating

In the *capacity evaluation*, the system, when distributing according to operating time, distributes the capacity requirements of each operation according to the operating time of the corresponding

subordinate work center, before it cumulates the capacity requirements of the operations in the superior hierarchy work center.

To ensure that the system executes the distribution during cumulation in the same way in *Capacity leveling with the capacity planning table* and in the *Extended evaluation*, you must set the *Hierarchy explosion* indicator in the selection profile. If you do not set the indicator, the system distributes the capacity requirements for an operation according to the operating time of the subordinate work center. For further information, see Distribution of capacity requirements [Page 37].

Activities

You can make all the settings for the dynamic cumulation:

- In the evaluation profile [Ext.] for capacity leveling and the extended evaluation
- In the options profile [Page 17] for the capacity evaluation

You can specify whether you want to cumulate available capacities or capacity requirements or both using the hierarchy specified. If you want to work with cumulated data you should cumulate both the capacity requirements and the available capacities. You can create cumulated available capacities in the work center at an early stage in capacity planning using the static cumulation [Page 44]. Then you only need to cumulate the capacity requirements dynamically in capacity planning.

When calling up the capacity evaluation, the extended evaluation or capacity leveling, the system cumulates the available capacities and capacity requirements according to your settings.

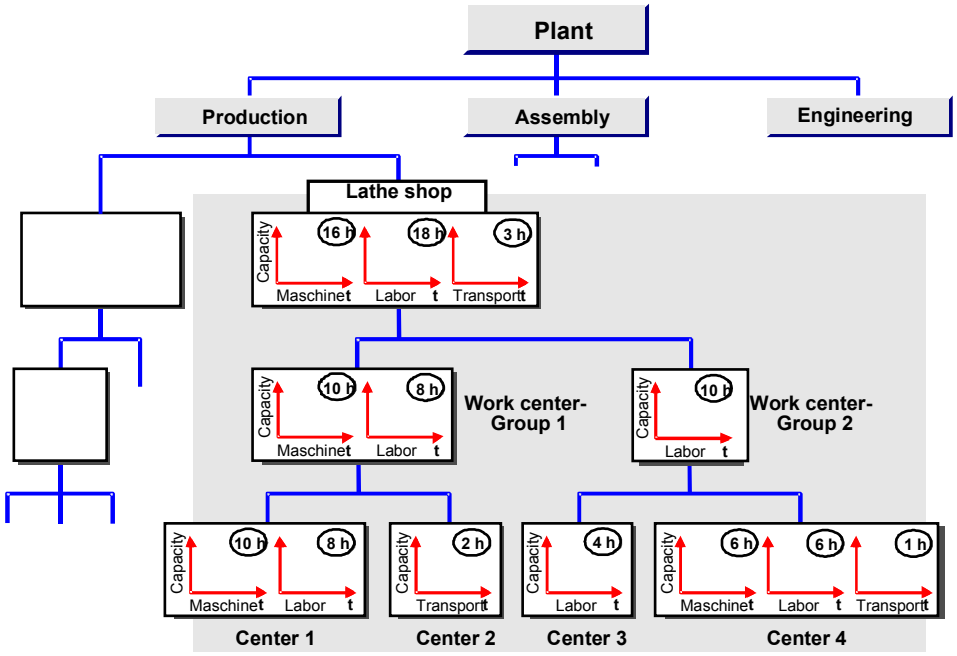
During the capacity evaluation, you can also execute a dynamic cumulation of the capacity requirements or available capacities using a hierarchy of your choice by choosing *Settings* → *General*. You can also display a hierarchy with *Hierarchy graphic.*

Cumulation of Available Capacities

If you want to look at capacity load of production areas in capacity planning rather than at the load of specific work centers then you can represent the areas of the business that are relevant to planning in work center hierarchies. You can then cumulate the available capacities and capacity requirements.

The following graphic displays an example of cumulating available capacities.

Cumulating available capacities in a work center hierarchy



In this graphic the following cumulations are carried out:

- The available capacities “labor” in work centers *center 3 and center 4* were cumulated one hierarchy level higher to the work center *work center group 2.* No cumulation was carried out in this work center for the capacity categories “machine” and “transport” because these capacity categories do not exist in *work center group 2.*
- The available capacities “machine” and “labor” in work centers *center 1* and *center 2* were cumulated one hierarchy level higher to the work center *work center group 1.* No cumulation was carried out in this work center for the capacity category “transport” because this capacity category does not exist in *work center group 1.*
- The available capacities “machine”, “labor” and “transport” for work centers *center1* to *center 4* at the lowest level of the hierarchy were cumulated two hierarchy levels higher to work center *lathe shop.*

The system does not cumulate successively from one hierarchy level to the next. The available capacity of the work center *Lathe shop* for example, does not comprise the available capacities of the work centers *Work center group 1* and *Work center group 2*.

Display and Edit Objects

Use

From the capacity evaluation you can display or process objects from the capacity planning environment.

Features

Depending on your settings in the Options profile [Page 17] you can either display or change the following objects from all of the evaluation lists.

- Capacities
- Work centers
- Orders (only from the detailed capacity list)

The following functions are available in the detailed capacity list:

- Processing goods receipts
- Displaying material masters
- Displaying stock/requirements list
- Creating or deleting confirmations

After a confirmation the current capacity requirements are only displayed if you have set the requirements type *Remaining requirements* in the options profile.

Activities

You call up the object or the function with the menu option *Environment.* After you have made a change (for example, to the available capacity) and have saved the change you must update the evaluation list with *Refresh.*

Calling up Capacity Leveling

To call up one of the capacity planning tables for capacity leveling in the capacity evaluation choose in the detailed capacity list [Page 9] *Environment → Capacity leveling*.

Graphical Display

Use

You can display the data from the various evaluation lists in the capacity evaluation using the SAP presentation graphic.

You can also use the SAP Gantt chart *Operation/work cntr.* to get an overview of the dates of operations at a work center.

Prerequisites

You define the settings for the layout of data for the various graphics in the graphics profile. You specify whether the system displays the data for the standard overview as blocks, bars or lines.

At any time during the capacity evaluation you can:

- Select a new graphics profile [Page 12]
- Change some of the settings [Page 12]

Features

General functions in the SAP presentation graphic

In the SAP presentation graphic, the data from the evaluation lists is displayed in two dimensions, three dimensions or as an overview.

All functions, for example switching between different displays, views and individual diagrams and changing graphic settings, are described in detail in the documentation BC-SAP-Graphic: User guide [Ext.].

Graphic for the standard overview

This graphic displays the capacity situation of capacities from the standard overview. A maximum of 32 capacities can be displayed in this graphic. The graphic cannot be generated for more than 32 capacities. A diagram can comprise a maximum of 32 periods; any other periods are cut off.

In the standard overview you can select capacities for the graphic by marking periods for the relevant capacities. In this way you also determine the display period in the diagrams. If you do not select any periods in the standard overview then (within the above restrictions) the diagrams for all the capacities are generated for all the periods.

Graphic for the detailed capacity list

In this graphic, for any selected capacity, in the detailed capacity list you can see the capacity requirements in every period listed according to the pegged requirements. In the overview display you can choose between the different views. The following are displayed:

- Capacity requirements of all pegged requirements for all periods
- Capacity requirements for all pegged requirements for a selected period
- Capacity requirements for one pegged requirement for all periods

To do this click on one front side (*periods* or *orders*) of the 3D diagram and select an appropriate entry from the list. If you double-click on a bar in the 2D diagram in the overview the system displays detailed information.

Graphic for variable overview

This graphic shows the values for the various columns in the variable overview. In the overview display you can choose between various views (as with the detailed capacity list). As with the standard overview a diagram can display a maximum of 32 periods; any other periods are cut off.

Graphic: Operations for the work center

This graphic shows the operations at a work center as bars in an adjustable period split. A dotted vertical line marks today's date. In the graphics profile and in the capacity evaluation you can specify:

- Which dates or durations are displayed for the operations
  - Earliest or latest start and finish dates
  - Actual start and actual finish date (for partially confirmed operations)
- Whether the times for the operation segments or the overall execution times are displayed
- How the operations in the diagram are sorted (for example, by material number, earliest start)

The bars for the operations have titles:

- With the material number, if there is a material for the order
- With the order description, if there is no material for the order
- With the order number, if there is neither a material nor an order description for the order.

If you double-click on an operation bar, the system displays detailed information on the order.

Activities

To call up the desired graphic, choose *Goto* → *Graphic.*

You can only call up the graphic for the detailed capacity list from the detailed capacity list.

Printing

Procedure

1. Choose *Planning → Printing → <Evaluation list>.*
2. Specify the print parameters.
3. Choose *Print*.

Result

The evaluation list is printed. With the standard overview and the detailed capacity list you can also print the selection list with the current values for the selection criteria.

Exporting an Evaluation List as an EXCEL File

Use

You can use the EXCEL interface to export the evaluation lists for the capacity evaluation from the R/3 System to your PC and then carry on working with MS EXCEL there.

Prerequisites

You can make settings for exporting in the list profile [Page 18] or during the capacity evaluation.

Features

- **Export**

  The data of the exported evaluation list is saved on the PC in a file with a symbolic link format (SYLK, enhancement SLK) and can be processed further with MS EXCEL.

- **Export with automatic start of the list viewer of MS EXCEL**

  Data is exported and MS EXCEL is started automatically. Thus you can maintain the data immediately.

  The files processed with MS EXCEL cannot be reimported to the R/3 system.

Activities

You can maintain various settings for the export during the capacity evaluation with *Settings.*

You can call up the export function by choosing *Environment* → *EXCEL interface*. You can execute the export with or without automatically starting the list viewer.

If you did not specify a directory and a file name in the list profile before calling up the export function with *Settings* then you should now enter this data.

Shop Floor Information System

Purpose

The shop floor information system is a tool for evaluating shop floor data. The shop floor information system provides data on the following:

- Lead time
- Adherence to dates
- Order stock situation
- Capacity load

This data can also be displayed graphically.

Integration

The shop floor information system is a component of the Logistics Information System. You can also Call up capacity planning in the area menu of capacity planning [Page 59].

In the capacity evaluation itself you have the Input/output diagram [Page 60] of the shop floor information system that represents the temporal development of the capacity situation at the work center.

Features

You can find detailed information on the shop floor information system in the documentation LO – Logistics Information System [Ext.].

Calling Up the Shop Floor Information System

In the area menu for *Capacity Planning* choose *Evaluation* → *Shop floor information system*.

You can find detailed information on the shop floor information system in the documentation LO – Logistics Information System [Ext.].

Input / Output Diagram

Definition

Special diagram for the Shop floor information system [Page 58], in which figures for production are displayed graphically.

Use

The input/output diagram that you can call up in the capacity evaluation displays the temporal development of the capacity situation at a work center. You can use the input/output diagram to monitor the progress of the orders and the lead time.

Structure

The input/output diagram in the capacity evaluation shows, for one work center, how the following data changes through time:

- Available capacity
- Cumulative capacity requirements (receipts)
- Cumulative confirmed capacity requirements (issue)

Integration

Input/output diagrams are only generated if the corresponding data in the shop floor information system is updated. You can control updating independently of the order category, for example in Customizing for production orders under *Defining order-dependent parameters.*

Calling Up the Input/Output Diagrams

Prerequisites

The input/output diagram [Page 60] for a work center is only displayed if the relevant order data is updated in the shop floor information system. You can control updating independently of the order category, for example in Customizing for production orders under *Defining order-dependent parameters.*

You can find detailed information on the shop floor information system in the documentation LO – Logistics Information System [Ext.].

Procedure

In capacity evaluation, choose *Environment* → *Input/output diagram*

Result

The system displays input/output diagrams for all the work centers selected.

If you double-click on the curve a Gantt diagram is displayed in which the orders for the work center are listed according to their dates.

Extended Evaluation

Purpose

The extended evaluation is purely a display version of the *capacity evaluation* component.

In the extended evaluation in contrast to the normal capacity evaluation you can display the following capacity requirements.

- Actual capacity requirements
- Split capacity requirements that are assigned to individual capacities of a capacity
- SOP requirements

You can also call up the extended evaluation in the following views as well as the work center view:

- Project view
- Order view
- Individual capacity view

Integration

The extended evaluation is a part of the component *Capacity Planning.*

Constraints

In contrast to the normal capacity evaluation you cannot do the following in the extended evaluation:

- Define and call up a variable overview
- Display data graphically
- Execute changes to object in the environment (work centers, capacities, orders)

Specify and Change Settings (Extended Evaluation)

Use

You define all the settings for the capacity evaluation using an overall profile [Page 64] and its subprofiles. The capacity evaluation is configured with these settings when it is called up.

In the extended evaluation you can at any time change settings that relate to the layout of the list data and the selection of the fields displayed. You can use list functions in the Logistics Information System (LIS) to do the following:

- Sort
- Group
- Cumulate
- Select fields

In contrast to the normal capacity evaluation, you cannot do the following in the extended evaluation:

- Select new profiles
- Change settings for the layout of the capacity requirements and available capacities, such as the period split, the display period or cumulation using a hierarchy.

Overall Profile (Extended Evaluation)

Definition

Profile containing all the settings for the extended evaluation.

Use

You can use different menu paths to start the extended evaluation with different overall profiles depending on the desired evaluation view. SAP specifies overall profiles for the menu paths. You can also save your own overall profiles for these menu paths using the appropriate SET/GET parameters.

The standard overall profiles and the SET/GET parameters for these menu options are shown in the following table.

Evaluation → Extended evaluation →...	**SET/GET parameter**	**Profile**
Work center view	CY:	SAPSFCG020
Order view	CY_	SAPSFCG021
Individual capacity view	CY~	SAPSFCG022
Project view → WBS element/version	CY8	SAPPS_G020
Project view → Work center/version	CY?	SAPPS_G021
Project view → Version	CY9	SAPPS_G022

In the extended evaluation in contrast to the normal capacity evaluation you can only change list settings.

You can define overall profiles for the extended evaluation and the subprofiles in Customizing for *Capacity leveling and the extended evaluation.* Not all subprofiles or settings in Customizing for *Capacity leveling and the extended evaluation* are relevant to the extended evaluation.

Structure

The overall profile for the extended evaluation must contain the following subprofiles:

- **Selection profile**

  Defines the settings for the selection of capacity requirements and available capacities.

- **Control profile**

  Defines the presentation (periodic line display).

- **Time profile**

  Specifies the date for dispatching backlog and the following periods:

  – Database read period

  – Evaluation period

- **Evaluation profile**

  Defines the settings for the presentation and display of capacity requirements and available capacities.

- **Period profile**

  Specifies the settings for the period split.

- **List profile**

  Specifies the settings for the standard overview and the detailed capacity list.

Select fields (Extended Evaluation)

Prerequisites

You can define what data is to be displayed in the standard overview or in the detailed capacity list in the list variants in the list profile in Customizing for *Capacity leveling and the extended evaluation*. You can change the field selection in the extended evaluation at any time.

Procedure

1. Choose *View* → *Select fields.*
2. Select the fields that are to be displayed.

Result

The desired fields are displayed in the list.

You can at any time display all possible fields for the selected periods with *Goto* → *All fields*.

Calling up the Extended Evaluation

Prerequisites

You define all the settings for the capacity evaluation in an overall profile for the extended evaluation [Page 64] and its subprofiles. The extended evaluation is configured according to your settings.

In the extended evaluation you can change the settings for generating lists and selecting fields. Other change options such as selecting new profiles as in the normal capacity evaluation are not available.

Procedure

1. Choose *Logistics* → *Production* → *Capacity Planning*

   The area menu of *Capacity Planning* appears.

2. With *Evaluation* → *Extended evaluation* → *…* you can start the extended evaluation in the desired evaluation view with an overall profile that is saved for the SET/GET parameter [Page 64] belonging to the menu path (SAP standard or user-defined).

   You reach the selection screen for the extended evaluation.

3. Select your data for the extended evaluation.

   You can further restrict your selection by choosing *Filter.*

4. Choose *Execute*.

Result

You reach the list that you have defined as the default list in the list profile (standard overview or detailed capacity list).

If the standard overview is displayed first, you can branch to the detailed capacity list by choosing *Goto.*

- With the collective display you get a list of all the selected periods.
- With the individual display you get a list for every selected period.

  With *Back* you reach a dialog box from which you can navigate between the individual lists. You can print the individual lists.

From the first individual list or from the collective list you reach the standard overview using *Back*.

Display Actual Capacity Requirements

Use

In the extended evaluation you can display actual capacity requirements as well as planned capacity requirements or remaining capacity requirements.

The system calculates the actual capacity requirements during confirmation from the confirmed activity or - using the formulas from the work center - from the confirmed quantity.

Prerequisites

Capacity in the work center

If you want to display actual capacity requirements in the extended evaluation you must specify the following in the screen *Capacity overview* in the work center for the capacity categories:

- That the actual capacity requirements are determined during confirmation
- How the actual capacity requirements are calculated
  - So that the system can calculated actual capacity requirements from the confirmed quantity you must have specified formulas to calculate the capacity requirements for the operation segments or for the internally processed operations.
  - So that the system can treat the confirmed work as actual capacity requirements you must specify in the work center which work is assigned to which operation segment or to which internally processed operation. You specify the appropriate standard value parameters for every actual capacity requirement for an operation segment or for the internally processed operation.

Customizing for the capacity category

If you do not set the indicator *NoActValue* in Customizing for the capacity category then on confirming an individual capacity actual capacity requirements are generated for the individual capacity and for the main capacity category to which the individual capacity is assigned. If you set the indicator *NoActValue* only actual capacity requirements are generated for the individual capacity.

Confirmation for operation

If the system is to calculate actual capacity requirements from confirmed activities you must specify the confirmed activities during confirmation using a unit with a time dimension.

When confirming the order the system does not calculate actual capacity requirements.

Customizing for capacity leveling and the extended evaluation

- In the selection profile you specify which capacity requirements categories you can display in the extended evaluation (planned-, remaining- or actual capacity requirements). If you do not select a capacity requirement type you can only display remaining capacity requirements in the extended evaluation.

- In the list versions for the detailed capacity list and the standard overview you specify which data the system displays on calling up the extended evaluation, for example actual capacity requirements. In the extended evaluation you can change the field selection [Page 66] at any time.

  An overall profile for the extended evaluation that displays the actual capacity requirements is the profile SAPSFCGO23.

Features

When carrying out a confirmation you can also specify the dates between which you have processed the quantity or carried out the activity confirmed (start processing, finish processing). In the extended evaluation the system distributes the actual capacity requirements using the distribution key [Page 37] over the periods between these dates.

Displaying Objects (Extended Evaluation)

Use

In the extended evaluation you can display the following objects from capacity planning.

- In the standard overview
  - Work center
  - Capacity
  - Person
- In the detailed capacity list:
  - Order
  - Operation
  - Component
  - Person
  - Capacity

In contrast to the normal capacity evaluation you cannot process the various objects in the extended evaluation.

Activities

You call up the desired object for a selected line by choosing *Environment.*