SAP PRESS

SAP for Utilities

SAP Audit Management

SAP Cost Center Accounting

POWERED BY SAP HANA

SAP S/4 HANA

A Business and Technical Roadmap to Deploying SAP

WHATSAPP +255738656506

INTRODUCTION

Welcome to the fascinating world of SAP. This book helps you crack the tricks of mastering SAP HANA Customization

Cost Center Accounting

This section describes the user-specific default settings to be made in Cost Center Accounting (CCA). The structure gives you an idea of the configuration sequence.

Further notes

For more information on the IMG for "Cost Center Accounting", see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting* under the topics:

Cost Center Accounting Master Data

Cost Center Planning

Actual Cost Calculation and Transaction-Based Allocations

Funds Commitment
Period-End Closing

Cost Center Accounting Information System

Requirements

Before you make settings for cost centers, you must already have processed the following sections:

The *Organization* section in the Implementation Guide (IMG) for *General Controlling*

The *Master data* section in the Implementation Guide (IMG) for *Cost Element Accounting*

If, in Cost Center Accounting you

Use activity types

Use statistical key figures

Make evaluations using the information system

you must select these application components in addition to Cost Center Accounting when you generate a project IMG.

Activate Cost Center Accounting in Controlling Area

In this IMG activity you use the controlling area control indicators to activate Cost Center Accounting (CO-CCA).

You use control indicators to activate or deactivate certain cost accounting functions by fiscal year.

The control indicators are valid as of the selected fiscal year, up to the fiscal year in which you maintain new indicators.

Requirements

You have completed the IMG activity Maintain Controlling Areas located in the *General Controlling* section of the IMG under *Organization*.

Standard settings

The standard SAP System includes controlling area 0001, to which company code 0001 is assigned.

Activities

Choose the controlling area in which you want to use CCA.

Choose *Activate components/control indicators*.

Activate CO-CCA. **Notes on transport**

To transport controlling area settings, a separate function is available in Customizing under *Controlling -> General Controlling*.

Enterprise Organization

In this activity you specify the necessary settings for using enterprise organizations

Further information

For more information on enterprise organizations, see the SAP Library under *AC - Financials -> CO - Controlling -> General Controlling -> Contolling Methods -> Enterprise Organization*.

Set Active Plan Version

Only **one** of the **plan versions** created in the system is active at a given time. The workflow system regards this plan version (with its contents) as the only valid plan version.

Recommendation

Mark plan version 01 as the active plan version.

Standard settings

All SAP workflows supplied are then automatically in the plan version marked as active.

Activities

Enter the plan version that you want to use as the active plan version in the field ***Value semantic abbreviation*** in the parameter group "PLOGI PLOGI".

Further notes

Maintaining an active plan version is part of the settings made in automatic Customizing.

You should definitely execute automatic Workflow Customizing, because it also makes other important settings. You can find automatic Workflow Customizing in the Implementation Guide by choosing SAP Business Workflow / Webflow-> Maintain Standard Settings for SAP Business Workflow.

If you have already set an active plan version, it is not overwritten by automatic Customizing.

Enter Settings for Enterprise Organization

To use the enterprise organization functions for maintaining cost centers or profit center standard hierarchy, you must activate enterprise organization per controlling area.

Note

If you have activated enterprise organization in a controlling area, the maintenance of the standard hierarchy for cost centers or profit centers is **limited** (the group structure cannot be changed: master data can be maintained).

Activities

To activate enterprise organization for a new controlling area, choose *New entries*.

To change the data on an existing controlling area, select the corresponding controlling area and choose *Detail*.
Prerequisite: You are in change mode.

Enter the controlling area.

To activate the enterprise organization, select *Enterprise organization active* for the controlling area in question.

Enter the fiscal year interval for which the standard hierarchy is to be classed as complete.

Note on number of fiscal years

Specify whether company codes may be assigned to one another hierarchically.

Note on assigning organizational units

Create Enterprise Organization

If you have **not** generated the enterprise organization from the standard hierarchy, you will need to regenerate the enterprise organization.

Prerequisites

You have activated the enterprise organization for the controlling area in question.

See

Customizing for *Cost Center Accounting* under *Enterprise Organization -> Settings for Enterprise Organization*

Customizing for *Profit Center Accounting* under *Enterprise Organization -> Settings for Enterprise Organization*

Check the *preview period*.
This time interval determines the processing period of the enterprise organization and is the preset processing period for the CO objects contained. You can change the preview period if necessary.

Activities

Creating a root organizational unit

The standard system contains a new HR organizational unit with the provisional title *New Organizational Unit* that you can use as a root organizational unit.

In the detail area, overwrite the provisional entries.

Save your entries.

Creating Additional HR Organizational Units

You can created additional HR organizational units:

In Customizing for the relevant application component by choosing *Enterprise Organization -> Enter Settings for Enterprise Organization*

In the relevant application component by choosing *Master data -> Enterprise organization -> Change*

To create further HR organizational units within an organizational structure, in the **overview area** select the organizational unit under which the new object is to be assigned.

Choose *Create -> Organizational unit*

Note

You can also copy an existing HR oganizational unit. All properties of this organizational unit are copied in the process. You then change the data in the **detail section** as needed.

To maintain the data for the HR organizational unit, double-click on the unit in the organizational structure.

Creating Cost Centers/Profit Centers

You can create additional cost centers and profit centers.

In Customizing for the relevant application component by choosing *Enterprise Organization -> Enter Settings for Enterprise*.

In the relevant application component by choosing *Master data -> Enterprise organization -> Change*

To create cost centers/profit centers within an organizational structure, in the **overview area**, select the HR organizational unit to which the cost center/profit center is to be assigned.

Choose *Create -> Cost center (for organizational unit)*

The system displays the master data in the *detail area*. In so doing, the system transfers the data in accordance with the inheritance principle.

Note

The system displays the assignment of the cost center/profit center to the HR organizational unit in the structure for the **overview area**

At present you can only maintain **cost center and profit center master data** in the enterprise organization. You can only display the master data for controlling area and company code from the organizational structure.

Creating Cost Center Groups/Profit Center Groups

You can create additional groups

In Customizing for the relevant application component by choosing *Enterprise Organization -> Enter Settings for Enterprise Organization*

In the relevant application component by choosing *Master data -> Enterprise organization -> Change*.

To create groups within an organizational structure, in the **overview area**, select the HR organizational unit to which the cost center is to be assigned.

The **detail area** contains the data on the HR organizational unit for processing.

In the **detail area** on the tab strip *CO Assignment* choose *Cost center group -> Create* or *Profit center group -> Create*.

Enter the name of the group along with a description.

The system transfers the group -> HR organizational unit assignment to the structure in the overview area

Note

You can change the group name at a later date but only up to the point at which you have **not** generated a standard hierarchy from the enterprise organization. If you have already assigned a group or an object to an HR organizational unit, you **cannot** assign any further group(s).

Further notes

For more information on the enterprise organization, see the SAP Library under *Financials - CO - Controlling -> Controlling -> Controlling Methods -> Enterprise Organization*.

Generate Enterprise Organization from Standard Hierarchy

You can generate the enterprise organization from an existing standard hierarchy.

You can then continue processing the standard hierarchy using the enterprise organization functions.

Requirements

You have activated enterprise organization for the corresponding controlling area in the standard hierarchy.

See also Customizing for *Cost Center Accounting* under *Enterprise Organization -> Enter Enterprise Organization*.

Activities

Specify the *target plan version*.

The system defaults the **active** plan version in each case, which you can however overwrite.

See also Customizing for *Cost Center Accounting* under *Enterprise Organization -> Set Active Plan Version*.

Specify the controlling area for which the enterprise organization is to be generated.
The system determines the appropriate standard hierarchy according to this controlling area.

Specify the key date.

At which the enterprise organization is to be generated (first generation run)

As of which all changes in the standard hierarchy are to be transferred to the enterprise organization (subsequent generation run)

The system defaults the current date which you can however overwrite.

Generate Standard or Alternative Hierarchy from Enterprise Organization

At a given key date, you can generate the following hierarchies for a cost center from the enterprise organization:
Standard hierarchy

Alternative hierarchie

Replace standard hierarchy with alternative hierarchy

Requirements

You specified the fiscal year interval in which the objects in the hiearchy in question are to be valid. This interval determines which objects are contained in the given hierarchy.

See also:

Customizing for *Cost Center Accounting* under Enter Enterprise Organization

Customizing for *Profit Center Accounting* under *Enterprise Organization -> Enter Enterprise Organization*.

Recommendation

If the hierarchies are large, generate them **in the background**.
If you try to generate large hierarchies online, processing can be stopped due to timeout.

Activities

Enter the key date on which the hierarchy is to be generated.

The system defaults the current date, which you can however overwrite.

If you want to generate an **alternative hierarchy**, enter a suffix for this hierarchy.

Note

You can assign a name **without** a suffix for the standard hierarchy **only**

If you want to replace the standard hierarchy with an alternative hierarchy,

Enter the name of the alternative hierarchy that is to be the standard hierarchy **Note**

When it generates this new standard hierarchy, the system automatically shortens the previous name by this suffix.

Enter a suffix for the old hierarchy.

This becomes an alternative hierarchy.

Specify whether the hierarchy should be generated for **cost center** or **profit center**.

Specify whether groups that exist in the existing standard or alternative hierarchy should be overwritten when the new hiearchy is generated.

Note on hierarchies

Specify whether the hierarchy is to be generated for **controlling areas** or for **profit centers**.

Choose *Execute*

To generate the hierarchies **in the background**, choose *Execute program in background*

Further notes

Detail information on time-dependent generation of hierarchies

Activate Inactive Master Data

In this IMG activity, you can activate inactive master record versions for the following organizational units within the enterprise organization:

Cost centers

Profit centers

Note on Active and Inactive Master Record Versions

Activities

1. Choose the corresponding organizational unit using one of the following criteria:

<Organizational unit> or <Organizational unit> interval

<Organizational unit> group

All <Organizational units> in a controlling area 2. Decide whether to activate *immediately* or in a *Test run* first.

Decide whether to activate in the *background* or *online*.

To activate the organizational units, choose *Execute*.

Note

You can go to *Profit center activation* from *Cost center activation* and vice versa.

Further notes

For more information, see the SAP Library under *Financials -> CO - Controlling -> Methods in Controlling -> Enterprise Organization -> Processing The Enterprise Organization -> Activate Inactive Master Data*.

Delete Inactive Master Data

In this IMG activity, you can delete inactive master record versions within the enterprise organization for the following organizational units:

Cost centers

Profit centers

Note on Active and Inactive Master Record Versions

Activities

1. Choose the corresponding organizational unit using one of the following criteria:

   <Organizational unit> or <Organizational unit> interval

   <Organizational unit> group

   All <organizational units> of a controlling area 2. Decide whether to delete *immediately* or in a *test run* first.

Decide whether to delete *in the background*, or *online*.

To delete the inactive master record versions, choose *Execute*.

Note

You can go directly to *Deleting profit centers* from *Deleting cost centers* and vice versa.

Further notes

For more information, see the SAP Library under *Financials -> CO - Controlling -> Methods in Controlling -> Enterprise Organization -> Processing the Enterprise Organization -> Deleting Inactive Master Data*.

Master Data

In the master data section you make default settings for:

Cost centers and cost center groups

Activity types and activity type groups

Statistical key figures and statistical key figure groups

You also have the option of creating master data and master data groups.

Note

When you create your master data groups you should be aware of the effects on planning, cost allocation, and the information system.

Further notes

For more information on master data, see the SAP Library under *Financials -> Controlling (CO) -> Cost Center Accounting -> Master Data in Cost Center Accounting*.

Cost Centers

In this activity you make settings for cost centers. These include:

Defining the standard hierarchy

Defining cost element types

Creating cost centers

Defining matchcodes for cost centers

Selecting time-dependent fields

Note

If you have activated the enterprise organization in a controlling area, you can no longer carry out group maintenance for the standard hierarchy of cost centers or profit centers.

For more information, see:
Enter enterprise organization (cost centers)
Enter enterprise organization (profit centers)

Further notes

For more information on cost centers, see the R/3 Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Cost Centers*

Request for a Change to Cost Center Master Data

In this activity, you make the settings needed for requesting changes to the following master data via the Intranet/Internet:

Cost centers

Internal orders

G/L accounts

Vendors

Customers

In the so-called scenarios, you define the process of requesting a master data change. This process definition is technically based on messages.

You can find additional information in the "SAP Library" under *Financials -> Controlling (CO) -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Processing Master Data -> Requesting Master Data Changes in the Internet/Intranet*.

Define Own Scenarios for Request to Change Master Data

In this IMG activity, you define scenarios for the **request to change master data**.

Standard settings

All the scenarios provided by SAP are in the *S** namespace.

For requests to change master data, the following notification types are provided in client 000:

Notification type 50 for requests for cost centers, orders, and G/L accounts.

Notification type 70 for requests for vendors and customers.

Note

To be able to use these notification types, you need to transfer the settings from client 000 using the QISR_SM29 transaction. Then you need to process number ranges for the notification types.

The notification type contains information on whether the request must be approved, and if so, by whom. Note that you can use a notification type for more than one scenario.

Requirements

SAP recommends that you use the scenarios provided for master data changes as a reference for creating your own scenarios, and then to adapt the copy as required.

Activities

To copy a scenario, select is and choose *Copy*. To create a scenario, choose *New entries*.

Enter a key and a description for the scenario.

Caution

The scenario key must **not** be in the SAP (S*) namespace.

In the *general data*, make the required entries.

Take this opportunity to store a long text for the scenario. This description is displayed as an explanation when you call up the form. You can also use this description to find a corresponding form in the intranet. When you enter the text, you do not have to enter key words as the search engine filters the text using not only the words, but also their conjugation or declination. Word groups are also used for the search. For more information on the search engine, see the *SAP Library* under *Financials ->*

Controlling -> Cost Center Accounting -> Information System -> Interactive Information System, and then see *Report Documentation* under *Document Search Using The Retrieval System*.

Transfer the scenarios from notification type **50** or **70** accordingly.

Note that you initially need to transfer the settings for the notification types from client 000 using the QISR_SM29 transaction. Then you need to process the number ranges for the notification types.

Note

Check whether the follow-up activities provided on the activities menu bar match your requirements. We recommend that you use the follow-up activities supplied by SAP.

Use *Entry with form* as the entry type.

You only need to specify an ITS service if you choose the *Entry with form* entry type. You use an HTML form specially designed for the scenario. You also need to assign an Internet service to the scenario that contains the required HTML templates, ITS (Internet transaction server) and language-dependent resources. In addition, there is a choice of business add-ins (BADIs) that you

can use, in which you can define specific requests. You can assign an Internet service to **maximum one** scenario. To create a new Internet service, choose *Generate*. You have two options:

Generate internet service with reference

When you generate the Internet service, if you specify a scenario with an existing Internet service as a reference, the system copies it to the new Internet service name.

Generate internet service without reference

If you do **not** specify a scenario with an existing Internet service as a reference, the system copies the default Internet service *SR00*. An internet service created in this way contains all settings required for immediate testing of the scenario definition. The system automatically inserts a *request data* area with corresponding entry fields, for the request-specific characteristics that were defined in the scenario.

Note

Before you can test the Internet service, you need to publish it manually. This takes you automatically to the Internet service processing in the development workbench, where you can publish the entire Internet service. Then you can test the ITS service from Customizing using *Test*.

7. To modify forms, choose *Business Add-Ins*. You can now change the implementation (create, change, delete and so on).

   If you require special initialization or checks on the request for the scenario, you can use a business add-in (BADI QISR1). For more information on BADIs, see *Basis -> Change and Transport System - Overview -> Transactions and Tools -> BC Changes to SAP Standards -> Business Add-Ins.*

   Caution

   SAP recommends that you use the F4 Help to transfer the corresponding *Business Add-In from the scenario* for requests to change master data. In this case, the existing interfaces to the SAP system are used automatically.

   Each Business Add-In provided ensures that all of the fields defined in the SAP system (which you use on your request form) are integrated with the SAP system, for example, for the purpose of consistency checks. You can also copy and enhance the Business Add-In if necessary.

Do not activate the *Cost incurring* indicator.

The scenarios for changing master data do **not** incur costs.

Choose *Transfer*.

In the next dialog box, choose *Copy all*. The selection list now provides the scenario that you copied.

Flag your scenario and choose *Characteristics* in the selection area.

Enter the fields that you require for the request form.

Next, select *Dictionary category* and transfer the structure for each request. All the fields are contained here that you can use for the form. You can carry out a search via structure name *ISR**.

In the *basic data* you use *ITS* to determine which fields appear on the form, and in which order they should appear. You use a **Business Add-In** to control which fields are filled as default.

Notes on field selection

In the cost center structures *ISR_COSTCENTER_CREATE* (for scenario **SRK1** create cost centers) and *ISR_COSTCENTER_CHANGE* for scenarios **SRK2** and **SRK3** (change/lock cost centers) some of the fields appear twice, but you **need** to choose the following fields for the request form:

LOCK_IND_ACT_PRIM_COSTS *Lock indicator for primary actual postings*
LOCK_IND_PL_SEC_COSTS *Lock indicator for secondary cost planning*
NAME_CC *General description*

For a request to **create** a new cost center, the following are minimum requirements:

Controlling area

Cost center key

Date valid from

Date valid to

Description

Person responsible

For a request to **change** a cost center, the following are the minimum requirements:

Controlling area

Cost center key

Date valid from

Date valid to

Choose *Tasks* in the selection area.

You specify the processing procedure in the SAP System for the request to change master data by using the workflow or worklists.

Transfer a *task* for each scenario.

Enter a processor or a standard role.

This data is automatically provided when you call up the request form.

SAP provides you with standard roles for the various requests to change master data. It is recommended that you copy these and adapt the copy accordingly.

Note

You can use the *partner role* to control whether a single processor (*task processor*) is defaulted in the request form, or a whole department (*department responsible*). For more information on the role, see the *SAP Library* under *Basis -> Business Management -> Organizational Management -> Integration Into The Workflow -> Role Breakdown -> Role Definition -> Define Responsiblity Roles*.

Example

SAP provides the standard role *30014* for requests to change cost center master data.

Further notes

More information on **master data adjustment requests** is available in the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Processing Master Data -> Master Data Adjustment Requests viaInternet/Intranet*.

Assign Own Scenarios for Requesting Master Data Changes

In this activity, you specify for cost centers the request forms that can be accessed from other applications. The assignment can be limited by a controlling area.

The following list contains the applications from which you can access the request forms for cost centers: center.

Enterprise organization,

Processing of Standard hierarchy,

Cost centers master data report

Example

Controlling area	scenario
0001	*SRK1 Request to create a cost center*
0001	*SRK2 Request to change a cost center*
0001	*SRK3 Request to lock a cost center*

For controlling area 0001, the access is made available from the corresponding applications of cost center accounting (Enterprise organization, Processing standard hierarchy and cost center master data report) to the forms for creating, changing, and locking a cost center.

Hinweis

If you do not enter a *controlling area*, the assigned scenario is valid for **all** controlling areas.

Activities

Choose *New entries*.

Enter the controlling area for which the assignments are to be valid.

Enter the scenarios that are to be accessed from SAP applications.

The system automatically adds this to the description of the scenario.

Save your entries.

Define Cost Center Categories

In this IMG activity you define cost center categories.

You define the categories yourself (such as P for a production cost center or A for an administration cost center), or you can use the cost center categories supplied by SAP.

Activate or deactivate the following indicators as default values:

Lock primary postings

Lock secondary postings

Lock revenue postings and revenue planning

Lock commitment update

Lock primary cost planning

Lock secondary cost planning

Lock consumption quantities

Enter a functional area as a default value.
The SAP System defaults this indicator when you create cost center master data from the cost center category specified. You can overwrite the default values in each individual cost center master record.

Note

The *Cost center category* field is also used in activity type planning. In the activity type master record you enter the cost center type for which the activity type can be planned. Enter "*" if the activity type is allowed for all cost center categories.

Example

You allow activity type PHR (production hours) to be planned on all cost centers with category P (production).

This means the activity type cannot be planned on an administration cost center by mistake.

Standard settings

A number of categories are included in the standard SAP System.

Actions

Check whether the categories supplied by SAP meet your requirements.

If not, create new categories to classify the cost centers in your company.

Note on transport

To transport cost center categories, an individual function is available in Customizing *General Controlling*.

Additional information

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Cost Centers*.

Define Selection Variants for Cost Centers

A selection variant contains the fields that are to be evaluated in your selection report. These fields determine the content and structure of a selection variant.

The following selection reports are available:

For cost elements RKKOASEL

For cost centers RKKSTSEL

For activity types RKLSTSEL

For business processes RKPRZSEL

For internal orders RKOSEL00

For projects RKPSEL00

You enter the selection values in the corresponding fields, and can overwrite these in the application. You can hide the fields that you do not require.

When you process "variant attributes", you can specify variables for selection variant fields, and so on.

Example

If you wish to select your objects by time, then define a selection variant, which only contains master data fields for times.

Standard settings

The following selection variants are defined for internal orders:

SAP_01 - SAP_02 - SAP_03

Activities

If you wish to create your own selection variants, proceed as follows:

Enter a name for your variant in the "ABAP: Initial screen for variants"

Confirm the "Values" default setting in the "Subobjects" group box, and choose "Create". In the "Variant maintenance: Report <your selection report>" screen, the system displays the selection fields for the corresponding master data.

Enter the values or variables in the fields that you wish the system to use for selection.

Choose **Continue**.

This takes you to the Attribute maintenance screen for the selection variants.

You can assign the following field attributes:

Protected

The value that you specified for the field can no longer be overwritten in the application.

Invisible

The system hides this field from the selection variant.

Selection variable

You can define a variable for a field, such as a user-defined selection rule (compare with the "Define selection rule" section). The field is filled with the corresponding value during runtime.

Enter a short text in the "Description" field.

Save your entries.

This variant is now available for the corresponding selection report.

Transport notes

You can transport selection variants manually by proceeding as follows:

Choose "Utilities -> Transport request..." in the "ABAP: Variants - Initial screen"

Enter the program name
Enter the name of the variant to be transported

Define List Variants for Group Processing

In this IMG activity, you create screen variants for the layout of the entry screen for the collective processing of cost centers .

You can determine which fields are displayed and in which order for the individual cost centers.

Default settings

The standard system includes the following list variants for the collective processing of cost centers:

Standard one row

Standard two rows

Standard three rows

Standard four rows

You cannot change these list variants. Standard and custom variants can be selected with the input help (F4).

Activities

Check whether the list variants delivered meet your requirements.

If necessary, create new list variants as follows:

Choose *Create*.

Enter a key for the list variant, a corresponding short text, and the number of rows to be displayed for each cost center.

From the list of the possible fields, select the fields which are to appear in the cost center list.
Note that you must choose the fields *Selection* and *Cost Center*.

If necessary, change the offset in order to change the position of the fields within the row.

Save your entries, and activate the list variant.

Further notes

To ensure that Cost Accounting is active in the given year for the objects in the list variant, you should also check the settings in the IMG activity Maintain Controlling Area.

Activate Inactive Cost Centers

In this IMG activity, you can activate the inactive version of a master record.

The following master data can be either active or inactive versions:

Cost centers

Profit centers

Business processes

Note on Active and Inactive Master Record Versions

Choose the corresponding objects using one of the following criteria:

<Object> or <object> interval

<Object> group

All <objects> in a controlling area

Decide whether to activate *immediately*, or in a *test run* first.

Decide whether to activate in the *background*, or *online*.

To activate the objects, choose *Execute*.

Note
You can go from the activation of one object into the activation for another object. This means that you can go from *Activation of cost centers* to *Activation of profit centers*.

Further notes

For more information, see the SAP Library, under *Financials -> CO - Controlling -> Methods in Controlling -> Enterprise Organization -> Processing Enterprise Organization -> Activate Inactive Master Data*.

Delete Inactive Cost Centers

In this IMG activity, you can delete the inactive version of one of the following master records:

Cost centers

Profit centers

Business processes

Note on Active and Inactive Master Record Versions

Activities

Choose the corresponding objects using one of the following criteria:
<Object> or <object> interval

<Object> group

All <objects> in a controlling area

Decide whether to delete *immediately*, or in a *test run* first.

Decide whether to delete in the *background*, or *online*.

To delete the inactive master record versions, choose *Execute*.

Note

You can go from the deletion transaction for one object to that of another object. This means that you can go from *Deleting cost centers* to *Deleting business processes* and *Profit centers*.

Further notes

For more information, see the SAP Library under *Financials -> CO - Controlling -> Enterprise Organization -> Processing the Enterprise Organization -> Delete Inactive Master Data*.

Define Cost Center Groups

You can combine similar cost centers to form cost center groups. You may then combine similar groups into further groups to create a cost center hierarchy.

Note on Cost Center Groups

The organizational division into cost centers can be displayed in the SAP system with the use of cost center groups.

Cost center hierarchies summarize the decision-making, responsibility, and control areas according to the user's requirements. Individual cost centers are the lowest hierarchical level. This ensures that at least one group holds all cost centers, and thereby represents the entire organization. Moreover, alternative groups can be created which can be divided according to structural or functional standpoints.

Cost center groups allow valuations according to any desired area of responsibility.

You can use cost center groups:

In the information system to create reports for selected cost centers -To process multiple cost centers in a single transaction:

Cost center planning

Distribution

Assessment

You must maintain the standard hierarchy for your controlling area in the master data. Here, you have the option of creating and changing other cost center groups.

Requirements

Complete the IMG activity Maintain Controlling Area.

Activities

Structure the cost centers in your controlling area along cost accounting standpoints.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.
If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.

The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:
You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:
Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To transport cost center groups, there is a separate function in Customizing under *Controlling -> General Controlling*.

Note on Validity Period

Note that groups have no validity period. However, most master data is time-based.

Further notes

For more information about cost center groups, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Processing Master Data -> Master Data Groups and also Cost Centers*.

Define Hierarchy Versions

Use

In this Customizing activity, you define hierarchy versions for use with inactive hierarchies. When you create an inactive hierarchy using a hierarchy version, the system applies the definition of the hierarchy version to the inactive hierarchy.

By using inactive hierarchies, users can create hierarchies for the future. These inactive hierarchies cannot be used in other transactions until they are activated. When an inactive hierarchy is activated, it overrides the current effective hierarchy from the specified date.

Standard settings

If a hierarchy version is used by an inactive hierarchy, you cannot delete it in this activity. If an inactive hierarchy using the hierarchy version has been activated, you cannot change the hierarchy version.

Activities

When you define a hierarchy version you must enter the following:

- A unique ID for the hierarchy version

A hierarchy version ID cannot contain special characters. Valid characters include letters (but not ö or á), numbers, underscores, and hyphens. - The date on which the hierarchy version takes effect

Activate Inactive Hierarchies

Use

In this Customizing activity, you activate inactive hierarchies whose validity dates have been reached. When a hierarchy is activated, the previously effective cost center group hierarchy is superseded by the newly activated hierarchy. This allows you to report on the hierarchy, use it in planning applications, and allocate using the groups contained within the hierarchy.

Hierarchies can be maintained in the Web Dynpro application by a central master data team and are typically updated periodically, for example, quarterly or yearly. Changes then come into effect on a specified validity date. For these types of hierarchies, you define inactive hierarchies for use in the future.

We recommend that you run the report behind this Customizing activity on a regular basis using either a background job or the *Schedule Manager* (**SCMA**) transaction.

Requirements

You have completed the following:

You have defined a hierarchy version in the Customizing activity Define Hierarchy Versions.

You have copied your cost center group hierarchy into the inactive hierarchy version using the Web Dynpro frontend.

Activities

Within this inactive hierarchy you can create new cost center groups and assign cost centers as required.

Once you are satisfied with the structure of your hierarchy, you can make it active by running the activation program. This creates a copy of the hierarchy and makes it effective for reporting, planning, allocations, and so on. If you need to report on the previously effective version, you can set the parameters in Report Writer to read on an earlier key date.

Note:

The system skips over any hierarchies that are locked or for which authorizations are missing. If an effective hierarchy is changed after an inactive hierarchy is created, you get a message. If this happens, you have to actively confirm that you want to continue running this report.

If you schedule this report behind this Customizing activity to run as a background job in test mode, you can run transaction `CFG1` to read messages raised by the system when activating the hierarchies are stored in the application log under the object `COOMMD` and the subobject `COMDACTIVATE`.

Define Search Helps for Cost Centers

In this IMG activity you can maintain or redefine search help for cost centers.

Notes

Search help maintenance requires technical knowledge of the ABAP Dictionary. Let system administration maintain search help for you.

Note that large numbers of search helps result to slow system performance. Check which search helps you need. Deactivate any search help you do not require.

Search help is valid for all clients.

Requirements

Before maintaining search help, see the SAP Library under *Basis Components -> ABAP Development Workbench -> ABAP Dictionary -> Search Help* for information on how search help is constructed in the SAP system and how to create one in the ABAP Dictionary.

Standard settings

SAP supplies the following standard search helps:

Search help ID "N" enables searching for a cost center using the cost center number.

The search help with the ID "S" enables searching for a cost center using the cost center name.

Activities

Check whether the standard search helps satisfy your requirements.

Supplement the existing search help objects with further search help objects or create new search helps if necessary.

Define Time-Based Fields for Cost Centers

In this step you determine on the client level, independently of organizational units such as controlling area or chart of accounts, whether master data table fields are **historically relevant** or not.

You can maintain master data for cost centers, cost elements, activity types, and business processes as time-based. Changes to any other time interval are possible at any given time. Data storage is also time-based. In this way, you can store multiple database records for a master data record, each holding different information.

The time-based dependencies are determined by SAP and cannot be changed. The following dependencies are possible:

Not time-based

Day-based

Period-based
Fiscal Year-based

In the "Time Dependency" column, you have an overview of the time-based dependencies for individual master data fields as set by SAP.

For day-based fields, you can set an indicator determining whether fields are **historically relevant** or not. Period-based and year-based fields are always historically relevant.

If you change fields during master data maintenance which were marked as historically relevant, and redefine a new analysis period, the system creates new database records, for the new analysis period and for any following periods, and simultaneously restricts the validity period of the existing database records.

Example:

You create an object (cost center, cost element, activity type, business process) from 011996 to 312999. Then you change the object by defining other field characteristics from 011997 to 312997. In Customizing, you defined the *Manager* field as historically relevant.

The SAP system stores three records. You can view them in master data maintenance by placing the cursor on the field and choosing *Expand*:

One record for the interval 011996 to 312996 Manager: Miller

One record for the interval 011997 to 312997 Manager: Wang

One record for the interval 011998 to 312999
Manager: Miller

If you change fields during master data maintenance not marked as historically relevant, but without a new analysis period, the entire database record changes for the entire analysis period. These changes appear in the change log.

If you change day-based fields not marked as historically relevant, the existing database record also changes for the entire selected analysis period. Definition of a new period is not possible. These changes appear in the change log.

Example

You create an object (cost center, cost element, activity type, business process) from 011996 to 312999. You then change the object by defining another cost center manager. In Customizing, you defined the *Manager* field as not historically relevant.

The SAP system changes the record for the *Manager* field:

Record for the interval 011996 to 312999 Manager: Wang

The SAP system documents the changes with date and user name in a change document.

Fields without time-based dependencies may be changed at any time, with the change applying to the entire validity period of the master data.

Note

Remember that time-based storage consumes large amounts of data storage space. Designate only important fields for time-based dependencies.

If consecutive fields have identical historically relevant definitions, the SAP system replaces the database records with a single record valid for the existence of the individual records.

Further Notes

Time-based master data storage minimizes maintenance effort. You can create master data crossing fiscal year boundaries without having to recreate them every year. Changes affecting a single time only can be made without direct effects on the other times involved.

Example:

You create a cost center with the following data: Cost Center: 41
Validity Dates: 011996 to 312000
This entry remains available in the SAP system until 312000.

However, you may also create:
Cost Center: 41
Validity Dates: 011996 to 312996
The disadvantage here is that you must recreate the cost center for the following years, each year, if you still require the cost center.

The example above uses the yearly borders of a calendar year. However, you can determine validity periods that are independent of any given calendar year. This is particularly useful if you define a fiscal year variant in Financial Accounting with delayed, extended, or shortened fiscal years, because master data is not oriented along fiscal year variant lines.

Actions

Determine which fields you want to designate as historically relevant.

Activate or deactivate the indicators according to your requirements.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Program Enhancements for Cost Center Master Data

You can add own fields to the cost center master data. The following SAP enhancement is available for this purpose:

COOMKS01 Cost Center: customer-specific additional fields in the master record This enhancement includes the following enhancement components:

EXIT_SAPLKMA1_001
CO-OM customer exit for PBO of customer-specific subscreen "0399" in SAPLKMA1.

EXIT_SAPLKMA1_002
CO-OM customer exit for PAI of customer-specific subscreen "0399" in SAPLKMA1.

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project

Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancements can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function Exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

BAdI: Maintain Cost Center Master Data

Use

This Business Add-In (BAdI) is used in the *Controlling* (**CO**) component. You can use this BAdI to integrate additional fields into master data for cost centers.

When you implement this BAdI, you override the settings in the Customizing activity Program Enhancements for Cost Center Master Data. This is because you cannot use this Customizing activity with the new Web Dynpro application. SAP uses Floor Plan Manager and this BAdI to support customer enhancement.

Requirements

You have created and activated the Customizing Include CI_CSKS.

Standard settings

For more information about the standard settings (filters, single or multiple uses), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction SE18).

Activities

For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

See also

BAdI method documentation:

GET_CUSTFLDS_PROPERTY

PROCESS_CUSTFLDS_AFTER_INTPUT

CHECK_CUSTFLDS_BEFORE_SAVE

Activity Types

In this section you can

maintain allocation cost elements

create activity types

maintain activity type groups

define matchcodes for activity types

determine time-dependent fields

Further notes

For more information on activity types, see the R/3 Library under " Financials -> CO Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Activity Types".

Define Cost Elements for Activity Allocation

In this IMG activity you create cost elements for activity allocation.

The cost element takes receiver debits as part of internal activity allocation, for example, direct or indirect activity allocations.
Example

Example

Production cost center PROD1 draws on support cost center HELP1 for mechanic hours of activity type MECH. The allocation cost element for mechanic hours is 4710. In the cost center report, the activity is identified by value under allocation cost element 4710.

The cost element for activity allocation, which you enter in the master data of an activity type, is a default that you can overwrite during activity type planning.

Note

Allocation of an activity type occurs with the cost element you save in activity type planning.

Activities

Decide for which business transactions and with which activity types you want to carry out activity allocation. You must also decide under which cost element the activity type is to be displayed in your reports.

Create a secondary cost element of category 43.

Note on transport

To transport cost elements, choose the function for this found in "General Controlling" Customizing.

Further notes

For more information on creating cost elements, see Maintain Cost Elements.

Define Selection Variants for Activity Types

A selection variant contains the fields that are to be evaluated in your selection report. These fields determine the content and structure of a selection variant.

The following selection reports are available:

For cost elements RKKOASEL

For cost centers RKKSTSEL

For activity types RKLSTSEL

For business processes RKPRZSEL

For internal orders RKOSEL00

For projects RKPSEL00

You enter the selection values in the corresponding fields, and can overwrite these in the application. You can hide the fields that you do not require.
When you process "variant attributes", you can specify variables for selection variant fields, and so on.

Example

If you wish to select your objects by time, then define a selection variant, which only contains master data fields for times.

Standard settings

The following selection variants are defined for internal orders:

SAP_01 - SAP_02 - SAP_03

Activities

If you wish to create your own selection variants, proceed as follows:

Enter a name for your variant in the "ABAP: Initial screen for variants"

Confirm the "Values" default setting in the "Subobjects" group box, and choose "Create". In the "Variant maintenance: Report <your selection report>" screen, the system displays the selection fields for the corresponding master data.

Enter the values or variables in the fields that you wish the system to use for selection.

Choose **Continue**.
This takes you to the Attribute maintenance screen for the selection variants.

You can assign the following field attributes:

Protected
The value that you specified for the field can no longer be overwritten in the application.

Invisible
The system hides this field from the selection variant.

Selection variable

You can define a variable for a field, such as a user-defined selection rule (compare with the "Define selection rule" section). The field is filled with the corresponding value during runtime.

Enter a short text in the "Description" field.

Save your entries.

This variant is now available for the corresponding selection report.

Transport notes

You can transport selection variants manually by proceeding as follows:

Choose "Utilities -> Transport request..." in the "ABAP: Variants - Initial screen"

Enter the program name

Enter the name of the variant to be transported

Define Search Helps for Activity Types

In this step you can maintain or redefine search help for activity types.

Notes

Technical expertise in the ABAP Dictionary is necessary to maintain search help. Let system administration maintain them for you.

Note that large numbers of search helps can slow system performance. Check which search helps you need. Deactivate any search help you don't require.

Search help is valid for all clients.

Requirements

Before maintaining search help, see the SAP Library under *Basis Components -> ABAP Development Workbench -> ABAP Dictionary -> Maintaining Search Help*.

There you will find information on how search help is constructed in the SAP System and how to create search help in the ABAP Dictionary.

Standard settings

The standard SAP System includes the following search help:

"N" enables searching through use of the activity type number

"S" enables searching through use of the activity type name

Activities

Check whether the standard search helps satisfy your requirements.

Supplement the existing search help objects with further search helps, or create new ones if necessary.

Define Time-Based Fields for Activity Types

In this step you determine on the client level, independently of organizational units such as controlling area or chart of accounts, whether master data table fields are **historically relevant** or not.

You can maintain master data for cost centers, cost elements, activity types, and business processes as time-based. Changes to any other time interval are possible at any given time. Data storage is also time-based. In this way, you can store multiple database records for a master data record, each holding different information.

The time-based dependencies are determined by SAP and cannot be changed. The following dependencies are possible:

Not time-based

Day-based

Period-based

Fiscal Year-based

In the "Time Dependency" column, you have an overview of the time-based dependencies for individual master data fields as set by SAP.

For day-based fields, you can set an indicator determining whether fields are **historically relevant** or not. Period-based and year-based fields are always historically relevant.

If you change fields during master data maintenance which were marked as historically relevant, and redefine a new analysis period, the system creates new database records, for the new analysis period and for any following periods, and simultaneously restricts the validity period of the existing database records.

Example:

You create an object (cost center, cost element, activity type, business process) from 011996 to 312999. Then you change the object by defining other field characteristics from 011997 to 312997. In Customizing, you defined the *Manager* field as historically relevant.

The SAP system stores three records. You can view them in master data maintenance by placing the cursor on the field and choosing *Expand*:

One record for the interval 011996 to 312996 Manager: Miller

One record for the interval 011997 to 312997 Manager: Wang

One record for the interval 011998 to 312999
Manager: Miller

If you change fields during master data maintenance not marked as historically relevant, but without a new analysis period, the entire database record changes for the entire analysis period. These changes appear in the change log.
If you change day-based fields not marked as historically relevant, the existing database record also changes for the entire selected analysis period. Definition of a new period is not possible. These changes appear in the change log.

Example

You create an object (cost center, cost element, activity type, business process) from 011996 to 312999. You then change the object by defining another cost center manager. In Customizing, you defined the *Manager* field as not historically relevant.

The SAP system changes the record for the *Manager* field:

Record for the interval 011996 to 312999 Manager: Wang

The SAP system documents the changes with date and user name in a change document.

Fields without time-based dependencies may be changed at any time, with the change applying to the entire validity period of the master data.

Note

Remember that time-based storage consumes large amounts of data storage space. Designate only important fields for time-based dependencies.

If consecutive fields have identical historically relevant definitions, the SAP system replaces the database records with a single record valid for the existence of the individual records.

Further Notes

Time-based master data storage minimizes maintenance effort. You can create master data crossing fiscal year boundaries without having to recreate them every year. Changes affecting a single time only can be made without direct effects on the other times involved.

Example:

You create a cost center with the following data: Cost Center: 41

Validity Dates: 011996 to 312000

This entry remains available in the SAP system until 312000.

However, you may also create:

Cost Center: 41

Validity Dates: 011996 to 312996

The disadvantage here is that you must recreate the cost center for the following years, each year, if you still require the cost center.

The example above uses the yearly borders of a calendar year. However, you can determine validity periods that are independent of any given calendar year. This is particularly useful if you define a fiscal year variant in Financial Accounting with delayed, extended, or shortened fiscal years, because master data is not oriented along fiscal year variant lines.

Actions

Determine which fields you want to designate as historically relevant.

Activate or deactivate the indicators according to your requirements.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.

To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Program Enhancements for Activity Type Master Data

You can add own additional fields to the activity type master data. The following SAP enhancement is available for this purpose:

COOMLA01 Activity Type: customer-specific additional fields in the master record This enhancement includes the following enhancement components:

EXIT_SAPLKMA6_001
CO-OM customer exit for PBO of customer-specific subscreen "0399" in SAPLKMA6.

EXIT_SAPLKMA6_002
CO-OM customer exit for PAI of customer-specific subscreen "0399" in SAPLKMA6.

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancements can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

BAdI: Activity Type Master Data

Use

This Business Add-In (BAdI) is used in the *Controlling* (**CO**) component. You can use this BAdI to integrate additional fields into master data for activity types.

When you implement this BAdI, you override the settings in the Customizing activity Program Enhancements for Activity Type Master Data. This is because you cannot use this Customizing activity with the new Web Dynpro application. SAP uses Floor Plan Manager and this BAdI to support customer enhancement.

Requirements

You have created and activated the Customizing Include CI_AUFK.

Activities

For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

See also

BAdI method documentation:

GET_CUSTFLDS_PROPERTY

PROCESS_CUSTFLDS_AFTER_INTPUT

Statistical Key Figures

In this section you make settings for statistical key figures.

Further notes

For more information on statistical key figures, see the R/3 Library under *Controlling -> Overhead Cost Controlling -> Cost Center Accounting -> Master Data -> Statistical Key Figures*".

Maintain Statistical Key Figures

In this IMG activity you create Statistical key figures or change existing ones.

Statistical key figures serve as a basis for internal allocations and as references in the key figure analysis framework.

You can use statistical key figures for the following transactions:

Internal allocations

Distribution

Assessment

Creating key figures for cost centers and orders

Example

Statistical key figure EMPLYE gives the number of employees per cost center. After creating statistical key figure EMPLYE, you can plan the number of employees for each cost center and enter this in actual. The numbers can be used for assessment of cafeteria costs to all other cost centers.

Note on Statistical Key Figures

Edit Statistical Key Figures

You can enter statistical key figures in a list screen or in a detailed maintenance screen similar to the maintenance functions for cost centers, cost elements, and activity types.

Maintenance with the detail screen has the following advanages over list maintenance.

Detailed maintenance is the only way to create a link to the LIS.

You can use a template to copy from.

The segmented entry screen is easier to understand than the list screen.

LIS Interface

In master data maintenance for statistical key figures, you can create a link from a key figure in the LIS to a statistical key figure in CCA. By means of this link you can lay the groundwork for a later transfer of key figures from the LIS to CCA.

Two methods for finding key figures in the LIS are available.

Information structures

Information sets

Requirements

Complete the IMG activity Maintain Controlling Area in Customizing for *General Controlling* under *Organization*.

Standard settings

The standard R/3 System includes the following sample key figures.

Employees

Square meters

Telephone charge units

Activities

Check whether the standard settings meet your requirements.

Create your statistical key figures.

Note on transport

To transport statistical key figures, see the Customizing functions under *Controlling -> General Controlling*.

Further notes

For more information, see the SAP Library under *Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Statistical Key Figures*.

Maintain Statistical Key Figure Groups

You can combine similar statistical key figures to form statistical key figure groups. You can combine similar such **groups** to form further groups, thereby creating a hierarchy of statistical key figures.

Statistical key figures are used:

In the Information System, to create reports for particular key figures

To maintain multiple key figures in Cost Center Accounting transactions:

Cost center planning

Distribution

Assessment

You may combine statistical key figures used in the distribution/assessment framework as tracing factors into a single group.

Requirements

You completed the IMG activity Maintain Controlling Area, located under *General Controlling -> Organization*.

Activities

Structure your statistical key figure groups in the controlling area based on your controlling requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:

You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:

Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To Transport statistical key figure groups, see *General Controlling* Customizing.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting*, then *Master Data in Center Accounting* -> *Processing Master Data -> Master Data Groups* or *Statistical Key Figures -> Statistical Key Figure Groups*.

Resources

In this section you define resources.

For more information on cost centers, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Resources*.

Planning

In this section, you make settings for the cost center planning structure.

Further notes

For more information on planning, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning*.

Basic Settings for Planning

In this section you make the basic settings for cost center planning. The following IMG activities are usually made only once for each planning session. You can make changes to planning (changes to the sequence in which the individual planning functions are carried out or changes made to exchange rates especially) at any time.

For more information, see the SAP Library under *Accounting -> Controlling CO -> Cost Center Accounting -> Cost Center Planning -> Cost Center Planning Scope -> Planning Sequence/Planning Flow in Cost Center Planning*.

Define Exchange Rate Types

In planning, exchange rate types are used to specify exchange rates used for different purposes at the same time in the system. Existing entries must not be deleted.

When exchange rate conversions take place between many different currencies, using a reference currency can simplify maintenance of exchange rates. For the exchange rate types concerned, you then only have to specify the exchange rates in relationship to the reference currency for all currencies. The SAP system then carries out all exchange rate conversions in two steps, using the reference currency.

As well as a buying rate "G", you can also maintain a selling rate "B".

The buying rate is that under which the average rate "M" is recorded.

When maintaining a buying rate, enter the appropriate currency type for the average rate.

This reduces the amount of work required in the conversion table.

The selling rate is that under which the average selling rate is recorded. The user need only maintain the conversions for the average rate. The conversion occurs by determining the average rate and then adding the difference between the rates to this rate.

If an entry for a currency conversion is missing, the indicator *Invert* ensures that the reversed currency relationship, should one exist, is available for the conversion.

Standard settings

The standard system includes exchange rate type P (standard translation for cost center accounting).

Note

When you create a controlling area, the system creates version 000 automatically for 5 years. Rate type P is defaulted.

The system uses rate type M for currency conversion during postings and clearings of documents.

Recommendation

Before creating your own exchange rate types, check those offered by SAP and use them if appropriate.

Activities

Check whether you require further exchange rate types for cost center planning in different versions.

Create additional exchange rate types if necessary.

Choose *New entries*.

Enter the following data:

Exchange rate type
Usage
Base currency
Buying rate
Selling rate

c) Activate the following indicators if necessary:
Permit calculation with inverted exchange rate?
Exchange rate type uses special translation reference
Exchange rate type uses fixed exchange rates

Save your entries. **Notes on transport**

You can transport settings for exchange rate types manually. To do this, choose *Table view -> Transport*.

Define Exchange Rates

Exchange rates for currency translations are used in several application components.

For actual and plan postings they are used to:

Translate foreign currency amounts when posting or clearing

Manually check a given exchange rate

Determine the profit and loss from exchange rate differences

Valuate open items in foreign currency

Valuate the foreign currency balance sheet accounts

Determine the amount in controlling area currency when working with various controlling area currencies

Allow for differing controlling area, sender, or receiver currencies when settling internal orders

Exchange rates are stored according to time; the rates are valid as of the specified date.

Note

Exchange rate definition in CO should be reconciled with that in FI.

The system uses exchange rates stored under the translation rate type M for currency translations in posting and clearing actual transaction data. These exchange rates are valid for all company codes.

For translation of plan postings, you define the exchange rate type that the system uses for translations in plan. This exchange rate type (fiscal year dependent) is defined in the version.

Requirements

You have defined the currency key required.

If you need custom exchange rate types in plan, you must create them beforehand. The standard system includes exchange rate type P.
The exchange rate relations for currency translation are only displayed here. To use other exchange rate relations, you must define them first.

Standard settings

In the standard system, exchange rates are set as examples with exchange rate type M.

Recommendation

SAP recommends using the minimum number of exchange rates required in your system in order to minimize system load.

Activities

In your organization, define at what intervals the currency translations should be maintained.

Maintain current exchange rates for exchange rate type M and for your own exchange rate types. Delete the entries you do not need.

Choose *New Entries*.

Enter the following data:

- Exchange rate type
- Validity date
- Indirect quotation
- From currency
- Direct quotation
- To currency

Save your entries.

Note on transport

You can transport exchange rates manually by choosing *Table view -> Transport*.

Define versions

Versions enable you to have independent sets of planning and actual data.

In planning, you use versions to configure alternative scenarios based on different assumptions. For example, the different versions can represent different employment markets, price and wage increases, or sales programs.

You normally configure the most likely scenario in version 000. The plan data you enter there forms the basis for calculating planned prices for activity types, and determines the rates with which activities containing actual amounts can be settled. Version 000 also contains all actual data postings. The plan and actual data for version 000 can be used in plan/actual comparisons and variance analysis.

You make settings for version maintenance on a hierarchical basis.
In this IMG activity, you make the following settings:

Controlling area settings

Fiscal year settings

Note

The term "version" replaces the earlier term "plan/planning version".

You can record planning and/or actual data in a version.

In planning, you must maintain fiscal-year dependent parameters.

If you use parallel valuations and transfer prices, you define parallel actual versions alongside operational version 000 in order to separate different valuations. To do this, you must maintain valuations, by carrying out the activity Create Versions for Valuation Methods in Customizing under *General Controlling -> Multiple Valuation Approaches/Transfer Prices*

In Activity-Based Costing, you can manage actual data in different delta versions of activity-based costing. To do so, you must specify a version that can be referenced. Once you specify this version, the current version is marked as a delta version.

Complete the IMG activity Maintain Controlling Area.

Complete the IMG activity Maintain Versions.

Standard Settings

When you create a controlling area, the SAP system automatically creates version 000, valid for five fiscal years. The first fiscal year depends on the control indicator you set when you created the controlling area:

If the indicator is set for the current year or earlier, the five-year period begins with the current year.

If the indicator is set for future years, the five-year period begins with the earliest of these years as the first year.

Recommendation

If you want to plan in a single version only, use version 000.

Actual primary cost data entry and actual data from internal acitivty allocation all post to version 000. SAP therefore recommends you use this version for all plan/actual comparisons.

Activities

To assign versions to authorization groups, define the groups first. These groups determine which users can maintain which versions. To assign authorizations, use authorization object "Controlling: Version" (K_KA09_KVS). Maintain Authorizations

Make the version settings in the current controlling area. To switch to another controlling area, choose *Extras -> Set controlling area...*

Change an existing version to meet your requirements.

Enter a key and a name.

Specify whether plan and/or actual data may be recorded in the version and activate the corresponding indicator.

You cannot activate the *actual* data recording indicator for version 001.

If necessary, enter an authorization group.

To create a delta version in the Activity-Based Costing component, enter a valid version as the reference version.

Maintain the fiscal year-dependent version parameters.

If you use a delta version in Activity-Based Costing, use *Reference version* to determine which transactions the system reads from the reference. The system does not execute these transactions in the delta version, but transfers the values from the reference instead.

Note on transport

To transport versions, a separate function exists in Customizing under *Controlling -> General Controlling*. (Transport Settings for Organization.

Further information

For more information, see:

Notes on Version Maintenance

Fiscal Year-Dependent Version Parameters.

Delta Versions in Activity-Based Costing

Further notes

Notes on Version Maintenance

The following should be taken into account when maintaining a version:

In general version definition you decide whether a version is allowed for

Panning (with the **Plan** indicator)

Actual data update (with the **Actual** indicator)

Note: In Overhead Cost Controlling, actual data is updated in operational version 0.

Actual versions different from 0 are found at present only for delta versions in Activity Based Costing (CO-ABC), and when you work with parallel assesment (additional versions):

A data version from results and WIP determination manages (indicator **WIP**)
Another version from variance determination manages (indicator **Variance**)

A version for exclusive use (field **exclusive application**)

You must maintain the version basic settings for each controlling area in which you want to update transaction data. General version definition restricts the settings possible for the controlling area:

If general version definition does not allow plan and/or actual data update for version, this applies to the version in all controlling areas. If plan and/or actual data updating is allowed for a version in general definition, this can be reset for each controlling area separately (unmark the plan or actual indicator).

Delta versions in ABC may not be used for parallel valuations in the actual; the same goes for versions with exclusive applications. In both cases, the valuation fields may not be maintained.

To set indicators WIP/Results- or Variance-determination the following conditions apply:

Both indicators may be set only during setup for the controlling area, when they are already established in the higher level general version definition

If either indicator is already active in the data bank, then the actual indicator may not be subsequently activated

If the actual indicator is inactive and either of these indicators is active, then the valuations in the corresponding versions and in version "000" must agree

If the actual indicator is active, then both indicators must be activated

Versions 0 and 1 are used regularly for various purposes by the system, which sets the following limitations/restrictions:

Version 0 must always be available. It cannot be used exclusively. The plan and actual indicators must always be active.

The actual indicator may not be activated in version 1.

If these conditions are violated during version maintenance, error messages are issued. There are three types of error message:

While maintaining the general version definition, you can only make changes if they do not violate the conditions outlined above.

While maintaining the basic settings in the controlling area, the entries must remain consistent with the higher level entries.

You want to maintain version 0 or 1. The restrictions outlined above apply.

Use the "Extras" menu option to display the structure of the entries in the complex data object version:

Select a version and choose **Extras -> Version use**.
The SAP System shows which controlling areas use this version.

Select **Extras -> Versions in CO area**
This displays all versions used in the current controlling area.

The subordinate entries in the hierarchy (settings for each fiscal year, strategic Activity-Based Costing: transactions for a delta versions) will also be shown for both cases.

Fiscal-Year-Dependent Version Parameters

In a version you define defaults for the following parameters based on the fiscal year:

Planning

Lock version

Integrated planning

Copying allowed

Exchange rate type

Value date

Integrated planning with Cost Center Accounting and Activity Based Costing

Version for indirect activity allocation for non-integratedorder/project planning

Receiver version

Valuation Variant for CO Resource Planning

Price Calculation

Purely iterative price

Plan price calculation: Determination method

Actual price calculation: Determination method

Recalcuation with actual prices

Cost component structure

Delta Versions in Activity-Based Costing

A delta version is an additional statistical version that is linked to a reference version. You create the delta version to be able to carry out other allocations for selected transactions. Allocations within a delta version do not affect the operative value flow in the system. It follows that you cannot allocate process costs within costing, cost object controlling, and Profitability Analysis. Referencing can take place at several levels. The reference version can also be a delta version and in turn be linked to another version.

Group Maintenance

In this section you maintain master data groups. You can adapt those groups you created in master data maintenance to meet your particular planning needs.

For more information on group maintenance, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Master Data in Cost Center Accounting -> Master Data Groups -> Processing Master Data Groups*.

Define Cost Element Groups

You can combine similar cost elements into cost element groups. Similar cost element groups can be combined to form other cost element groups so as to build a cost element hierarchy.

You can use cost element groups:

In the information system

The row structure of your report is determined by the cost element structure. You can create totals for each node in the report.

When processing of several cost elements in one transaction, such as

Cost center planning

If, for example, you wish to display and plan personnel costs in one work transaction, select the group "Personnel costs".

Distribution

Assessment

Report totalling takes place via cost element group nodes. To achieve a clear illustration, each node on a level must have the same number of subordinate levels.

Prerequisites

In Customizing of *Financial Accounting* (under *General Ledger Accounting -> G/L Accounts -> Master Data*) you have maintained a chart of accounts.

You must have completed the Customizing activity Maintain Controlling Area in Customizing of *General Controlling* under *Organization*.

Default Settings

Standard cost element group **OAS-INT** is created for chart of accounts INT (international chart of accounts) in controlling area 0001.

Actions

Check whether the standard cost element groups meet your requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.
Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding

object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

By double-clicking, you can change each selection variant.

You cannot create new selection variants while processing a group.

You can reassign selection variants in the same way as groups.

You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.

The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:

CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |

+-> Node 1 +-> Node 1

+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:

You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy.

The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:

Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Notes on transporting

A separate activity for transporting cost element groups exists in Customizing under *Controlling -> General Controlling*.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information about creating cost element groups, see SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Processing Master Data* and *Cost Elements -> Cost Element Groups*.

Define Activity Type Groups

You can combine similar activity types into activity type groups. You can combine groups into further groups, thus building an hierarchy of activity types.

Activity type groups are used:

In the Information System to create reports for certain activity types - To maintain multiple activity types in a CCA transaction:

Planning

You can display and plan multiple activity types in one transaction, for example in

Planning

You can display and plan several activity types in one transaction.

Assessment

You can carry out assessment for chosen activity type groups.

Requirements

Complete the IMG activity Maintain Controlling Area to be found under *General Controlling -> Organization*.

Activities

Structure activity types in the controlling area according to your controlling requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:
You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:
Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To transport activity type groups, see *General Controlling* Customizing.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting* and the sections *Processing Master Data -> Master Data Groups* and *Activity Types -> Activity Type Groups*.

Define Statistical Key Figure Groups

You can combine similar statistical key figures to form statistical key figure groups. You can combine similar such **groups** to form further groups, thereby creating a hierarchy of statistical key figures.

Statistical key figures are used:

In the Information System, to create reports for particular key figures

To maintain multiple key figures in Cost Center Accounting transactions:

Cost center planning

Distribution

Assessment

You may combine statistical key figures used in the distribution/assessment framework as tracing factors into a single group.

Requirements

You completed the IMG activity Maintain Controlling Area, located under *General Controlling -> Organization*.

Activities

Structure your statistical key figure groups in the controlling area based on your controlling requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.
If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:

You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:

Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To Transport statistical key figure groups, see *General Controlling* Customizing.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting*, then *Master Data in Center Accounting* -> *Processing Master Data -> Master Data Groups* or *Statistical Key Figures -> Statistical Key Figure Groups*.

Manual Planning

This section contains information on the settings required for manual planning. Manual planning includes:

Primary and secondary costs

Activities and prices

Statistical key figures

For more information on manual planning, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Manual Planning*.

Enter Settings for Manager's Desktop

Manager's Desktop is a function originally developed in Human Resources that assists cost center managers in performing their administrative and planning tasks.

Using Manager's Desktop, you can access manual planning on cost centers directly and tailor this planning to your own requirements by specifying a selection of those planner profiles and planning layouts that you require.

The Manager's Desktop offers you direct access to manual planning, in which you find only those planning layouts with the parameters that you have pre-set.

You select these planning layouts by assigning a function code to each planner profile and planning layout.

If you enter particular default parameters in these planning layouts, you can restrict manual planning to particular parameters like a version, fiscal year, or cost center, or to activity types and cost elements.

Example

You are responsible for planning personnel costs in manufacturing. You therefore need view only those cost centers in manufacturing with those cost elements for personnel costs, namely 420000 to 430000.

Procedure

Select the planner profile SAPALL and the planning layouts 1-1 and 1-4. When defining the planning layout, enter the following values:

- Cost center group: *MANUFACTURING*
- Cost element: *420000 to 430000*
- Version: *000*
- Fiscal year: *1999*

Requirements

You have defined planner profiles and planning layouts or you use the settings supplied in the standard system.

You implement the Human Resources component to manage the organizational structure.

One or more cost centers are assigned to your system user.

Standard settings

SAP supplies the following function codes for the planner profile SAPALL:

COCCA1 Primary cost planning

COCCA2 Secondary cost planning

COCCA201 Activity planning and price planning

COCCA301 Statistical key figure planning

Recommendation

Define one variable only for the cost center group, **not** for a range of cost centers. - Use one fiscal year only; enter default parameters for other fiscal years.

Enter default parameters in as many fields as possible or enter user parameters. The system enters default values for all other fields, in other words version 000, all cost centers, cost elements, period 1 to posting period, fiscal years for planning.

Activities

Check whether the settings supplied by SAP meet your requirements.

If you require further planner profiles and planning layouts, proceed as follows:

Choose *New entries*.

Enter a name for the function code.
You can define more than one function code at once.

Select a planner profile and assign a planner profile with planning layout to each function code.
(You do this for each planner profile that you require for manual planning).

In the relevant User-Defined Planner Profiles, enter the required characteristics for the planning layouts used.

Save your entries.

Under the Customizing settings for Manager's Desktop, carry out the following activities:

Enhance Function Codes

Define Object Type-Specific Function Codes

Define Structure of Function Codes

Further notes

For more information, see the

SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Manual Planning -> Manager's Desktop*.

SAP Library under *HR - Human Resources -> PA - Personnel Management -> Manager's Desktop*

Personnel Management Customizing under Manager's Desktop

User-Defined Planning Layouts

In this IMG activity you define new planning layouts or change existing ones.

Using the planning layout you specify what contents appear in the header, rows, and columns (elements) of your planning screens depending on the specific management requirements made by cost center planning.

The SAP system contains standard SAP planning layouts that satisfy most planning requirements. Only if this is not the case do you require your own layouts.

Standard SAP planning layouts

SAP offers the following standard planning layouts:

Cost Center Accounting

Cost Element/Activity Input Planning

1-1 CCtr: Cost elements, activity-dependent/-independent

1-2 CCtr: Activity inputs, activity-dependent/-independent

1-3 CCtr: Costs/revenues/consumption

1-4 CCtr: Primary/secondary order costs

1-161 CCtr: Cost elements, simplified

1-162 CCtr: Cost element central planning, simplified

1-151 CCtr: Cost elements in transaction currency

1-152 CCtr: Cost element comparison, 2 quarters

1-153 CCtr: Cost element planning, 2 versions

1-154 CCtr: Cost elements with display of previous year

1-155 CCtr: Activity output from sender viewpoint

1-156 CCtr: Cost element central planning

1-157 CCtr: Cost element plan/actual comparison

Activity/Activity Price Planning

1-201 CCtr: Activity types/prices, standard

1-201C CCtrs: Activity types/prices, central planning

1-202 PP planning: Activity types/prices

1-203 ATyp: Actual activity price indicator and switch structure

1-204 CCtr: Activity types/prices, attributes

1-261 CCtr: Activity price, simplified

1-262 CCtr: Activity price, centralized

Manual Actual Prices

1-N01 CCtr: Manual actual prices, cost centers

Resource Planning

1-1R1 CCtr: Resource planning

1-4R1 Orders: Resource planning

1-7R1 WBS elements: Resource planning

Dependency planning

1-1R2: CCtr: Value-based recipe planning

1-1R3: KoStellen: Quantity-based recipe planning

Statistical Key Figure Planning

1-301 CCtr: Statistical key figures, standard

1-302 CCtr: Statistical key figures, activity-dependent

1-3C CCtr: Statistical key figures, central

1-361 CCtr: Statistical key figures, simplified

1-362 CCtr: Statistical key figures, centralized

Internal Orders

Cost/Revenue Element Planning

1-401 Orders: Cost elements, standard

1-402 Orders: Activity inputs, standard

1-402P: Orders: Process inputs

1-404 Orders: Primary/secondary order costs

Cost Planning/Activity Input Planning

1-461 Cost elements: Simplified layout

1-462 Cost elements: Simplified layout, central

Statistical Key Figure Planning

1-601 Orders: Statistical key figures, standard

1-603C: Orders: Statistical key figures, central

1-661 Statistical key figures, simplified

1-662 Statistical key figures, simplified, central

Project Cost Controlling

Cost Element/Activity Input Planning

1-701 WBS elements: Cost element planning

1-702 WBS elements: Activity inputs

1-702P: WBS elements: Process inputs

1-703 WBS elements: Revenues, revenue cost elements

1-704: WBS elements: Primary/secondary order costs

Statistical Key Figure Planning

1-901 WBS elements: Statistical key figures, standard - 1-903C WBS elements: Statistical key figures, central

1-C01 Networks: Statistical key figures - 1-C02 Networks: Statistical key figures

1-C03C Networks:Statistical key figures, central

Activity-Based Costing

Cost Planning/Activity Input Planning

1-4P Processes: Primary/secondary order costs, processes

1-2P Processes: Activity-dependent/-independent process inputs

1-D01 Processes: Cost elements

1-D02 Processes: Activity inputs

1-D02P Processes: Process inputs

Quantities and Prices

1-E01 Processes: Quantity planning/price planning

1-E02 Processes: Tax codes

Statistical Key Figure Planning

1-F01 Processes: Statistical key figures, standard - 1-F03C Processes: Statistical key figures, central

Manual Actual Prices

1-Q01 Processes: Manual actual prices, business processes

Cost Object Accounting

Cost/Activity Input Planning

1-G01 Cost object: Primary costs

1-G02 Cost object: Activity inputs, standard

1-G02P Cost object: Process inputs

Statistical Key Figure Planning

1-I01 Cost objects: Statistical key figures, standard

1-I03C Cost objects: Statistical key figures, central

Real Estate

Cost element allocation/activity allocation

1-J01-1 Business entity: Cost elements, standard

1-J01-2 Buildings: Cost elements, standard

1-J01-3 Property: Cost elements, standard

1-J01-4 Rental unit: Cost elements, standard

1-J01-5 Rental agreement: Cost elements, standard

1-J01-6 Management contract: Cost elements, standard

1-J02-1 Business entity: Activity inputs, standard

1-J02-2 Buildings: Activity inputs, standard

1-J02-3 Property: Activity inputs, standard

1-J02-4 Rental unit: Activity inputs, standard

1-J02-5 Rental agreement: Activity inputs, standard

1-J02-6 Management contract: Activity inputs, standard

Further notes

Procedures for Layout Definition

With some exceptions, defining planning layouts is similar to defining reports with the Report Painter.

The following is essential information on defining a planning layout. For a detailed description of functions, see the SAP Library under *Financials -> Controlling -> Cost Center Accounting -> Information System -> Define Reports -> Creating Reports with Report Painter*, or in the Implementation Guide for Cost Center Accounting under *Information System -> Own Reports -> Create reports* .

A planning layout consists of the following components:

- Header
  Lead and value columns (elements)

Header

Defining a planning layout begins by entering general selection criteria (*Edit -> General selection -> Display/Change*). These criteria control which characteristics and which characteristic values are in the header of the planning layout.

The *General Selections* characteristics apply to the whole planning layout. This reduces the time required for defining the planning layout and also improves the response times when you execute the planning, since the SAP system has to read less data. You have the option of defining the characteristics and the lead and value columns as variables. Defining them as variables means that these fields are ready for input on the initial screen when you execute the planning.
In a layout for cost element planning, you would (under general selections) choose the characteristics *version*, *period*, *fiscal year*, and *cost center*. The lead column contains the characteristics *activity type* and *cost element*. The value columns contain key figures like e.g. *Plan costs in object currency* and *actual costs in object currency*.

In a layout for a quarterly comparison, you would for example choose the characteristics *Version* and *Fiscal year* as general selections. You would enter the *period* and the *cost center* in the lead column or value columns.

In a further step, you can determine the hierarchical order in which characteristics in the general selection criteria are used (*Edit -> General selection -> Header*). Without header entries, the hierarchical order given by the SAP system as a default is retained.

Lead columns and value columns

You now define the content of the lead and value columns in the planning layout. The layout of the columns and rows is based on the selection of particular characteristics that are preset by SAP. You assign an attribute to each characteristic.

Definition of Lead Columns

When defining lead columns you have two options:

Definition of one or more lead columns above the column heading

Definition of one lead column only above the rows

Definition of one or more lead columns above the column heading

Under this type of definition, the system proposes all the possible combinations of characteristic values of the lead columns defined for planning.

You define the first lead column by selecting the column heading, or by placing the cursor on the lead column and choosing *Edit -> Element -> Define element*. By choosing *Edit -> Columns -> New lead column* you can insert further lead columns.

Note that the system inserts each new lead column **in front of** the other lead columns.

Under this definition method, you can select exactly one characteristic per lead column.

Example Primary cost planning,
fast entry

1st lead column	**2nd lead column**	**1st value column**
	Cost center	Cost element	Plan costs
4711 - 4719	400000 - 403000	
	420000 - 429000	

The system calculates the rows from the Cartesian product of the values from all lead columns.

Defining exactly one lead column above the rows

In this type of definition you must define every row by double-clicking on the row description. The definition of the first row determines whether all rows are defined through a key figure with characteristics or just with characteristics. You can choose one or more characteristics per row.

If, for example, you want a complete overview of all key figures in the planning layout, you define the lead columns via key figures with characteristics.

Rows of element type *Characteristics* are defined by choosing the characteristics and assigning them characteristic values.

Rows of element type *Key figure with characteristics* are defined by first choosing exactly one key figure from the list of all possible key figures. Afterwards, you decide on the characteristics and characteristic values.

The procedure is similar to that for defining value columns.

Example

Quarterly planning in several versions
1st lead column 1st value column
Version/QuarterPlan costs
Version1/Quarter1
Version2/Quarter1
Version1/Quarter2
Version2/Quarter2
...

Note on cost element planning

If you wish to plan activity-dependent and activity-independent costs together in a planning layout, you must enter *initial* for the characteristic activity type.

The *Initial* value is set:

In layout maintenance by entering "#" as the characteristic value

In the group maintenance dialog window *Maintain values...* by choosing the *Set initial value* function
On the initial screen for planning by entering "*" in the *From* field if you assigned a group variable for the activity type. The system selects all characteristic values for the *Activity type* field, including the initial value.

Definition of Value Columns

To define the first value column, select the column heading. Define other value columns by selecting the empty space next to the first value column.

You may also select the corresponding column and choose *Define element*.

You can also hide rows and columns from later display. This is useful for those elements necessary for calculations but not necessary for report displays.

You have several options for defining value columns:

Define column with either a key figure with characteristics or just characteristics

Define formula column

Define attribute column

Define Column with Either a Key Figure with Characteristics or Just Characteristics

To define a value column, select the column heading.
The definition of the first value column determines whether all rows are defined by a key figure with characteristics or just with characteristics.
If you defined lead columns with rows using key figures with characteristics, you can define value columns only with characteristics.
If you defined lead columns with characteristics or through the column header, you can define value columns only with characteristics.

The procedure is similar to that for defining lead columns with rows.

Define Formula Column

A formula column is a value column made up of values from previously defined columns. When defining a formula, the SAP system provides you with a selection of value columns in a dialog box. The system calculates the values for these columns once the value columns used in the formula contain values. In the dialog window, choose the element type *Formula*.
In the following screen you can create a formula using previously defined value columns with the aid of the formula components found in the screen.

Example

Planning layout with formula column as 3d value column

Lead column	**Value column 1**	**Value column 2**	**Formula column**
Cost element	Plan curr. year	Plan prev. year	Variance Curr. year Prev. year

Indirect Formulas
Indirect formulas allow you to enter values in formula columns during planning that the R/3 System uses to determine values in another layout column.

To define indirect formulas:

Define the planning layout with the desired formula column and save.

Set the indicator for the column to "Not ready for entry".
To do so, select the column in question and choose *Format -> Entry ready on/off*.

Set the formula column to "Entry ready" in the same manner.

Generate the indirect formula by choosing *Extras -> All indirect formulas -> Generate formulas*.
The SAP system determines the values for the non-entry ready column.

Example
You plan a wage increase for employees as a percentage surcharge. The SAP system should determine the plan value of the current year from the surcharge and the plan value of the previous year.

Planning Layout

Define the following layout:

Key Column	**Value Col. 1**	**Value Col. 2**	**Formula Column**
CElm	Plan Cur. Year	Plan Pre. Year	% Raise ((Plan cur. year - Plan pre. year)

/Plan pre. year)

X 0

Indicate the column "Plan Cur. Year" as not ready for input , the column "% Raise" as ready for input.
Afterwards, generate the reverse formula.

Planning (Example)

If, before manual planning starts, the previous year plan values are copied to the current year (via *Planning -> Planning aids -> Copy planning*), the new plan costs can be calculated then by entering the percentage raise.

After copying planning:

CElm	Plan Cur. Year	Plan Pre. Year	% Raise
430000	50,000	50,000	

After calculating the new plan costs:

CElm	Plan Cur. Year	Plan Pre. Year	% Raise
430000	55,000	50,000	

Define Attribute Column

When defining an attribute column, you have two options, depending on the attributes used:

Attribute columns **with direct reference** to a value column

Attribute columns **with no direct reference** to a value column

Attribute columns with direct reference to a value column

You set the *Unit*, *Distribution key* and *Action* attributes in conjunction with a value column.
You have options for definition:

Select a previously defined value column and choose *Edit -> Columns -> Attach add. fields*. This inserts selected attribute columns into the planning layout. This method establishes a direct reference between the attribute column and the value column. If you wish to change characteristics and characteristic values for the value column, the SAP system confirms whether the dependent attributes are to be changed and, if so, adjusts the attribute column accordingly.

You can also define characteristic and characteristic values in the attribute column independently of the value column.

Select the free field next to an existing value column and choose the element type *Attribute* from the dialog window.

The attribute column so defined has no direct connection to a value column. Changes in the characteristic values of value columns have no further effects on the attribute column.

Attribute columns with no direct reference to a value column

Define other attributes by selecting the free field beside an existing value column, or by choosing *Define element*.

Having selected the element type *Attribute*, the system provides you with a list of possible attributes, from which you can select one attribute.

There are two kinds of attribute - display attributes and those that can be maintained during the planning process.

Attributes for all planning areas

- Unit, maintainable with restrictions

Depending on the attribute of the corresponding value column, the SAP system displays either the currency unit or the quantity unit.

Example
Key figure *Plan activity*
Unit: Activity unit from the activity unit master record

The following units exist:

Consumption unit in cost element planning, maintainable with restrictions. The consumption unit is useful in the activity-dependent and activity- independent planning of both primary and secondary costs (without sender reference) and in revenue planning.The SAP system takes the value from the cost element master record as the default value. In planning at cost center/cost element level, you can overwrite the consumption unit, provided no dependent data exists.

Activity unit in activity input planning, display attribute.
The system automatically uses the activity unit belonging to the sender activity type.

Currency units in cost element planning, display attribute.
The controlling area, object, and transaction currency are useful where you plan with foreign currencies or the object currency differs from the controlling area currency. The different currencies cannot be displayed unless you have activated the *All currencies* indicator in your controlling area. Only if you have done this does the system update all currencies.

Activity unit in activity type planning, display attribute.
For the key figures *plan activity*, *capacity* and *scheduled activity* the SAP system automatically uses the activity unit entered in the activity type master record.

Output unit in activity type planning, maintainable with restrictions. For the key figure *plan output* you can maintain the output unit at cost center/activity type/fiscal year level, provided no dependent data exists.

Currency units for prices, display attribute.
Controlling area, object, and transaction currency are especially useful if you plan with foreign currency or the object currency differs from the controlling area currency. To be able to display the different currencies, you must have activated the *All currencies* indicator in your controlling area, since only then does the system update all currencies.

Units in statistical key figure planning, display attribute. The SAP system automatically uses the unit entered in the key figure master record as the unit for statistical key figures in planning.

- Distribution key, maintainable.
  The SAP System stores plan data per period. If, when planning, you enter an annual value on the overview screen, the SAP system distributes this value to the individual periods according to a rule that is stored in the distribution key. The standard system includes fixed non-changeable distribution keys (standard distribution keys).

If you want to use a particular season distribution, you can also define any number of individual distribution keys.

You can define distribution keys per key figure.

Example

Fixed plan costs + distribution key for plan costs (fixed) Variable plan costs + distribution key for plan costs (variable).

Action, maintainable.

The action determines how the SAP system is to process the values entered. You can add, subtract, or replace the entry value for the existing value.

Caution

You can define the action per plan record only, and not per key figure.

Long text exists, display attribute.

This indicator tells the user that a long text exists for the planning item. This text may be an explanation, or a description of the origin of the plan data.

Attributes for cost element planning

Transaction, display attribute.

This indicator shows the business transaction under which the corresponding plan record is stored.

It has two further important functions:

Document number assignment control

Lock option per version, fiscal year, and transaction

Exchange rate type, display attribute.

If you plan in foreign currencies, you can use the exchange rate type to follow the currency translation. The type is determined per version and fiscal year.

Value date, display attribute.

If you plan in foreign currencies, you can use the value date to follow the currency translation. The date with which the exchange rates are read depends on the contents of the *Value date* field:

If it is not filled in version maintenance, calculation takes place by period. Each period's starting date is used to calculate its own rate, to take possible rate swings within a fiscal year into account.

If a value date is entered, all periods are processed with the same exchange rate calculated with this date.

Record quantites, maintainable.

This indicator shows whether consumption quantities are recorded on the cost center.

Cost element attributes, display attribute.

A cost element can be characterized independently of the account framework by entereing a maximum of eight attributes. The attributes can be drawn upon within reporting for use in evaluations.

In addition, they have no access to control information.

An indicator is assigned for each attribute. A cost element can be given the following as indicators: **D** for service costs

W for costs affecting payment

The attribute indicators and their valid combinations are maintained in customizing for Cost Center Accounting under Cost Element Attributes and Attribute Mix.

A valid combination of the permitted attributes can be defined as follows:

In the cost element's master data record

Within cost center planning for the combination cost center/ activity type and varying from the entry in the cost element master data record.

Note that you must always specify one of the attributes valid for the first item

Detailed planning exists

The calculation number is the internal number under which detailed planning is stored.

Value calculation type, maintainable.

This displays whether plan values are entered manually (1) or through detailed planning (4). Since the indicator is maintainable within planning, further manual editing of plan records entered via detailed planning is possible. In this case, change the indicator "Value calculation type" accordingly.

Allocation cost element, display attribute.

Allocation cost elements are used exclusively in activity input planning as attributes. Because the *cost element* characteristic is optional for activity input planning, it can be left out of a planning layout for secondary cost planning. By inserting the attribute of the same name, you can nevertheless display the allocation cost element.

Cost element type, display attribute.

The cost element type determines for which transactions a cost element may be used.

The following types are differentiated:

Primary cost elements	Type 01
Secondary cost elements	Type 21, 41, 43
Revenue elements	Type 11, 12

Dependency type, maintainable.

The dependency type is available only in value-based or quantity-based dependency planning.

Dependency source type, display attribute

The system sets the dependency source type according to the dependency type.

Attributes for activity type planning

Along with the attributes for unit, distribution key, action type, long text available, transaction, exchange rate type, value date, and cost element attribute, the following attributes are available in activity type planning: Two transactions are differentiated here, those for:

Manual and non-allocatable activities

Automatically allocatable activitites
The transaction results from the activity type category.

Production factor, maintainable.

The production factor gives the relationship of activity quantity to output quantity by means of the following formula:

Output quantity = Activity quantity x Output factor

In planning, the output quantity can be calculated with the formula using the function *Calculate output*.

You may select individual or groups of planning lines for use and begin the calculation.

Allocation cost element, maintainable with limitations.

The SAP system automatically uses the allocation cost element from the activity type master record as a default value in planning. You can overwrite the default as long as no debit and credit records have been posted for the allocation cost element.

Activity type category, maintainable with restrictions.

You can maintain the category in the activity type master data record as well as in planning on the cost center/activity type/version/fiscal year level. The category serves as a default setting for planning. You can switch between the allocatable activity type categories (1, 2, 3) as long as no debit and credit records have been posted.

Actual activity type category, maintainable.

You can determine a category deviating from plan categories for actual allocations. If no actual activity type category is maintained, the SAP system automatically uses the plan activity type category. A variant actual category is useful for a planning layout when, for example, the plan values must be indirectly calculated due to missing results (such as from the power plant), but where the actual values were registered.

Activity price indicator, maintainable.

The indicator contains the calculation basis for the plan activity price of a cost center's activity type.

The activity price indicator can take the following values:

001:

The activity type's activity price is automatically calculated on the basis of plan activity for the cost center to be planned. Fixed activity price: Fixed plan costs / Plan activity

Variable activity price:Variable plan costs / Plan activity Total activity price: Fixed activity price + Variable activity price

002:

The activity type's activity price is automatically calculated on the basis of the capacity of the cost center to be planned. The capacity serves only for fixed costs as a basis for activity price calculation. This is relevant for cost centers that must continually be prepared for maximum activity quantity output, such as costs for supplying energy from a power plant. The total costs are fixed. Fixed activity price: Fixed plan costs / Capacity

Variable activity price:Variable plan costs / Plan activity

Total activity price: Fixed activity price + Variable activity price

Note

If you set values 001 or 002, you must carry out plan activity price calculation.

003:

The activity type's activity price is set manually.

If you activate the indicator "ItAcPr" (purely iterative activity price) in the version, the system calculates a purely iterative activity price along with the activity price resulting from planning.

- Actual activity price indicator, maintainable.

  This indicator shows how the activity price's actual activity price for a cost center is calculated. If you do not maintain this indicator, the system automatically uses the plan activity price indicator value.

  The activity price indicator can take the following values:

  005:

  The actual activity price is calculated by the system on the basis of actual activity.

  If you set this value, you must carry out actual activity price calculation. Indicators 005 and 006 are useful in planning only if you set revaluation of actual activity with actual activity prices in the version.

  006:

  The actual activity price is calculated by the system on the basis of capacity. Cost center capacity serves only for fixed costs as a basis for activity price calculation. This is relevant for cost centers that must continually be prepared to supply the maximum activity quantity output, such as costs for supplying energy from a power plant. The total costs are fixed.

  If you want to execute activity price calculation, you must determine the actual activity price indicator. In planning layouts for activity type planning, you must set the attribute for this situation.

- Average activity price, maintainable.

  This indicator ensures that cost center/activity type activity prices remain constant for the entire fiscal year.

This determination takes place on two levels: *Version/fiscal year*

For a version, all cost center/activity type activity prices in a fiscal year are held constant. During activity price calculation, only plan total costs and total activity for the timeframe are used. Monthly swings are ignored.

Cost center/activity type/version/fiscal year

If no average activity price is determined for the version, individual cost centers/activity types may be assigned a constant allocation activity price for a fiscal year. Activity price calculation averages the price swings for this cost center/activity type. Insert the corresponding attribute in the activity type planning layout and maintain the indicator in activity type planning.

Switching layout, maintainable.

Within price calculation with cost component split, the switching layout is used to change the cost component assignment.

In activity price calculation, cost component splitting utilizes a cost component structure, in which is defined which cost elements are steered to which components. You define the layout during version maintenance, and per fiscal year. For allocations between cost centers, this cost component layering is usually retained. There are, however, cases in which the sender components are not to be retained, but where the allocation is to other receiver components. Here is where the switching layout is used. The layout stores which sender components are allocated to which receiver components. You determine the switching layout in activity type planning for the sender, but it must have been defined in Customizing first.

Fixed cost predistribution, maintainable.

If you carry out standard costing on a marginal costing basis, the fixed costs are not distributed to the cost objects in proportion to the operating rate. In this case, you must work with fixed cost predistribution in order to credit fixed costs to the cost centers accepting activity inputs. You can overwrite the default value in the indicator **Fixed cost predistribution**, which controls whether the fixed costs (that is, the activity-independent preparation costs) are distributed to the cost centers or not.

Attributes for statistical key figure planning

In addition to the attributes unit, distribution key, action type, and long text available, the following attributes are available for statistical key figure planning:

Variant, display attribute

Key figure type, display attribute.

This indicator controls the entry and updating of statistical key figures. It can take the following values:

Fixed value

The key figure values are valid as of the period entered for all following periods in the fiscal year. Average values are planned.

Total value

The key figure values are not carried over from the period entered to the following periods. You can enter new plan values for each period.

Variant, display attribute

Origin, display attribute

Key figure, display attribute

These attributes are useful in the planning layout when you transfer key figures from the Logistics Information System (LIS).

Afterwards, you determine characteristics and characteristic values for the attribute columns.

Characteristics and characteristic values

When defining headers, lead columns, and value columns, you must enter one or more characteristics.

Characteristics are predefined by the SAP system for the corresponding planning area.

Characteristics

The following section is a list of the possible characteristics.

These are divided into optional and required characteristics.

Version
Enter one or more individual values or one or more intervals.

Planning period
Enter an individual value or an interval.

Fiscal year
Enter one or more individual values or one or more intervals.

Cost center
Enter one or more individual values, one or more intervals, or one or more cost center groups.

Version, planning period, fiscal year, and cost center are required characteristics in all planning areas.

Activity type: Required characteristic for activity type planning, optional characteristic for cost element and statistical key figure planning
Enter either one or more individual values, several intervals, or one activity type group. The following transactions do not require the characteristic:

Primary cost planning, activity-**in**dependent

Activity input planning, activity-**in**dependent

Revenue planning

Settlement cost planning, activity-**in**dependent

Secondary order cost planning, activity-**in**dependent
Cost element: Relevant only for cost element planning, where it is an optional characteristic which can be ignored if plan records **only** are entered for activity inputs in the affected planning layout.

There the cost element is the sender allocation cost element.
In primary cost planning the cost element is a required characteristic.
Enter one or more individual values, one or more intervals, or a cost element group.

Resource
This is important for resource planning, where it is a required characteristic. Resource planning is primary cost planning on a quantity basis. You can valuate planned consumption quantities and determine resulting costs. Resource planning can thus sub-divide cost element planning. You can plan on orders and WBS structures. You cannot use resources in the Actual. Use Define resources to maintain resources. Enter one or more single values or intervals.

Sender cost center: Relevant only for cost element planning, where it is an optional characteristic
The characteristic can be ignored if you do not wish to plan activity inputs with the relevant layout.
For the following transactions, you do not require the characteristic:

Primary cost planning, activity-independent and activity-dependent

Revenue planning

Settlement cost planning, activity-independent and activity- dependent without sender reference

Planning credits as surcharges
Enter one or more individual values, one or more intervals, or a cost center group.

Sender activity type: Relevant only for cost element planning, where it is an optional characteristic
The characteristic can be left aside if you do not wish to plan activity inputs with the relevant layout.
For the following transactions, you do not require the characteristic:

Primary cost planning, activity-independent and activity-dependent

Revenue planning

Settlement cost planning, activity-independent and activity- dependent without sender reference

Planning credits as surcharges
Enter one or more single values, one or more intervals, or an activity type group.
The characteristics sender cost center and sender activity type are only useful in tandem.

Transaction currency: Relevant only for cost element planning, where it is an optional characteristic.
Enter one or more individual values or one or more intervals.
If you do not select the characteristic, the controlling area currency will be set for the field.
Note

If you define a value column in your planning layout for cost element planning via the key figures "Total actual costs in controlling area currency" or "Total actual costs in object currency", you must include the transaction currency as an additional characteristic in the key columns if actual cost postings use a transaction currency which is not the same as the controlling area currency.

Statistical key figure: Required characteristic for statistical key figure planning Enter one or more single values, one or more intervals, or an activity type group.

After specifying the characteristic, you must determine the characteristic value controlling the data selection.

Characteristic Values

When defining characteristic values, you have the following options:

Entry of fixed characteristic values

You set characteristic values for each element to be used as selection criteria by the SAP system to generate the planning screen.

You can specify a single value, an interval, or a group of values. By choosing *More* you can enter more than one single value or interval.

Characteristic value parameterization

You can also use varaibles for the characteristic values.

Variables enable flexible shaping of the planning layout. The content is determined only after planning is executed.

Note that the system distinguishes between *local* and *global* variables, but that you may only use local variables for the planning layout.

Local variables are not permanently in the system, but are valid only in the affected planning layout. They may be used more than once the layout.

Example:

You create a layout with the following three value columns:

Column 1: Version, Variable 1 Fis.Y, 1996

Column 2: Version, Variable 1 Fis.Y, 1995

Column 3: Version, Variable 2 Fis.Y, 1995

Local variable 1 is used twice, variable 2 only once.

You enter a variable for the characteristic value by choosing *Indicator for entering variables* (variables on/off) on the screen *Define Element*.

The system changes the size of the input field and marks the field. The local variable designation can be set as desired.

Additionally, you can also parameterize texts under *Edit -> Element -> Change text* (text variable). On the screen *Enter Text*, enter a local variable beginning with special character "$". According to your setting per text variable, the SAP system determines the text automatically from the selection of the assigned characteristics.

If you set characteristic values as variables, the user will be asked during planning callup to replace the variables with values.

Notes

Calculated variables

Variables based on numerical fields may be changed with additive operations. The variable is extended with a "+" or "-" and a number (no more than two places). In a formula, for example, variable "A" is used in a fiscal year column. The second column should display the previous year. Parameter "A-1" is thus maintained as the fiscal year characteristic. In the planning transactions, the fiscal year variable "A" is called up as a control date, and the previous year is calculated automatically.

Mandatory/optional variables

For variables in optional characteristics, you have the choice between

Replacement through mandatory entry

Replacement through optional entry

Use the menu path *Extras -> Variables -> Define variable*. Choose a variable for an optional characteristic and you thereby replace the default *Mandatory* with *Optional*.

Example

You set *Activity type* as the optional characteristic in the planning layout *Cost elements/Activity inputs* and activate the *Optional* setting. On the initial planning screen, you have the option of selecting activity-dependent and activity-independent planning. Only when you fill the field *Activity type* on the initial screen will activity-dependent planning be executed.

3. **Names/key values of variables**

To give each variable a name, use *Extras -> Variables -> Define variables -> Name* and use the name when prompted in the initial planning screen.

Examples

You use 2 versions for an optimistic/pessimistic planning comparison. Using the naming function identifies the variables in the different versions.

You define a period interval. To distinguish between the "From" period and the "To" period on the initial planning screen, save the appropriate names for the variables.

For more information about variables, see the SAP Library under *Cross-Application Components -> CA - Drilldown Reporting -> Reports -> Variables -> Variables for Characteristic Values, Variables for Texts*, or *Variables for Formulas*.

Create Planning Layouts for Activity Type Planning

To be able to plan activities, you first need to define planning layouts for activity type planning. In these planning layouts, you determine the format of the planning screens.

Requirements

In the standard SAP System, planning layouts are found only in client 000. To use them as models for user-defined planning layouts, they must be taken from client 000 and imported to your production client. Use the IMG *General Controlling* under the section *Prepare Production Startup -> Transport System Settings -> Transport Planning Settings ->* Import Standard Planning Layouts.

Recommendation

After installing a new release or update, you should repeat the import of standard planning layouts from client 000 in order to access the latest layouts.

Activities

Create planning layouts according to your requirements for activity type planning.

Change an existing planning layout. **Further notes**

Procedure for Creating Planning Layouts

Note on transport

For the transport of planning layouts, an individual function is available in Customizing under *Controlling -> General Controlling -> Production Startup Preparation -> Transport System Settings -> Transport Settings for Planning -> Transport Planning Layouts*.

Create Planning Layouts for Statistical Key Figure Planning

To be able to plan statistical key figures, you first need to define planning layouts for planning statistical key figures. You specify the layout of the planning screens in these planning layouts.

Requirements

In the standard SAP System, planning layouts are found only in client 000. To use them as models for user-defined planning layouts, they must be taken from client 000 and imported to your production client. Use the IMG *General Controlling* under the section *Prepare Production Startup -> Transport System Settings -> Transport Planning Settings ->* Import Standard Planning Layouts.

Recommendation

After installing a new release or update, you should repeat the import of standard planning layouts from client 000 in order to access the latest layouts.

Activities

Create planning layouts according to your requirements
for the planning of statistical key figures.

Change an existing planning layout. **Additional Notes**

Procedure for Creating Planning Layouts

Note on transport

For the transport of planning layouts, an separate function is available in Customizing for *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings -> Transport Settings for Planning -> Transport Planning Layouts*.

Define User-Defined Planner Profiles

You use planner profiles to control the way planning is carried out. In a planner profile, you specify per planning area which planning layout is to be used with which default values. Per planning area, you can create as many planning layouts as you require. The profile item determines the order of the planning layouts within a planning area and can be used to assign the same planning layout to a planner profile in multiple areas, but with a different default setting each time.

Planner profiles are hierarchically structured as follows:

Planner Profile

General Controlling

Layouts Controlling

Default Parameters

Planner Profile

You can assign an authorization group to every standard profile and every planner profile that you create in the *Profile planning overview*.

The combination of authorization groups and locked default settings (see *Default layout*) results in highly detailed authorization assignments for entering planning data. All the planner profiles in the system are defaulted. This is regardless of the component in which you wish to call up planner profile processing. This enables you to define allowed entries of planner profiles from other components, for each component chosen.

General Controlling

For each planner profile, the system recommends different planning areas, depending on the application component. You can create additional planning areas.

In *CuDK* you can enter a default value for a distribution key for currency amounts.
In *QtDK* you can enter a default value for a distribution key for quantities. The system uses these default values for combinations that have not yet been planned, even if you have not selected a distribution key in the definition of the planning layout.

Layout Controlling

In each planning area, you determine which planning layouts appear in which sequence. For each planning area, you must define at least one profile item and assign a planning layout.

The *Deflt* indicator shows whether settings already exist (see: *Default settings layout*). If you deactivate the *Over.* (=Default settings not protected) indicator, the user must use the entries given in planning and may use only the defaulted variables. If the indicator is active, the entries are default values which can be overwritten when entering planning. The *Excel integration* indicator gives you the option of entering planning data in an Excel worksheet. If the indicator is active, you can use Excel to make your entries. The file description influences the layout of the worksheet. If you move the planning data (that you entered in the system) within the worksheet, the file description creates the link between the old data and the new location.

You can also find further information on preparation for planning with Excel in the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Manual Planning -> Techniques for Supporting Manual Planning -> Integrated Excel in Planning*.

- Default parameters

You can enter default parameters for the selection of planning data of each item in the assigned planning layout.

All variables defined in a layout are referenced during planning as parameters, which you can set with values per profile item.

If you undertake decentralized planning in your organization, the planner profiles assist the organizational aspects of the planning process. You can assign particular user groups to profiles in which objects have already been preset and precisely delimited.

Example

You set general selection criteria (fiscal year, version, periods and transaction currency) in your planning layout PRIMARY.

From an organizational perspective, it was decided that the cost center managers decentrally plan the material expenses first, followed by the personnel expenses.

In the *Planning profile overview* create the planning profile "PLAN01".

Choose the planning profile "PLAN01" and *CO General Settings*.

Choose the planning area "Cost centers: Cost elements/acty inputs" and *Layouts CO general*.

Enter the planning layout "PRIMARY" with both item number 0 and item number 020.

Choose the item "0" and *Default parameters* and enter the cost element group for material expenses.

Choose the item "020" and *Default parameters* and enter the cost element group for personnel expenses.

Also assign the cost center managers in the user parameters to planner profile PLAN01 via the parameter ID "PPP". To do so, choose *System -> User profile -> User parameters*.

When the cost center manager calls up planning by choosing "Planning -> CElems/Actvty input -> Change", the system suggests profile PLAN01 and branches to planning layout PRIMARY with the plan costs for material expenses. The cost center manager can now enter the plan data and, after it is saved, can go to other planning by choosing *Next layout*.

Requirements

To create entire planner profiles, the planning layouts used must be available. Complete the IMG activity Create Planning Layout.

Standard settings

The standard system includes several defined planner profiles. The names of the profiles begin with SAP. These are protected, meaning you cannot create custom profiles beginning with "SAP".

Note

Note that as of Release 4A, the planner profile SAP1, SAP2, SAP3, and SAP4 and the planning layouts 1-1 to 1-4 contained in these profiles are no longer maintained by SAP.

Activities

To assign planner profiles to authorization groups, create the necessary groups in the IMG activity *Create Custom Authorization Groups*. You can use the authorization groups to control which users have access to which planner profiles. Assign authorizations with the authorization object "CO: Planner Profiles" (K_TKA 50).

To create planner profiles, proceed as follows

CO Planner Profile Overview

To create a new planner profile, choose *New entries*.

To copy an existing profile, select a reference and choose *Edit -> Copy as*.

Enter a name and explanatory short text for the object.

If necessary, assign an authorization group to the planner profile.

General Controlling

Select the suggested planning area for which you want to make settings and choose *Settings for General Controlling*.

To create a new planning area, choose *New entries*.

Layouts for Controlling

Select a planning area for which you want to make settings and choose *Layouts for General Controlling*.

Choose *New entries* and enter an item and previously defined layout.

Activate the indicator *Default settings not protected* if users may overwrite the defaulted variables.

Activate *Excel integration* if you want to enter your planning data in an excel worksheet.

Enter a name for the file description.
If you do not enter a name, the system automatically assigns a name when you save the file.

Save your entries and return to the layout overview screen.

Layout Default Settings

Select a planning area for which you want to make settings and choose *Layout Controlling*.

Set the parameters of the defined variables per profile item for the planning layout.

Notes

To define the excel worksheet, at least one row must exist on the screen. For this reason, you need to enter example data as dummy data in the SAP System using the planning layout.

To be able to plan directly using the corresponding planning layout, you may need to reset any planner profile that has been set under *Planning -> Set planner profile*.

Optional steps:

Authorizations

In the IMG activity *Authorization Management*, set authorizations as required for object K_TKA50 and assign the authorizations to the authorization profiles of the appropriate users.

User parameters

Assign parameter ID PPP to the users who are to work with the profile in the user parameters (choose *System -> User profile -> User parameters*).

Deleting planner profiles

When you delete a planner profile, the system checks whether the profile is also used in other components. If it is, you first need to delete the dependent entries for the planner profile in all components, before you can delete the planner profile itself.

Note on transport

To transport planner profiles, see the *General Controlling Customizing -> Production Start-Up Preparation -> System Configuration Transport -> Planning Configuration Transport -> Transport Other Planning Configurations*. You can use this function to transport the complete set of planner profiles from a test to a productive client.

Planner profile maintenance is connected to the automatic recording of transport data.

This also includes the settings for integrated Excel. The system includes file descriptions and Excel sheet templates in the transport request, provided you have created them in Customizing.

The system also transports the settings for integrated Excel if you have manually included a planner profile in - or manually deleted a planner profile from - a transport request (you do both by choosing *Table View -> Transport*).

Warning

When performing the transport, ensure that you have not manually created any *integrated Excel* settings in the target system.

Only supply the target system by means of transports, otherwise inconsistencies could arise. When importing the Excel sheet templates from the source system, the system does **not** overwrite the settings already made in the target system.

If, however, planner profiles with corresponding Excel sheet templates already exist in the target system, you have to delete them before performing any imports. In planner profile maintenance, you can delete these Excel sheet templates for specific planner profiles or profile items.

Further notes

You can find more information on planner profiles in the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Manual Planning -> Planning Techniques -> Planning Screen Layout -> Planner Profiles*.

Define User-Defined Distribution Keys

You use distribution keys to both simplify and speed up the entry of monthly plan values. The following options are available for defining your own distribution keys:

Distribution keys that refer to a standard distribution key (1, 2, 3, 4, 5, 6, 7).

Note

The system also saves distribution keys in the object currency.

You can also change the distribution key during the runtime.

Note

You define a distribution key in which you save the number of shifts (relative factor) per month (period). In cost center planning you enter the annual plan activity and combine this with your distribution key.

Five workers work seven hours per shift. Multipling 35 hours per shift with 680, the maximum number of shifts per year, results in annual plan activity of 23,800 hours.

The following table shows the distribution of activity according to the distribution key used. -----

Plan Activity: 23,800 hours			
Period	Relative Factor	Calculation	Plan Activity
1	40	23,800 : 680 X 40 =	1,400
2	40	23,000 : 680 X 40 =	1,400
3	40	23,800 : 680 X 40 =	1,400

4	60	23,800 : 680 X 60 =	2,0
5	60	23,800 : 680 X 60 =	2,0
6	80	23,800 : 680 X 80 =	2,800
7	80	23,800 : 680 X 80 =	2,800
8	80	23,800 : 680 X 80 =	2,800
9	60	23,800 : 680 X 60 =	2,0
	60	23,800 : 680 X 60 =	2,0
11	40	23,800 : 680 X 40 =	1,400
12	40	23,800 : 680 X 40 =	1,400
	680		23,800

Standard settings

The standard SAP System includes unchangeable default distribution keys.

Distribution key **0**
Enter the values manually for each period.

Distribution key **1**
Given plan value is distributed equally to the plan periods.

Distribution key **2**
Given plan value is distributed according to the previous distribution.

Distribution key **3**
The value entered is interpreted as a percentage and applied to the previous values.

Distribution key **4**
The periods containing a value not equal to zero are distributed to the following empty periods.

Distribution key **5**
The periods containing a value not equal to zero are copied to the following periods.

Distribution key **6**
The period value entered is copied to the following period

Distribution key **7**
The total value is distributed to the periods according to the number of calendar days in each period.

Distribution key **11**
Used only in the Cost Center Controlling component for activity-dependent cost planning or activity-dependent statistical key figure planning.
The given value is distributed based on the plan activity quantity of a cost center. The system uses the activity quantities planned at the time you create the distribution key. If you change activity quantities afterwards and copy the plan values to another version, the system does not create a new distribution automatically.

Recommendation

If the SAP standard keys do not meet your requirements completely, but you want to use certains parts of them, you should copy the distribution key and save it as your own key after making changes to it.

Position the cursor on the standard distribution key you want to use and choose *Copy* using the context menu.

Enter a new name for your own distribution key.

Maintain and save your settings.

Activities

If necessary, define distribution keys that meet your requirements.

Place the cursor on

Referenced, if you want to refer to one of the standard distribution keys (**except 11**).

Independent, if you want to create a new distribution key.

Choose *Create or Change* using the context menu.

Assign a key and a description for the new distribution key.

Maintain the number of posting periods and a relative distribution factor. The system distributes the input value to the individual posting periods according to the relative distribution factor.

Via *Suppress zero factor*, you can suppress posting periods to which you have assigned a relative distribution factor "0". You can display these posting periods again by choosing *Display zero factor*.

If you subsequently want to set a relative distribution factor in a period to "0", you can recalculate the factors of the remaining periods by choosing *Calculation*.

You can compare the original version of the distribution key with the new one by choosing *Compare*.

Notes on transport

To transport distribution keys, a separate function is available in Customizing under *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings -> Transport Settings for Planning -> Transport Other Planning Settings*.

Further notes

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Manual Planning -> Techniques for Supporting Manual Planning -> Distribution Keys*.

Detailed Planning of Primary Cost Elements

In this section, you define the settings for detailed planning of the primary cost elements in Cost Center Accounting.

Detailed planning is carried out beneath the cost element level. This is useful where the actual postings of multiple individual actions and transactions are totaled in one cost element.

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Manual Planning -> Detailed Planning of Cost Elements*.

Define Costing Variants

In detailed planning, you plan the costs of a cost center on a level below the cost element.

This enables you not only to plan, for example, the costs for the materials (such as bulk materials) staged at a cost center as an amount under the primary cost element under which the material costs are updated on the cost center, but also to list each material to be staged at the cost center.

Prices are stored in the accounting and costing views of the material master records. In the costing variant you define a strategy for price selection by linking the costing variant to a valuation variant.

A costing variant contains the following parameters among others:

costing type

For detailed planning, the standard system contains costing type 03. This costing type specifies that the reference object of costing is a primary cost element. This costing type cannot be changed.

valuation variant

The valuation variant contains a strategy sequence for selecting prices from the material master, such as:

Planned price 1

Standard price

Moving average price

Note

The results of detailed planning are written to the database as a costing document. You should therefore avoid having two costing variants with the same costing type and valuation variant (even though that is technically possible) to prevent data from being overwritten. The reason for this is that the key structure for the costing results in the database uses the costing type and the valuation variant, rather than the costing variant.

Standard settings

The standard system contains the predefined costing variant PP for detailed planning. This costing variant points to costing type 03 and valuation variant 013.

SAP recommendation

You should assign a different valuation variant to each costing variant with which you intend to save cost estimates.

This one-to-one assignment enables you to change the valuation strategies later as desired.

Actions

Decide whether the costing variant provided in the standard system meets your requirements.

To create a new costing variant:

Enter an alphanumerical key and a text for the costing variant.

In the detail screen, assign a costing type and a valuation variant to the costing variant.

If you want to use your own parameters, you must carry out the steps under Define valuation variants.

Note on transport

To transport costing variants manually, choose "Table view -> Transport".

Define Valuation Variants

You create a valuation variant that contains the parameters for the valuation of the costing items in detailed planning of the primary cost elements of a cost center.

You create valuation strategies for the materials that are used at the cost center. You define the sequence in which the system searches for prices in the accounting view and the costing view in the material master record to valuate the materials.

Strategy sequences

You define the individual valuation bases of the valuation variant as strategy sequences. For the valuation of the material components, for example, you define a strategy sequence that reads the fields of the material master record in the following sequence:

Planned price 1

Standard price
Moving average price

The first price that is not zero is used to valuate the material component.

To be able to use the valuation variant in costing, you must assign the valuation variant to a costing variant.

Standard settings

The standard system contains predefined valuation variants. You can modify these valuation variants to suit your requirements by changing the standard strategy sequences. Seventeen price strategies are currently available for material valuation. You can select up to five strategies for each valuation variant.

Actions

Enter an alphanumeric key and a text for the new valuation variant.

Define a valuation strategy for material components by entering up to five values as the search sequence.

Assign the valuation variant to a costing variant.

Note on transport

To transport valuation variants manually, choose *Table view -> Transport*.

Resource Planning

In this section, you make the settings for price calculation of resource prices in resource planning.

Where only the quantities of used resources are known, resource planning enables you to plan primary activity-independent and activity-dependent costs. The SAP system multiplies the planned quantity by the resource price

Price calculation is based on the conditions method and enables you to control access to resource prices in line with your requirements. To do so, you can specify your own criteria for price calculation.

Price calculation depends on the following settings:

Condition type

Condition table

Access sequence

Costing sheet

Valuation variant
For more information on resource planning, see the *SAP Library* under *Financials -> Controlling (CO) -> Cost Center Accounting -> Cost Center Planning -> Manual Planning -> Primary Cost Planning -> Resource Planning*.

Notes regarding Transport

You can import the settings for resource planning from client 000 into your operating client. A separate function is available in *General Controlling* Customizing under *Production Start-Up Preparation -> Transport System Settings -> Transport Settings for Planning -> Import Standard Settings for Resource Planning*.

Define Price Tables

Price table are special condition tables for resource planning.

In a condition table you specify the combination of fields for which you can create condition records.

Recommendation

You should not make any changes to the price tables contained in the SAP standard. Instead, you should first copy them and then make any changes to meet your requirements.

Standard settings

The following price tables are stored for resource planning in the SAP standard:

132 Price per cost center

136 Price per controlling area

137 Price per country / region

138 Price per company code / business area

139 Price per profit center

Activities

Check whether the control elements in the SAP standard delivery meet your requirements. If this is not the case, proceed as follows:

1. Define your own price tables based on the field catalog supplied by SAP.

To define price tables proceed as follows:

Enter a key (from 501 to 999).

Add an explanatory text.

Selected the desired fields from the field catalog sequentially using "Edit -> Select field and then move them to the "Selected fields" dialog box by choosing "Edit -> Move".
In a user-defined price table you must always select the fields "Controlling area" and "Version" and "Resource", in this sequence, at the start, as otherwise the prices cannot be locked per version if planning is to be locked.

Save your entries.

The namespace of the user-defined price tables begins with 501.

You cannot change the field catalog.

Your user-defined price tables must begin with the field combination of controlling area / version / resource. If you have defined a table with other fields the system issues an error message.
In this case, delete the table and create a new one using the fields mentioned above.

A price table cannot consist of more than ten hierarchy levels (including the obligatory fixed fields controlling area / version / resource).

Save your entries.

Define Access Sequences

An access sequence is a search strategy that the system uses during pricing to search for valid prices for each condition type. It refers via the condition tables contained in the access sequence to the fields relevant for the price determination.

If you want the SAP System to end its search as soon as it has found a price, you should set the *Exclusive* indicator for the Access Sequence.

Examples

The access sequence K001 is defined with price table 132 for resource pricing. This access sequence ensures that the system searches by the criteria "Controlling area", "Version" and "Cost center".

Recommendation

You should not change the access sequences contained in the SAP standard version. Instead, you should copy them and make changes to the copy in line with your requirements.

If you define your own access sequence, the key should begin with "Z" (user namespace).

Standard settings

The access sequence K001 is supplied by SAP in the standard for cost center resources.

Activities

If the control elements delivered in the standard do not meet your requirements, you should define your own access sequences.

To define access sequences proceed as follows:
Choose *New entries* and fill the following fields:

Access sequence, maximum four characters, alpha-numeric.

Name

Save your entries.

To maintain accesses, select an access sequence and choose *Accesses*.

Choose *New entries* and fill the following fields:

Access number

Condition price table

By entering the price table in the access sequence, you create a link between the condition type, access sequence and condition record.

See also Create Price Tables.

You do not need to enter a condition.

Exclusive

Save your entries.

To maintain fields for an access, select an access and choose *Fields*.

The system displays the fields of the price table assigned to this access. You can change the access fields in Create price fields.

Fill the following fields:

Source of constant

Initial value

Processing type in access

Priority

Save your entries. **Notes on transport**

If you want to import standard settings for resource planning, you can use a separate function in Customizing *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings-> Transport Settings for Planning -> Import Standard Settings for Resource Planning*.

Define Condition Types

In this IMG activity you define condition types.

You use the condition types to define which types of resource prices exist in the SAP system. These can be:

Absolute amounts
Percentage values

Manually specified prices

Prices determined by the system using search strategies (for example, from the material master data)

To determine which fields the system should check to find a valid condition record, you enter an access sequence in each condition type.

Note

It is not possible to edit scale prices in resource planning.

The system can only take material prices from the material master for the resource valuation if you have entered a material in the Resource Master Data.

Condition types are not relevant if you have entered a price in the material or base object master record.
In this case, the system always uses the material or base object price to valuate the resource consumption.

Recommendation

Do not change the condition types contained in the SAP standard version. Instead, you should copy them and make any necessary changes in the copy.

If you define your own condition types, the key should begin with "Z" (user namespace).

Standard settings

The following condition types are stored in the standard delivery:

CQ01 Resource prices

CQ02 Resource price for materials

Activities

If the condition types supplied by SAP do not meet your requirements, you can define your own condition types.

Define condition types

To define condition types proceed as follows:

Choose *New entries*.

Enter data in the following fields:

Condition type, maximum of four characters, alphanumeric

Description

Access sequence
You can also enter your own access sequences.

Save your entries.

To process condition types that were already defined, proceed as follows :
Select a condition type and choose *Condition records* in the dialog structure.

Choose an access for the access sequence.

Enter a controlling area, a version and a fiscal year.

The SAP system selects the corresponding entries and displays them in the list of condition records.

Note

You can also copy existing condition types by selecting the condition type to be copied and choosing *Edit -> Copy as*.

Enter a target entry (a name under which the copy is to be stored).

Notes for transport

To import standard settings for resource planning, you can use a function in Customizing under *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport Planning Settings -> Import Standard Settings for Resource Planning*.

Define Valuation Variants

Valuation variants control pricing for resource planning in the Controlling component (CO).

The valuation variants are hierarchically structured as follows:

Valuation variant

Costing sheets

Costing sheet rows

Valuation variants

A valuation variant can contain one or more costing sheets.

Costing Sheets

In the costing sheet you specify which condition types, and in what sequence, the system should consider. For pricing, the SAP system automatically determines which costing sheet is valid for a business transaction. It then processes sequentially the condition types contained in the costing sheet. Costing sheets can consist of one or more costing sheet rows.

Costing Sheet Rows

The costing sheet rows refer to condition types. You can use the condition types defined by SAP or define your own. The level numbers determine the order of the condition types in the costing sheet.

You can use condition type CQ02 to maintain your own prices or search for prices from the material master record.

Requirements

In the Implementation Guide for *Cost Center Accounting*, section *Planning -> Basic Settings*, IMG activity Maintain versions you must have maintained the fiscal year-dependent version parameters.

Standard settings

SAP supplies the valuation variant 0 in the standard for resource planning.

Recommendation

You should use the valuation variants and costing sheets supplied by SAP as much as possible.

Do not change the valuation variants and costing sheets supplied by SAP in the standard system.

Activities

To create a valuation variant, proceed as follows:

Choose *New entries*.

Enter a key for a new valuation variant.

Activate the *Cost analysis* indicator, if you want to follow the price determination on the screen.

Enter a description for your valuation variant.

Save your entries. **Notes for transport**

For the import of standard settings for resource planning, you can use a special function in Customizing under *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport Planning Settings -> Import Standard Settings for Resource Planning*.

Assign Costing Sheets To Valuation Variants

In this IMG activity you assign one or more costing sheets to your valuation variant.

Activities

To assign costing sheets to a valuation variant, you should proceed as follows:

Change the existing assignments to meet your requirements or create new ones.

To create new assignments choose "New entries".
Enter the following:

The key of a valuation variant

Costing sheet to be assigned

Sequence

Save your entries.

Assign Valuation Variants to the Version

You enter a valuation variant in the fiscal year-dependent parameters of your version. The system uses the valuation variant stored in the version to calculate the resource prices.

Activities

Enter a valuation variant in fiscal year-dependent parameters for your version.

Save your entries.

Formula Planning

This section contains information on creating a Templates for formula planning on cost centers, use plan primary costs and statistical key figures.

For more information on formula planning, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Formula Planning*

Notes on Transports

You can transport the settings for templates. A function is available for this in *General Controlling* under *Production Start-Up Preparation -> Transport System Settings -> Transport Settings for Templates*.

Define Environments and Function Trees

In this step you maintain:

Function trees

Structure nodes - Function references - Functions.

The basis for the maintenance of the object is always the chosen environment.

Environment

The Template's environment determines the information of the SAP-environment and the external system that can be accessed. Basically, the functions relevant to each context are already provided in the corresponding environment. Environments always contain a row of sub-environments which group functions by theme; these include material, BOM, routing, and others.

The standard system delivers the following environments:

Template allocation (for cost objects, profitability segments,

business processes, cost centers/activity types)

Formula planning (business processes, cost centers, profit centers)

Standard cost estimates

Process quantity determination (SOP/LTP)

Easy Cost Planning/Internal Service Request

Recommendation

Use the sub-environments provided by SAP as much as possible. When you assign an function to a sub-environment, it is automatically available in all the main environments containing this sub-environment.

Further notes

For more information on environments and a list of these and their sub-environments go to the help for applications of Activity-Based Costing under "Template -> Template Environment".

Function Tree

A function tree is a user-defined hierarchy which structures or groups functions. With the Help for function trees, you can structure groups of functions available in each environment according to their their theme or emphasis. Functions are then processed from here on.

A function tree is assigned to an environment and consists of nodes and function nodes.

Environments: all environments are displayed when you call up the n transaction. Environments themselves cannot be changed or deleted. The creation of new environments is also not possible.

Function trees: the first level under environments. You can subordinate nodes or function nodes to a function tree.

Nodes: nodes are always subordinate to function trees or other nodes. You can subordinate other nodes to a node or function node. In function trees SAP1, nodes contain sub-environments.

Function nodes are always subordinate to function trees or nodes. They always refer to a function.
SAP standard delivery for all environments includes function tree SAP1 (for example, for environment 001, function tree SAP1-001). This contains all standard nodes (sub-environments) and function nodes (with reference to the respective function).

Activities

The transaction provides you with left and right screens. The left one displays the existing environments. You can expand the hierarchy and view the function trees, nodes and function nodes in their hierarchical structure. Place the curser on an object you want to process.

The right screen details of the chosen object (environment, function tree, nodes or function nodes) in list form. If you double click on a funciton node you will see the maintenance screen for the functions.

Further notes

For more information see Application help for Activity-Based Costing:

AC-Financials -> CO-Controlling -> Activity-Based Costing -> Template -> Function tree -> Maintain function tree or *Template -> Template environment -> Maintain functions*

AC-Financials -> CO-Controlling -> Cost center accounting -> Cost center planning -> Aids -> Formula planning -> Template -> Template environment.

Define Templates

You define templates for planning primary costs and statistical key figures using formula planning.

Purpose

Templates are also used outside of Cost Center Accounting. Particular environments exist for each use (application) of a template. Before you create a template, choose Maintain Environments and Function Hierarchies. One of the things the environment determines is which row and column types you can choose from in the template to be created.

The following uses (applications)/receiver objects are possible:

Template allocations to cost objects or use in standard cost estimates for cost objects and materials (environments 001 - 012)

Template allocation to business process, cost center or cost center/ activity type (environments SBP, SCI, SCD)

Template allocation to profitability segments (environment PAC)

Formula planning (environments CPI, CPD, BPP)
Determination of output quantities (environment SOP)

Planning templates are independent of the cost center.

You can use a given planning template for more than one cost center. At the time of evaluation, the system uses a determination strategy to decide which planning template should be used to calculate the plan values.

You can define the costs to be evaluated as variables.

You also define formulas with which the system can determine the costs dynamically at the time of evaluation.

You can define the quantity as a variable.

You can use formulas to specify the consumption quantity that is to be claimed by the cost center. The SAP system calculates these formulas at the time of evaluation.

You can set individual rows (items) of the planning template as active or inactive. If you want to plan individual cost elements only on specified cost centers, you can use methods to set them as active or inactive. The system only considers the active items for evaluation.

You can use subtemplates.

You can define relationships that are required in multiple planning templates just once and then use them again as subtemplates.

Structure of the planning template

A planning template consists of rows (items) and columns. The following columns are possible:

Object type, item category, for example, cost element, subtemplate, calculation row

Name of the item

Object, such as, name of cost element, subtemplate, calculation row

Costs

Costs for activity-independent planning

Fixed costs, variable costs per activity unit for activity-dependent planning

Quantity, such as, consumption

Overall quantity for activity-independent planning

Fixed quantity, variable quantity per activity unit for activity-dependent planning

Activating values

For activity allocations, the following columns are also available:

Plan quantity factor variable

Plan quantity fixed

Actual quantity factor variable
Actual quantity fixed

You can either specify the values as fixed in the columns or define mathematical formulas and methods, whose values are determined dynamically by the system during the planning template evaluation.

Requirements

To be able to create a planning template, you must already have defined your cost centers.

If you want to use user-defined functions, you must have created these in the IMG activity *Maintain Environments*. For some functions you need to maintain, for example, statistical key figures.

Activities

To maintain a planning template, you need to enter data on an initial screen and an overview screen, from which you can branch to the various editors.

Initial screen

Enter the name of the planning template you want to create or maintain.

Enter the environment of the planning template, such as "Activity-independent cost center planning".

Overview screen

Enter a description for the new planning template.

Select the item category.

Enter a description for the item.

Depending on the specified item category, enter the object (for example, cost element). For the category *cost element*, you can specify a fixed cost element as the object or let the system determine the cost element dynamically at the time of evaluation.

In items of category cost elements, you should specify how often they are to be claimed by the cost center.

You can define this quantity either as a constant value or let the system calculate it dynamically during evaluation.

Specify under which preconditions the item is to be activated.

To activate an item, you can specify the values as *Active* or *Inactive* or define a method that is returned as *Active* or *Inactive* by the system at the time of evaluation. **Further notes**

For more information on *templates* see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Utilities -> Formula Planning -> Templates*.

Assign Templates for Cost Centers

You create the link between cost center and formula planning in the master record of the cost center in question.

You assign templates to those cost centers for which you want to determine planned values using formulaplanning, or which are to be receiver objects for template allocations.

Activities

You can also define templates when maintaining master data.

In the cost center master record, choose the *Templates* tab.

On the *Templates* tab, choose *Create*.

You can now change or display existing templates or display an allocation structure with the template.

If you have already defined templates, you can enter these on corresponding tab.

If you want to determine activity-independent planned costs for the relevant cost center, enter an activity-independent template in the *Aty-ind. formula temp.* field.

If you want to determine activity-dependent planned costs for the relevant cost center, enter an activity-dependent template in the *Aty-dep.formula tmp.* field.

If you want to carry out an activity-dependent activity allocation for the cost center in question, enter an activity-dependent template in the *Aty-dep.alloc.tmp* field.

If you want to carry out an activity-independent activity allocation for the cost center in question, enter an activity-independent template in the *Aty-ind.alloc.tmp* field.

Save your entries.

Further notes

For more information on cost center master data, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Cost Centers -> Cost Center Master Data*.

Planning Aids

This section contains information on defining planning aids such as reposting or revaluation.

Define Revaluation

Versions can be revalued according to various criteria. The SAP system determines a revaluation amount from the percentage rate of the revaluation. This amount is added to or subtracted from the initial amount (= costs, consumption quantities).

You can revalue data as often as you wish and the data can be reset using the reversal function.

You can execute the revaluation for the whole fiscal year and for individual periods.

You can use cost center groups or cost element groups for the revaluation.

The SAP system, however, offers the option of creating, changing, or displaying master data groups during the definition of the revaluation. To do so, position the cursor on the desired group and choose *Extras -> Create/change/display group*.

Note

All currency fields for which values were determined in planning are revaluated by the SAP system.

In the current release, all cost elements that can be planned using primary cost and revenue planning can be revaluated. These are activity-independent and activity-dependent respectively.

Primary cost elements (category 1)

Revenue elements (categories 11 and 12)

Primary order cost elements (category 22)

Accrual cost elements (categories 3 and 4), cost elements for internal activity allocation (category 43), and assessment cost elements (category 42) cannot be revaluated.

Recommendation

SAP recommends that you perform the revaluation in a version created specifically for it.

Actions

Create a revaluation for a version or change a previously defined assessment.

Enter the cost centers and cost elements that you wish to revaluate (single values or groups).

Set the rules according to which the revaluation will be executed.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.
For more information on revaluation, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Utilities -> Revaluing Cost Center Planning*.

Periodic Repostings

In this section, you make settings for periodic repostings in the plan.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Planning -> Utilities -> Periodic Repostings*.

Determine Sender/Receiver Types for Periodic Reposting

When making periodic repostings you can specify which table fields are active and whether, in cycles for these fields, a single value, an interval, or a group can be entered.

You make these settings per controlling area and separately for plan and actual data respectively.

If you change the attributes for a field that is already used in cycles then if you change:

Individual values, groups, and intervals that have a "to" value, the system deletes the corresponding data records from the table.

Intervals with "From" values, the "To" values are deleted from the table.

Example

You use periodic reposting for cost centers, but want to use only cost center groups as receivers.

Remove the table field indicator "Cost Center" in the fields for individual value entry readiness and in the receiver area interval to ensure that you can only enter groups as cost center receivers during cycle definition.

Allocation Cat:	Periodic Reposting
Actual/Plan:	Actual
Field:	Cost Center

Field Characteristics:

Active Indicator	Entry-Ready	Entry-Ready	Entry-Ready
+ Sender	X Indv. Valu	X Interval	X Group
+ Receiver	_ Indv. Valu	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of a periodic reposting as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen.
This retrieves the original standard values for a table field.

Save your changes.

Note on transport

To transport periodic reposting field attributes manually, choose *Table view -> Transport*.

Define Periodic Repostings

Periodic reposting reduces the number of postings in Financial Accounting for document entry.
The assignment of costs to cost centers in line with the source of these costs occurs in Controlling. The complete amount is first assigned to an allocation cost center (such as telephone costs).

During reposting to the originating cost center, the posting document is given all controlling-relevant data but no sender information.

Example of Periodic Reposting

All phone costs (cost element 4731) are collected in cost center 2130 (Telephone Central).

At period-end closing, the costs are reposted to the other cost centers on the basis of statistical key figure LDC (Long-Distance Calls).

The sender cost center is Telephone Central (CCtr 2130). The receivers are all cost centers in the organization.

Recommendation

Check whether assessment can be used instead of periodic reposting, as this leads to considerably better system performance.

You can use assessment if the origin of the primary costs is not important. If required, you can use multiple assessment cost elements for differentiation.

Periodic reposting is recommended if the origin of primary costs is important, but the partner object does not need to be displayed directly. The partner information, however, is not lost. Proof of origin is always possible via the line item document.

If you do need to show the partner object directly in the report, you must use distribution. The data volume will grow significantly for the proof of the partner objects, particularly in large distributions.

Note that the data volume generated for past periods will grow with increased numbers of periods. Especially in reporting and for data backups, it is important to keep the data volume generated by allocation to a minimum. For this reason, assessment or periodic reposting are to be recommended.

For performance reasons, you should not use more than 50 segments in one cycle. If necessary, define multiple cycles. A larger number of segments per cycle is only necessary for extensive iterations.

Also: For performance reasons, never use more than ,000 relationships in an allocation cycle. If you require more than that, you must plan a mass test of the allocations beforehand.

Example

From a sender cost center with 0 sender cost elements, allocations are made with one segment to 500 receiver cost centers.

The following numbers of sender and receiver totals records result from the different allocations that must be written in the processed period:

Allocation	Sender totals recds	Receiver totals recds
Assessment	500	500
Periodic reposting	0	500 x 0
Distribution	500 x 0	500 x 0

This simple example already demonstrates that

far more sender totals records are written for distribution than for periodic reposting

far more receiver totals records are written for periodic reposting than for assessment

In practice, because of the far higher number of senders and receivers, the advantages of assessment and periodic posting are even more apparent.

Activities

Create a cycle for periodic reposting by proceeding as follows:

Enter a name for the cycle.

Enter a validity period for the cycle.

Maintain the header data for the cycle by determining the following:

Which currencies are used for allocation

Whether consumption is to be allocated

Whether negative tracing factors are scaled or not

Whether cycle processing takes place iteratively

The version from which plan data is to be taken

Define the cycle segments, where the following information is stored:

The sender cost element to be reposted

The criteria for distributing the costs onto the receiver

The sender objects

The receiver objects

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.

To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Further notes

Periodic reposting

Periodic reposting is a cost controlling aid equivalent to manually- posted cost transfer Periodic reposting can be used for plan or actual postings.

To simplify cost center planning, you can enter plan values for one center and repost them to other CO objects.

For actual postings, you can enter controlling-relevant postings in Financial Accounting which the system collects on an allocation cost center, which minimizes account assignments during document entry. At the end of a period, you can repost the collected costs to other CO objects.

Reposting uses keys (fixed values or calculated tracing factors) for allocation to the corresponding receiver objects (cost centers, internal orders, and so on).

The original primary cost element remains intact in periodic reposting. The line items do not receive updated information about senders and receivers.

For more information on periodic reposting, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Periodic Allocations -> Defining Periodic Repostings or Periodic Allocations*.

Develop Authorization Enhancements for Periodic Repostings

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Accrual Calculation

In this section you learn how to enter settings for accrual calculation. Two methods are available:

The percentage method

The target=actual method

For more information, see the *SAP Library* under

Financials -> CO Controlling -> Cost Center Planning -> Utilities -> Plan Accrual Calculation

Financials -> CO - Controlling -> Cost Center Accounting -> Period-End Closing -> Accrual Calculations

Determine Order Types for Accrual Orders

In the same way as for cost centers, internal orders can be used as accrual objects to which the monthly credits that result from accrual calculation can be posted.

Accrual calculation requires an order type with order category 02 (accrual order).

An order type has a large amount of control information important to order management. This information includes a range of default values that are used when you create a new order with this order type.

You need to assign each order to an order type that transfers certain parameters to the order.

The order depends on the client, meaning that each order type can be used in all controlling areas.

If you want to sort your order types by controlling area, you need to create separate order types for each controlling area, for example:

Order types 00 to 0199 for controlling area "0001"

Order types 0200 to 0299 for controlling area "0002" The order type determines the following:
The **order category**

You need to assign each order type to an order category. The order category cannot be changed in the individual orders.

The order categories are defaulted in the SAP System and characterize the technical characteristics of the order. An order category, for example, specifies the transactions that you can use to process an order.

Internal orders, for example, are category one (category two is used for cost center accruals), model orders are category three.

Number assignment

You need to assign a number range to each order type. Number assignment is made centrally for all orders with this order type.

Control indicator

You can change the control indicator for all orders of this order type centrally.

CO Partner update

You can determine whether the partner information remains the same during allocations between orders and other CO objects (such as, cost centers, or projects), and if the system is to write a totals record for each order. **Caution:** This can significantly increase the data volume.

Order classification

You can specify that the orders of this order type are to be classified. You only require classification for reporting purposes, and for the Maintenance of free characteristics. You can also use order classification retrospectively. For order summarization, you can have user-defined master data fields instead of classification. To transfer classification data in user-defined fields, choose the IMG activity on Replacing Classification With User-Defined Fields.

Commitments Management

For each order type, you need to specify whether you require Commitments Management.

Revenue postings

Posting costs is generally allowed on each order. You also need to specify if revenue postings are allowed for an order type.

Orders with revenues can be settled to G/L accounts, profitability segments, sales orders, billing elements, and other orders with revenues.

Integrated planning

If you want to update the planned activity input for an order type directly on the sending cost sender, you can activate integrated planning as a default value.

Settlement profile

In the settlement profile you store the objects which the orders in this order type are allowed to settle to. You can also assign a settlement profile to an order type at a later date. It is also possible to change the settlement profile in the order.

Planning profile

This profile contains parameters and default values for overall planning. You can also assign a planning profile to an order type at a later date.

Budget profile

This profile contains parameters and default values for budgeting. You can also assign a budget profile to an order type at a later date.

Reference order, from which default values are taken.

The reference order is used as a template for creating a new order. You can either enter the number of a "normal" order, or of a model order (category three). This can be done at any time, also at a later date.

Status management

An order can go through more than one status. One of the functions of the status is to determine which business transactions are allowed on the order.

For more information on the various possibilities provided by status management, see the SAP Library, under *Financials -> CO - Controlling -> Internal Orders -> Master Data in Internal Orders -> Status Management for Internal Orders*.

You can make a **field selection** that is **not dependent** on status, for the fields available in the order master data.

Note

General SAP status management is also used in other areas (such as, projects, or production orders). The old order status management will soon become obsolete.

Order **residence times** in the system

This is where you define how long your closed orders stay in the system before being archived. Choose the residence times so that you are sure that orders not used during the residence time will also not be needed at a future date. Note that for plan-integrated orders, you can only determine prices for the controlling area if the orders still exist in the system.

You can change the residence times for all orders of this order type centrally.

Master data display

You can determine the order layout for the master data. You determine which subscreens are to be used for order master data, and with which group boxes.

You can specify which print form is to be used for printing order master data.

You can modify the characteristics of certain fields in the order master depending on the order type.

These modifications are however, are overridden by the field selection, and the field field modifications, which you cannot influence.

The structure of an internal order is not permanently defined. Depending on the purpose of your orders, you will not always use all of, or the same fields.

You can use field selection to define fields as display or input fields, or to hide them altogether. Hidden fields do **not** appear on the screen.

You can use the field selection to define the field selection for the whole order. However, if you wish to use order status management, you can also define the field selection per status. The field characteristics for the status then supersede those for the order type.

The active fields also differ in other ways, such as

Hide

Hidden fields are not displayed.

Display

Fields specified as "Display" fields cannot be filled. They are used to display information which cannot be changed (such as the order type).

Entry

You can fill these fields, but they are not checked,

Because they are mainly for information (example: text), or

Because they must match a particular value (for example,you can only enter a particular status if this is also defined for the order type) or will be checked for validity (example: dates).

Required entry

If you do not make any entries required entry fields, the system issues an error message and you cannot continue processing until you make the entry. Such fields usually contain a question mark, unless they are additional input fields for other fields which you have filled.

Highlight

Highlighted fields stand out optically.

Activities

Split your orders according to their usage (order type, default values and so on).

Check whether the order types delivered meet your requirements.

If necessary, define new order types that match your needs.

Notes for Transport

Ensure during the transport of order types, that in the target system there are the same number of number range groups and in the same sequence as in the source system.

Otherwise, it could happen that in the target system some order types are assigned to other number ranges than in the source system. In this case, you have to manually maintain the assignment of the order types to the number range groups.

Notes on transport

To manually transport order types for accrual cost orders, choose *Edit -> Transport*.

Create Order Layout for Accrual Orders

In this workstep you define the layout for the order master data. You can assign a layout to each order type.

The system displays the order master data as a tab with a series of tab pages. On the tab pages there are group boxes with a series of fields for the order master data. The group boxes are defined by the system.

You can specify,

Which title the individual tab cards should receive and

which group boxes should be displayed in which position on the tab pages.

The tab pages are numbered from left to right with "TabPage 01" to "TabPage xx". On every tab page there are five positions, which you can assign individually to a group box. One of the group boxes can contain user-defined master fields (see workstep "Develop enhancements for order master data").

Use each group box only once in a layout.

Tab pages to which you assign neither a title or a group box, do not appear in the order master data.

To ensure that the display of order master data from the system occurs in a specified layout, enter the layout required in the order type. See the workstep: "Define order types".

Standard settings

Layout SAP0 corresponds to the default settings. You can copy this layout if you want to make changes to the default settings.

Activities

Check whether you need your own layouts. If you only want to make small changes to the standard delivery, you can copy layout SAP0 and use it as the basis for your layout.

If you want to create a new layout, choose "New entries".

Enter a name and a description for your layout.

Choose "Tab page title" and "New entries", to specify the title for your tab pages.

Enter the number for each of the tab pages.

Enter for which language the title is to be used.

Enter the title of the tab page.

Choose "Position group boxes on tab pages" and "New entries", to specify which group boxes should appear in which position on the tab pages.

Enter the number for each of the tab pages.

Enter the position on each of the tab pages.

Enter the group box that should appear on the specified position on the tab page.

Save your entries.

Target=Actual Method

In this section you make settings for the target=actual method in accrual calculation.

Whereas you can only use the percentage method in the plan, because no actual values are available in which target values can be set, both methods can be used in the actual.

Create Accrual Cost Elements

Accrual cost elements are primary cost elements.

For the percentage method of accrual calculation, use cost element category 03, "Accrual cost element, percentage".

For the target=actual method, use cost element category 04, "Accrual cost element, target=actual".

Special cost elements are used in accrual calculation for posting the accrual amounts.

In the percentage method, overhead is posted under the accrual cost element.

In the target=actual method, accrual cost elements are used for the affected cost centers for executing activity-dependent primary cost planning. The system calculates the target costs during accrual calculation for the affected cost center and sets the target values in the actual values.

Requirements

Complete the IMG activity Maintain Controlling Area located under *General Controlling -> Organization*.

Create G/L accounts in FI for the primary cost elements.

Activities

Define the primary cost elements.

You can store the following indicators:

Cost element category

Primary

Secondary

Record quantities

Quantity unit

Save default account assignments for cost centers or orders

Note on transport

To transport cost elements, a separate function is available in *General Controlling* Customizing.

Further notes

For more information on creating cost elements, see the SAP Library under *Financials -> Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Cost Elements*.

Percentage Method

In this section you make settings for the percentage method in accrual calculation.

The percentage method can only be used in planning, as actual values do not yet exist (in which target values could be placed). However, you can use the percentage method and the target=actual method for actual data.

Create Accrual Cost Elements

Accrual cost elements are primary cost elements.

For the percentage method of accrual calculation, use cost element category 03, "Accrual cost element, percentage".

For the target=actual method, use cost element category 04, "Accrual cost element, target=actual".

Special cost elements are used in accrual calculation for posting the accrual amounts.

In the percentage method, overhead is posted under the accrual cost element.
In the target=actual method, accrual cost elements are used for the affected cost centers for executing activity-dependent primary cost planning. The system calculates the target costs during accrual calculation for the affected cost center and sets the target values in the actual values.

Requirements

Complete the IMG activity Maintain Controlling Area located under *General Controlling -> Organization*.

Create G/L accounts in FI for the primary cost elements.

Activities

Define the primary cost elements.
You can store the following indicators:

Cost element category
Primary
Secondary

Record quantities

Quantity unit

Save default account assignments for cost centers or orders

Note on transport

To transport cost elements, a separate function is available in *General Controlling* Customizing.

Further notes

For more information on creating cost elements, see the SAP Library under *Financials -> Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Cost Elements*.

Maintain Overhead Structure

The overhead structure controls the overhead calculation. Keys are determined for all controlling areas and, in a further step (separate for plan and actual accrual), are characterized at the controlling area level.

You must define the following keys in the structure, valid for all controlling areas in a client:

- Calculation Base

Definition

Key identifying different calculation bases.
The calculation base is used to determine those cost elements that are drawn upon to calculate the values of accrual cost elements.

- Overhead

Definition

Customizing profile key identifying different overhead.

The overhead is used to determine the overhead rates used to determine accrual calculation values, according to the calculation base. You can maintain differentiated overhead based on the dependency used.

- Credit Key

Definition

Key identifying a credit posting.

The credit posting determines:

Which overhead cost element is posted

Which cost center/order the credit includes

Sample Overhead Structure

Personnel costs "Vacation" and "Bonus" are accrued equally based on wages and salaries in plan and actual.

The keys A-B1 WAGES (cost elements 420000 and 4200) and A-B2 SALARIES (cost element 430000) make up the calculation base for the overhead.

For reconciliation with FI, the system collects credits monthly to an order or cost center (credit object). In FI, the complete expense is posted once to the order. You can then display the order balance anytime between CO and FI.

The accrual objects here are stored in the following credit keys:

Credit	Valid To	Cost Elem	Order
E11 Vacation	001 1999	434 000	9A99
E12 Bonus	001 1999	435 000	9A99

The link between calculation base and credit key is created in the overhead structure SAP000:

Row	Base	Overhead	Frm	To	Cred.	Name
1	A-B1					Wages
120	A-B2					Salaries
190			1	120		Calc. base
2		A-Z1	190		E11	Vacation pay
220		A-Z2	190		E12	Bonus pay
390			200	380		Overhead
400						Total personnel

This overhead structure determines that vacation and bonus money is calculated using the calculation base (step 190).

The following overhead to wages and salaries appear here:

Vacation money for all employees: %

Gratuities

For all employees: 5 %

For assembly line employees: 7 %
(Cost centers 43 and 4320)

An overhead key is created for each accrual cost element:

Overhead Key		Perc.	Dependency
A-Z1 Vacation	Act	%	CO area
	Plan	%	
A-Z2 Bonus	Act	5%	CO area/cost
	Plan	5%	center
Cost Center 43	Act	7%	
	Plan	7%	
Cost Center 4320	Act	7%	
	Plan	7%	

Overhead calculation for a particular cost center is based on **dependencies**.

For the key with dependency "CO area", the system checks whether the controlling area overhead type (actual/plan) has overhead rates and uses these. This is the case with base A-Z1.

For the key with dependency "CO area/cost center", the procedure takes place in two steps.

In the first access, the SAP system checks whether the current controlling area has overhead rates maintained in the overhead for the given cost centers. This is the case for 43 and 4320, with rates of 7% for each.

For the others, no overhead exists, and the procedure moves to the second step, searching for overhead in the entire controlling area.

Here, in plan and actual, the system finds a rate of 5% that applies to all employees.

The sample accrual **SAP000** can be displayed or used as a reference copy for a custom overhead structure.

Requirements

To change an existing overhead structure, you need authorization for changing structures in all controlling areas using this structure.

To create a new overhead structure, you need authorization for creating structures for the controlling area to which you want to assign the structure.

Standard settings

The standard system includes overhead structure **SAP000**.

Activities

Create an overhead structure or change an existing one.

To create a new overhead structure, choose *Create*.

Enter the key and name and choose *Save*.

Go to the detail screen of your overhead structure.

Specify a separate row number for each calculation base.

Enter a key for the calculation base.

If you specify a calculation base that does not exist yet, the SAP system will propose creating it automatically.

Maintain the overhead.

Specify a separate row number for each overhead key.

Determine on which calculation bases the overhead will be calculated.

If the overhead key does not exist, you can have the system create it automatically. Then enter the dependency with which the overhead rates are to be determined.

Maintain the credit key for every row with an overhead key. You can have the SAP system create this as well, if it does not exist yet.

Assign the overhead structure to a controlling area.

Note on transport

To transport accrual calculation data, a separate function is available in Customizing under *Controlling -> General Controlling*.

Further notes

Business Aspects of Accrual Calculation

Business expenses are often allocated differently in Financial Accounting than in Cost Accounting.

If the expense is incurred for the whole fiscal year, you must allocate it in Cost Accounting to reflect the relevant periods and origins. This allocation lets you avoid cost fluctuations within Cost Accounting.

We refer to the uniform distribution of a one-off expense as "accrual calculation". You can use accrual calculation to take into account anticipated costs.

For more information on accrual calculation, see the SAP Library under *AC - Financials -> CO - Controlling -> Cost Center Accounting -> Period-End Closing -> Accrual Calculations*.

Utilities for Maintenance of Accrual Calculation

Access to accrual calculation maintenance is made through a tree structure in which you will find an access screen with a list of all available overhead structures and their uses in the different controlling areas. You can create menu-controlled alternative views of these lists, such as a controlling-area-related display. The list steps for the overviews can be expanded or contracted interactively.

A number of utilities, briefly explained below, are available for the maintenance for calculating accrual.

Assignments of overhead structures

If you select an overhead structure from the list and choose **Allocations -> Display assignments -> To overhead structure**, you receive an overview of the controlling areas, posting periods, and versions the structure is assigned to.

Assignments to the controlling area

The function *To controlling area* likewise displays in which controlling areas the structure appears.

Assignments of unused structures

Choose **Assignments -> Structures not used** for an overview of the structures not assigned to controlling areas. You can choose a structure from the list to make an assignment.

Delete overhead structure

Choose **Overhead structure -> Delete structure** to delete existing structures and/or assignments to the controlling area.

When selecting this function, you receive a selection list and can determine which data is to be deleted.

Change name

Choose **Edit -> Change name** to change the structure name. The structure's key (for example, SAP000) cannot be changed.

To change the key, you must copy the structure to a new name and then delete the origin structure. These functions are located under *Overhead structure*.

Set controlling area

If you make controlling area-dependent settings, the SAP system requests that you choose a controlling area. For subsequent data maintenance in other controlling areas, you must choose *Extra -> Set controlling area*.

Assignments to controlling area

To assign overhead structures to the "set" controlling area, choose **Allocations -> controlling area** depending on posting periods.

Actual postings

For actual postings, assign exactly one overhead structure to the controlling area.

Plan postings

For plan accrual, assign the overhead structure of the version.

Note that you cannot assign the structures to special periods. The system uses the structure of the last posting period for accrual calculation in special periods.

Environment data

Choose *Environment data* to branch to other processes and the maintenance of further object components:

Calculation base

Overhead rates

Credit

Target=actual credit

The SAP system branches each time to an overview screen where you can change or delete the available keys, create new keys, and store controlling area-specific definitions. Alternatively, you

can directly select the key for the base, the overhead, and the credit in the detail screen of the overhead structure to allocate values for the set controlling area.

If you want to maintain credits for all business areas, proceed as follows:

Choose **Maintain accrual calculation**.

Select the overhead structure.

Choose *Structure*.

Select a row in which a credit is displayed.

Choose *Goto -> Credit.*

Enter the controlling area.

Program Enhancements for Copying Plan and Actual Data

In addition to the standard function for copying planning or actual data, SAP provides the enhancement COOMKPT4, with which you can adapt the above-mentioned programs to your specific requirements:

COOMKPT4
Before the data that is imported for copying is transferred to the planning data interface for checking and updating, you can process this data. Callup the enhancement per planning transaction (RKP1, RKP2 etc.).

This SAP enhancement includes the following enhancement components:

EXIT_SAPMGPT4_0 Copying costs

EXIT_SAPMGPT4_020 Copying quantities and prices

Example

SAP supplies the following examples on using the enhancement components for copying actual data to planning:

Grouping of detailed cost elements in actual with cost elements in plan

Using sets

Entering missing data in actual periods in plan with average values from actual

These example routines can be found in report program **LXKPT4F01**

Activities

Create the enhancement.

You can edit the SAP enhancement in SAP enhancement management. For this purpose, choose Tools -> ABAP workbench -> Utilities -> Enhancements -> Project management Create either a new project or use an available project.

Activate the project.

Only through activation does your enhancement becomes effective.

Further notes

Unlike modifications, enhancements are generally compatible with any release because they are not part of the SAP original and reside in a name range reserved for the customer.

Information on the procedure when using enhancements can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function Exits".

For more information on the enhancement, refer to the documentation of the enhancement. You can find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Plan Data Transfer

In this section you make settings for transferring plan data from other SAP applications. You can transfer plan data from the following modules: - Personnel costs from HR (Human Ressources)

Depreciation and interest from AA (Assets Management)

Key figures from the LIS (Logistics Information System)

Scheduled activity from PP (Product Planning)

For more information on transferring planning data, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Utilities -> Transferring Plan Values from Other Application Components*.

Transfer Personnel Costs from HR

You can transfer planned personnel costs from Personnel Cost Planning in HR (Human Resources) to Cost Center Planning, where these two applications exist in two systems both at Release 4A or later.

In pre-4A Releases, the user initiates transfer of planning data from HR manually. As of 4A, the system transfers personnel costs to cost center accounting automatically provided a cost center is set in personnel cost planning.

The settings that you make for data transfer are hierarchically structured in the system as follows:

Planning source

Settings per fiscal year

Settings per source system

Settings per source version

In the **plan source** you enter the source of the data that you want to transfer from personnel cost planning to cost center accounting. You can specify the plan source in more detail using the following settings:

Settings per fiscal year

Under **Settings per fiscal year** you define in which controlling area, fiscal year, up to which date, and in which version of the SAP system, personnel costs are to be transferred to cost center accounting.

Settings per source system

Under **Settings per source system** you specify which logical system you want to use to transfer data. You maintain this level of the structure tree whenever you use multiple HR systems and you want to transfer the personnel costs in these systems to different CO versions.

Settings per source version

If you want to transfer personnel costs from several HR systems into cost center accounting, you use externally defined reference keys to specify what data is to be transferred to cost center accounting. You enter these reference keys under **Settings per source version**.

At each navigation level of the structure tree, you can specify whether the system

Overwrites the data that exists before transfer takes place, or

Adds the values transferred to the existing data

Requirements

You are working in a scenario with different systems.

Activities

To make your settings for transferring personnel costs to cost center accounting, proceed as follows:

Check the settings in the standard system.

If you are not able to use these settings because they do not meet your requirements, proceed as follows:

Choose *New Entries* and define a new plan source. Enter an explanatory text.

Select a plan source and choose *Settings per fiscal year* from the structure tree.

Choose *New Entries* and enter a controlling area, a fiscal year, a date, and a version.

Select a row and choose *Settings per source system* in the structure tree.

Choose *New Entries* and enter a logical system, a date, a version, and an explanatory text.

Select a row and choose *Settings per source version* in the structure tree.

You can narrow down the work area by entering reference keys.

Save your entries.

Note

You do not need to maintain every level of the structure tree.

The resulting transfer scenarios vary according to your system landscape which in turn determine which levels you run through when making your settings for data transfer.

Further notes

For more information on transferring planning data from HR and on special settings in HR, see the *SAP Library* under *Human Resources -> PA Personnel Management -> Compensation Management (PA-CM) -> Personnel Cost Planning -> Integration with Controlling (CO)*.

Transfer Depreciation, Interest and Investments from FI-AA

Here, you transfer the depreciation and interest that is periodically calculated for a fixed asset in Asset Accounting, together with the planned investments in an asset. You transfer these values to primary cost planning in Cost Center Accounting.

Further notes

For more information on the procedure for transferring data, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Utilities -> Transferring Plan Values From Other Application Components -> The Cost Center Accounting/Asset Accounting Interface -> Transferring Data from the AA Application Component*, and under *Financials -> FI Financial Accounting -> FI Asset Accounting -> Processing for Closing -> Primary Cost Planning -> Carry out Cost Planning*.

Transfer Scheduled Activities from PP

In Production Planning, you carry out preliminary planning based on individual work center capacity. You can copy PP scheduled activity to Cost Center Accounting. You specify parameters for a version and a fiscal year at the CO area level. The parameters control the transfer of scheduled activity:

Further notes

For more information about the transfer of scheduled activities from PP, see the *SAP Library* under *Financials -> Controlling -> Cost Center Accounting -> Cost Center Planning -> Utilities -> Transferring Plan Values from Other Application Components -> Transfer Services Required by Production -> Transferring Production Activity Requirements*

Notes on Transport

A separate function exists for transporting the parameters for transferring scheduled activities from PP. This function is located under *General Controlling* in Customizing.

Statistical Key Figure Transfer From LIS

In this section, you learn how to transfer plan key figures from the Logistic Information System (LIS) to cost centers and cost center/ activity types.

Further notes

For more information on the search strategy for LIS key figures, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Statistical Key Figures*.

Define Link Between Statistical Key Figures and LIS

To be able to transfer statistical key figures from the Logistics Information System (LIS) to Cost Center Accounting (CCA), you need to create a link between the statistical key figure in CCA and that in LIS.

You can activate the interface in the master data of the relevant statistical key figure in CCA. This enables the later automatic transfer of key figures from the LIS to CCA.

To find key figures in the LIS, two methods are available:

Find via info-structures

Info-structures are database tables administered by the SAP System and automatically updated with the different LIS key figures from a particular area or application.

Find via info-sets

Info-sets also serve to divide the LIS key figures. Here, however, even finer differentiation can take place.

Info-structures and info-sets are defined within Logistics Controlling.

Requirements

You have completed the Customizing activity Activate Cost Center Accounting in Controlling Area.

Activities

Enter the statistical key figure for which you want to create a link to the LIS.

Choose the pushbutton "Link LIS".

Decide whether to use info-structures or info-sets in the search for the key figure in the LIS.

Find the desired key figure in the LIS.

The search via info-structures takes place through the choice of application and info-structure.

The serarch via info-sets takes place through the continuing choice of info-sets.

The information on the corresponding LIS key figure are displayed in the statistical key figure basic screen.

Notes on transport

To transport statistical key figures, a separate function is available in *General Controlling* Customizing.

Define Assignment of Cost Centers to Key Figures

In this IMG activity, you maintain the assignment of one or more statistical key figures to a cost center. You thereby determine which key figure from the LIS is transferred to which cost center.

The assignment takes place via a variant, which you can create in the assignment framework. Variants can be used to delimit with characteristic values the LIS database area from which the key figures are to be transferred. Characteristic values are

Sold-to party

Material - Division

Sales organization

Distribution channel

Example

You wish to transfer the number of invoice receipts for cost centers of Accounts Payable.

Cost center 1 maintains customers A-K and cost center 2 L-Z.

The corresponding definitions ensure that cost center 1 receives the invoice receipts for customers A-K and cost center 2 those for customers L-Z.

Afterwards, the key figures are transferred from the LIS via a transfer transaction and posted on the cost centers a statistical key figures.

Periodic allocations such as assessment can be used for these key figures as tracing factors. It is possible to assess the costs of data processing based on the automatically transferred key figures and charge them to cost centers 1 and 2.

Requirements

The LIS and the modules from which the key figures are to be transferred are active.

You have created statistical key figuresand set up a link to the LIS.

You have created the cost centers for which the key figures are to be transferred.

Activities

Determine which key figures are to be transferred from the LIS.

Determine which key figure is to be transferred to which cost center.

Enter a cost center, version, and fiscal year for which the key figures are to be transferred.

Create variants.

If you do not enter any delimitations via the characteristic values, the SAP system chooses the key figure from the entire LIS database.

Assign a variant to each key figure.

Save your entries.

Note on transport

For the transport of the settings for transporting activity-independent key figures from the LIS, an individual function is available in Customizing under *Controlling -> General Controlling*.

Define Assignment of Cost Centers/Activity Types to Key Figures

By maintaining the assignment of one or more statistical key figures to a cost center (dependent on an activity type), you determine which key figure is transferred to which cost center/activity type.

The assignment is made with a variant, which is created in the assignment framework. A variant can be used to delimit the area of the LIS database from which key figures are taken using characteristic values:

Sold-to party

Material - Division

Sales organization

Distribution channel

Example

You want to adopt the statistical key figure for order items (AUFPOS) for cost center "Purchase", activity type "Test". To do so, create the link to the Logistics Information System (LIS) in the master data:

Select value source "A" (Automatic Selection of Key Figure)

Select info structure "S001 Customer".

Select LIS key figure ANZAUPOS.

For the data adoption, enter statistical key figure AUFPOS as well as a variant.

The SAP system uses the value in ANZAUPOS from the LIS for statistical key figure AUFPOS for the given combination of cost center and activity type.

Requirements

The LIS and modules from which key figures are taken must be active.
You have created statistical key figures and linked them to the LIS.

You created the objects (cost centers, activity types) for which the key figures will be transferred.

You have completed activity type planning for the cost centers and activity types for which you wish to transfer key figures.

Activities

Determine which key figures will be transferred from the LIS.

Determine which key figure will transfer to which cost center/activity type.

Enter a cost center, version, and fiscal year for which key figures are transferred.

Create the variants.

If you do not make any limitations on the characteristic values selected, the SAP system takes the corresponding key figures from the entire LIS database.

Assign a variant to each key figure.

Save your settings.

Note on transport

For the transport of settings for the transfer of activity-dependent key figures from the LIS, an individual function is available in Customizing under *Controlling -> General Controlling*.

Data Transfer from External Systems

During external data transfer, the system distinguishes between

plan data

actual data

The SAP system checks the data to be transferred just as in the corresponding dialog functions.

Transferring external data to the SAP system requires ABAP programming experience, as you have to create your own transfer program. SAP provides sample programs to make this task easier. These sample programs contain callups for function modules that control the data transfer.

Further information

Detailed information on the procedures and execution of external data transfer can be found in the *SAP Library* under *Financials -> Controlling (CO) -> Controlling -> CO External Data Transfer*.

Allocations

In this section you make settings for the allocation of plan data.

Define Plan Overhead Rates

You can calculate both plan and actual overhead rates

For details of how to define overhead rates, see the section Actual Postings -> Overhead Rates.

Activities

Define your overhead rates in the plan.

For more information, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Planning Overheads*.

Distribution

In this section, you make settings for plan distribution.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Distribution*.

Specify Receiver Types for Distribution

When making distributions you can specify which table fields are active and whether, in cycles, a single value, an interval, or a group can be entered for these fields.

You make these settings per controlling area and separately for plan and actual data respectively.

If you change the attributes for a field that is already used in cycles then:

If you change individual values, groups, and intervals that have a "to" value, the system deletes the corresponding data records from the table.

If you change intervals with "From" values, the "To" values are deleted from the table.

Example

You use assessments on cost centers, but would always only like to touch upon cost center groups as a receiver.
By deleting the character of the table field 'Cost center' in the fields for input-readiness as a single value and in the interval in the area of receiver, you discover that only one group can be entered with the definition of the assessment cycle as a receiver for cost centers.

Allocation type	Assessment
Act./Plan	Act.

	Field	Cost center
Field properties		
Activ ind.	Input ready	Input ready	Input ready
+ Sender	X Single value	X Interval	X Group
+ Receiver	_ Single value	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of an assessment as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value
Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen. This retrieves the original standard values for a table field.

Save your changes.

Notes on transport

To transport assessment field attributes manually, choose *Table view -> Transport*.

Define Distribution

In this activity, you define distributions in the form of cycles by specifying rules for the settlement of primary costs on a cost center.

Recommendation

Check whether distribution can be replaced here by periodic reposting or assessment in order to achieve better system performance.

You can use assessment if the origin of the primary costs is not important. If required, you can use multiple assessment cost elements for differentiation.

Periodic reposting is recommended if the origin of primary costs is important, but the partner object does not need to be displayed directly. The partner information, however, is not lost. Proof of origin is always possible via the line item document.

If you do need to show the partner object directly in the report, you must use distribution. The data volume will grow significantly for the proof of the partner objects, particularly in large distributions.

Note that the data volume generated for past periods will grow with increased numbers of periods. Especially in reporting and for data backups, it is important to keep the data volume generated by allocation to a minimum. For this reason, assessment or periodic reposting are to be recommended.

For performance reasons, you should not use more than 50 segments in one cycle. If necessary, define multiple cycles. A larger number of segments per cycle is only necessary for extensive iterations.

Also: For performance reasons, never use more than ,000 relationships in an allocation cycle. If you require more than that, you must plan a mass test of the allocations beforehand.

Example

From a sender cost center with 0 sender cost elements, allocations are made with one segment to 500 receiver cost centers.

The following numbers of sender and receiver totals records result from the different allocations that must be written in the processed period:

Allocation	Sender totals recds	Receiver totals recds

Assessment	500	500
Periodic reposting	0	500 x 0
Distribution	500 x 0	500 x 0

This simple example already demonstrates that

far more sender totals records are written for distribution than for periodic reposting

far more receiver totals records are written for periodic reposting than for assessment

In practice, because of the far higher number of senders and receivers, the advantages of assessment and periodic posting are even more apparent.

Activities

Create a plan distribution cycle by proceeding as follows:

Determine a name for the cycle.

Determine a validity period for the cycle.

Maintain the header data for the cycle by entering the following.

- Which currencies are to be used in the allocations
- Whether consumption is to be allocated or not
- Whether negative tracing factors are scaled or not
- Whether cycle processing is to be iterative
- In which version the allocation is to take place

Define cycle segments in which you store the following information.

- Sender cost element to be distributed
- Criteria for cost distribution to the receiver
- Sender objects
- Receiver objects

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.

To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Further notes

Distribution

During distribution, the following information remains:

Original primary cost element.

Information on the sender cost center is noted in the receiver cost center or receiver order.

Information on the receiver cost center or order is noted in the sender cost center.

For more information, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Defining Periodic Repostings or Periodic Allocations*.

Develop Authorization Enhancements for Distribution

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".
For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Assessment

In this section you make settings for plan assessment.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Assessment*.

Specify Receiver Types for Assessment

When making assessments you can specify which table fields are active and whether, in cycles a single value, an interval, or a group can be entered for these fields.

You make these settings per controlling area and separately for plan and actual data respectively.

If you change the attributes for a field that is already used in cycles then:

If you change individual values, groups, and intervals that have a "to" value, the system deletes the corresponding data records from the table.

If you change intervals with "From" values, the "To" values are deleted from the table.

Example

You use assessments on cost centers, but would always only like to touch upon cost center groups as a receiver.
By deleting the character of the table field 'Cost center' in the fields for input-readiness as a single value and in the interval in the area of receiver, you discover that only one group can be entered with the definition of the assessment cycle as a receiver for cost centers.

	Allocation type	Assessment	
	Act./Plan	Act.	
	Field		Cost center
Field properties			
Activ ind.	Input ready	Input ready	Input ready
+ Sender	X Single value	X Interval	X Group
+ Receiver	_ Single value	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of an assessment as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen. This retrieves the original standard values for a table field.

Save your changes.

Notes on transport

To transport assessment field attributes manually, choose *Table view -> Transport*.

Create Assessment Cost Elements

In assessment, the R/3 System converts the original cost elements cumulatively or in groups into assessment cost elements. The original cost elements are lost in this process.
Assessment cost elements are secondary cost elements.

Requirements

- Complete the IMG activity Maintain Controlling Area, found in the *General Controlling* section of the IMG under *Organizaton*.

Activities

Create secondary cost elements of category 42 (assessment cost element).

Note

For more information, see Maintain Cost Element.

Define Allocation Structures

If the assessment for each segment is not made with a pre-defined assessment cost element, you can assign the source cost elements to the desired assessment cost element in the allocation structure. During cycle definition, enter the allocation structure instead of an assessment cost element in the segment.

An allocation structure for the assessment consists of at least one assignment, stating the assessment cost element to which the source element is assigned. The original cost elements will already have assignments in the source.

Requirements

To define the assessment cost elements required for the allocation structures, you must first complete the IMG activity "Create Assessment Cost Elements".

Activities

Creating an allocation structure.

To create an allocation structure, proceed as follows:

Choose "New Entries".

Enter a name and text for the allocation structure.

Save the allocation structure.

Enter the assignments for each allocation structure. To make the assignments, proceed as follows:

Select the allocation structure, and then choose "Assignments".

Choose "New Entries".

Enter a name and text for the assignment.
Save the assignment.

Specify the source for each assignment.
To specify the source for an assignment, proceed as follows:

Select the assignment, then choose "Source".

Enter a cost element interval or a cost element group.

Save the source.

Enter the assessment cost element for each assignment.
To specify an assessment cost element for an assignement, proceed as follows:

Select the assignment, then choose "Assessment cost element".

Enter the assessment cost element you require.

Save your entries.

Further notes

For more information on the allocation structure, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Periodic Allocations -> Assessment*.

Define Assessment

You define assessments as cycles by specifying rules for allocating primary and secondary costs in the plan.

Requirements

You have completed the IMG activity *Create Assessment Cost Elements*.

If you are using an allocation structure, you must have completed the IMG activity *Maintain Allocation Structure*.

Recommendation

When using assessment, distribution, and periodic reposting, note the following:

You can use assessment if the origin of the primary costs is not important. If required, you can use multiple assessment cost elements for differentiation.

Periodic reposting is recommended if the origin of primary costs is important, but the partner object does not need to be displayed directly. The partner information, however, is not lost. Proof of origin is always possible via the line item document.

If you do need to show the partner object directly in the report, you must use distribution. The data volume will grow significantly for the proof of the partner objects, particularly in large distributions. Note that the data volume generated for past periods will grow with increased numbers of periods. Especially in reporting and for data backups, it is important to keep the data volume generated by allocation to a minimum. For this reason, assessment or periodic reposting are to be recommended.

For performance reasons, you should not use more than 50 segments in one cycle. If necessary, define multiple cycles. A larger number of segments per cycle is only necessary for extensive iterations.

Also: For performance reasons, never use more than ,000 relationships in an allocation cycle. If you require more than that, you must plan a mass test of the allocations beforehand.

Example

From a sender cost center with 0 sender cost elements, allocations are made with one segment to 500 receiver cost centers.

The following numbers of sender and receiver totals records result from the different allocations that must be written in the processed period:

Allocation	Sender totals recds	Receiver totals recds
Assessment	500	500
Periodic reposting	0	500 x 0
Distribution	500 x 0	500 x 0

This simple example already demonstrates that

far more sender totals records are written for distribution than for periodic reposting

far more receiver totals records are written for periodic reposting than for assessment

In practice, because of the far higher number of senders and receivers, the advantages of assessment and periodic posting are even more apparent.

Activities

Create an plan assessment cycle by proceeding as follows:

Enter a name for the cycle

Enter a validity timeframe for the cycle

Maintain the header data for the cycle by entering the following:

In which currencies the costs should be charged

Whether consumption quantities should be charged

Whether negative tracing factors should be scaled

Whether the cycle should be processed iteratively
In which version the cycle is valid

Create segments for the cycle that contain the following information:

The sender cost element to be distributed

Criteria to distribute the costs among the receivers

Sender objects

Receiver objects

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Additonal Notes

Notes For Working With A Delta Version

Please note the following during cycle definition:

If you select a delta version, the following **additional** allocation characteristics are available for segment definition:

Business processes and/or groups

External value added

Internal value added

Type
The receiver objects "order" and "WBS element" become invalid.

Develop Authorization Enhancements for Assessment

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle
This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Activity Allocation

In this section you make settings for activity allocations and for splitting.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations*.

Indirect Activity Allocation

In this section you make your settings for the indirect activity allocation of plan values.

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Indirect Activity Allocation*.

Determine Send/Recv Categories for Indirect Acty Allocation

For indirect activity allocation you can determine which table fields are active and whether, in cycles you can enter a single value, an interval, or a group for these fields.

You make these settings per controlling area, and separately for plan and actual data respectively.

Example

You use indirect activity allocation for cost centers, but want to use only cost center groups as receivers.

Remove the table field indicator "Cost Center" in the fields for individual value entry readiness and in the receiver area interval to ensure that you can only enter groups as cost center receivers during cycle definition.

	Allocation Cat:		Indirect Activity Allocation
	Actual/Plan:		Actual
	Field:		Cost Center
Field Characteristics:			
Active Indicator	Entry-Ready	Entry-Ready	Entry-Ready
+ Sender	X Indv. Valu	X Interval	X Group
+ Receiver	_ Indv. Valu	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of an indirect activity allocation as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:
Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen.
This retrieves the original standard values for a table field.

Save your changes.

Notes on transport

To transport indirect activity allocation field attributes manually, choose *Table view -> Transport*.

Define Activity Types for Indirect Activity Allocation

You use indirect activity allocation for those activity types for which activity quantities cannot easily be determined.

It is important to distinguish between the following cases:

Sender activities can be summarized
The sender allocates activities to the receivers based on receiver tracing factors.

Sender activities imposssible or difficult to determine The sender allocates these activities:

Using receiver tracing factors and sender weighting factors

Using specified fixed amounts

Activities

Create activity types of category 3 for sender activities which can be summarized.

Create activity types of category 2 for sender activities which are impossible or difficult to determine

Note

For more information, see Create activity types.

Define Indirect Activity Allocation You determine rules for indirect activity allocation in the form of cycles.

For cost centers with activities that cannot be measured or measured only with great difficulty, the activity quantities can be determined indirectly.

In indirect activity allocation, the usage of sender activities (cost center/activity type) is determined via tracing factors from the viewpoint of the activity receivers.

The tracing factors are defined as in assessment or distribution.

Requirements

You must maintain activity types for indirect allocation in actual and plan.

The requirement for indirect activity allocation in actual and planning data is that all senders and all receivers of the cost object cost center/activity type are included in activity type planning for activity type category 3.

You enter activity quantities for activity type category 3 ("Manual entry, automatic allocation") for **planning data** with activity type planning.

Note:

Planning activity quantities with the aid of activity type planning is only possible for activity type category 3. For activity type category 2 the SAP system automatically creates a cost center/activity type record. Sender activity quantities are indirectly determined from the receiver tracing factors and through fixed quantities.

For **actual data**, a posted sender activity quantity can be created by entering non-allocatable activities.

Note:

Entering posted activity quantities for activity type category 3 is not possible, since the activity quantities are indirectly determined.

The requirement for indirect activity allocation in actual and planning data for activity type category 2 is that a value NOT equal to zero is entered in the segment definition for the sender-specific weighting factors with the function *Sender values*. Only then will the corresponding record be included in the activity allocation. Examples for Indirect Activity Allocation

Activity types of category 3, "Manual entry, indirect allocation"

The cost center "Quality control" produces 00 hours of activity type "Test". Activities go to cost centers "Goods receipt" and "Finished products". The allocation is made on the basis of the tracing

factor "Number of test items" (NI). For "Goods receipt" these are 4000 items, for "Finished products" 6000.

Price per activity unit for "Quality control" equals 50 USD/hr. The resulting costs of activity production equal USD 50,000.

The receiver centers are debited **according to the tracing factor** with the following costs:

Goods receipt: (50,000 X 4000 NI) / ,000 NI = **$ 20,000**
Finished products: (50,000 X 6000 NI) / ,000 NI = **$ 30,000**

Activity types of category 2, "Indirect entry, indirect allocation"

Activity determination for the sender takes place via receiver tracing factors and weighting factors defined for each sender. The sender rule here is usually "Indirectly determined quantities"; receiver rule can be any rule.

Using the example above, the receiver tracing factors are:

"Goods receipt"	4000 NI
"Finished products"	6000 NI
Total	,000 NI

The sender is credited with ,000 test items. This amount can be valuated with weighting factors defined per sender activity type. Weighting factor, activity type "Test": 0

Debiting of the sender and the activity type "Test" are thus equal to

(50,000 / ,000 NI) X ,000 NI X 0,4 = **$ 20,000**

Activities

Create a cycle for indirect activity allocation as follows:

Determine a name for the cycle.

Determine a date as of which the cycle is to be valid.

Maintain the header data of the cycle by specifying the following:

- an explanatory text
- the date to which the cycle is to be valid
- whether negative tracing factors are to be standardized

Define cycle segments in which you store the following information:

- a name and text for each segment
- the sender values
- the tracing factor

the selection criteria (sender objects and receiver objects)

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Further notes

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Indirect Activity Allocation* or in *Period-End Closing -> Defining Periodic Repostings or Periodic Allocations*.

Information for Indirect Activity Allocation

Indirect activity allocation consists of two subfunctions which you can enter as required in a cycle. However, one segment can cover only one subfunction in each case:

Sender activity quantities are known and can be entered as totals. Using indirect activity allocation, the posted activity quantities are distributed from senders to receivers according to the tracing factors defined in the segment.

segment uses this method if *Posted quantities* (rule 1) is the sender rule and *Fixed quantities* (rule 2) is NOT a receiver rule.

In a segment to distribute posted sender amounts, you can use activity types of category 3 *manual entry, indirect allocation* only.

Sender activity quantities are not known because measurement is either impossible or not feasible (for example, a joint office working for several cost centers). However, the SAP system can derive sender activity quantities indirectly, based on receiver tracing factors adjusted with a sender-specific weighting factor.

segment uses this method if *Indirectly determined quantities* (rule 3) is the sender rule, or if *Fixed quantities* (rule 2) is a sender or receiver rule. Using the *Sender values* function, you can determine sender-specific weighting factors for the sender rule *Indirectly determined quantities*. The default value is "1".

In segments for indirect calculation of sender activity quantities you can only use activity types of category 2 *indirect entry, indirect allocation*.

Senders and receivers in indirect activity allocation

In indirect activity allocation for actual and plan data, **senders** can be objects of the category *cost center/activity type* or **business processes**.

In a given segment, you can use category 2 or category 3 activity types only.

In indirect activity allocation for **plan data**, all usual CO objects are possible (cost center, cost center/activity type, orders, projects, etc.) as **receivers**

All of these receiver categories can appear in a cycle. However, cost objects of the category cost center/activity type may not be combined with other receiver categories.

In indirect activity allocation for **actual data**, you can use the same cost objects as receivers as in manual activity allocation, meaning **no** cost centers/activity types.

Fixed and variable activity references; evaluating activity quantities

In indirect activity allocation for **actual data**, all quantities are posted as total quantities. The division into fixed and variable quantity parts is carried out through actual cost splitting.

In indirect activity allocation for **plan data**, the determination of fixed and variable quantity quotas depends on the receiver category:

Receivers of the category cost center/activity type post all activity quantities as variable quantities, with tracing factors dividing actual and plan activity into fixed and variable quantity parts.

For all other receivers the receiver quantities are posted as fixed.

If an activity price is available for a sender object, the activity quantities of the sender and the corresponding receivers are valuated using this activity price.

Updating the databases

The activity quantity updated on the senders is determined either from read/posted sender quantities (subfunction 1) or from indirectly calculated activity quantities based on receiver tracing factors or predefined sender quantities/receiver quantities (subfunction 2). The activity quantity thus determined is posted to the respective sender as activity output (quantity credit) and to the respective receiver as activity-dependent or activity-independent activity input in relation to their tracing factors (quantity debit). The indefinite credit rate is updated for plan data as well (with activity type category 2).

Additionally, the following activity postings are based on the sender activity quantities:

If available quantities are distributed (subfunction 1), the scheduled quantity are updated. If the sender activity quantities are indirectly determined or fixed, the activity quantity is also updated in addition to the scheduled quantity.

In actual indirect activity allocation, all quantities are treated as fixed quantities.

You use indirect activity allocation in activity price calculation.

Develop Authorization Enhancements for Indirect Activity Allocation

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001

Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001

Execute customer exit for cycle authorization check

Activities

Create the enhancement

To do so, either create a new project or use an available project.

Activate the project.

Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Template Allocation: Plan

In this section you make your settings for template allocation of plan values. For information on creating a template see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Template Allocation in Plan*.

You can use the template to make allocations for cost centers/activity types, and to allocate processes to cost centers. Special environments exist for each way in which a template can be used.

The environment determines what row and column types are available to you in the template to be created.

Define Environments and Function Trees

In this step you maintain:

Function trees

Structure nodes - Function references - Functions.

The basis for the maintenance of the object is always the chosen environment.

Environment

The Template's environment determines the information of the SAP-environment and the external system that can be accessed. Basically, the functions relevant to each context are already provided in the corresponding environment. Environments always contain a row of sub-environments which group functions by theme; these include material, BOM, routing, and others.

The standard system delivers the following environments:

Template allocation (for cost objects, profitability segments,
business processes, cost centers/activity types)

Formula planning (business processes, cost centers, profit centers)

Standard cost estimates

Process quantity determination (SOP/LTP)

Easy Cost Planning/Internal Service Request

Recommendation

Use the sub-environments provided by SAP as much as possible. When you assign an function to a sub-environment, it is automatically available in all the main environments containing this sub-environment.

Further notes

For more information on environments and a list of these and their sub-environments go to the help for applications of Activity-Based Costing under "Template -> Template Environment".

Function Tree

A function tree is a user-defined hierarchy which structures or groups functions. With the Help for function trees, you can structure groups of functions available in each environment according to their their theme or emphasis. Functions are then processed from here on.

A function tree is assigned to an environment and consists of nodes and function nodes.

Environments: all environments are displayed when you call up the n transaction. Environments themselves cannot be changed or deleted. The creation of new environments is also not possible.

Function trees: the first level under environments. You can subordinate nodes or function nodes to a function tree.

Nodes: nodes are always subordinate to function trees or other nodes. You can subordinate other nodes to a node or function node. In function trees SAP1, nodes contain sub-environments.

Function nodes are always subordinate to function trees or nodes. They always refer to a function.

SAP standard delivery for all environments includes function tree SAP1 (for example, for environment 001, function tree SAP1-001). This contains all standard nodes (sub-environments) and function nodes (with reference to the respective function).

Activities

The transaction provides you with left and right screens. The left one displays the existing environments. You can expand the hierarchy and view the function trees, nodes and function nodes in their hierarchical structure. Place the curser on an object you want to process.

The right screen details of the chosen object (environment, function tree, nodes or function nodes) in list form. If you double click on a funciton node you will see the maintenance screen for the functions.

Further notes

For more information see Application help for Activity-Based Costing:

AC-Financials -> CO-Controlling -> Activity-Based Costing -> Template -> Function tree -> Maintain function tree or *Template -> Template environment -> Maintain functions*

AC-Financials -> CO-Controlling -> Cost center accounting -> Cost center planning -> Aids -> Formula planning -> Template -> Template environment.

Maintain Templates

Here you maintain templates.

Applications

Each purpose (application) of a template requires a special environment. Before creating a template, choose an environment. The environment determines which row and column types are available, for example.

The available applications include the following:

Template allocation to cost objects, or use in standard cost estimates for cost objects and materials (environments 001 - 012)

Template allocation to business processes, cost centers, or cost centers/activity types (environments SBP, SCI, SCD)

Template allocation to profitability segments (environment PAC)

Formula planning (environments CPI, CPD, BPP, PCA)

Calculation of output quantities (environment SOP)

Easy Cost Planning/Internal Service Requests (environment 200 - 299)

Structure

A template consists of rows (items) and columns. The row and column types available to you depend on the environment.

Columns available include:

Type of row, such as business process, cost element subtemplate, or calculation row

Name of the item

Object, such as the name of the process, cost element, subtemplate, or calculation row

Quantity (actual/plan), such as the process quantity or statistical key figure quantity

Activation (actual/plan)

Allocation event (template for cost objects)

Activities

To maintain a template, you must edit the initial and overview screens, from which you can access various editors.

Initial screen

Enter the name of the template that you want to create or edit.

Enter the environment of the template.

Choose *Enter*.

Overview screen

If the template is new, enter a name for it.

Select the row type.

Enter a name for the row.

Edit the other columns. Use the mouse or the tab key to reach the individual columns. Double-clicking on particular column types (such as object, quantity, activation, or allocation event) brings you to the editor or function selection.

Once you have entered or edited all rows, choose *Template -> Save*.

Further notes

Detailed information is available in the Application Help for the transaction, or in the *SAP Library* under **Financials -> Controlling -> Activity-Based Costing -> Template -> Maintaining Templates**.

Assign Templates for Cost Centers

You create the link between cost center and formula planning in the master record of the cost center in question.

You assign templates to those cost centers for which you want to determine planned values using formulaplanning, or which are to be receiver objects for template allocations.

Activities

You can also define templates when maintaining master data.

In the cost center master record, choose the *Templates* tab.

On the *Templates* tab, choose *Create*.

You can now change or display existing templates or display an allocation structure with the template.

If you have already defined templates, you can enter these on corresponding tab.

If you want to determine activity-independent planned costs for the relevant cost center, enter an activity-independent template in the *Aty-ind. formula temp.* field.

If you want to determine activity-dependent planned costs for the relevant cost center, enter an activity-dependent template in the *Aty-dep.formula tmp.* field.

If you want to carry out an activity-dependent activity allocation for the cost center in question, enter an activity-dependent template in the *Aty-dep.alloc.tmp* field.

If you want to carry out an activity-independent activity allocation for the cost center in question, enter an activity-independent template in the *Aty-ind.alloc.tmp* field.

Save your entries.

Further notes

For more information on cost center master data, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting -> Cost Centers -> Cost Center Master Data*.

Splitting

In this section you define a splitting structure, used to split activity-independent costs (belonging to cost centers) between activity types. You assign this structure to the corresponding cost centers.

For more information on cost splitting, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Plan Cost Splitting*.

Define Splitting Structure

Splitting structure determine how and what selected activity-independent costs from a cost center are divided between the activity types. This applies to both plan and actual costs.

A splitting structure consists of one or more assignments, which define the connection between the cost element(s) or cost element group to be split and the splitting rule used to divide the

costs.

Each splitting rule is based on a splitting method; for example, splitting costs based on statistical key figures.

After you define a splitting structure, you must assign it to the cost centers on which you want to split costs according to the given rules. You can assign a structure to:

All cost centers

All cost centers in a given group

All cost centers in a given interval

The structure can apply to a single version or to all versions in a controlling area for a fiscal year.

Splitting Example

Activities

Create a splitting structure or change an existing structure.

To create a splitting structure:

In the overview screen for structure maintenance, choose *New entries*.

Enter a two-character key for the structure, a text, and save your entries.

Define assignments for the splitting structure.

Select a structure and choose *Assignments* in the structure tree.

Choose *New entries* and include the required entries with a two-character key and descriptive text.

For the assignment, define according to which rule splitting should be carried out. You can define new rules or use existing ones.

Select an assignment and choose *Selection for assignment* in the structure tree.

Choose *New entries* and define which cost element, which cost element interval, or which cost element group is valid for this assignment.

Save your settings.

Define splitting rules

To create new splitting rules, proceed as follows:

Select an assignment and choose *Splitting rules* in the structure tree.

Choose *New entries* and enter a key for the rule along with a text and procedure. Use the "Weighting" indicator to control whether cost splitting uses weighting of tracing factors.

Define the selection criteria for the splitting rule.

Select a splitting rule and choose *Selection for rules*. Choose *New entries*.

If necessary, enter a version.

If the splitting method is based on statistical key figures, you *must* enter a statistical key figure, a key figure interval, or a key figure group as the selection criterion. Save the selection criteria.

Additional Information

Check your structure to ensure that no inconsistencies could arise during splitting.

Inconsistencies can result from:

Overlaps or redundancies between individual values, intervals, and groups

Deletions of selection criteria, rules, assignments, or structures

In contrast to actual cost splitting, plan cost splitting consists of only a single splitting step. Splitting based on target costs is not possible in planning because actual data is not yet available for creating target costs.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Plan Cost Splitting* and under *Period-End Closing -> Variance Calculation -> Actual Cost Splitting*.

Note on transport

To transport splitting layouts, a separate function is available in the *General Controlling* section of the IMG.

Assign Splitting Structure to Cost Centers

If you want to split costs in the cost center to the activity types, you must assign a splitting structure to this cost center.

The SAP System splits costs per the rules that you set in the splitting structure.

Requirements

You have defined a Splittung Structure.

Activities

Determine the type of assignment to be defined:

Assignment of splitting structure for each cost center group

Assignment of splitting structure for all cost centers

Select the corresponding criteria in the initial screen.

Along with cost center/group, you can determine whether to make the assignment valid for one version or for all versions. The assignment is made for one fiscal year.

Choose additional cost centers from the list of non-assigned centers.

Choose the splitting structure (cursor) to which you wish to assign the cost center(s).

Choose *Assign* or *Edit -> Assign* to assign the cost centers the structure.

Save your entries.

Note on transport

The transport of assignments of cost centers to a splitting structure is accomplished by transporting the structure itself. A separate function is available the Customizing under *CO Controlling -> Controlling*.

Price Calculation

In this activity, you make settings for price calculation.

For more information on price calculation, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Plan Price Calculation*.

Change Basic Settings for Price Calculation

You can change the following SAP default control parameters for price calculation.

Indicator *Generate*.

Controls report generation for iterative price calculation.

Before running price calculation, the system generates the corresponding report on the execution. The number of entries in the associated internal tables is generated, as well as the parallel processing of field groups.

By entering realistic figures during performance problems, the storage capacities and runtimes can be improved significantly.

Because generation also requires some time, you should activate this indicator only for very large processing runs when problems occur. If the indicator is active, entering numbers in the fields mentioned above can be left aside.

Number of senders/receivers

The number of entries in the internal tables is also set if the generation indicator is activated itself.

Number of relationships between senders/receivers

The number of entries in the internal tables is also set if the generation indicator is activated itself.

Number of cost centers in the controlling area

The number of entries in the internal tables is also set if the generation indicator is activated itself.

Number of significant digits in the price unit

To achieve more accurate results, the price unit can be set. The activity price is thereafter not based on units of 1, but on units of , 0, 00, or 000. If the activity price per unit is already relatively high, but you nevertheless want greater accuracy for your prices, this results in even higher values. With the number of significant digits, you can limit this development. The moving of digits takes place until the number of significant digits is reached.

Example

If the price per unit is 333333333, and the significant digit number was set to 6, the price unit remains 1 and the price 333. For 12 significant digits, the unit would be 000 and the price ,333,333333.

Indicator for deactivating the optimization of the price unit

Deactivates the significant digit settings mentioned in the previous point. If this is chosen, the price unit is 1.

Tolerance percentage for reconciliation of actual and scheduled activity Activity planning should be reconciled when price calculation is called up. The plan activity of the activity type should equal the scheduled receiver activity quantity. Only in this way will a sensible price be determined. All activity types are checked for reconciliation and, if necessary, issues warnings or error messages.

Due to planning rounding differences, especially in period distribution, minimal variances may occur nevertheless.

Enter the percentage by which plan activity may vary from scheduled activity.

Indicator *Post anyway*.

Indicator for posting of price calculation results even if errors occur.

Exceptions are serious system errors resulting in program termination and errors occurring in update preparation (such as integration or document assignment problems). Normally, errors prevent update booking of postings. In online processing, the update can be repeated from the results list. In background processing, this is not the case.

Standard settings

Use the function *Set standard* to set the parameter values defaulted by the SAP system.

Recommendation

SAP recommends using the standard settings unchanged.

Changing settings to meet the requirements of your organization is useful only if your results vary greatly from the SAP default values.

The changes in generation factors can worsen the runtimes of price calculation.

Activities

Maintain the settings for price calculation according to your requirements.

Additional Notes

For more information about price calculation, see the SAP Library under *Financials -> Controlling (CO) -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Plan Price Calculation*.

Note on transport

To transport settings for price calculation, there is a function available in Customizing under *Controlling -> General Controlling*.

Settings for Cost Component Split

In this section you make settings for price calculation using cost component splitting.

Define Cost Component Structure

You require a cost component structure to calculate prices using cost component split.

For each cost component structure you define a cost component such as energy, personnel, or raw materials. The components combine all costs occuring for a particular cost element area. In this way, you ensure greater cost transparency in activity price calculation when putting together the activity type prices - for example, it becomes easier to find how much of the activity price is taken up by the material costs.

In activity allocation, the cost component structure remains constant, meaning that the receiver takes on the sender cost elements and that the allocated costs are posted in the same cost components in the receiver as in the sender.

A cost component structure can have a maximum of 40 defined cost components.

Cost components are assigned to cost elements. You thereby determine which cost elements go to which rows in the structure, and how these components are updated in price calculation.

The cost component structure must be stored independently of fiscal year in the version.

You can transfer cost component splitting directly as primary cost splitting to product costing, or you can use a transfer structure to transport it to the Product Cost Controlling component (CO-PC).

Note

You need only carry out the steps named in "Activity". Further settings for cost components are not necessary, as they are relevant for product costing only.

Activities

To use cost component splitting for price calculation:

Create a cost component structure or change an existing one.

- To create a new structure, enter a two-character key and an explanatory text.
  Otherwise, choose an existing structure and maintain it in the following steps.
- Save the cost component structure.

Define cost components

- Select the structure and choose the navigation level "Cost components with characteristics".
- If no components exist, choose "New entries". Otherwise, maintain the existing elements.
- Enter the structure, a key, and a short text for the component.
- Save your entries.

Assign the cost elements to the cost components.

- Branch to the navigation level "Assign Cost Component - Cost Element Interval".
- If no assignments exist, choose "New entries". Otherwise, maintain the existing elements.
- For each component, enter the structure, the chart of accounts, and the relevant cost element or cost element interval.
- Save your entries.

Enter the cost component structure in the fiscal year dependent part of the version's detailed information.

Further notes

For more information about the cost component structure, and price calculation using cost component splitting, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting - Period-End Closing -> Actual Price Calculation -> Price Calculation using Cost Component Splitting*.

Notes on transport

To transport cost component layouts, a separate function is available in Customizing under *CO Controlling -> Controlling*.

Define Switching Structure

You need to define a switch scheme, if within cost component split for price calculation you do not want a cost component split for primary costs only. In other words, where for an activity allocation, the allocated costs on the receiver are entered on a cost component different from that of the sender. You then determine which sender cost element is to be entered on which receiver cost element.

In price calculation, a cost component structure is used for price component splitting. This structure stores which cost elements are to be directed into which component.
For example, you can note in the cost component structure that material cost elements assigned to the sender component "Raw materials" and wage costs assigned to the sender component "Personnel" can be directed to the receiver component "Energy".

As the structure is used only with a specific combination of cost center/activity type, it is entered in the activity type planning of the sender. The corresponding planning structure for activity type planning using a switching structure is found in planner profile SAP4.

Activities

Create a switching structure if you require one To do
so, proceed as follows:

Assign an existing cost component structure to a switching structure.

Assign the structure's components to target components.

Save your entries.

Further notes

For more information and an example, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Actual Price Calculation -> Price Calculation with Cost Component Split*.

Note on transport

You can also transport switching structures manually. To do this, choose *Table View -> transport*.

Budget Management

In this section you make settings for budget management.

For more information, see the *SAP Library* under *Financials -> CO - Controlling -> Cost Center Accounting-> Cost Center Planning -> Manual Planning -> Budget Planning*.

Define Budget Planning Profiles

To prepare budget management, you need to:

Create new budget profiles

Maintain the field contents of cost-center-specific detailed information for the created profiles (= texts)

With the detailed configurations you can also list the defined budget profiles for budget planning of orders and financial planning along with the budget profiles for Cost Center Accounting.
Once you have created a budget profile, you can maintain the following detailed configurations for this profile relevant for Cost Center Accounting.

Budgeting analysis period

Past
: Valid analysis period extending into the past

Future
: Valid analysis period extending into the future

Start

Annual values, allowing annual value planning

Period values, allowing period value planning

Distribution key

Display

Decimal places

Scaling factor

Note

If budget planning is carried out in annual values and the budget profile is switched over at a later time to period values, the annual values will continue to be displayed.

The profiles do not have version features at this time.

Actions

Check whether the delivered profiles meet your requirements.

Create a new profile, if necessary, by choosing *New entries*, or copy an existing profile.

Enter a key for your budget profile.

Enter a description for your budget profile.

Maintain the detailed configurations for your profile by carrying out the following IMG activitys:

Choose your profile from the list of all budget profiles available for CCA.

Maintain the cost-center-relevant fields for your budget profile.

Save your entries.

Note on transport

To transport budget planning profiles, a separate function is provided in Customizing under *Controlling -> General Controlling*.

Commitments and Funds Commitments

In this section you make the settings necessary to activate Commitments Management, together with those required for Funds Commitments in Cost Center Accounting.

For more information on commitments management, see the "SAP Library" under *Financials -> CO Controlling -> Controlling -> Controlling Methods -> Commitments Management*.

For more information on Funds Commitments see the "SAP Library" under *Financials -> PS Project System -> Costs -> Funds Commitments (Cost Centers, Internal Orders, Projects)*.

Activate Commitments Management

To be able to use commitments management, you need to carry out the following steps:

Activate commitments management in the controlling area

Save a default value for commitments management in cost center types

Overwrite, if necessary, the default value in cost center maintenance

Requirements

You have completed the IMG activity Activate Cost Center Accounting in Controlling Area.

If you require user-defined cost center types, you must create these first.

Activities

Activate commitments management in the control indicators of your controlling area.

Store a default value per cost center type for the commitment management indicator. When creating new cost centers of this type, you can accept or change the default value.

If necessary, overwrite the default value in cost center maintenance. To do so in collective maintenance of cost centers, use *Goto -> Indicator*.

Note on transport

To transport controlling area settings, a separate function is available in Customizing under *Controlling -> General Controlling*.

Define Document Types for Funds Commitment

In this IMG activity, you maintain document types for funds commitment to classify the documents in Controlling. You can specify characteristics for every document type. These characteristics control the entries for the document or are themselves noted in the document.

For controlling, document type "CO" and field status group "G003" are allowed for in the standard. The field status group defines which fields are ready for input when you post documents in your controlling area. It defines which fields you need to fill and which are to be hidden.

Make the following entries:

Number range interval

If you wish to archive the posted documents, enter a residence time for each document type.

If required, you can specify which field contents should be transferred from the reference document.

Requirements

You need to define the number range interval in the IMG activity "Define Number Ranges for Funds Commitment ".

Notes

The Workflow is not supported by Controlling.

Define Number Ranges for Funds Commitment

In this IMG activity, you can change the number range interval for funds commitment.

This number range interval applies to all controlling areas and is assigned to number range object "Internal AC document".

Standard settings

The following number range intervals are reserved in the standard system:

Business transaction	Number range interval
Funds commitment	01
Fixed price agreement	
Fixed price allocation	11

Recommendations

Use the number range intervals supplied if possible.

Changes to number range intervals from which numbers have already been used may cause problems, therefore you need to check carefully before making such changes.

Activities

Change number range interval 05 as required.

Check the other number range intervals, as there cannot be any overlaps.

Notes on the transport

You transport number range objects as follows:

Choose *Interval -> Transport* in the accounting document *Number Range* screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

Field Control for Funds Commitment

Define field status variant

You can create and delete field status variants in this step.

You must then assign a field status variant to each FM area. You can enter a field status variant to as many FM areas as you want.

By assigning a field status variant and field status group to a field selection string, you can control the document entry for the various business transactions very differently in your FM areas. The field selection string determines which fields are optional, required or hidden when you enter documents.

Activities

Use the *New entries* option to create at least one field status variant.

Then use the step "Assign field status variants to FM area" to assign the field status variants to your FM areas.

Then use the step "Assign field selection string"

to assign field status variants and field status groups to the field selection strings.

If there are any field status variants you do not need any more, you can delete them by choosing *Edit-> Delete* .

Assign field status variant to company code

In this step, you assign a field status variant to each of your company codes. You can assign a field status variant to as many company codes as you want.

Activities

Make the assignments.

Define field status groups

In this step, you define field status groups. You must assign the field status groups, along with a field status variant, to a field selection string, and enter them when defining document types.

By defining the field selection string, you determine which fields are optional, required or hidden when you enter documents. The document types classify the business transactions (such as funds blocking and funds commitments) in Funds Management.

You can define separate field status groups for the various business transactions and control document entry by defining the field selection and document type accordingly.

Standard settings

There are field status groups defined in the standard.

Activities

Check the field status groups delivered in the standard system.

Choose *Edit -> New entries* to create new field status groups. There is a copy function available. To use it, select an entry in the standard list and choose *Edit -> Copy as*.

In the step Define field selection string, assign the field status group and the field status variant to a field selection string.

Remember to specify the field status group you need in the step Define document types.

Define field selection string

In this step, you can define the field selection strings - that is, you can specify which fields are ready for entry, required or hidden during Earmarked funds and transfers. In another step, you must assign a field status variant and field status group to the field selection string.

Activities

Determine which fields on the doucment entry screen are

ready for input

required

to be hidden
displayed only

Use the *New entries* option to create a field selection string, then choose *Maintain field status for field selection string*.

Choose a desired field status for each field.

If you mark the following fields as required entry, the fields are preassigned when entering an FM document and cannot be changed by the user:

FM account assignment changeable in the follow-on document

Use may exceed reserved amount without limit

Reduction only in local currency

Statistics indicators Funds Management

Subsequently, assign a field status variant and a field status group to the field selection string in the step "Define Field Selection String".

Assign field selection string

In this step, you assign a field status variant and field status group to a field selection string you want to use.

Activities

Enter the assignments you need.

Actual Postings

In this section you define general settings for actual postings. You can distinguish between:

Manual actual postings

Automatic actual data transfer

From other SAP applications

External systems

Period-end closing

Variance calculation

Further notes

For more information on actual postings, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Manual Actual Postings* or *Manual Actual Postings -> Funds Reservation* or *Period-End Closing*.

Manual Actual Postings

In this section you make settings for manual actual postings.

Edit Automatic Account Assignment

In this IMG activity you define automatic additional account assignments for postings to primary cost elements.

Automatic assignment occurs during postings in external accounting (within the FI, MM, or SD components) if you did not enter a CO account assignment object (cost center, order, or project) for a cost accounting relevant posting. This is always the case if the system automatically created the line item in question.

Examples of Automatically Created Items

Discounts, exchange rate differences, and banking fees in FI

Price differences and minor differences in MM

Possible automatic additional account assignments include:

Cost center

Order

Profit center (for revenue postings)

You can differentiate the additional assignment according to various criteria (such as company code, valuation area, business area).

Requirements

Complete the following IMG activities:

Activate Cost Center Accounting in Controlling Area

Maintain Cost Elements (for automatic assignments)

Create Cost Centers

In addition to cost centers, you must create the additional objects (such as orders or profit centers) if the system is to use these in automatic account assignment.

Activities

Enter the cost elements, including the company codes.

If you want account determination to run on the company code level, also enter the corresponding CO object (cost center, order, profit center) to complete the line items.

If you want account determination to run on the valuation or business area level, find the column "Mandatory fields for account assignments" and enter 1 (Valuation area mandatory) or 2 (Business area mandatory).

Choose "Detail by business/valuation area".

For each valuation or business area, enter the corresponding CO object (cost center, order, profit center) to complete the line item.

If you want account determination to run on the profit center level, find the column "Mandatory fields for account assignments" and enter 3 (Profit center mandatory).

Choose "Detail by profit center".

For each profit center, enter the corresponding CO object (cost center, order) to complete the line item.

Set the Priority business area indicator to ensure that the business area of the CO account assignment overrides other business areas.

Note on transport

To transport automatic account assignments, see the separate function in Customizing under *Controlling -> General Controlling*.

Further notes

Automatic Account Determination and Default Account Assignment

You can define automatic account assignments and defaults in the cost element master data record (Cost Center Accounting menu "Master data -> Cost element") or in the IMG using step "Maintain automatic account assignment". The cost element master data record can determine these assignments per controlling area, and the IMG per company code, business area, and/or valuation area. Both information sources appear for valuation at the following times:

Before new posting row data is entered (for example, during row-by-row entry of an FI document), the default account assignment is determined on the basis of company code and account number. The SAP R/3 System creates an assignment which is then displayed in front of the posting row and can be overwritten. Account assignment follows these rules:

If you used the IMG step for definition per company code, account, and business area or valuation area, the system does not find an assignment since neither business nor valuation area are known.

If you used the IMG step to save an automatic assignment per company code and account, this becomes the default.

If you did not save an automatic assignment in the IMG step, the defaultis taken from the cost element master data record.

If you do not enter a CO account assignment object for a CO-relevant row, the system searches for an automatic assignment. This is the case in particular for automatically created posting rows, such as for price differences, small amounts, exchange rate differences, or discounts.

The derivation uses the most detailed assignment available, meaning:

The SAP R/3 System searches first in the IMG assignment per company code, account, business area and/or valuation area. This is possible only if the business/valuation area is known for the posting row.

If the system finds no assignment, it continues by using the account saved in the IMG step, by company code and account.

Should this fail, the system uses the default value from the cost element master data record.

Automatic Account Determination for Business Areas

If you use business areas, as a rule you store an account assignment for a cost element not by company code, but by company code and business area. You can thus ensure that each posting row is confirmed with an error message, if you forgot to make an account assignment for the business area.

This procedure has the following exceptions:

Management decisions

In some cases it is intended that an automatically generated posting row assigns costs to a single cost center and thus to only one business area, even when the automatically generated row displays differentiated business areas derived for it.

Example

You should post all exchange rate differences to a general cost center.

To do this, store the cost center for the corresponding cost element at the company code level and activate the indicator "Priority to business area".

System-related exceptions that are required

If a customer or vendor row cannot be uniquely assigned to a company code, FI automatically generates posting rows without business areas. Therefore, automatic account assignments must be stored at the company code level. The system uses this to derive a business area for the posting row.

For discounts and exchange rate differences, you can choose from the following to make periodic postings to business areas and CO account assignment objects:

You wish to post discounts and exchange rate differences to different business areas. Only the CO account assignment object that you assigned automatically to each business area is of relevance to Controlling.

You make postings directly to the business area (that you uniquely assigned the posting to) and the assigned CO account assignment object.

You subsequently make a profit and loss adjustment by distributing all other postings to the business areas, which are assigned to the posting expenses. When you distribute, the system uses the automatic CO account assignments that you stored for each company code and business area. Here, you should only make the profit and loss adjustment of the account assignment object for the business area (see Profit and Loss Readjustment). In this case, you can store the automatic account assignments on the controlling area level as well as the controlling area and business area level.

You wish to post discounts and exchange rate differences to different business areas and account assignment objects for which you make a non- statistical account assignment. To do this, you only need to make an initial assignment of all postings to one cost center. You then distribute the postings from this cost center as a subsequent profit and loss adjustment to the business areas and CO account assignment objects. The business areas and account assignment objects are those which you assigned to the expense and revenue rows in the invoices.

To do this, store a default account assignment on the controlling area level, but do not store a detailed account assignment on the business area level. You need to set the "Priority to business area" indicator.

You cannot use the default account assignment, if you wish to distribute discounts and exchange rate differences on Profit Center level as well as on business area level.

Instead, you have the following options:

Distribution of discounts and exchange rate differences on the profit center level, not the business area level, is not possible with the account assignment function offered.

However, you do have the following options:

Do **not** create the discount accounts as cost elements and assign them at period-end as claims and payables to the corresponding profit centers. For more information, see the SAP Library under "AC - Financials -> EC - Enterprise Controlling" in the "Profit Center Accounting -> Actual Postings -> Cash Discount Expenses/Income and Exchange Rate Differences" section.

Using substitution, you can define a custom account assignment that derives a cost center for the cost element per company code and profit center, where the cost center itself must be assigned to the profit center.

Automatic Account Determination by Profit Center

You can also store the automatic account assignment for each profit center individually.

You need the automatic account assignment per profit center -- for example, if you want to post price variances in the Materials Management component (MM) to the profit center of the material.

Without the automatic account assignment, you can do this only if you do not define the price variance account as a cost element.

Within the automatic account assignment you define a product cost center for each product profit center. The R/3 System derives this cost center from the profit center during automatic account assignment.

Define Own Screen Variants for Postings in Controlling

You use screen variants to define the layout of the screen on which you make one of the following postings:

Manual reposting of costs

Manual reposting of revenues

Activity allocation

Manual cost allocation

Statistical key figures

A screen variant consists of variants for the individual transactions in manual actual postings (reposting costs or activity allocation for example).

Note:

Authorization object K_PVARIANT controls whether the screen variants can be accessed.

Requirements

Check the settings in activity *Maintain Controlling Area* to check that cost accounting for the objects that you want to include in the screen variant is active in the relevant fiscal year. Examples of these objects include:

Cost centers

Order management

Projects

Cost objects

Sales and distribution documents

Standard settings

SAP supplies a wide variety of screen variants for the postings mentioned above.

Note

You **cannot** make changes to the standard system. If, however you need to make only minor changes, you should copy the standard delivery and adjust the copy to meet your requirements.

Activities

The screen variants supplied by SAP are displayed on the initial screen.

To create your own screen variants, proceed as follows:

Creating screen variants

Determine what postings you want to make.

Choose *New entries*.

Enter a key and an explanatory text for the screen variant.
Save your entries.

Assigning variants for individual transactions

Select a screen variant and, in the navigation tree, double-click on *Define screen variants per business transaction*.

Choose *New entries*.

Choose the transaction you require.

Select the fields that you want to have included on the entry screen for the posting.

The system provides different fields depending on the transaction

Field selection is broken down into *General fields*, *Sender fields* and *Receiver fields*.

Specify whether you want to use **Individual entry** or **List entry**.

To do so, select the appropriate option in the *Initial screen* field under **Additional data**.

Recommendation

For complex postings, choose **Individual entry**. If you have selected a lot of fields for the entry screen, individual entry helps you retain a better overview.

Selecting display variants for lists

For the **Overview list**, you can select all line items for a display variant. To do so, under *Additional data* choose a variant.

You can access the overview list from either the individual entry screen or the list entry screen.

You can select a display variant for the **navigation list** by choosing a variant under *Further data*.

Under individual entry, you can switch between posting records using the navigation list.

Note

In the display variant for the overview list and the navigation list you specify what columns are to be displayed, their width, and the order in which they are displayed. You can create your own display variants in the respective entry transaction. These are then displayed here and can be selected.

You can select a **transaction variant**.

To do so, under *Further data* choose a variant.

Using the transaction variant and for both individual entry and list entry you can

Define default values for particular fields

Display or hide fields

Change the order of the fields

Save your entries.

Further notes

You can transport the screen variants straight away.
To do so, choose *Table view -> Transport* and enter the screen variants in a Customizing request.

BAdI: Implement External Valuation of Activity Allocations

Use

This Business Add-In is used for the valuation of internal activity allocations. You can use it to specify the valuation of the activity allocation (different from the standard valuation done by the system). You

can either specify the price used for valuating the allocated activity quantity, or the direct value of the activity allocation. The price and the value can be specified with fixed and variable portions.

Requirements

The implementation of the BAdI must transfer the valuation of the activity allocation in the `EXT_PRICE` output structure. This structure (category `COEXPRICE`) has the following components:

`PRICE_TOTAL` – Total price per unit of measure

`PRICE_FIX` – Fixed price per unit of measure

`PRICE_VAR` – Variable price per unit of measure

`PRICE_TKE` – Price unit

`EX_CURR` – Currency key

`VALUE_TOTAL` – Total value

`VALUE_FIX` – Fixed value

`VALUE_VAR` – Variable value

In the `PRICE_xxx` components, you can specify the price to be used for valuating the allocated activity quantity. In the `VALUE_xxx` components, you can specify the value of the activity allocation. `EX_CURR` specifies the currency that the values in the output structure refer to.

In the `MESSAGES` structure (category `MESG`), you can transfer a message to the caller (for example, an error message).

The importing parameters `SENDER` (category `COBL_SENDER`), `RECEIVER` (category `COBL_RECEIVER`) and `GENERAL` (category `COBL_GENERAL`) provide you with information on the context of the activity allocation to be valuated.

The BAdI has the following exceptions:

`VALUATION_NOT_FOUND` – No valuation could be found

`VALUATION_ZERO` – Valuation 0 was found

`GENERAL_ERROR` – General error in processing

The exceptions must be removed by using `message ... raising ....`

Standard settings

If there is no active BAdI implementation, the standard valuation is done by the system.

Activities

Create an implementation for the `EXT_VALUATION_IAA` definition and implement the `GET` method.

Actual Data Transfer

In this section you learn how to transfer actual key figures from the Logistics Information System (LIS) to cost centers and cost center/ activity types.

Transfer of Personnel Costs from Human Resources (HR)

In this section, you make the settings for transferring personnel costs from the SAP Human Resources (HR) component to the Controlling (CO) component.

Assign Personnel Costs to Cost Centers

In this IMG activity you assign selected personnel costs to given allocation cost centers or internal orders.

In Payroll Accounting, the costs incurred are normally debited on the causing cost center or job. This is usually the master cost center of the employee.

For some accounts, it may be desirable to gather the costs on an allocation cost center or on an internal order instead.

In these cases, enter the required allocation cost center or an internal order for each company code and cost element. If you subdivide a company code into business areas, you can also enter the allocation cost center or the internal order for each company code, business area, and cost element.

Examples

Overhead costs for all employees as employer's contribution to Social Security or costs due to pregnancy leave.

If accrual was calculated in CO for costs such as vacation bonuses, the actual costs must be assigned to the accrual calculation order.

Define Substitute Cost Centers for Payroll

In this IMG activity you maintain alternative cost centers for Payroll Accounting.

In Payroll Accounting, the costs incurred are normally debited on the originating cost center or job. If postings can no longer be made to the cost center or job at the time of settlement, postings are made to the master cost center of the employee instead, and this account assignment change is recorded in the settlement log.

Payroll Accounting will terminate if it is not possible to post to a master cost center. Therefore, you can store an alternative cost center here for each company code. This alternative cost center is then assigned instead of master cost centers that you cannot post to.

By means of the messages in the settlement log, you can take suitable measures after the settlement to transfer the costs from the alternative cost center to the originating cost center in CO.

Statistical Key Figure Transfer From LIS

In this section you learn how to transfer actual key figures from the Logistics Information System (LIS) for cost centers and cost center/ activity types.

Define Link Between Statistical Key Figures and LIS

To be able to transfer statistical key figures from the Logistics Information System (LIS) to Cost Center Accounting (CCA), you need to create a link between the statistical key figure in CCA and that in LIS.

You can activate the interface in the master data of the relevant statistical key figure in CCA. This enables the later automatic transfer of key figures from the LIS to CCA.

To find key figures in the LIS, two methods are available:

Find via info-structures

Info-structures are database tables administered by the SAP System and automatically updated with the different LIS key figures from a particular area or application.

Find via info-sets

Info-sets also serve to divide the LIS key figures. Here, however, even finer differentiation can take place.

Info-structures and info-sets are defined within Logistics Controlling.

Requirements

You have completed the Customizing activity Activate Cost Center Accounting in Controlling Area.

Activities

Enter the statistical key figure for which you want to create a link to the LIS.

Choose the pushbutton "Link LIS".

Decide whether to use info-structures or info-sets in the search for the key figure in the LIS.

Find the desired key figure in the LIS.

The search via info-structures takes place through the choice of application and info-structure.

The serarch via info-sets takes place through the continuing choice of info-sets.

The information on the corresponding LIS key figure are displayed in the statistical key figure basic screen.

Notes on transport

To transport statistical key figures, a separate function is available in *General Controlling* Customizing.

Define Assignment of Cost Centers to Key Figures

In this IMG activity, you maintain the assignment of one or more statistical key figures to a cost center. You thereby determine which key figure from the LIS is transferred to which cost center.

The assignment takes place via a variant, which you can create in the assignment framework. Variants can be used to delimit with characteristic values the LIS database area from which the key figures are to be transferred. Characteristic values are

Sold-to party

Material - Division

Sales organization

Distribution channel

Example

You wish to transfer the number of invoice receipts for cost centers of Accounts Payable.

Cost center 1 maintains customers A-K and cost center 2 L-Z.

The corresponding definitions ensure that cost center 1 receives the invoice receipts for customers A-K and cost center 2 those for customers L-Z.

Afterwards, the key figures are transferred from the LIS via a transfer transaction and posted on the cost centers a statistical key figures.

Periodic allocations such as assessment can be used for these key figures as tracing factors. It is possible to assess the costs of data processing based on the automatically transferred key figures and charge them to cost centers 1 and 2.

Requirements

The LIS and the modules from which the key figures are to be transferred are active.

You have created statistical key figuresand set up a link to the LIS.

You have created the cost centers for which the key figures are to be transferred.

Activities

Determine which key figures are to be transferred from the LIS.

Determine which key figure is to be transferred to which cost center.

Enter a cost center, version, and fiscal year for which the key figures are to be transferred.

Create variants.

If you do not enter any delimitations via the characteristic values, the SAP system chooses the key figure from the entire LIS database.

Assign a variant to each key figure.

Save your entries.

Note on transport

For the transport of settings for the transfer of activity-independent key figures from the LIS, an individual function is available in Customizing under *Controlling -> General Controlling*.

Define Assignment of Cost Centers/Activity Types to Key Figures

By maintaining the assignment of one or more statistical key figures to a cost center (dependent on an activity type), you determine which key figure is transferred to which cost center/activity type.

The assignment is made with a variant, which is created in the assignment framework. A variant can be used to delimit the area of the LIS database from which key figures are taken using characteristic values:

Sold-to party

Material - Division - Sales organization

Distribution channel

Example

You want to adopt the statistical key figure for order items (AUFPOS) for cost center "Purchase", activity type "Test". To do so, create the link to the Logistics Information System (LIS) in the master data:

Select value source "A" (Automatic Selection of Key Figure)

Select info structure "S001 Customer".

Select LIS key figure ANZAUPOS.

For the data adoption, enter statistical key figure AUFPOS as well as a variant.

The SAP system uses the value in ANZAUPOS from the LIS for statistical key figure AUFPOS for the given combination of cost center and activity type.

Requirements

The LIS and modules from which key figures are taken must be active.

You have created statistical key figures and linked them to the LIS.

You created the objects (cost centers, activity types) for which the key figures will be transferred.

You have completed activity type planning for the cost centers and activity types for which you wish to transfer key figures.

Activities

Determine which key figures will be transferred from the LIS.

Determine which key figure will transfer to which cost center/activity type.

Enter a cost center, version, and fiscal year for which key figures are transferred.

Create the variants.

If you do not make any limitations on the characteristic values selected, the SAP system takes the corresponding key figures from the entire LIS database.

Assign a variant to each key figure.

Save your settings.

Note on transport

For the transport of settings for the transfer of activity-dependent key figures from the LIS, an individual function is available in Customizing under *Controlling -> General Controlling*.

Data Transfer from External Systems

BAdI: Implement Transfer of External CO Actual Data

Use

This Business Add-In transfers external actual posting data to Overhead Cost Controlling. This implements the uploading of the posting data into the SAP system.

Requirements

You can transfer actual posting data for the following business transactions:

Activity allocation

Primary cost reposting - Revenue reposting

Manual cost allocation

Non-allocable activities

Statistical key figures

Reversal

Depending on the transaction, the BAdI implementation transfers the uploaded posting data to the following output tables:

`aa_headers` and `aa_items` for activity allocations (`BAPIAAHDR` or `BAPIAAITM`) ,

`rc_headers` and `rc_items` for primary cost repostings (`BAPIRCHDR` or `BAPIRCITM`) ,

`rr_headers` and `rr_items` for revenue repostings (structure `BAPIRRHDR` or `BAPIRRITM`) ,

`ma_headers` and `ma_items` for manual cost allocations (`BAPIMAHDR` or `BAPIMAITM`) ,

`ia_headers` and `ia_items` for non-allocable activities (`BAPIIAHDR` or `BAPIIAITM`) ,

`skf_headers` and `skf_items` for statistical key figures (`BAPISKFHDR` or `BAPISKFITM`) or

`rev_headers` for reversals (`BAPIDOCHDRR`)

In addition, if profitability segments are to be assigned:

`send_crit` (`BAPISCRIT`) and - `recv_crit` (`BAPIRCRIT`).

The output tables for the document headers (`xx_headers`) have the same structure as the corresponding interface paramter of the BAPIs for these transactions. This is specified above in parentheses.

The output tables for the document items (`xx_items`) have the following components:
`CO_AREA` - controlling area

`DOC_NO` - document number - `ITEMS` - document items.

The document number is initially used for assigning the document headers to document items. If you do not set the *External Document Number Assignment* for the data transfer, these document numbers are replaced by numbers from the internal number range related to the transaction. If you set this indicator, the documents are posted with the specified document numbers. You need to ensure that the specified document numbers are in teh correct external number ranges.

The document item component is a table with the same structure as the corresponding interface paramter of the BAPI for this transaction. This is specified above in parentheses.

Actual posting data for more than one transaction can be transferred at the same time. To enable this, the BAdI implementation must fill the corresponding output tables.

Standard settings

If there is no active BAdI implementation, the system does not transfer any actual posting data.

Activities

Create an implemenation for the `EXT_CO_ACTUAL_DATA` definition and implement the `IMPORT` method.

Example

An example for uploading posting data that was entered in Excel and saved as a tab-separated text file has been implemented in the `CL_IM_EXT_CO_DATA_EXAMPLE` class (implementation name `EXT_CO_DATA_EXAMPLE`).

The following data format is required for this example:

A data block is started off with a header and ended by an empty row.

The header is in the first cell of the row and the rest of the cells in this row are empty.

The header defines the structure of the following data rows and must also contain the name of one of the BAPI structures mentioned above (`BAPIxxHDR, BAPIxxITM` etc.).

The row that comes after the header contains the names of the fields used in the following data rows.

The following data rows contain the posting data, whereby the field name row described above is the "table header".

Example:

```
BAPIRCHDR
CO_AREA   DOC_NO     POSTGDATE  TRANS_CURR
0001      0000000001 200101   EUR
          0000000002 200921   EUR
          0000000003 200819   EUR
BAPIRCITM
CO_AREA   DOC_NO     SEND_CCTR  REC_CCTR   VALUE_TCUR COST_ELEM
0001      0000000001 R-KS1      R-KS2      0        0000417000
                     R-KS3      R-KS2      120        0000420000
                     R-KS1      R-KS4      50         0000417000
          0000000002 R-KS5      R-KS2      200        0000420000
          0000000003 R-KS1      R-KS3      40         0000420000
                     R-KS2      R-KS1      160        0000417000
```

Period-End Closing

In Periodic Allocations you define:

Accrual calculation

Periodic actual allocations, by using sender-receiver relationships in cycles such as:

Periodic reposting

Distribution

Assessment

Indirect activity allocation

Variance calculation

Activity price calculation

Note

Periodic allocation methods are classified as indirect because user- defined keys, not activity exchanges between cost centers, form the basis of allocation. These methods are easy to use because, as a rule, you define sender-receiver relationships only once.

Additional information

Periodic allocations

The SAP System writes line items for the following period-related allocations:

Periodic transfer posting

Distribution

Assessment

Indirect activity allocation

You cannot restrict line item updating in the SAP System. When a period-related allocation is repeated, the SAP System reverses the line items in the period.

Periodic Reposting

In this section you make settings for periodic repostingin the actual.

Determine Sender/Receiver Types for Periodic Reposting

When making periodic repostings you can specify which table fields are active and whether, in cycles for these fields, a single value, an interval, or a group can be entered.

You make these settings per controlling area and separately for plan and actual data respectively.

If you change the attributes for a field that is already used in cycles then if you change:

Individual values, groups, and intervals that have a "to" value, the system deletes the corresponding data records from the table.

Intervals with "From" values, the "To" values are deleted from the table.

Example

You use periodic reposting for cost centers, but want to use only cost center groups as receivers.

Remove the table field indicator "Cost Center" in the fields for individual value entry readiness and in the receiver area interval to ensure that you can only enter groups as cost center receivers during cycle definition.

Allocation Cat: Periodic Reposting

	Actual/Plan:	Actual
	Field:	Cost Center

Field Characteristics:

Active Indicator	Entry-Ready	Entry-Ready	Entry-Ready
+ Sender	X Indv. Valu	X Interval	X Group
+ Receiver	_ Indv. Valu	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of a periodic reposting as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen. This retrieves the original standard values for a table field.

Save your changes.

Note on transport

To transport periodic reposting field attributes manually, choose *Table view -> Transport*.

Define Periodic Repostings

Periodic reposting reduces the number of postings in Financial Accounting for document entry.
The assignment of costs to cost centers in line with the source of these costs occurs in Controlling. The complete amount is first assigned to an allocation cost center (such as telephone costs).

During reposting to the originating cost center, the posting document is given all controlling-relevant data but no sender information.

Example of Periodic Reposting

All phone costs (cost element 4731) are collected in cost center 2130 (Telephone Central).

At period-end closing, the costs are reposted to the other cost centers on the basis of statistical key figure LDC (Long-Distance Calls).

The sender cost center is Telephone Central (CCtr 2130). The receivers are all cost centers in the organization.

Recommendation

Check whether assessment can be used instead of periodic reposting, as this leads to considerably better system performance.

You can use assessment if the origin of the primary costs is not important. If required, you can use multiple assessment cost elements for differentiation.

Periodic reposting is recommended if the origin of primary costs is important, but the partner object does not need to be displayed directly. The partner information, however, is not lost. Proof of origin is always possible via the line item document.

If you do need to show the partner object directly in the report, you must use distribution. The data volume will grow significantly for the proof of the partner objects, particularly in large distributions.

Note that the data volume generated for past periods will grow with increased numbers of periods. Especially in reporting and for data backups, it is important to keep the data volume generated by allocation to a minimum. For this reason, assessment or periodic reposting are to be recommended.

For performance reasons, you should not use more than 50 segments in one cycle. If necessary, define multiple cycles. A larger number of segments per cycle is only necessary for extensive iterations.

Also: For performance reasons, never use more than ,000 relationships in an allocation cycle. If you require more than that, you must plan a mass test of the allocations beforehand.

Example

From a sender cost center with 0 sender cost elements, allocations are made with one segment to 500 receiver cost centers.

The following numbers of sender and receiver totals records result from the different allocations that must be written in the processed period:

Allocation	Sender totals recds	Receiver totals recds
Assessment	500	500

Periodic reposting	0	500 x 0
Distribution	500 x 0	500 x 0

This simple example already demonstrates that

far more sender totals records are written for distribution than for periodic reposting

far more receiver totals records are written for periodic reposting than for assessment

In practice, because of the far higher number of senders and receivers, the advantages of assessment and periodic posting are even more apparent.

Activities

Create a cycle for periodic reposting by proceeding as follows:

Enter a name for the cycle.

Enter a validity period for the cycle.

Maintain the header data for the cycle by determining the following:

- Which currencies are used for allocation
- Whether consumption is to be allocated
- Whether negative tracing factors are scaled or not
- Whether cycle processing takes place iteratively
- The version from which plan data is to be taken

Define the cycle segments, where the following information is stored:

- The sender cost element to be reposted
- The criteria for distributing the costs onto the receiver
- The sender objects
- The receiver objects

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Further notes

Periodic reposting

Periodic reposting is a cost controlling aid equivalent to manually- posted cost transfer
Periodic reposting can be used for plan or actual postings.

To simplify cost center planning, you can enter plan values for one center and repost them to other CO objects.

For actual postings, you can enter controlling-relevant postings in Financial Accounting which the system collects on an allocation cost center, which minimizes account assignments during document entry. At the end of a period, you can repost the collected costs to other CO objects.

Reposting uses keys (fixed values or calculated tracing factors) for allocation to the corresponding receiver objects (cost centers, internal orders, and so on).

The original primary cost element remains intact in periodic reposting. The line items do not receive updated information about senders and receivers.

For more information on periodic reposting, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Periodic Allocations -> Defining Periodic Repostings or Periodic Allocations*.

Develop Authorization Enhancements for Periodic Repostings

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Accrual Calculation

In this section you learn how to enter settings for accrual calculation. Two methods are available:

The percentage method

The target=actual method

For more information, see the *SAP Library* under

Financials -> CO Controlling -> Cost Center Planning -> Utilities -> Plan Accrual Calculation

Financials -> CO - Controlling -> Cost Center Accounting -> Period-End Closing -> Accrual Calculations

Determine Order Types for Accrual Orders

In the same way as for cost centers, internal orders can be used as accrual objects to which the monthly credits that result from accrual calculation can be posted.

Accrual calculation requires an order type with order category 02 (accrual order).

An order type has a large amount of control information important to order management. This information includes a range of default values that are used when you create a new order with this order type.

You need to assign each order to an order type that transfers certain parameters to the order.

The order depends on the client, meaning that each order type can be used in all controlling areas.

If you want to sort your order types by controlling area, you need to create separate order types for each controlling area, for example:

Order types 00 to 0199 for controlling area "0001"

Order types 0200 to 0299 for controlling area "0002" The order type determines the following:

The **order category**

You need to assign each order type to an order category. The order category cannot be changed in the individual orders.

The order categories are defaulted in the SAP System and characterize the technical characteristics of the order. An order category, for example, specifies the transactions that you can use to process an order.

Internal orders, for example, are category one (category two is used for cost center accruals), model orders are category three.

Number assignment

You need to assign a number range to each order type. Number assignment is made centrally for all orders with this order type.

Control indicator

You can change the control indicator for all orders of this order type centrally.

CO Partner update

You can determine whether the partner information remains the same during allocations between orders and other CO objects (such as, cost centers, or projects), and if the system is to write a totals record for each order. **Caution:** This can significantly increase the data volume.

Order classification

You can specify that the orders of this order type are to be classified. You only require classification for reporting purposes, and for the Maintenance of free characteristics. You can also use order classification retrospectively. For order summarization, you can have user-defined master data fields instead of classification. To transfer classification data in user-defined fields, choose the IMG activity on Replacing Classification With User-Defined Fields.

Commitments Management

For each order type, you need to specify whether you require Commitments Management.

Revenue postings

Posting costs is generally allowed on each order. You also need to specify if revenue postings are allowed for an order type.

Orders with revenues can be settled to G/L accounts, profitability segments, sales orders, billing elements, and other orders with revenues.

Integrated planning

If you want to update the planned activity input for an order type directly on the sending cost sender, you can activate integrated planning as a default value.

Settlement profile

In the settlement profile you store the objects which the orders in this order type are allowed to settle to. You can also assign a settlement profile to an order type at a later date. It is also possible to change the settlement profile in the order.

Planning profile

This profile contains parameters and default values for overall planning. You can also assign a planning profile to an order type at a later date.

Budget profile

This profile contains parameters and default values for budgeting. You can also assign a budget profile to an order type at a later date.

Reference order, from which default values are taken.

The reference order is used as a template for creating a new order. You can either enter the number of a "normal" order, or of a model order (category three). This can be done at any time, also at a later date.

Status management

An order can go through more than one status. One of the functions of the status is to determine which business transactions are allowed on the order.

For more information on the various possibilities provided by status management, see the SAP Library, under *Financials -> CO - Controlling -> Internal Orders -> Master Data in Internal Orders -> Status Management for Internal Orders*.

You can make a **field selection** that is **not dependent** on status, for the fields available in the order master data.

Note

General SAP status management is also used in other areas (such as, projects, or production orders). The old order status management will soon become obsolete.

Order **residence times** in the system

This is where you define how long your closed orders stay in the system before being archived. Choose the residence times so that you are sure that orders not used during the residence time will also not be needed at a future date. Note that for plan-integrated orders, you can only determine prices for the controlling area if the orders still exist in the system.

You can change the residence times for all orders of this order type centrally.

Master data display

You can determine the order layout for the master data. You determine which subscreens are to be used for order master data, and with which group boxes.

You can specify which print form is to be used for printing order master data.

You can modify the characteristics of certain fields in the order master depending on the order type.

These modifications are however, are overridden by the field selection, and the field field modifications, which you cannot influence.

The structure of an internal order is not permanently defined. Depending on the purpose of your orders, you will not always use all of, or the same fields.

You can use field selection to define fields as display or input fields, or to hide them altogether. Hidden fields do **not** appear on the screen.

You can use the field selection to define the field selection for the whole order. However, if you wish to use order status management, you can also define the field selection per status. The field characteristics for the status then supersede those for the order type.

The active fields also differ in other ways, such as

Hide

Hidden fields are not displayed.

Display

Fields specified as "Display" fields cannot be filled. They are used to display information which cannot be changed (such as the order type).

Entry

You can fill these fields, but they are not checked,

Because they are mainly for information (example: text), or

Because they must match a particular value (for example,you can only enter a particular status if this is also defined for the order type) or will be checked for validity (example: dates).

Required entry

If you do not make any entries required entry fields, the system issues an error message and you cannot continue processing until you make the entry. Such fields usually contain a question mark, unless they are additional input fields for other fields which you have filled.

Highlight

Highlighted fields stand out optically.

Activities

Split your orders according to their usage (order type, default values and so on).

Check whether the order types delivered meet your requirements.

If necessary, define new order types that match your needs.

Notes for Transport

Ensure during the transport of order types, that in the target system there are the same number of number range groups and in the same sequence as in the source system.

Otherwise, it could happen that in the target system some order types are assigned to other number ranges than in the source system. In this case, you have to manually maintain the assignment of the order types to the number range groups.

Notes on transport

To manually transport order types for accrual cost orders, choose *Edit -> Transport*.

Create Order Layout for Accrual Orders

In this workstep you define the layout for the order master data. You can assign a layout to each order type.

The system displays the order master data as a tab with a series of tab pages. On the tab pages there are group boxes with a series of fields for the order master data. The group boxes are defined by the system.

You can specify,

Which title the individual tab cards should receive and

which group boxes should be displayed in which position on the tab pages.

The tab pages are numbered from left to right with "TabPage 01" to "TabPage xx". On every tab page there are five positions, which you can assign individually to a group box. One of the group boxes can contain user-defined master fields (see workstep "Develop enhancements for order master data").

Use each group box only once in a layout.

Tab pages to which you assign neither a title or a group box, do not appear in the order master data.

To ensure that the display of order master data from the system occurs in a specified layout, enter the layout required in the order type. See the workstep: "Define order types".

Standard settings

Layout SAP0 corresponds to the default settings. You can copy this layout if you want to make changes to the default settings.

Activities

Check whether you need your own layouts. If you only want to make small changes to the standard delivery, you can copy layout SAP0 and use it as the basis for your layout.

If you want to create a new layout, choose "New entries".

Enter a name and a description for your layout.

Choose "Tab page title" and "New entries", to specify the title for your tab pages.

Enter the number for each of the tab pages.

Enter for which language the title is to be used.

Enter the title of the tab page.

Choose "Position group boxes on tab pages" and "New entries", to specify which group boxes should appear in which position on the tab pages.

Enter the number for each of the tab pages.

Enter the position on each of the tab pages.

Enter the group box that should appear on the specified position on the tab page.

Save your entries.

Create Accrual Orders

In this IMG activity you define orders to be used as credit objects in accrual calculation. These orders collect monthly credits. The output to FI is also posted on the credit object.

In this manner, the balance between FI and CO can be displayed at any time by the accrual order.

If you use cross-company-code cost accounting, the accrual orders must be created in all company codes in which accrual calculation for cost centers takes place.

To generate business area balances, you must create accrual orders in all business areas in which accrual calculation for cost centers takes place.

Requirements

You completed the Create order types for accrual orders step.

Actions

Create accrual orders.

Additional information

For more information on master data maintenance for orders, see the SAP library under *Financials -> CO - Controlling -> Overhead Cost Controlling -> Internal orders -> Master data for internal orders*.

Note on transport

No standard transport function is supported for accrual orders.

Create Accrual Cost Centers

Accrual cost centers collect monthly credits created during accrual calculation. Ouput to FI is also posted to the credit object.

The balance between CO and FI can be displayed in the accrual cost center at any time.
In the following section you learn how to create cost centers .

Note on Cost Centers

Cost centers are created to support differentiated assignment of overhead costs, to calculate overall costs of sales (cost calculation function), and to carry out detailled control of costs occuring within the organization (cost controlling function).

Cost centers are grouped into higher-level decision, control, and responsiblity areas on the basis of overhead Controlling standpoints.

Requirements

You have completed the step Maintain controlling area in the IMG *General Controlling* under *Organization*.

You have maintained the necessary cost center types.

You defined a standard hierarchy.

Activities

Create your cost centers.

Note on transport

To transport cost centers, a separate function is available in the IMG *General Controlling*.

Addtional information

For more information on creating cost centers, see the SAP Library under *Controlling -> Cost Center Accounting -> Cost Center Accounting Module Administration -> Cost Centers and Cost Center Groups -> Maintaining Cost Centers*.

Target=Actual Method

In this section you make settings for the target=actual method for accrual calculation.

The target=actual method is used for activity-dependent and activity-independent costs. Planning of the dependent and independent primary costs is made with an accrual cost element

for the cost centers for which accrual is to be calculated

for the interval in which accrual is to be calculated

The SAP system calculates target costs and enters these costs in the actual value fields.

This method is useful when accrual can be planned periodically.

If you calculate activity-independent accrual, use a plan=actual method. No target costs can be calculated. The SAP system enters plan costs in the actual value fields.

Create Accrual Cost Elements

Accrual cost elements are primary cost elements.

For the percentage method of accrual calculation, use cost element category 03, "Accrual cost element, percentage".

For the target=actual method, use cost element category 04, "Accrual cost element, target=actual".

Special cost elements are used in accrual calculation for posting the accrual amounts.

In the percentage method, overhead is posted under the accrual cost element.

In the target=actual method, accrual cost elements are used for the affected cost centers for executing activity-dependent primary cost planning. The system calculates the target costs during accrual calculation for the affected cost center and sets the target values in the actual values.

Requirements

Complete the IMG activity Maintain Controlling Area located under *General Controlling -> Organization*.

Create G/L accounts in FI for the primary cost elements.

Activities

Define the primary cost elements.
You can store the following indicators:

Cost element category
- Primary
- Secondary

Record quantities

Quantity unit

Save default account assignments for cost centers or orders

Note on transport

To transport cost elements, a separate function is available in *General Controlling* Customizing.

Further notes

For more information on creating cost elements, see the SAP Library under *Financials -> Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Cost Elements*.

Percentage Method

In this section you make settings for the percentage method in accrual calculation.

Create Accrual Cost Elements

Accrual cost elements are primary cost elements.

For the percentage method of accrual calculation, use cost element category 03, "Accrual cost element, percentage".

For the target=actual method, use cost element category 04, "Accrual cost element, target=actual".

Special cost elements are used in accrual calculation for posting the accrual amounts.

In the percentage method, overhead is posted under the accrual cost element.

In the target=actual method, accrual cost elements are used for the affected cost centers for executing activity-dependent primary cost planning. The system calculates the target costs during accrual calculation for the affected cost center and sets the target values in the actual values.

Requirements

Complete the IMG activity Maintain Controlling Area located under *General Controlling -> Organization*.

Create G/L accounts in FI for the primary cost elements.

Activities

Define the primary cost elements.
You can store the following indicators:

Cost element category
Primary
Secondary

Record quantities

Quantity unit

Save default account assignments for cost centers or orders

Note on transport

To transport cost elements, a separate function is available in *General Controlling* Customizing.

Further notes

For more information on creating cost elements, see the SAP Library under *Financials -> Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Cost Elements*.

Maintain Overhead Structure

In this IMG activity you define an overhead structure for accrual calculation.

The overhead structure controls the overhead calculation. Keys are determined for all controlling areas and, in a further step (separate for plan and actual accrual), are characterized at the controlling area level.

You must define the following keys in the structure, valid for all controlling areas in a client:

Calculation base

At the controlling area level you allocate cost elements whose overhead value is calculated to the key "Calculation base".

Overhead

You always define this key with respect to one or several calculation bases. Here you set the dependency with which the SAP system is to determine the overhead. The dependency controls with which sequence and which combinations (controlling area, cost center, business area, and so on) overhead rates apply.

At the controlling area level you allocate percentages to the key "Overhead", used to derive the values of the accrual calculation from the values of the calculation base, dependent on posting periods and with respect to the defined dependency.

Credit key

When carrying out accrual calculation, the cost centers on which costs of the tracing factors have incurred are debited with the calculated overhead. Via the credit keys, you determine the following at the controlling area level:

The cost element under which the overhead is posted (accrual cost element)

The CO object (cost center or order) to be credited with overhead

The validity period of the credit code ("valid to")

Sample Overhead Structure

Employee benefits "Vacation bonus" and "Other bonus" are calculated in plan and actual based on wages and salaries.

The condition records "A-B1 WAGES" (cost elements 420 000 and 421 000) and "A-B2 SALARIES" (cost element 430 000) are used jointly to calculate surcharges.

To balance accounts with financial accounting, the SAP System collects the credits for each month on an order.
In financial accounting you post the total expense in one sum to the order. You can display the balance between cost accounting and financial accounting at any time.

The imputed cost objects for this example are defined in the following credit keys:

Cr. key	Imp. cost object	CElem	Order
E11	Vacation bonus	434 000	9A99
E12	Other bonus	435 000	9A99

The link between the calculation base and the imputed cost key is set up in the costing sheet "SAP000":

Level	Cond. Record	Name	From level	To level	Credit key
1	A-B1	Wages	0	0	
120	A-B2	Salaries	0	0	

190		Calculation base	1	120	
2	A-Z1	Vacation bonus	190	0	E11
220	A-Z2	Other bonus	190	0	E12
390		Surcharges	200	380	
400		Total personnel costs	0	0	

This costing sheet specifies that the vacation bonus and other bonus is calculated using the calculation base (level 190).

The following surcharges to wages and salaries are made in this example:

Vacation bonus for all employees: %

Other bonus

for all employees: 5 %

for employees in assembly: 7 %
(cost centers 43 and 4320)

A surcharge condition is defined for each cost element whose imputed costs are calculated:

Surcharge condition		S type	S rate	Acc.seq.
A-Z1 Vacation bonus		1 (Act)	%	ZF01
		2 (Plan)	%	
A-Z2 Other bonus		1 (Act)	5%	ZF11
		2 (Plan)	5%	
CCtr 43	"E"	1 (Act)	7%	
	"E"	2 (Plan)	7%	
CCtr 4320	"E"	1 (Act)	7%	
	"E"	2 (Plan)	7%	

The access sequence determines which surcharge is charged to which cost center.

For surcharge conditions with access sequence ZF01 the system checks if a surcharge rate exists for the controlling area and the surcharge type (1=actual and 2=plan). In this example this is the case for condition A-Z1.

The access sequence ZF11 is a two-level access sequence:

Level 1

In Access No. the system checks if surcharge rates for certain cost centers are maintained for the surcharge type in the current controlling area. The system finds a surcharge of 7% for the cost centers 43 and 4320. The exclusive indicator "E" is set for Access No. , so the system does not look for further surcharge rates for these cost centers.

Level 2

The system cannot find any surcharges for the remaining cost centers in Access No. and so looks in Access No. 20 for surcharges of the surcharge type for the controlling area.

The system finds a surcharge of 5% in both plan and actual which applies to all employees.

The example for imputed cost calculation is set up in client 000, controlling area 0001, with transaction Display Cost Center Imputed Cost Calculation.

Requirements

To change an existing overhead structure, you need authorization for changing structures in all controlling areas using this structure.

To create a new overhead structure, you need authorization for creating structures for the controlling area to which you want to assign the structure.

Standard settings

The standard system includes overhead structure **SAP000**.

Activities

Create an overhead structure or change an existing one.

To create a new overhead structure, choose "Create".

Enter the key and name and choose "Save".

Go to the detail screen of your overhead structure.

Specify a separate row number for each calculation base.

Enter a key for the calculation base.

If you specify a calculation base that does not exist yet, the SAP system will propose creating it automatically.

Maintain the overhead.

Specify a separate row number for each overhead key.

Determine on which calculation bases the overhead will be calculated. If the overhead key does not exist, you can have the SAP system create it automatically. Then enter the dependency with which the overhead rates are to be determined.

Maintain the credit key for every row with an overhead key. You can have the SAP system create this as well, if it does not exist yet.

Assign the overhead structure to a controlling area.

Note on transport

To transport accrual calculation data, a separate function is available in Customizing under *Controlling -> General Controlling*.

Further notes

Business Aspects of Accrual Calculation

Business expenses are often allocated differently in Financial Accounting than in Cost Accounting.

If the expense is incurred for the whole fiscal year, you must allocate it in Cost Accounting to reflect the relevant periods and origins. This allocation lets you avoid cost fluctuations within Cost Accounting.

We refer to the uniform distribution of a one-off expense as "accrual calculation". You can use accrual calculation to take into account anticipated costs.

For more information on accrual calculation, see the SAP Library under *AC - Financials -> CO - Controlling -> Cost Center Accounting -> Period-End Closing -> Accrual Calculations*.

Utilities for Maintenance of Accrual Calculation

Access to accrual calculation maintenance is made through a tree structure in which you will find an access screen with a list of all available overhead structures and their uses in the different controlling areas. You can create menu-controlled alternative views of these lists, such as a controlling-area-related display. The list steps for the overviews can be expanded or contracted interactively.

A number of utilities, briefly explained below, are available for the maintenance for calculating accrual.

Assignments of overhead structures

If you select an overhead structure from the list and choose **Allocations -> Display assignments -> To overhead structure**, you receive an overview of the controlling areas, posting periods, and versions the structure is assigned to.

Assignments to the controlling area

The function *To controlling area* likewise displays in which controlling areas the structure appears.

Assignments of unused structures

Choose **Assignments -> Structures not used** for an overview of the structures not assigned to controlling areas. You can choose a structure from the list to make an assignment.

Delete overhead structure

Choose **Overhead structure -> Delete structure** to delete existing structures and/or assignments to the controlling area.

When selecting this function, you receive a selection list and can determine which data is to be deleted.

Change name

Choose **Edit -> Change name** to change the structure name. The structure's key (for example, SAP000) cannot be changed.

To change the key, you must copy the structure to a new name and then delete the origin structure. These functions are located under *Overhead structure*.

Set controlling area

If you make controlling area-dependent settings, the SAP system requests that you choose a controlling area. For subsequent data maintenance in other controlling areas, you must choose *Extra -> Set controlling area*.

Assignments to controlling area

To assign overhead structures to the "set" controlling area, choose **Allocations -> controlling area** depending on posting periods.

Actual postings

For actual postings, assign exactly one overhead structure to the controlling area.

Plan postings

For plan accrual, assign the overhead structure of the version.

Note that you cannot assign the structures to special periods. The system uses the structure of the last posting period for accrual calculation in special periods.

Environment data

Choose *Environment data* to branch to other processes and the maintenance of further object components:

Calculation base

Overhead rates

Credit

Target=actual credit

The SAP system branches each time to an overview screen where you can change or delete the available keys, create new keys, and store controlling area-specific definitions. Alternatively, you can directly select the key for the base, the overhead, and the credit in the detail screen of the overhead structure to allocate values for the set controlling area.

Develop Enhancements for Percentage Method

The following SAP enhancement is available if you are using the percentage method during accrual calculation:

COOM 0002 User Exits for cost center accrual calculation

This User Exit lets you transfer the following to overhead calculation:

Values and quantities of a calculation base

Percentage rates or amounts per unit of measure for an overhead rate

A credit cost element and a credit cost center or a credit order This enhancement contains the following enhancement components:

EXIT_SAPLKASC_011
Calculation base

EXIT_SAPLKASC_012
Overhead base

EXIT_SAPLKASC_013
Credit

You can find examples in the documentation of the relevant enhancement components.

Activities

Create an enhancement

You can either create a new project or use an existing one.

Activate the project

The enhancement only works once you have activated it.

Further notes

Unlike modifications, enhancements are suitable for release, as they are not part of the original SAP software, but are in the user-defined name space.

For more information on general procedures for creating enhancements, see the enhancement transaction under "Help -> Application help".
For documentation on enhancements, see the enhancement transaction under "SAP Documentation".

Overhead

This section tells you how to define all the parameters which determine the calculation of overhead rates for cost centers (including activity types), business processes, orders, projects, products and such like.

Overhead rates are used to pass on costs to cost centers that do not directly reference the activity used. Thus you can, for example, distribute the costs from a warehouse cost center to orders for which material was taken from the relevant warehouse.

Overhead costing differs from internal activity allocation in that you cannot express cost center output in quantities. Instead, the costs for the cost center are passed on via overhead rates to the cost centers (including activity types), orders, projects products, and so on.

The tracing factor for the overhead costing can be either the amount of particular direct costs (such as direct material costs for a production order) or a total of direct costs and overhead cost of goods manufactured.

You can also calculate percentage or quantity-based overhead rates, which lead to an actual credit being posted to a cost center and a debit to the order, project etc.

You can use this function to calculate both plan and actual overhead, rates, and overhead rates for commitments (business processes do not use commitments).

Plan overhead rates are determined as part of cost center planning, business process planning, order planning, preliminary costing, project planning, product costing or unit costing.

Actual overhead rates and commitment overhead rates are calculated as part of period-end closing based on the actual costs incurred or the commitments set up.

The parameters for overhead costing are summarized in a costing sheet. Overhead costing is only carried out for objects, for which a costing sheet is maintained. (See IMG activity Define Costing Sheet)

For cost centers, you enter the costing sheet in the master data of the cost center.

For business processes, you enter the costing sheet in the master data of the business processes.

For internal orders and production orders without quantity structures, the costing sheet can be referenced from a model order.

For production orders, process orders, product cost collectors, maintenance orders, maintenance orders and service orders, you default the costing sheet using a valuation variant.

For projects, you enter the costing sheet in the project profile.

For products, you select the costing sheet using the valuation variant.
For Cost object-ID numbers you default the costing sheet using the cost object profile.

For sales document items, you default it using the requirements class.

Standard Settings

The standard SAP system contains various costing sheets, which you can use as reference models for defining your own costing sheets.

To work with these costing sheets, you need to:

Ensure that all the relevant cost elements are in the calculation bases

Check the conditions for overhead calculation

Include the cost centers or overhead cost orders for your company in the credit keys

Ensure that the costing sheet is defaulted in master data maintenance

If the preconfigured calculation bases, overhead rates and credits are not enough for your requirements, you can create new ones or change the existing ones.

The SAP standard system contains the following costing sheets:

A00000 Standard

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions in the sheet are controlling area-dependent. In this sheet, you can determine plan, actual and commitment overhead.

A00001 Standard 1/overhead key

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions for the overhead determination are dependent on the overhead keys you enter in the orders, projects and so on. This means that you can create separate keys for each project or for particular products or orders. You can determine plan or actual overhead.

A00002 Standard 2 /Plant

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions in the sheet depend on the plant. You can determine plan or actual overhead and can use this sheet as the base for entering different overhead conditions for each plant in your business.

A00003 Standard 3/Company code

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions in the sheet depend on the company code. You can determine plan or actual overhead and can use this sheet as the base for entering different overhead conditions for each company code in your business.

A00004 Standard 4/Business area

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions in the sheet depend on the business area. You can determine plan or actual overhead and can use this sheet as the base for entering different overhead conditions for each business area in your business.

A00005 Standard 5/Order type

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions in the sheet depend on the order type. You can determine plan or actual overhead and can use this sheet as the base for calculating overhead dependent on the purpose of the order (capital investment measure, production order, service order).

A00006 Standard 6/Order category

You can use this costing sheet to determine material, production, administration and sales overhead. The conditions in the sheet depend on the order category. You can determine plan or actual overhead and can use this sheet as the base for calculating overhead in orders, to make overhead conditions dependent on the technical character of the order (PP order, PM order etc.).

PP-PC1 PP-PC Standard

You can use this costing sheet to determine material and production overhead. This sheet is usually used to determine the production costs for a product. The conditions in the sheet depend on the controlling area. You can determine plan, actual and commitment overhead.

PP-PC2 PP-PC Overheads on cost of goods manufactured

You can use this costing sheet to determine material, production, administration and sales overhead. This sheet is usually used to determine the cost of goods sold for a product. The conditions in the sheet depend on the controlling area. You can determine plan, actual and commitment overhead.

Define Overhead Cost Elements

To allocate overhead to cost centers (including activity types), business processes, orders, projects or products, you need to define overhead cost elements. The SAP system then posts the overheads within these overhead cost elements.

In this IMG activity, you create secondary cost elements for overhead.

Activities

Create secondary cost elements of type 41 (overhead).

Note on transport

In Customizing, under *Controlling -> General Controlling*, there is a separate function for cost element Transport.

Define Costing Sheets

In this IMG activity you define a costing sheet.

The costing sheet integrates all elements of overhead costing. It consists of the following rows that are processed during the calculation:

Base rows

Base rows contain the calculation base of the overhead costing: the cost elements and origins to which overhead is to be applied.

You can take the calculation bases directly from the costing sheet and then maintain them as necessary, or define them separately in the IMG activity Define Calculation Base.

Overhead rows

You define the overhead rows by assigning an overhead rate to them. An overhead row references one or more base rows or totals rows. The amount contained in these rows, along with the percentage rate calculated using the overhead rates, determines the overhead amount.

You can take the overhead rates directly from the costing sheet and then maintain them as necessary, or define them separately in the IMG activities Define Percentage Overhead Rate or Define Quantity-Based Overhead Rate.

The overhead row contains a credit key that defines which object (cost center or order) is credited during the overhead calculation.

You can either take the credit keys directly from the costing sheet and then maintain them as necessary, or define them separately in the Define Credit activity.

- **Totals Rows**

No calculation bases or overhead rates are assigned to the totals rows. They are used only to form subtotals or end totals.

Prerequisite

You should already have read the "Define overhead costs" section.

Activities

Check whether the delivered costing sheets meet your requirements.

If necessary, change the standard costing sheets to meet your requirements, or define your own sheets.

If you want to create a costing sheet, you have the following possibilities in the "Change Costing Sheet: Overview" screen:

If you want to copy an existing sheet, select the sheet you want to copy and choose "**Copy as...**".

If you want to create a new sheet, choose "**New entries**".

Enter a sheet abbreviation and a name, and choose "**Enter**". The new costing sheet appears in the overview.

To define the sheet, proceed as follows:

Select the sheet you want and choose "**Costing sheet rows**".

Define a **base row**

Enter a row number and a calculation base.

You can either enter an existing calculation base or create a new one. If you enter a new calculation base, choose "Base" in the "Navigation" group box.

Create a new **Calculation base**.

Enter a four-character key in the "Base" field in the "Costing Sheet: Change Rows: Overview" screen and select the row.

Choose "Base" in the "Navigation" group box and create your new base.

You can specify individual cost elements or cost element intervals as your calculation base. If you have subdivided your cost elements into origins, you can also specify individual origins or origin intervals. Origins are subdivisions of cost elements and permit you to, for example, conduct separate analyses of materials belonging to the same cost element.

Save your entries.

You can define or change individual cost elements independently of the costing sheets (see "Define calculation base").

Define overhead row

To define an overhead row, proceed as follows:

Enter a row number and an overhead key.

Enter "from" and "to" rows to determine which rows you apply overhead to. See the F1 help on how to determine row totaling.

Enter a credit key.

You can either enter existing overheads and credits, or define new ones. If you want to define a new overhead, choose "Overhead" in the "Navigation" group box.

If you want to define a new credit, choose "Credit" in the "Navigation" group box.

Define an **Overhead Rate**

Enter a four-character key in the "Overhead" field in the "Costing Sheet: Change Rows: Overview" screen and select a row.

Choose "Overhead" in the "Navigation" group box and create your new overhead key.

Assign a dependency to your overhead and choose "Enter".

Specify the individual overhead rates.

Each record comprises a validity period, the controlling area, the overhead type (actual, plan, commitment), a percentage, and a number of condition fields derived from the appropriate condition tables via the chosen dependency.

Save your overhead.

You can also define or change individual overhead rates, independently of the costing sheet (see "Define percentage/quantity-based overhead rates").

Define a **Credit**

Enter a three-character key for your credit in the "Credit" field in the "Costing Sheet: Change Rows: Overview" screen and select a row.

Choose "Credit" in the "Navigation" group box and create your new credit. You have the option of entering credit records with validity periods, overhead cost elements, origins, and credit object.

The overhead cost element must have cost element type "41".

For your credit object, you can enter **either** a cost center **or** an order **or** a business process. You cannot make several entries at once.

Save your entries.

You can also define or change individual credits independently of the costing sheet (see section "Define credits").

Define a **Totals row**

If you do not assign a calculation base or an overhead to a row, it is defined as a totals row.

Totaling is controlled via the "from" and "to" row fields. See the F1 help on how to control totaling.

Additional information

Choose "Sheet -> List" to display a detailed breakdown of your costing sheet. The function breaks down each row and shows all the entries you have made for the relevant costing sheet.

Choose "Edit -> Check" to check whether your sheet is fully defined and free of errors.

Dependencies

Your costing sheet is linked with the relevant condition tables via a dependency (= access sequence). This makes it possible for you to look for valid overhead records.

A dependency consists of one or more condition tables and, by assigning condition tables, determines the order in which overhead records are read.

Dependency example

You want to make your overhead percentage dependent on the overhead key in the order and order type.

You can use standard condition table 14 for the overhead key and table 36 for the order types for this purpose.

If you put table 14 in the first position and table 36 in the second, the system first looks for a percentage which is dependent on the overhead key, and then for one which is dependent on the order type.

Use "Exclusive indicator" to control whether the SAP System continues to search for valid records after successfully accessing the first one.
If you do not set this indicator, the system searches for all valid percentages and adds them together.

Standard settings

The standard SAP System contains examples of assignments of dependencies for overhead.

Activities

To use the dependencies supplied, proceed as follows:

Do not change table assignments.

Change the dependency names to meet your requirements.

To define new dependencies, proceed as follows:

Choose "Extras -> Dependency".
The SAP System displays an overview of all the existing dependencies.

Enter an abbreviation and a name for your new dependency.

Choose "Enter".
The new dependency is incorporated in the list.

Choose "Goto -> Detail screen" to access the detail screen.

Assign condition tables as required.
Ensure that you assign the tables in the sequence "from specific criteria to general criteria".

Return to the overview screen.

Activate your dependency.
You can create a dependency without activating it. However, if you use an unactivated dependency in an overhead, the SAP System will not be able to find any valid records for this dependency.

Condition tables

A condition table defines the structure of an overhead record. The field contained in a table lays down the conditions according to which overhead percentage rates are calculated.

You define a condition table by selecting the fields you want in the order you want from the stock of permitted fields.

An overhead line can hold a maximum of three fields. If you select more than three fields, the SAP System automatically puts the last three selected into the overhead line. The remaining fields appear in the specified order in the screen header.

Example

You want to use the fields "Company code", "Business area", and "Plant" as condition for calculating your overheads.
To do this, you must create a new condition table and select the three fields you want from the list of permitted fields.

Standard settings

The standard SAP System contains examples of dependency assignments for condition tables. They are in the range up to number 500 and cannot be changed.

Recommendation

For performance reasons, you should preserve the following field sequence:

Controlling area
This only applies if you have more than one controlling area.

Overhead type
This only applies if your actual and plan percentages might be different.

Group-specific condition fields
Choose the sequence of these fields so that the fields filled most frequently appear first.

Activities

To create new condition tables, proceed as follows:

Choose "Extras -> Condition table".

Enter a number between 501 and 999.

Choose "Condition -> Create".

Enter a name for your condition table.

Choose the fields you want in the sequence you want.

Generate your condition table.

NOTE

If you want to maintain credits for all business areas, proceed as follows:

Choose **Maintain accrual calculation**.

Select the overhead structure

Choose *Structure*

Select a row in which a credit is displayed

Choose *Goto -> Credit*.

Enter the required controlling area.

Costing Sheet: Components

In this section you can edit the details for costing sheet maintenance separately. These are:

Calculation bases

Percentage overhead rates

Quantity-based overhead rates

Credits

In contrast to the costing sheet, you can enter several of these detail data types at one time. You can then include the newly entered records in any costing sheet at a later date.

Additionally, there is an enhancement to working with overhead rates.

Define Calculation Bases Referring to Cost Element and Origin

In this IMG activity you define a calculation base for overhead costing. The calculation base determines to which cost elements overhead is applied together.

For each controlling area, you assign individual cost elements or cost element intervals, or origins or origin intervals, to the calculation bases.

For production overhead costs, you can differentiate between fixed and variable costs for the calculation base. In this way, you can charge the fixed and variable portions of the activity price differently for activity types.

For material overhead costs, you can differentiate the materials used. If you want to define different material overhead costs for particular raw materials, you can define origin groups and define your own calculation bases for particular origin groups.

Requirements

You have defined the origin groups:

Define origin groups

Note

If you do not specify any origins for a cost element interval, the SAP System considers all the origins in the relevant interval.

Activities

To define a calculation base, proceed as follows:

Choose "**New entries**" to create a new calculation base.

Enter any four-character key you want, and a name for the new calculation base.
Select a row and choose "Detail"

Enter the individual cost elements or cost element groups.

If you have subdivided your cost elements into origins, you can also specify individual origins or origin intervals.

Save your entries.

Define Calculation Bases Referring to Cost Center and Activity Type

Use

This step shows how you define a calculation base for overhead calculation. The calculation base defines the cost centers and activity types to which overheads are to be applied.

For each controlling area you assign the calculation base of individual cost centers or cost center ranges or individual activity types or activity type ranges.

- For production overheads you can differentiate the calculation base by fixed and variable costs. This enables you to apply different overheads to the fixed and variable shares of the activity type tarifs.

Note

If you do not specify activity types for a cost center range, all activity types are included from the affected range.

Activities

You define a calculation base as follows:

Choose "**New Entries**" to create a new calculation base.

Enter a four figure identifier of your choice and a description for the new calculation base.

Select the line and choose "Detail".

Enter the individual cost centers or cost center range.

If you want to break down cost centers in activity types, you can also specify individual activity types or activity type ranges. If you enter an upper limit for an activity type range, all activity types up to this limit are selected.

Save your entries.

Define Percentage Overhead Rates

An overhead rate specifies the conditions under which overhead is applied to an object.

In this IMG activity you define **percentage** overhead rates, for example, 25% in controlling area 0001. You can also define quantity-based overhead rates ($0 per piece).

Percentage overhead rates are recommended if, for example, you want to calculate quantity-independent overhead on costs for particular cost elements in a cost center. Quantity-based overhead rates , on the other hand, are calculated for each unit of measure of a cost element.

You can combine the two by assigning a % overhead rate, for example, to a cost element and an additional rate pf $3 per hour.

Overhead rates are limited in duration and can be adapted to meet your requirements as part of current settings.

You must assign a Dependency to each overhead rate. The content of particular order fields for a cost center, a business process or an order can be moved back as dependencies. The system prescribes which

fields you can use. For example: if you enter "plant" as a condition, a defined overhead rate is calculated for each plant.

Using this condition, the system can access the relevant condition fields in the appropriate Condition Tables. All the condition tables delivered in the standard contain the fields "Controlling area", "Overhead type" and at least one field from the cost center master data, business process master data or order master data (see below).

Plan, actual, and commitment overhead can be calculated. The overhead type distinguishes between the three. Business processes do not use commitments.

Standard settings

The SAP standard system contains overhead rates with the following dependencies:

Controlling area

Company code

Order type

Plant

Order type

Order category

Plan version

Overhead type

Overhead key

To define order-dependent overhead rates, you create an overhead key and enter this key in the order master data.

To define product-dependent overhead rates, create an overhead key and link this key to an overhead group. This group is then entered in the costing view of the material master record.

Activities

To define a percentage overhead rate, proceed as follows:

Choose "Create" to create a new overhead rate.
Enter a four-character identification code and a description for the new overhead rate and assign a condition to it.

Select the row and choose "Detail"

Specify the individual overhead rates.
Each record consists of a validity period, a percentage rate and several condition fields, which are taken from the the condition tables.

Save your overhead rate.

Define Quantity-Based Overhead Rates

An overhead rate determines the conditions under which overhead is allocated to an object, and how much overhead is allocated.

In this step you define **quantity-based overhead rates**, such as $0 per piece. You can also define percentage-based rates (such as 25% in controlling area 0001) in the previous step.

Percentage overhead rates are recommended if you want to allocate overhead to particular cost elements for a cost center independent of the quantity. In contrast, a quantity-based rate allocates overhead per unit of measure of a cost element. You can combine percentage and quantity-based rates. For example, you could define a rate of % on a cost element plus an additional $300 for every 0 hours.

Overhead rates have a time-based validity. You can adapt them to your requirements using the current settings.

You need to assign a dependency to each overhead rate. You can use the contents of particular fields of an order, cost center, or business process as dependencies. The fields you can use are predefined by the system. For example, you can apply a defined overhead rate for each plant by specifying a plant dependency. The fields you choose to define your dependency are saved in a condition table (price table). All condition tables in the system contain the fields "controlling area" and "overhead type", plus a maximum of one additional field (see below) for the order master, the cost center master, or the business process master.

You can apply overhead rates in plan data, actual data, and commitments. The overhead type differentiates accordingly between plan, actual, and commitment overhead. Business processes do not use commitments.

Standard settings

The standard SAP system provides overhead rates with the following dependencies:

Controlling area

Company code

Business area

Plant

Order type
Order category

Plan version - Profit center

Responsible cost center

Overhead type

Overhead key

To define order-dependent overhead rates, create an overhead key and enter it in the order master data.

To define product-dependent overhead rates, create an overhead key and link it to an overhead group. Then enter the overhead group in the costing view of the material master record.

Activities

To define a quantity-based overhead rate:

Choose **New entries**.

Enter any four-character identification code and a description for the new overhead rate, and assign a dependency to it.

Select the line and choose "Detail".

Specify the individual overhead rates.

Each record consists of a validity period, several condition fields taken from the price tables, and an amount to be applied to the base costs as overhead.

Save your overhead rate.

Additional Information

To apply quantity-based overhead rates, the units of measure must be updated in Controlling (CO).

You have two options:

Set the *Record Quantity* indicator in the cost element master data.

If you want to assign different materials to an object (order, cost center, business process, WBS element, etc.) under the same cost element but with different units of measure, set the *Material Origin* indicator in the costing view of the material's master record. In addition, materials with different units of measure must have different entries in the "Origin Group" field.

With quantity-based overhead rates, the system only includes input materials and activities with units of measure that are updated in CO. For materials, these are the base units of measure.

Conversions between units of measure are based on the rules stored in the global settings in Customizing (step Check Units of Measurement). Quantity conversions (such as those that you define in the material master) are disregarded.
For example, the system applies overhead in $ per kilogram to input materials with the base unit of measure "G" but not to materials with the unit "pallet".

Define Credits

Cost allocation is part of the process of determining overhead rates. If this leads to an object being debited with actual costs, another object in Cost Accounting must be credited at the same time. This can be either a cost center, order or a business process. This type of posting is recorded under a secondary cost element of cost element category 41 (overhead rates) in the SAP System.

When you define credits, you also specify which credit object is to be credited under which cost element when overhead is to be applied to an object in the actual.

You can also define what percentage of the overhead is to be allocated as fixed costs.

Activities

To define a credit, proceed as follows:

Choose **New entries** to create a new credit.

Enter a three-character key and a name for the new credit.

Select the row and choose "Detail".

You have the option of entering credit definitions that contain the following:

A validity period

An overhead cost element

The overhead cost element must have cost element category 41.

An origin group

You must specify an origin group if you want to see both the overhead cost element and the origin of the overhead in cost accounting

The percentage of the overhead to be allocated as fixed costs.

"*": The fixed portion of the costs is determined in the same way as the portion of fixed costs for the debit object.

A credit object

You can enter **either** a cost center **or** an order, **or** a business process as a credit object, but not more than one at the same time.

Save your entries.

NOTE

If you want to maintain credits for all business areas, proceed as follows:

Choose **Maintain accrual calculation**.

Select the overhead structure
Choose *Structure*

Select a row in which a credit is displayed

Choose *Goto -> Credit*.

Enter the required controlling area.

Extras: Dependencies/Condition Tables

In this section you maintain dependencies and condition tables. You need dependencies and condition tables to specify under which conditions overheay should be assigned.

The SAP standard delivery includes dependencies and condition tables which cover most requirements. If you have extra requirements, you can include further entries.

Define Dependencies

In this IMG activity, you maintain dependencies. You specify the conditions for overhead calculation, and can use the contents of certain fields in an order, cost center, or a business process. The fields that can be used are provided by the system. For example, you can use a dependency from the plant to determine that a defined overhead is calculated per plant.

To define a particular dependency, select from the usable fields those fields that your overhead is dependent on. The fields you select are saved in a condition table in the system.

A dependency consists of one or more condition tables. To complete the definition of the dependency, specify the condition tables in the order (access order) in which they are to be read. Enter the dependencies defined in this way in your costing sheet. The system determines the valid overhead rates during runtime.

Example

You want to make your overhead percentage dependent on the overhead key in the order, and on the order type.
To do this, you can use standard condition table no. "14" for the overhead key, and no. "36" for the order types.

If you have table no. "14" in first place, and table no. "36" in second place, then the system starts by looking for a percentage during overhead calculation. This percentage is dependent on the order type.

Standard settings

The SAP standard system contains examples of assignments of dependencies to overheads.

Activities

To use the dependencies provided by SAP, proceed as follows:

Do **not** change the table assignments.

Change the names of the dependencies according to your requirements.

If you require new dependencies with new condition tables, you need to define one or more of your own condition tables , and as described below, corresponding new dependencies.

To define new dependencies, proceed as follows:

The system displays an overview of all existing dependencies (access sequences).

Choose "New entries" to create a new dependency.

Enter an identifier and a name for your dependency.

Choose "Accesses"

Specify a sequence number, and the condition table whose field contents are to be uesd for calculating overhead.
If more condition tables are to be checked, specify these with correspondingly higher sequence numbers in more rows. This type of condition table listing is an access sequence.
Ensure that the tables are assigned in order, ranging from specific to general criteria. You can use the exclusive indicator to ensure that the system stops its search for more valid records once it has successfully accessed a table. If you do not set this indicator, the system includes all specified condition tables.

Select each row with a condition table, and choose "Fields" to specify fields whose contents are to be used for overhead calculation.

Save your entries.

In the access sequence overview, choose "Utilities" to generate your dependency. You can create a dependency without generating it. However, if you use a non-generated dependency in an overhead, the system is not able to determine any valid records for this overhead.

Further notes

If you process dependencies, change a cross-client table. All changes that you make apply to all clients in your SAP system.

Define Condition Tables

In this IMG activity you maintain condition tables. A condition table defines the construction of an overhead rate. In the condition table, you enter the fields on which you want to make the overhead rates dependent.

You define a condition table by selecting the fields you require in a specified sequence from the list of permitted fields. This list is preset. You can then enter the condition tables you have thus defined in a Dependency.

Example

You want to use the fields "Company code", "Business area" and "Plant" as conditions for calculation of your overhead.
To do this, you must create a new condition table and select the three fields specified from "Allowed fields".

Standard settings

In the SAP standard delivery, there are examples of Condition Tables. They are in the number range 001 to 500 and cannot be changed.

Activities

If you want to create new condition tables, proceed as follows:

To create a new condition table, choose **"Condition -> Create"**.

Enter a number between "501" and "999".
Confirm the creation of a condition table for internal orders with a validity period and table type "T".

Enter a name for your condition table.

Select the desired fields in the desired sequence.

Generate your condition table.

Further notes

To improve system performance, you should keep to the following field sequence:

Controlling area
This applies only when you have more than one controlling area.

Overhead type
This only applies when your actual percentage rates and your plan percentage rates are different.

Business-organizaion specific condition fields
Select the sequence for these fields so that the fields filled most frequently appear first.

Develop Enhancements for Overhead Rates

The following SAP enhancement is now available for overhead rates:
COOM0001 User Exits for Overhead Rates

You can use the user exists to transfer the following to overhead costing:

Values and quantities for a calculation base

Percentages or amounts per unit of measure for an overhead rate

A credit cost element and a credit cost center or credit order This enhancement contains the following components:

EXIT_SAPLKASC_001
Calculation base

EXIT_SAPLKASC_002
Overhead rate

EXIT_SAPLKASC_003
Credit

Look at the documentation for the individual components for examples of how to use them.

Activities

Create an enhancement
You can either create a new project or use an existing one.

Activate the project
The enhancement only works once you have activated it.

Further notes

Unlike modifications, enhancements are suitable for release, as they are not part of the original SAP software, but are in the user-defined name space.

For more information on general procedures for creating enhancements, see the enhancement transaction under "Help -> Application help".

For documentation on enhancements, see the enhancement transaction under "SAP Documentation".

Define Selection Variants for Overhead Rates

A selection variant contains the fields that are to be evaluated in your selection report. These fields determine the content and structure of a selection variant.

The following selection reports are available:

For cost elements RKKOASEL

For cost centers RKKSTSEL

For activity types RKLSTSEL
For business processes RKPRZSEL

For internal orders RKOSEL00

For projects RKPSEL00

You enter the selection values in the corresponding fields, and can overwrite these in the application. You can hide the fields that you do not require.

When you process "variant attributes", you can specify variables for selection variant fields, and so on.

Example

If you wish to select your objects by time, then define a selection variant, which only contains master data fields for times.

Standard settings

The following selection variants are defined for internal orders:

SAP_01 - SAP_02 - SAP_03

Activities

If you wish to create your own selection variants, proceed as follows:

Enter a name for your variant in the "ABAP: Initial screen for variants"

Confirm the "Values" default setting in the "Subobjects" group box, and choose "Create". In the "Variant maintenance: Report <your selection report>" screen, the system displays the selection fields for the corresponding master data.

Enter the values or variables in the fields that you wish the system to use for selection.

Choose **Continue**.
This takes you to the Attribute maintenance screen for the selection variants.

You can assign the following field attributes:

Protected
The value that you specified for the field can no longer be overwritten in the application.

Invisible
The system hides this field from the selection variant.

Selection variable
You can define a variable for a field, such as a user-defined selection rule (compare with the "Define selection rule" section). The field is filled with the corresponding value during runtime.

Enter a short text in the "Description" field.

Save your entries.

This variant is now available for the corresponding selection report.

Transport notes

You can transport selection variants manually by proceeding as follows:

Choose "Utilities -> Transport request..." in the "ABAP: Variants - Initial screen"

Enter the program name

Enter the name of the variant to be transported

Activate Realtime Overhead Calculation

Use

Activate Realtime Overhead Calculation for controlling area.

Activate Overheads for Controlling Area and Business Transaction

Use

In this IMG activity you activate transaction-based calculation of overhead for certain business transactions. For more information, see SAP Library under SAP ERP Central Component -> Financials -> Controlling (CO) -> Cost Center Accounting (CO-OM-CCA) -> Period-End Closing (CO-OM-CCA) -> Overheads -> Transaction-Based Calculation of Overhead.

Standard settings

In the standard system, transaction-based calculation is not activated for any business transactions.

Activities

In the period when you first activate transaction-based calculation, if you have already posted business transactions for which you have activated transaction-based calculation, you must calculate the overhead for these transactions by starting transaction RTOHC_UPGRADE.

Activate Date From Time Sheet as Document Date for Confirmation

Use

In this IMG activity, you activate for each controlling area that the date from the time sheet is to be used as the document date for confirmation documents.

Together with the settings for the valuation date and activation of transaction-based overhead, you can use this activation to be able to carry out the activity allocation and overhead calculation based on the document date instead of the posting date.

Requirements

So that the document date is used, you have to carry out not just the activation in this IMG activity, but also Determine and Assign the Settings for the Valuation Date . For the overhead calculation, it is also necessary that you have activated the Transaction-Based Overhead.

Example

In a closed period, an adjustment of the confirmation is made in the time sheet. By activating the date of the time sheet as document date, the adjustments can be made with the prices and overhead that were valid on the day for which the adjustment was made. Without this activation, the adjustment would be made with current prices and overhead in the current period.

Special Valuation Date Settings

Use

In this IMG activity, you decide for each controlling area whether the document date or a date determined using a BAdI is to be used as the valuation date for the activity allocation or the transaction-based calculation of the overhead rate. If you do not opt for either of these for a controlling area, the standard system uses the posting date of the activity allocation and transaction-based overhead calculation.

Dependent on the valuation date is, for example, the price used: the price valid on this date is the one used. Consequently, it is particularly important with corrections in periods already closed that a date other than the posting date is used as the valuation date, because only then the prices are used for the adjustment posting that were valid in the past.

You can assign the valuation date selected here to the following business transactions:

Manual cost allocation (KAMV)

Actual activity allocation (RKL)

Repost costs (RKUI)

Repost revenue (RKU 2)

Requirements

If you want to use the valuation date for the transaction-based calculation of overhead, you have to have the transaction-based calculation activated.

To be able to use the document date as the valuation date for confirmations, you have to have activated the date of time sheet as document date for confirmations activated.

BAdI: Maintain Valuation Date

Use

Within Cost Accounting, configuration allows the use of special valuation date for certain business transactions, with an option that this date be filled by user exit. This enhancement supports filling the special valuation date during creation of CO documents, and controlling whether direct input of the special valuation date is permitted during manual entry of activity allocation documents.

Requirements

Configuration of view cluster TKSVD_VC.

Activities

Implementation of the BAdI method SET_VAL_DATE is mandatory to provide the value for the special valuation date.

Implementation of the BAdI method ALLOW_MANUAL_INPUT is optional to allow users to modify the special valuation date during transaction entry.

Distribution

In this section you make settings for actual distribution.

Specify Receiver Types for Distribution

When making distributions you can specify which table fields are active and whether, in cycles, a single value, an interval, or a group can be entered for these fields.

You make these settings per controlling area and separately for plan and actual data respectively.

If you change the attributes for a field that is already used in cycles then:

If you change individual values, groups, and intervals that have a "to" value, the system deletes the corresponding data records from the table.

If you change intervals with "From" values, the "To" values are deleted from the table.

Example

You use assessments on cost centers, but would always only like to touch upon cost center groups as a receiver.
By deleting the character of the table field 'Cost center' in the fields for input-readiness as a single value and in the interval in the area of receiver, you discover that only one group can be entered with the definition of the assessment cycle as a receiver for cost centers.

Allocation type Assessment

Act./Plan Act.
Field Cost center

Field properties

Activ ind.	Input ready	Input ready	Input ready
+ Sender	X Single value	X Interval	X Group
+ Receiver	_ Single value	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of an assessment as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen. This retrieves the original standard values for a table field.

Save your changes.

Notes on transport

To transport assessment field attributes manually, choose *Table view -> Transport*.

Define Distribution

In this activity, you define distributions in the form of cycles by specifying rules for the settlement of primary costs on a cost center.

Recommendation

Check whether distribution can be replaced here by periodic reposting or assessment in order to achieve better system performance.

You can use assessment if the origin of the primary costs is not important. If required, you can use multiple assessment cost elements for differentiation.

Periodic reposting is recommended if the origin of primary costs is important, but the partner object does not need to be displayed directly. The partner information, however, is not lost. Proof of origin is always possible via the line item document.

If you do need to show the partner object directly in the report, you must use distribution. The data volume will grow significantly for the proof of the partner objects, particularly in large distributions.

Note that the data volume generated for past periods will grow with increased numbers of periods. Especially in reporting and for data backups, it is important to keep the data volume generated by allocation to a minimum. For this reason, assessment or periodic reposting are to be recommended.

For performance reasons, you should not use more than 50 segments in one cycle. If necessary, define multiple cycles. A larger number of segments per cycle is only necessary for extensive iterations.

Also: For performance reasons, never use more than ,000 relationships in an allocation cycle. If you require more than that, you must plan a mass test of the allocations beforehand.

Example

From a sender cost center with 0 sender cost elements, allocations are made with one segment to 500 receiver cost centers.

The following numbers of sender and receiver totals records result from the different allocations that must be written in the processed period:

Allocation	Sender totals recds	Receiver totals recds
Assessment	500	500
Periodic reposting	0	500 x 0
Distribution	500 x 0	500 x 0

This simple example already demonstrates that

far more sender totals records are written for distribution than for periodic reposting

far more receiver totals records are written for periodic reposting than for assessment

In practice, because of the far higher number of senders and receivers, the advantages of assessment and periodic posting are even more apparent.

Activities

Create a plan distribution cycle by proceeding as follows:

Determine a name for the cycle.

Determine a validity period for the cycle.

Maintain the header data for the cycle by entering the following.

- Which currencies are to be used in the allocations
- Whether consumption is to be allocated or not
- Whether negative tracing factors are scaled or not
- Whether cycle processing is to be iterative
- In which version the allocation is to take place

Define cycle segments in which you store the following information.

- Sender cost element to be distributed
- Criteria for cost distribution to the receiver
- Sender objects
- Receiver objects

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Further notes

Distribution

During distribution, the following information remains:

Original primary cost element.

Information on the sender cost center is noted in the receiver cost center or receiver order.

Information on the receiver cost center or order is noted in the sender cost center.

For more information, see the "SAP Library" under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Defining Periodic Repostings or Periodic Allocations*.

Develop Authorization Enhancements for Distribution

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Assessment

In this section you make settings for actual assessment.

Specify Receiver Types for Assessment

When making assessments you can specify which table fields are active and whether, in cycles a single value, an interval, or a group can be entered for these fields.

You make these settings per controlling area and separately for plan and actual data respectively.

If you change the attributes for a field that is already used in cycles then:

If you change individual values, groups, and intervals that have a "to" value, the system deletes the corresponding data records from the table.

If you change intervals with "From" values, the "To" values are deleted from the table.

Example

You use assessments on cost centers, but would always only like to touch upon cost center groups as a receiver.
By deleting the character of the table field 'Cost center' in the fields for input-readiness as a single value and in the interval in the area of receiver, you discover that only one group can be entered with the definition of the assessment cycle as a receiver for cost centers.

	Allocation type	Assessment
	Act./Plan	Act.
	Field	Cost center

Field properties

Activ ind.	Input ready	Input ready	Input ready
+ Sender	X Single value	X Interval	X Group
+ Receiver	_ Single value	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of an assessment as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen. This retrieves the original standard values for a table field.

Save your changes.

Notes on transport

To transport assessment field attributes manually, choose *Table view -> Transport*.

Create Assessment Cost Elements

In assessment, the R/3 System converts the original cost elements cumulatively or in groups into assessment cost elements. The original cost elements are lost in this process.

Assessment cost elements are secondary cost elements.

Requirements

- Complete the IMG activity Maintain Controlling Area, found in the *General Controlling* section of the IMG under *Organizaton*.

Activities

Create secondary cost elements of category 42 (assessment cost element).

Note

For more information, see Maintain Cost Element.

Define Allocation Structures

If the assessment for each segment is not made with a pre-defined assessment cost element, you can assign the source cost elements to the desired assessment cost element in the allocation structure. During cycle definition, enter the allocation structure instead of an assessment cost element in the segment.

An allocation structure for the assessment consists of at least one assignment, stating the assessment cost element to which the source element is assigned. The original cost elements will already have assignments in the source.

Requirements

To define the assessment cost elements required for the allocation structures, you must first complete the IMG activity "Create Assessment Cost Elements".

Activities

Creating an allocation structure.

To create an allocation structure, proceed as follows:

Choose "New Entries".

Enter a name and text for the allocation structure.

Save the allocation structure.

Enter the assignments for each allocation structure. To make the assignments, proceed as follows:

Select the allocation structure, and then choose "Assignments".

Choose "New Entries".

Enter a name and text for the assignment.

Save the assignment.

Specify the source for each assignment.

To specify the source for an assignment, proceed as follows:

Select the assignment, then choose "Source".

Enter a cost element interval or a cost element group.

Save the source.

Enter the assessment cost element for each assignment.

To specify an assessment cost element for an assignement, proceed as follows:

Select the assignment, then choose "Assessment cost element".

Enter the assessment cost element you require.

Save your entries.

Further notes

For more information on the allocation structure, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Periodic Allocations -> Assessment*.

Maintain Assessment

In the IMG activity "Define Assessment" you set rules in the form of cycles to allocate primary and secondary costs in the actual.

Requirements

You must already have completed the IMG activity Create Assessment Cost Elements.

If you are using an allocation structure, you must have completed the IMG activity Define Allocation Structure.

Recommendation

When using assessment, distribution, and periodic reposting, note the following:

You can use assessment if the origin of the primary costs is not important. If required, you can use multiple assessment cost elements for differentiation.

Periodic reposting is recommended if the origin of primary costs is important, but the partner object does not need to be displayed directly. The partner information, however, is not lost. Proof of origin is always possible via the line item document.

If you do need to show the partner object directly in the report, you must use distribution. The data volume will grow significantly for the proof of the partner objects, particularly in large distributions.

Note that the data volume generated for past periods will grow with increased numbers of periods. Especially in reporting and for data backups, it is important to keep the data volume generated by allocation to a minimum. For this reason, assessment or periodic reposting are to be recommended.

For performance reasons, you should not use more than 50 segments in one cycle. If necessary, define multiple cycles. A larger number of segments per cycle is only necessary for extensive iterations.

Also: For performance reasons, never use more than ,000 relationships in an allocation cycle. If you require more than that, you must plan a mass test of the allocations beforehand.

Example

From a sender cost center with 0 sender cost elements, allocations are made with one segment to 500 receiver cost centers.

The following numbers of sender and receiver totals records result from the different allocations that must be written in the processed period:

Allocation	Sender totals recds	Receiver totals recds
Assessment	500	500
Periodic reposting	0	500 x 0
Distribution	500 x 0	500 x 0

This simple example already demonstrates that

far more sender totals records are written for distribution than for periodic reposting

far more receiver totals records are written for periodic reposting than for assessment

In practice, because of the far higher number of senders and receivers, the advantages of assessment and periodic posting are even more apparent.

Activities

Create an actual assessment cycle as follows:

Enter a name for the cycle

Enter a validity timeframe for the cycle

Maintain the header data for the cycle by entering the following:

In which currencies the costs should be allocated
Whether the cycle is to be processed iteratively and/or cumulatively.

Create segments for the cycle that contain the following information:

The cost element to be assessed or the cost element of the sender allocation structure

Criteria for the distribution of costs among the receivers

Whether negative tracing factors are to be scaled

Criteria for determining the sender values

The sender objects and the receiver objects

The selection criteria for the receiver tracing factors

The selection criteria for the sender values

Receiver weighting factors for receiver rule 1 (variable portions):

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Additonal information

Notes for working with a delta version

Please note the following during cycle definition:

If you select a delta version, the following **additional** allocation characteristics are available for segment definition:

Business processes and/or groups

External value added

Internal value added

Type
The receiver objects "order" and "WBS element" become invalid.

For more information on defining an assessment, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Periodic Allocations or Periodic Repostings*.

Develop Authorization Enhancements for Assessment

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Activity Allocation

In this section you make settings for activity allocations and for splitting.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations*.

Direct Activity Allocation

In this section you make settings for direct activity allocation in the actual.

Indirect Activity Allocation

In this section you define the settings for actual indirect activity allocation.

Determine Send/Recv Categories for Indirect Acty Allocation

For indirect activity allocation you can determine which table fields are active and whether, in cycles you can enter a single value, an interval, or a group for these fields.

You make these settings per controlling area, and separately for plan and actual data respectively.

Example

You use indirect activity allocation for cost centers, but want to use only cost center groups as receivers.

Remove the table field indicator "Cost Center" in the fields for individual value entry readiness and in the receiver area interval to ensure that you can only enter groups as cost center receivers during cycle definition.

Allocation Cat:	Indirect Activity Allocation
Actual/Plan:	Actual
Field:	Cost Center

Field Characteristics:

Active Indicator	Entry-Ready	Entry-Ready	Entry-Ready
+ Sender	X Indv. Valu	X Interval	X Group
+ Receiver	_ Indv. Valu	_ Interval	X Group

Requirements

Complete the IMG activity Maintain Controlling Area in the Implementation Guide under *General Controlling -> Organization*.

Standard settings

Initially, standard values are defaulted as to whether single values, intervals, or groups can be entered. In order to ensure overall data consistency, not all the standard values can be changed.

Activities

Change the field attributes of an indirect activity allocation as follows:

Select the controlling area for which you want to change the field characteristics by entering the CO area in the dialog box offered. If the dialog box does not appear, you can change the CO area by choosing **Extras -> Set CO area**.

Mark the rows from the list of fields offered for which you want to maintain field attributes.

Depending on the field selected, one or more of the following maintenance options are offered in the detailed screen:

Field attributes in cycle

Field attributes in cycle sender control

Field attributes as sender

Field attributes as sender tracing factor

Field attributes as receiver

Field attributes as receiver tracing factor

In the detail screen, maintain the following table fields:

Active indicator

Ready-for-input as single value

Ready-for-input as interval

Ready-for-input as group

To reverse changes you have made to field attributes, choose *Get standard values* in the detail screen.
This retrieves the original standard values for a table field.

Save your changes.

Notes on transport

To transport indirect activity allocation field attributes manually, choose *Table view -> Transport*.

Define Activity Types for Indirect Activity Allocation

You use indirect activity allocation for those activity types for which activity quantities cannot easily be determined.

It is important to distinguish between the following cases:

Sender activities can be summarized
The sender allocates activities to the receivers based on receiver tracing factors.

Sender activities imposssible or difficult to determine The sender allocates these activities:

Using receiver tracing factors and sender weighting factors

Using specified fixed amounts

Activities

Create activity types of category 3 for sender activities which can be summarized.
Create activity types of category 2 for sender activities which are impossible or difficult to determine

Note

For more information, see Create activity types.

Define Indirect Activity Allocation You determine rules for indirect activity allocation in the form of cycles.

For cost centers with activities that cannot be measured or measured only with great difficulty, the activity quantities can be determined indirectly.

In indirect activity allocation, the usage of sender activities (cost center/activity type) is determined via tracing factors from the viewpoint of the activity receivers.

The tracing factors are defined as in assessment or distribution.

Requirements

You must maintain activity types for indirect allocation in actual and plan.

The requirement for indirect activity allocation in actual and planning data is that all senders and all receivers of the cost object cost center/activity type are included in activity type planning for activity type category 3.

You enter activity quantities for activity type category 3 ("Manual entry, automatic allocation") for **planning data** with activity type planning.

Note:

Planning activity quantities with the aid of activity type planning is only possible for activity type category 3. For activity type category 2 the SAP system automatically creates a cost center/activity type record. Sender activity quantities are indirectly determined from the receiver tracing factors and through fixed quantities.

For **actual data**, a posted sender activity quantity can be created by entering non-allocatable activities.

Note:

Entering posted activity quantities for activity type category 3 is not possible, since the activity quantities are indirectly determined.

The requirement for indirect activity allocation in actual and planning data for activity type category 2 is that a value NOT equal to zero is entered in the segment definition for the sender-specific weighting factors with the function *Sender values*. Only then will the corresponding record be included in the activity allocation. Examples for Indirect Activity Allocation

Activity types of category 3, "Manual entry, indirect allocation"

The cost center "Quality control" produces 00 hours of activity type "Test". Activities go to cost centers "Goods receipt" and "Finished products". The allocation is made on the basis of the tracing factor "Number of test items" (NI). For "Goods receipt" these are
4000 items, for "Finished products" 6000.

Price per activity unit for "Quality control" equals 50 USD/hr. The resulting costs of activity production equal USD 50,000.

The receiver centers are debited **according to the tracing factor** with the following costs:

Goods receipt: (50,000 X 4000 NI) / ,000 NI = **$ 20,000**
Finished products: (50,000 X 6000 NI) / ,000 NI = **$ 30,000**

- *Activity types of category 2, "Indirect entry, indirect allocation"*

Activity determination for the sender takes place via receiver tracing factors and weighting factors defined for each sender. The sender rule here is usually "Indirectly determined quantities"; receiver rule can be any rule.

Using the example above, the receiver tracing factors are:

"Goods receipt"	4000 NI
"Finished products"	6000 NI
Total	,000 NI

The sender is credited with ,000 test items. This amount can be valuated with weighting factors defined per sender activity type. Weighting factor, activity type "Test": 0

Debiting of the sender and the activity type "Test" are thus equal to

(50,000 / ,000 NI) X ,000 NI X 0,4 = **$ 20,000**

Activities

Create a cycle for indirect activity allocation as follows:

Determine a name for the cycle.

Determine a date as of which the cycle is to be valid.

Maintain the header data of the cycle by specifying the following:

- an explanatory text
- the date to which the cycle is to be valid
- whether negative tracing factors are to be standardized

Define cycle segments in which you store the following information:

- a name and text for each segment
- the sender values
- the tracing factor
- the selection criteria (sender objects and receiver objects)

Save the cycle.

Notes for Transport

If, in your client, you have not selected the automatic recording of changes for client-specific objects (in Customizing under *Basis Components -> System Administration -> Change and Transport System -> Configure Clients*), you can transport your settings to the target system in a user-defined activity.
To do this, in Customizing, choose *Controlling -> General Controlling -> Production Start-Up Preparation -> Transport System Settings* and then process the relevant activity.

Further notes

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Indirect Activity Allocation* or in *Period-End Closing -> Defining Periodic Repostings or Periodic Allocations*.

Conceptional Information for Indirect Activity Allocation

Indirect activity allocation consists of two subfunctions which you can enter as required in a cycle. However, one segment can cover only one subfunction in each case:

Sender activity quantities are known and can be entered as totals. Using indirect activity allocation, the posted activity quantities are distributed from senders to receivers according to the tracing factors defined in the segment.
segment uses this method if *Posted quantities* (rule 1) is the sender rule and *Fixed quantities* (rule 2) is NOT a receiver rule.

In a segment to distribute posted sender amounts, you can use activity types of category 3 *manual entry, indirect allocation* only.

Sender activity quantities are not known because measurement is either impossible or not feasible (for example, a joint office working for several cost centers). However, the SAP system can derive sender activity quantities indirectly, based on receiver tracing factors adjusted with a sender-specific weighting factor.

segment uses this method if *Indirectly determined quantities* (rule 3) is the sender rule, or if *Fixed quantities* (rule 2) is a sender or receiver rule. Using the *Sender values* function, you can determine sender-specific weighting factors for the sender rule *Indirectly determined quantities*. The default value is "1".

In segments for indirect calculation of sender activity quantities you can only use activity types of category 2 *indirect entry, indirect allocation*.

Senders and receivers in indirect activity allocation

In indirect activity allocation for actual and plan data, **senders** can be objects of the category *cost center/activity type* or **business processes**.

In a given segment, you can use category 2 or category 3 activity types only.

In indirect activity allocation for **plan data**, all usual CO objects are possible (cost center, cost center/activity type, orders, projects, etc.) as **receivers**

All of these receiver categories can appear in a cycle. However, cost objects of the category cost center/activity type may not be combined with other receiver categories.

In indirect activity allocation for **actual data**, you can use the same cost objects as receivers as in manual activity allocation, meaning **no** cost centers/activity types.

Fixed and variable activity references; evaluating activity quantities

In indirect activity allocation for **actual data**, all quantities are posted as total quantities. The division into fixed and variable quantity parts is carried out through actual cost splitting.

In indirect activity allocation for **plan data**, the determination of fixed and variable quantity quotas depends on the receiver category:

Receivers of the category cost center/activity type post all activity quantities as variable quantities, with tracing factors dividing actual and plan activity into fixed and variable quantity parts.

For all other receivers the receiver quantities are posted as fixed.

If an activity price is available for a sender object, the activity quantities of the sender and the corresponding receivers are valuated using this activity price.

Updating the databases

The activity quantity updated on the senders is determined either from read/posted sender quantities (subfunction 1) or from indirectly calculated activity quantities based on receiver tracing factors or predefined sender quantities/receiver quantities (subfunction 2). The activity quantity thus determined is posted to the respective sender as activity output (quantity credit) and to the respective receiver as activity-dependent or activity-independent activity input in relation to their tracing factors (quantity debit). The indefinite credit rate is updated for plan data as well (with activity type category 2).

Additionally, the following activity postings are based on the sender activity quantities:

If available quantities are distributed (subfunction 1), the scheduled quantity are updated. If the sender activity quantities are indirectly determined or fixed, the activity quantity is also updated in addition to the scheduled quantity.

In actual indirect activity allocation, all quantities are treated as fixed quantities.

You use indirect activity allocation in activity price calculation.

Develop Authorization Enhancements for Indirect Activity Allocation

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement
To do so, either create a new project or use an available project.

Activate the project.
Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".

Template Allocation

This activity contains information on the structure of a template for template allocation.

You can use the template to carry out allocations for cost centers/ activity types and for processes on cost centers.

For each way in which a template is used, particular environments exist which determine which rows and column types can be used in the template to be created.

Additional Information

For more information on using templates, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Periodic Allocations -> Template Allocation in Actual*.

Define Environments and Function Trees

In this step you maintain:

Function trees

Structure nodes - Function references - Functions.

The basis for the maintenance of the object is always the chosen environment.

Environment

The Template's environment determines the information of the SAP-environment and the external system that can be accessed. Basically, the functions relevant to each context are already provided in the corresponding environment. Environments always contain a row of sub-environments which group functions by theme; these include material, BOM, routing, and others.

The standard system delivers the following environments:

Template allocation (for cost objects, profitability segments,

business processes, cost centers/activity types)

Formula planning (business processes, cost centers, profit centers)

Standard cost estimates

Process quantity determination (SOP/LTP)

Easy Cost Planning/Internal Service Request

Recommendation

Use the sub-environments provided by SAP as much as possible. When you assign an function to a sub-environment, it is automatically available in all the main environments containing this sub-environment.

Further notes

For more information on environments and a list of these and their sub-environments go to the help for applications of Activity-Based Costing under "Template -> Template Environment".

Function Tree

A function tree is a user-defined hierarchy which structures or groups functions. With the Help for function trees, you can structure groups of functions available in each environment according to their their theme or emphasis. Functions are then processed from here on.

A function tree is assigned to an environment and consists of nodes and function nodes.

Environments: all environments are displayed when you call up the n transaction. Environments themselves cannot be changed or deleted. The creation of new environments is also not possible.

Function trees: the first level under environments. You can subordinate nodes or function nodes to a function tree.

Nodes: nodes are always subordinate to function trees or other nodes. You can subordinate other nodes to a node or function node. In function trees SAP1, nodes contain sub-environments.

Function nodes are always subordinate to function trees or nodes. They always refer to a function.

SAP standard delivery for all environments includes function tree SAP1 (for example, for environment 001, function tree SAP1-001). This contains all standard nodes (sub-environments) and function nodes (with reference to the respective function).

Activities

The transaction provides you with left and right screens. The left one displays the existing environments. You can expand the hierarchy and view the function trees, nodes and function nodes in their hierarchical structure. Place the curser on an object you want to process.

The right screen details of the chosen object (environment, function tree, nodes or function nodes) in list form. If you double click on a funciton node you will see the maintenance screen for the functions.

Further notes

For more information see Application help for Activity-Based Costing:

AC-Financials -> CO-Controlling -> Activity-Based Costing -> Template -> Function tree -> Maintain function tree or *Template -> Template environment -> Maintain functions*

AC-Financials -> CO-Controlling -> Cost center accounting -> Cost center planning -> Aids -> Formula planning -> Template -> Template environment.

Maintain Templates

Here you maintain templates.

Applications

Each purpose (application) of a template requires a special environment. Before creating a template, choose an environment. The environment determines which row and column types are available, for example.

The available applications include the following:

Template allocation to cost objects, or use in standard cost estimates for cost objects and materials (environments 001 - 012)

Template allocation to business processes, cost centers, or cost centers/activity types (environments SBP, SCI, SCD)

Template allocation to profitability segments (environment PAC)

Formula planning (environments CPI, CPD, BPP, PCA)

Calculation of output quantities (environment SOP)
Easy Cost Planning/Internal Service Requests (environment 200 - 299)

Structure

A template consists of rows (items) and columns. The row and column types available to you depend on the environment.

Columns available include:

Type of row, such as business process, cost element subtemplate, or calculation row

Name of the item

Object, such as the name of the process, cost element, subtemplate, or calculation row

Quantity (actual/plan), such as the process quantity or statistical key figure quantity

Activation (actual/plan)

Allocation event (template for cost objects)

Activities

To maintain a template, you must edit the initial and overview screens, from which you can access various editors.

Initial screen

Enter the name of the template that you want to create or edit.

Enter the environment of the template.

Choose *Enter*.

Overview screen

If the template is new, enter a name for it.

Select the row type.

Enter a name for the row.

Edit the other columns. Use the mouse or the tab key to reach the individual columns. Double-clicking on particular column types (such as object, quantity, activation, or allocation event) brings you to the editor or function selection.

Once you have entered or edited all rows, choose *Template -> Save*.

Further notes

Detailed information is available in the Application Help for the transaction, or in the *SAP Library* under **Financials -> Controlling -> Activity-Based Costing -> Template -> Maintaining Templates**.

Splitting

In this section you define a splitting structure, used to split activity-independent costs (belonging to cost centers) between activity types. You assign this structure to the corresponding cost centers.

Define Splitting Structure

Splitting structure determine how and what selected activity-independent costs from a cost center are divided between the activity types. This applies to both plan and actual costs.

A splitting structure consists of one or more assignments, which define the connection between the cost element(s) or cost element group to be split and the splitting rule used to divide the costs.

Each splitting rule is based on a splitting method; for example, splitting costs based on statistical key figures.

After you define a splitting structure, you must assign it to the cost centers on which you want to split costs according to the given rules. You can assign a structure to:

All cost centers

All cost centers in a given group

All cost centers in a given interval

The structure can apply to a single version or to all versions in a controlling area for a fiscal year.

Splitting Example

Activities

Create a splitting structure or change an existing structure.

To create a splitting structure:

In the overview screen for structure maintenance, choose *New entries*.

Enter a two-character key for the structure, a text, and save your entries.

Define assignments for the splitting structure.

Select a structure and choose *Assignments* in the structure tree.

Choose *New entries* and include the required entries with a two-character key and descriptive text.

For the assignment, define according to which rule splitting should be carried out. You can define new rules or use existing ones.

Select an assignment and choose *Selection for assignment* in the structure tree.

Choose *New entries* and define which cost element, which cost element interval, or which cost element group is valid for this assignment.

Save your settings.

Define splitting rules

To create new splitting rules, proceed as follows:

Select an assignment and choose *Splitting rules* in the structure tree.

Choose *New entries* and enter a key for the rule along with a text and procedure. Use the "Weighting" indicator to control whether cost splitting uses weighting of tracing factors.

Define the selection criteria for the splitting rule.

Select a splitting rule and choose *Selection for rules*. Choose *New entries*.

If necessary, enter a version.

If the splitting method is based on statistical key figures, you *must* enter a statistical key figure, a key figure interval, or a key figure group as the selection criterion. Save the selection criteria.

Additional Information

Check your structure to ensure that no inconsistencies could arise during splitting.

Inconsistencies can result from:

Overlaps or redundancies between individual values, intervals, and groups

Deletions of selection criteria, rules, assignments, or structures

In contrast to actual cost splitting, plan cost splitting consists of only a single splitting step. Splitting based on target costs is not possible in planning because actual data is not yet available for creating target costs.

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Plan Cost Splitting* and under *Period-End Closing -> Variance Calculation -> Actual Cost Splitting*.

Note on transport

To transport splitting structures, a special function is available in Customizing under *Controlling -> General Controlling*.

Assign Splitting Structure to Cost Centers

If you want to split costs in the cost center to the activity types, you must assign a splitting structure to this cost center.
The SAP System splits costs per the rules that you set in the splitting structure.

Requirements

You have defined a Splittung Structure.

Activities

Determine the type of assignment to be defined:

Assignment of splitting structure for each cost center group

Assignment of splitting structure for all cost centers

Select the corresponding criteria in the initial screen.

Along with cost center/group, you can determine whether to make the assignment valid for one version or for all versions. The assignment is made for one fiscal year.

Choose additional cost centers from the list of non-assigned centers.

Choose the splitting structure (cursor) to which you wish to assign the cost center(s).

Choose *Assign* or *Edit -> Assign* to assign the cost centers the structure.

Save your entries.

Price Calculation

In this section you make the following settings for price calculation:

Basic Settings for Price Calculation

Cost Component Structure

Switching Structure

Change Basic Settings for Price Calculation

You can change the following SAP default control parameters for price calculation.

Indicator *Generate*.

Controls report generation for iterative price calculation.

Before running price calculation, the system generates the corresponding report on the execution. The number of entries in the associated internal tables is generated, as well as the parallel processing of field groups.

By entering realistic figures during performance problems, the storage capacities and runtimes can be improved significantly.

Because generation also requires some time, you should activate this indicator only for very large processing runs when problems occur. If the indicator is active, entering numbers in the fields mentioned above can be left aside.

Number of senders/receivers

The number of entries in the internal tables is also set if the generation indicator is activated itself.

Number of relationships between senders/receivers

The number of entries in the internal tables is also set if the generation indicator is activated itself.

Number of cost centers in the controlling area

The number of entries in the internal tables is also set if the generation indicator is activated itself.

Number of significant digits in the price unit

To achieve more accurate results, the price unit can be set. The activity price is thereafter not based on units of 1, but on units of , 0, 00, or 000. If the activity price per unit is already relatively high, but you nevertheless want greater accuracy for your prices, this results in even higher values. With the number of significant digits, you can limit this development. The moving of digits takes place until the number of significant digits is reached.

Example

If the price per unit is 333333333, and the significant digit number was set to 6, the price unit remains 1 and the price 333. For 12 significant digits, the unit would be 000 and the price ,333,333333.

Indicator for deactivating the optimization of the price unit

Deactivates the significant digit settings mentioned in the previous point. If this is chosen, the price unit is 1.

Tolerance percentage for reconciliation of actual and scheduled activity Activity planning should be reconciled when price calculation is called up. The plan activity of the activity type should equal the scheduled receiver activity quantity. Only in this way will a sensible price be determined. All activity types are checked for reconciliation and, if necessary, issues warnings or error messages.

Due to planning rounding differences, especially in period distribution, minimal variances may occur nevertheless.

Enter the percentage by which plan activity may vary from scheduled activity.

Indicator *Post anyway*.

Indicator for posting of price calculation results even if errors occur.

Exceptions are serious system errors resulting in program termination and errors occurring in update preparation (such as integration or document assignment problems). Normally, errors prevent update booking of postings. In online processing, the update can be repeated from the results list. In background processing, this is not the case.

Standard settings

Use the function *Set standard* to set the parameter values defaulted by the SAP system.

Recommendation

SAP recommends using the standard settings unchanged.

Changing settings to meet the requirements of your organization is useful only if your results vary greatly from the SAP default values.

The changes in generation factors can worsen the runtimes of price calculation.

Activities

Maintain the settings for price calculation according to your requirements.

Additional Notes

For more information about price calculation, see the SAP Library under *Financials -> Controlling (CO) -> Cost Center Accounting -> Cost Center Planning -> Periodic Allocations -> Plan Price Calculation*.

Note on transport

To transport basic settings for price calculations, see Customizing under *Controlling -> General Controlling*.

Settings for Cost Component Split

In this section you make settings for price calculation using cost component splitting.

Define Cost Component Structure

You require a cost component structure to calculate prices using cost component split.

For each cost component structure you define a cost component such as energy, personnel, or raw materials. The components combine all costs occuring for a particular cost element area. In this way, you ensure greater cost transparency in activity price calculation when putting together the activity type prices - for example, it becomes easier to find how much of the activity price is taken up by the material costs.

In activity allocation, the cost component structure remains constant, meaning that the receiver takes on the sender cost elements and that the allocated costs are posted in the same cost components in the receiver as in the sender.

A cost component structure can have a maximum of 40 defined cost components.

Cost components are assigned to cost elements. You thereby determine which cost elements go to which rows in the structure, and how these components are updated in price calculation.

The cost component structure must be stored independently of fiscal year in the version.

You can transfer cost component splitting directly as primary cost splitting to product costing, or you can use a transfer structure to transport it to the Product Cost Controlling component (CO-PC).

Note

You need only carry out the steps named in "Activity". Further settings for cost components are not necessary, as they are relevant for product costing only.

Activities

To use cost component splitting for price calculation:

Create a cost component structure or change an existing one.

To create a new structure, enter a two-character key and an explanatory text.
Otherwise, choose an existing structure and maintain it in the following steps.

Save the cost component structure.

Define cost components

Select the structure and choose the navigation level "Cost components with characteristics".

If no components exist, choose "New entries". Otherwise, maintain the existing elements.

Enter the structure, a key, and a short text for the component.

Save your entries.

Assign the cost elements to the cost components.

Branch to the navigation level "Assign Cost Component - Cost Element Interval".

If no assignments exist, choose "New entries". Otherwise, maintain the existing elements.

For each component, enter the structure, the chart of accounts, and the relevant cost element or cost element interval.

Save your entries.

Enter the cost component structure in the fiscal year dependent part of the version's detailed information.

Further notes

For more information about the cost component structure, and price calculation using cost component splitting, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting - Period-End Closing -> Actual Price Calculation -> Price Calculation using Cost Component Splitting*.

Note on transport

To transport of cost component structures, an individual function is available Customizing under *CO - Controlling -> Controlling*.

Define Switching Structure

You need to define a switch scheme, if within cost component split for price calculation you do not want a cost component split for primary costs only. In other words, where for an activity allocation, the allocated costs on the receiver are entered on a cost component different from that of the sender. You then determine which sender cost element is to be entered on which receiver cost element.

In price calculation, a cost component structure is used for price component splitting. This structure stores which cost elements are to be directed into which component.

For example, you can note in the cost component structure that material cost elements assigned to the sender component "Raw materials" and wage costs assigned to the sender component "Personnel" can be directed to the receiver component "Energy".

As the structure is used only with a specific combination of cost center/activity type, it is entered in the activity type planning of the sender. The corresponding planning structure for activity type planning using a switching structure is found in planner profile SAP4.

Activities

Create a switching structure if you require one To do
so, proceed as follows:

Assign an existing cost component structure to a switching structure.

Assign the structure's components to target components.

Save your entries.

Further notes

For more information and an example, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Period-End Closing -> Actual Price Calculation -> Price Calculation with Cost Component Split*.

Note on transport

You can also transport switching structures manually. To do this, choose *Table View -> transport*.

Variances

In this section you make settings for the variance calculation.

Variance calculation in Cost Center Accounting displays the differences between actual costs and allocated actual costs in different variance categories. The system calculates the individual categories on a cumulative basis; the total of individual variances corresponds to the total balance of the cost center. Variance calculation distinguishes between input side and output side of the cost center.

The input side contains all debits and all credits of the cost center except the credits from activity allocations. The system compares actual costs (control costs) with target costs. It can then calculate the following variance categories:

Input price variance

Input quantity variance

Resource usage variance

Remaining input variance

The output side contains the activity allocations of the cost center. The SAP system compares allocated actual costs with the target costs or plan costs. It can then calculate the following variance categories:

Output price variance

Output quantity variance

Fixed cost variance

Volume variance

Secondary fixed cost variance

Remaining variance

In Cost Center Accounting, you can post actual costs to cost centers only, not to the activity types on the cost center. To be able to compare actual costs with target costs, and to display the variances on the activity types, the actual costs must be distributed (split) on the activity types. Splitting takes place in several steps:

In the first splitting step, actual costs distribute to activity types on the basis of target costs or quantities.

This is divided by cost element. If no target costs exist on a cost element, the system determines the target costs of the corresponding cost element group. If target costs exist on this group, these are used as the basis for the first splitting step.

A second splitting step is then necessary:

If no target costs or quantities exist for the cost element or cost element group In this case, the tracing factor for splitting is missing.

If activity-independent target costs or quantities exist

In this case, the share of the actual costs remains on the cost center, which corresponds to the portion of the activity-independent target costs (target quantities) of the entire target costs (target quantities).

In the second splitting step, the actual costs distribute to the activity types based on splitting rules.

You can determine these splitting rules yourself. If no rules exist for a cost center, the actual costs distribute on the basis of the activity type equivalence numbers.

Further notes

For more information, see the SAP Library under *Financials -> Controlling (CO) -> Cost Center Accounting -> Period-End Closing -> Variance Calculation*.

In addition, see the following IMG activities:

Maintain Target Cost Version

Maintain Splitting Structure

Determine Primary Data Input Price Variances

The SAP System identifies input price and quantity variances even if the recording and posting of consumption quantities is too involved, or not required.

In this IMG activity you create a variance percentage rate for a cost element, based either on the controlling area or on a period interval within a fiscal year.

After defining the variance percentage rate, the system records costs and variances involved during primary postings. The quantity variance is thereby identified as remaining input variance.

Note

Remember that the variance percentage rates are based on the costs to be determined, without variances.

Example

You post $00 to account 400000. For this account you have defined a primary input price variance of %, or $0. 1% equals $10.

Requirements

Complete the following IMG activities:

Activate Cost Center Accounting in Controlling Area Here, activate variance calculation.

Create Cost Elements

To do this see the Implementation Guide under *Cost Element Accounting -> Master Data -> Cost Elements -> Create Cost Elements*.

Activities

Create the price variance in accordance with your requirements.

Note on transport

To transport primary data price variances, see the IMG under *Controlling -> Controlling General*.

Check Units of Measure in Cost Element Master Data

In order to calculate input price and quantity variances, the system requires the consumption quantities in addition to actual and plan costs. Only then can it distinguish between variance categories.

To assign consumption quantities to an account, you must define a quantity unit in the cost element master data. You can also assign quantities to accounts using a quantity unit you define as convertible to the unit stored in the cost element master data.

In addition, if you set the indicator *Record quantities* in the cost element and cost center master data, the system issues an error message if you do not enter quantities.

The deciding factor for variance calculation, however, is solely the **quantity unit**.

Example of Input Quantity Variance

To provide the activity type "Machine Hours", you define the consumption of liters of grease as a ratio of the activity quantity. At an operating rate of 1%, actual postings record the consumption of 12 liters. The input quantity variance therefore equals 1 liter because the cost center activity consumed more than

provided for in the adjusted plan (target) costs. Consumption as based on the operating rate equals 11 liters.

Note

Cost elements with frequent price fluctuations require consumption quantities for differentiated calculation of input price and quantity variances and their assignment to accounts.

You can determine input price variances for cost elements with relatively stable prices. To do so, complete the IMG activity Determine Primary Cost Input Price Variance. The input quantity variance is identified here.

Activities

Maintain a quantity unit in the cost element master data for cost elements with frequent price fluctuations.

Note on transport

To transport cost elements, there is a separate Customizing function under *Controlling -> General Controlling* available (Transport Settings for Master Data.

Define Variance Variants

In this IMG activity you define the variance variant determining the variance categories to be calculated.

You can calculate the following variance categories:

Input Side Variance:
Input price variance

Resource-usage variance

Input quantity variance

Remaining input variance **Output Side Variance:**

Output price variance

Fixed-cost variance, itself divided into:

Volume variance

Secondary fixed cost variance

Remaining variance

The system calculates variances for all categories chosen.

The values from variance categories not chosen are added onto the following variance category.
Fixed cost variance is calculated as a whole and not sub-divided.

If you do not select variance categories, the two remaining variance categories hold all the variances as totals.

You define the variance variant in the target version of each controlling area.

Default settings

The standard system includes default variance variant 001.

Actions

Check whether the standard variance variant meets your requirements. If you require a new variance variant:

Choose **New entries** and enter a key and a corresponding short text for the new variance variant.

Select the corresponding variance categories.

Save the variance variant.

Note on transport

To transport variants, choose "Table view -> Transport".

Further notes

For more information on and examples of variance categories, see the SAP Library under *Financials -> CO - Controlling -> Cost Center Accounting or Activity Based Costing -> Period-End Closing -> Variance Calculation -> Variance Categories*.

Define Cost Element Groups

In variance calculation, the first splitting step distributes the activity-independent actual costs on the basis of the target costs and quantities by cost element to the activity types. If no target costs are given for a cost element, the SAP System determines target costs for the corresponding cost element group. These target costs are then used as the basis for the first splitting step.

You may use either the defined cost element groups or define new cost elements for the special requirements of variance calculation.

You can combine similar cost elements into cost element groups. Similar cost element groups can be combined to form other cost element groups so as to build a cost element hierarchy.

You can use cost element groups:

In the information system
: The row structure of your report is determined by the cost element structure. You can create totals for each node in the report.

When processing of several cost elements in one transaction, such as

Cost center planning
: If, for example, you wish to display and plan personnel costs in one work transaction, select the group "Personnel costs".

Distribution

Assessment

Report totalling takes place via cost element group nodes. To achieve a clear illustration, each node on a level must have the same number of subordinate levels.

Prerequisites

In Customizing of *Financial Accounting* (under *General Ledger Accounting -> G/L Accounts -> Master Data*) you have maintained a chart of accounts.

You must have completed the Customizing activity Maintain Controlling Area in Customizing of *General Controlling* under *Organization*.

Default Settings

Standard cost element group **OAS-INT** is created for chart of accounts INT (international chart of accounts) in controlling area 0001.

Actions

Check whether the standard cost element groups meet your requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:

You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:
Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Notes on transporting

A separate activity for transporting cost element groups exists in Customizing under *Controlling -> General Controlling*.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information about creating cost element groups, see SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Processing Master Data* and *Cost Elements -> Cost Element Groups*.

Define Target Cost Versions

In this IMG activity you maintain a target cost version for variance calculation.

To carry out variance calculation in Cost Center Accounting, you must first create a target cost version for the respective controlling area.

You determine the following by means of the target cost version:

the version from which plan and actual data is read

the version in which the target costs are calculated

the version to which the split actual costs are posted

the version in which the variances are updated

In the target cost version you also store

which cost element group is used for the first splitting step

according to which variant the variances are determined

Keep in mind that currently only version 000 is allowed as an entry for all versions (plan, actual, and target). The standardization of variance calculation in Cost Center Accounting and Product Cost Accounting, however, makes the use of the target cost version necessary.

Activities

Create a target cost version.

Enter a variance variant for your controlling area.

Activate the target cost version by setting the "Active" indicator on the overview screen of the target cost versions.

Note on transport

Target versions can be manually transported by choosing "Table view -> Transport".

Information System

In this activity you make the settings for the cost center accounting information system. You do so by:

Maintaining master data groups for the information system

Adding to the available pool of standard reports

Creating user-defined reports with Report Painter

Specifying the initial screen for executing user-defined reports

Specifying user settings

Further notes

For more details on the information system, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Information System in Cost Center Accounting*.

Group Maintenance

In this IMG activity, you adapt master data groups to the specific requirements of the information system.

For more information on group maintenance, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Cost Center Planning -> Master Data in Cost Center Accounting -> Master Data Groups -> Processing Master Data*.

Define Cost Element Groups

You can combine similar cost elements into cost element groups. Similar cost element groups can be combined to form other cost element groups so as to build a cost element hierarchy.

You can use cost element groups:

In the information system
: The row structure of your report is determined by the cost element structure. You can create totals for each node in the report.

When processing of several cost elements in one transaction, such as

Cost center planning
: If, for example, you wish to display and plan personnel costs in one work transaction, select the group "Personnel costs".

Distribution

Assessment

Report totalling takes place via cost element group nodes. To achieve a clear illustration, each node on a level must have the same number of subordinate levels.

Prerequisites

In Customizing of *Financial Accounting* (under *General Ledger Accounting -> G/L Accounts -> Master Data*) you have maintained a chart of accounts.

You must have completed the Customizing activity Maintain Controlling Area in Customizing of *General Controlling* under *Organization*.

Default Settings

Standard cost element group **OAS-INT** is created for chart of accounts INT (international chart of accounts) in controlling area 0001.

Actions

Check whether the standard cost element groups meet your requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".
: Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".
: The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

  You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

  You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

  You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

  To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

  You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

  Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

  To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

  You can branch to displaying master data. To do so, select the value and choose *Master data*.

  If you entered a value interval, you cannot display master data.

Report info

  To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:
You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:
Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Notes on transporting

A separate activity for transporting cost element groups exists in Customizing under *Controlling -> General Controlling*.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information about creating cost element groups, see SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Processing Master Data* and *Cost Elements -> Cost Element Groups*.

Define Cost Center Groups

You can combine similar cost centers to form cost center groups. You may then combine similar groups into further groups to create a cost center hierarchy.

Note on Cost Center Groups

The organizational division into cost centers can be displayed in the SAP system with the use of cost center groups.

Cost center hierarchies summarize the decision-making, responsibility, and control areas according to the user's requirements. Individual cost centers are the lowest hierarchical level. This ensures that at least one group holds all cost centers, and thereby represents the entire organization. Moreover, alternative groups can be created which can be divided according to structural or functional standpoints.

Cost center groups allow valuations according to any desired area of responsibility.

You can use cost center groups:

In the information system to create reports for selected cost centers -To process multiple cost centers in a single transaction:

Cost center planning

Distribution

Assessment

You must maintain the standard hierarchy for your controlling area in the master data. Here, you have the option of creating and changing other cost center groups.

Requirements

Complete the IMG activity Maintain Controlling Area.

Activities

Structure the cost centers in your controlling area along cost accounting standpoints.
Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups To copy groups, you have the following options: - Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:
You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous

standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:
Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To transport cost center groups, there is a separate function in Customizing under *Controlling -> General Controlling*.

Note on Validity Period

Note that groups have no validity period. However, most master data is time-based.

Further notes

For more information about cost center groups, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data for Cost Center Accounting -> Processing Master Data -> Master Data Groups and also Cost Centers*.

Define Activity Type Groups

You can combine similar activity types into activity type groups. You can combine groups into further groups, thus building an hierarchy of activity types.

Activity type groups are used:

In the Information System to create reports for certain activity types - To maintain multiple activity types in a CCA transaction:

Planning
You can display and plan multiple activity types in one transaction, for example in

Planning

You can display and plan several activity types in one transaction.

Assessment

You can carry out assessment for chosen activity type groups.

Requirements

Complete the IMG activity Maintain Controlling Area to be found under *General Controlling -> Organization*.

Activities

Structure activity types in the controlling area according to your controlling requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.
Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:

You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:

Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.
There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To transport activity type groups, see *General Controlling* Customizing.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost Center Accounting -> Master Data in Cost Center Accounting* and the sections *Processing Master Data -> Master Data Groups* and *Activity Types -> Activity Type Groups*.

Define Statistical Key Figure Groups

You can combine similar statistical key figures to form statistical key figure groups. You can combine similar such **groups** to form further groups, thereby creating a hierarchy of statistical key figures.

Statistical key figures are used:

In the Information System, to create reports for particular key figures

To maintain multiple key figures in Cost Center Accounting transactions:

Cost center planning

Distribution

Assessment

You may combine statistical key figures used in the distribution/assessment framework as tracing factors into a single group.

Requirements

You completed the IMG activity Maintain Controlling Area, located under *General Controlling -> Organization*.

Activities

Structure your statistical key figure groups in the controlling area based on your controlling requirements.

Enter the group to be created or changed and choose "Enter".

In the structure screen, select the node from which the group is to be extended and choose "Same level" or "Lower level".

Data fields appear at the selected location in the tree structure.

Enter a name and a text for the new node.

Confirm by choosing "Accept changes".

To assign values to an end node, select the node and choose "Insert value". Data fields appear in the tree structure.

Enter a "From" value and, if necessary, a "To" value.

Confirm by choosing "Accept changes".

The selected values appear together with the name.

Notes on Group Maintenance

During group maintenance, you can take advantage of the following functions.

- Selection Variants

  If you create or change groups of cost centers, cost elements, activity types, internal orders, business processes or WBS elements, you can also add a selection variant onto an end node. This end node is one that you already defined in the implementation guide (IMG) for the corresponding object type. To do this, place the cursor on the end node, then choose *Insert lower level* followed by .+<<)< Name of selection variant> (or choose the selection variant using input help).

  By double-clicking, you can change each selection variant.

  You cannot create new selection variants while processing a group.

  You can reassign selection variants in the same way as groups.

  You can display a list of the master data that belongs to one selection variant by placing the cursor on the selection variant and choosing *Extras -> Break down selection variant*. The system then displays a list of the corresponding master data in a dialog box.

Expand/collapse

You can open the entire hierarchy to the individual value level or hide it up to the second level. You can thus display and print different summarization levels of the hierarchy. Under *Edit*, you find *Expand all* and *Collapse all*.

Change node

You can change the location of subgroups or individual nodes in the hierarchy. To do so, select the highest subgroup node or individual node, select the reference node, and choose *Same level* or *Lower level*.

Remove nodes/values

You can remove subgroups or values from the structure. To do so, select the highest subgroup node, the value, or the value interval, and choose *Edit -> Selected entry -> Remove*. The affected node is thereafter no longer part of the complete group, but remains on the database.

Delete node from database

To delete nodes in a database structure, select the highest node and choose *Edit -> Selected entry -> Delete*.

You can only delete each node if it is not used elsewhere in the system. To check this, choose *Extras -> Where-used list group*. You then receive a selection of the areas for which you can create the Where-used list.

Find values

Within each group, you can search for particular values using *Edit -> Cost element, cost center, activity type, statistical key figure, business process, order or WBS structure -> Find*. The system expands the corresponding subgroup and highlights the single value.

Sort values

To sort values, choose *Edit -> Cost element/Cost center/Activity type/ Statistical key figure/Business process/Order WBS element ->* Sort in ascending order or *Sort in descending order*.

Display master data

You can branch to displaying master data. To do so, select the value and choose *Master data*.

If you entered a value interval, you cannot display master data.

Report info

To maintain report information, choose *Utilities -> Report settings* .

Maintain defaults

You can maintain the following defaults using *Utilities -> Defaults -> Structur, for:*

Master data

Node structures

You can make the following default settings to compare individual values with master data in the initial screen of group maintenance:

Display texts

Master data texts of individual values appear in the hierarchy.

Master data validation

Checks whether master data exists for the individual values of the hierarchy. If no master data exists, a warning message appears.

You can display individual values with existing master data by entering a search string in the individual value field.

Breakdown interval

Checks whether at least one individual value exists in master data within an interval of individual values. If no individual value exists, a warning message appears. If values exist in the master data, these appear instead.

Key date

Enter the test date for the master data. The current date is defaulted.

Notes on Copying Groups

To copy groups, you have the following options:

Copy Entire Group Structure

In the same controlling area/chart of accounts

To copy the group, you enter a supplementary key as a suffix. The copy receives a new name through the attachment of the suffix to the original name of the group node. If a suffix already exists, this will be replaced by the new suffix. Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 0001, group HIER997

To a different controlling area/chart of accounts

In this case, you create a new group based on a reference group from another controlling area or chart of accounts.
The complete structure and name are copied from the current controlling area/chart of accounts.
Copy and original are two separate, independent structures.

Example:
CO area 0001, group HIER
-> CO area 9999, group HIER

This does not apply to order groups because they are not assigned to a controlling area or chart of accounts.

Copy Highest Group Node in Controlling Area/Chart of Accounts and Attach Existing Structure

In this case, you create a new group based on a reference group from the same controlling area or chart of accounts.
The highest node holds the given group name, and the existing structure attaches to the highest node. All changes in the original automatically affect the copy as well.

Example:
CO area 0001, group HIER --> CO area 0001, group NEW_HIER

| |
+-> Node 1 +-> Node 1
+-> Node 2 +-> Node 2

When copying groups, the system checks whether group nodes with the copy name exist in the system. If at least one exists, the system asks whether it should overwrite all existing group nodes or whether it should not carry out copying. The standard hierarchy is exempt from this overwriting function.

Copying groups is especially useful when you want to freeze the characteristics of a group with time-based dependencies for objects at a given time in order to make changes affecting the following fiscal year.

Example: Copy standard hierarchy for cost centers

Problem:
You are using planning functions for cost centers. You want to execute planning for the following fiscal year in the current fiscal year, based on the standard hierarchy.

However, in the new fiscal year, changes will take place in the structure for the standard hierarchy, due for example to the removal or addition of cost centers, or because the hierarchy assignment for these

cost centers has been changed. To be able to plan using the standard hierarchy structure that is valid for the next fiscal year, you must make the necessary changes to the standard hierarchy. The previous standard hierarchy is required for reporting in the current fiscal year, because it no longer matches the structure in the current fiscal year.

Solution:
Copy the current standard hierarchy to "freeze" its current state, and carry out the changes to the structure.

There are two hierarchies available for you in the system:

The current standard hierarchy used for reporting

The changed standard hierarchy used for planning the next fiscal year Further usages of the copying of groups is a possibility.

Note:

Remember that the number of groups doubles with each copying transaction. If you have a very large hierarchy, you should

regularly delete those copies you no longer need. Alternatively, you can keep the number of groups low by only copying those parts in which changes occur. If you do this, you need to create the backup copy manually.

Note on transport

To Transport statistical key figure groups, see *General Controlling* Customizing.

Note on Validity Period

Note that groups have no validity periods. However, most master data is time-based.

Further notes

For more information, see the SAP Library under *Financials -> CO Controlling -> Cost*

Center Accounting -> Master Data in Cost Center Accounting, then *Master Data in Center Accounting -> Processing Master Data -> Master Data Groups* or *Statistical Key Figures -> Statistical Key Figure Groups*.

Define Selection Variants

You use selection variants to select master data using one or more master data attributes. The variant contains the fields that the SAP system evaluates in your selection report. These fields determine both the content and layout of a selection variant.

The following selection reports exist:

RKKOASEL for cost elements

RKKSTSEL for cost centers

RKLSTSEL for activity types

RKPRZSEL for business processes

RKOSEL00 for internal orders

RKPSEL00 for projects

You enter the selection values in the appropriate fields. You can overwrite these fields in the application; you can also hide those fields that you do not require.

When maintaining the *variant attributes* you can also specify variables for selection variant fields.

You need enter the selection criteria for selecting the objects only once, and then save these criteria as a selection variant. You can then use this variant to call up the master data of the selected objects.

Example

If you want to display reports in the information system for objects with given selection values, you can also enter the <name of the selection variant> under the group.

If you want to define reports using selection variants, enter the <name of the selection variant> as the characteristic value under group. You can then for instance display all the cost centers for a company code in the report.

Activities

If you want to define more than one selection variant, proceed as follows:

Enter a name for your variant in *ABAP: Variants: Initial Screen*.

Transfer the *Values* default in the *Subobjects* group box and choose *Create*. The system displays the selection fields for the given master data on the screen *Variant Maintenance: Report <your selection report>*.

Enter the values by which you want to select the desired fields.

Choose **Continue**.

You branch to the attribute maintenance in the selection variant.

Enter a short text in the *Description* field.

Save your entries.

Notes on transport

You can transport selection variants manually:

Choose *Variants -> Transport request*..

Enter the program name.

Enter the name of the variant to be transported.

Standard Reports

In this activity, you add to the list of standard reports. You do so by:

Importing standard reports into your production system

Specifying report languages

Generating standard reports

Import Standard Reports

In this IMG activity, you import SAP standard reports from client 000, online or in background, to the client in which you are working.

You have the following import options:
Import some reports
Select the required standard reports from the list of all report groups offered.

Import all reports
Determine a time of low system use to create a background job for importing all reports.

Repeat the import of standard reports from client 000 after each update or new release.

Note

Do not change the standard objects in the target client. Rather, use them as models for your own objects. This ensures that changes are not overwritten by the next transport of standard objects.

Standard settings

The standard system includes all default reports for the components.

Activities

To import only some of the reports:

Choose *Online*.

Select the standard reports for the system to import.

Choose *Copy*.

To import all reports:

Determine a time of low system use

Choose *Background*

Enter a job name.

Transfer reports from the defaulted source client 000.

Enter the desired start time and date, or activate the *Start now* indicator to instantly begin the job.
The system plans the job and selects all available standard reports automatically.

Further notes

For more information on CCA standard reports, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Information System -> Important Standard Reports*. Information is also available by choosing *Extras -> Documentation* after running a report program.

Specify Report Languages

Report Writer can generate a report in up to 32 languages simultaneously. When generating a report group, the system adopts the language-dependent report parts (such as rows or column texts) in the languages set by you in the report. In addition, the logon language is taken into account.

Note

The languages that you specify are valid for all Report Writer reports and **in all clients**.

To improve performance, only enter the languages required. The more languages specified, the longer it takes for the system to execute the report.

Activities

Determine the languages you need for your reports.

Enter the required languages.

choose *New entries*

Enter a language key and the corresponding description.

Save your entries.

Generate Standard Reports

SAP standard reports that you have imported must also be generated. Only then is an executable program created that can be run in the information system.

The following generation options are available:

Generate some reports
You receive a list of all report groups. From the list of standard reports, you can designate those required for your reporting needs.

Generate all reports

If you want to generate all reports, create a background job for times of low system use.

Standard settings

All standard reports for an application are defaulted in the standard SAP System.

Activities

To generate only some of the reports, proceed as follows.

Choose *Online*.

Mark the standard reports that the SAP System is to generate.

Choose *Generate*.

To generate all reports, create a background job for times of low system use. To do so, proceed as follows.

Choose *Background*

Enter a job name.

Enter the desired start time and start date, or activate the indicator *Start now* to execute the job immediately.

The SAP System plans the job and automatically selects all available standard reports.

Further notes

Non-generated reports are generated online automatically during report callup.

Enhancements for Line Item Reports

You can enhance line item reports by adding custom fields. The SAP system includes the following standard enhancements:

COOMEP01 CO-OM: Info System -> Line Items: Custom Fields This

enhancement includes the following components:

EXIT_SAPLKAEP_001

Line Item Report, Actual: Custom Fields in Layout

EXIT_SAPLKAEP_002

Line Item Report, Plan: Custom Fields in Layout

EXIT_SAPLKAEP_003

Line Item Report, Commitments: Custom Fields in Layout

EXIT_SAPLKAEP_004

Line Item Report Budget/Cost Center Budget: Custom Fields in Layout

EXIT_SAPLKAEP_005

Line Item Report, Actual: Customer-specific Authorization Checks

EXIT_SAPLKAEP_006

Line Item Report, Plan: Customer-specific Authorization Checks

EXIT_SAPLKAEP_007

Line Item Report, Commitment: Customer-specific Authorization Checks

EXIT_SAPLKAEP_008

Line Item Report Budget/Cost Center Budget: Customer-specific Authorization Checks

EXIT_SAPLKAEP_009

Line Item Reports: Customer-specific Formatting of the Lists.

You can use this enhancement to protect layouts or to modify column headings. You can call up the transaction for reposting actual costs (posted to cost centers) directly from the actual line item report and actual document display. The system adds the new records to the reports.

Activities

Create the enhancement

To do so, create a new project or use an existing project.

Activate the project

The enhancement is valid only after activation.

Further notes

Unlike modifications, enhancements are compatible with all Releases because they are not part of the original SAP system but part of the name range reserved for customers.

For more information on using enhancements, use the enhancement transaction CMOD by choosing *Utilities -> Online handbook* in the section *Function Exits*.

For more information on the enhancement, see the enhancement documentation in CMOD by choosing *Display SAP documentation*.

User-Defined Reports

In this section you learn how to quickly and easily create user-defined reports.

Specify Report Languages

Report Writer can generate a report in up to 32 languages simultaneously. When generating a report group, the system adopts the language-dependent report parts (such as rows or column texts) in the languages set by you in the report. In addition, the logon language is taken into account.

Note

The languages that you specify are valid for all Report Writer reports and **in all clients**.

To improve performance, only enter the languages required. The more languages specified, the longer it takes for the system to execute the report.

Activities

Determine the languages you need for your reports.

Enter the required languages.

choose *New entries*

Enter a language key and the corresponding description.

Save your entries.

Define Libraries

In this IMG activity, you can maintain previously defined libraries or create new ones. You must assign each report that you define to a library.

A library is a selection of characteristics, key figures, and predefined columns from the list of all options in the Report Writer table. In Controlling, table *CCSS* is used.

A characteristic (in earlier releases *field* or *dimension*) is a non-numerical field, for example, *Account*, *Cost center*, and *Business area* .

A key figure (new as of Release 3) is a numerical value field, such as *Amount in local currency*, *Total costs*, and *Activity quantity*.

A default column (in earlier releases *Data-set-entry* is made up of a key figure and one or more characteristics. With default columns, you can define standard columns that can be used more than once in your reports, for example, *Actual costs in current fiscal year* and *Plan costs in closed fiscal year*.

Four screens are available for library maintenance:

Header

Key figures

Characteristics

Default columns

Activities

Check whether the standard libraries satisfy your requirements. If not, proceed as follows:

Enter a name for the library and the name of the table to which the library is assigned.

To copy and change an existing library, enter the name of the reference library in the field of the same name.

Enter a description for your library.

Determine which key figures are to be used in the library.

Determine which characteristics are to be used in the library.

Determine which default columns are to be used in the library.

For steps 2 to 4, if necessary, enter the ranking order (position) in which the characteristics, default columns, and key figures are to appear in the selection lists of the Report Painter.

Note on transport

To transport libraries, an separate function is available, Transport Report Writer Objects, in the IMG for Financial Accounting under *Special Purpose Ledger -> Tools -> Transport*.

Further notes

For more information, see the *SAP Library* under *Financials -> Financial Accounting (FI) -> Special Purpose Ledger -> Libraries*.

Import Templates

You import standard SAP templates for report rows or columns from client 000, online or in the background, to the client you are using.

Templates are one-dimensional report modules in which complete row or column blocks are predefined, and which can be placed in reports during definition.

The following options are available:

Import a certain number of templates
: The system displays a list of all templates, from which you select those required for your information system.

Import all templates
: Importing all templates should be done during times where system usage is at a minimum, using a background job.

After installing a new release or update, repeat the import of templates from client 000 in order to access the changes.

Standard settings

The standard system defaults all templates.

Activities

To import only some of the templates, proceed as follows:

Choose *Online*.

Mark the templates that the SAP system should import.

Choose *Copy*.

To import all templates, create a background job and schedule it as follows:

Choose *Background*.

Enter a job name.

Keep the defaulted value "000" as source client.

Enter the desired start time and date, or use the indicator *Start now* to execute the job immediately.
: The system plans the job and automatically selects all existing templates.

Further notes

For more information, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Information System -> Report Definition -> Report Painter*.

Create Reports

Many reporting requirements are solved by standard system reports. If, however, non-standard requirements remain unfulfilled, you can use Report Painter for simple, quick definition of user-defined reports.

You can also use standard references objects to construct your own reports: libraries, standard layouts, default columns, and row and column models, all in the standard system, and available for custom reports.

A report can consist of several "logical" pages. This is useful if you wish to construct managerial key figures, such as costs per employee. You can switch between logical pages and carry out calculations with them.

Report Painter report definition requires several Preparatory Steps, depending on the complexity of the report to be generated.

Requirements

To create reports for user-defined libraries with Report Painter, you must maintain the Libraries first.

Standard settings

The standard system includes many standard layouts and column and row models, as well as default columns for libraries 1VK, 1GK, 1AB, 1RU, and 7KK. As a rule these standard modules are sufficient for report definition.

Recommendation

Do not change a standard report because any changes will be overwritten when importing new reports from client 000 (which supplies standard reports).

- To make small changes to a standard, use the report as a model, copy it to another name, and change the copy only. Choose *Report -> Copy*.
  You can use reports as models in one library only, but you can copy reports from other libraries.

Activities

The procedure when defining a Report Painter report depends on how far the supplied standards satisfy your requirements.

1. If the libraries, layouts, row and column models, and default columns in the standard system are sufficient:

   a) Define report columns by using the supplied default columns and characteristics as well as formulas and standard layouts in the standard library.
   You can construct columns from characteristics, formulas, or predefined columns. Predefined columns can be changed by inserting further characteristics. You can also use variables, but only those already defined in Report Writer.
   Select a column by double-clicking.
   Choose *Key figure with characteristics* or *Default columns* for the column structure.
   If you choose *Key figure with characteristics*, use the dialog box to mark the key figure to be used in the report.
   In the following dialog box, choose the characteristics to be used in the column and afterwards specify the characteristic values as individual values, groups, intervals, or variables.

To define all possible values for a chosen characteristic, enter an asterisk (*); to define an initial value, enter a pound sign (#).

To use variables, choose *Variables on/off*. The SAP system automatically indicates the appropriate field and automatically adjusts the field length. Choose "Possible entries" to display all existing variables.

If you choose *Default columns*, specify one of the standard default columns in the dialog box. You can then change or expand upon the suggested characteristics and characteristic values.

To define a further report column, select the element type *Formula* in the dialog box. Use the formula editor to select other report columns and predefined cells to define a formula which calculates a value for the column.

Enter a column text. Choose *Copy* to copy the short text to the fields *Middle* and *Long* as well.

You can also use variables in a column text. To store a variable, enter an ampersand (&) followed by a variable name. When you activate *Key* as text type in the standard report layout under *Column text*, the report issues the current value of the variable. If you activate *Name*, the report issues the name of the current value.

b) Define report rows by using the characteristics or row models available in the standard library.

All steps in row definition are similar to those in column definition.

If the libraries, layouts, and row and column models do not meet your requirements:

If necessary, maintain the corresponding library.

If necessary, create a new layout or change an existing one.

If necessary, maintain the standard default columns.

In Report Painter, choose **Set maintenance -> Data set entries -> Maintenance**.

If necessary, create new row and column models.

Proceed as described in the definition of report rows and columns.

For further report definition proceed as described in step 1.

Determine general selections

General selections include the characteristics according to which you select data for a report, but which are not to be identified in report rows or columns.

Save your report.

Insert your report into a report group.

Further Notes

Note the following when defining reports with Report Painter:

The SAP System stores reports created with Report Painter in a special storage area, in the same name range as Report Writer reports. When generating the related report group or copying to a Report Writer report, Report Painter reports are converted to Report Writer format. This results in the following:

- Report Painter reports can only be changed or displayed with Report Painter.

  To subsequently change a report with Report Writer, first copy the report to a Report Writer report under a different name. Then modify the report with Report Writer. The SAP system automatically generates the necessary sets during copying.

It is possible to execute a Report Painter report with Report Writer and to assign Report Painter reports to a mixed report group, that is, to a report group that contains both Report Writer and Report Painter reports.

Additional editing functions

Below is an overview of functions and work techniques in Report Painter that will facilitate you report definitions.

F2 key

To define individual report columns or rows, select the specific column or row (in the report to be defined) by double clicking on the corresponding text (Column1, etc. or Row1 etc.) or with the F2 key.

Directories

You can display existing objects (defined by SAP or yourself) for layouts, libraries, row or column models as well as predefined columns.

Create with model

If you want to define your own libraries, reports, layouts, row or column models, you can use the standard objects delivered by SAP to aid you and then adjust them to your needs.

The following functions are available to structure and format the rows and columns of your reports:

Working with row and column models

When defining multiple reports with similar structure, it is useful to work with models. Models are one-dimensional, predefined modules for rows and columns, maintained with the the function "Model". To incorporate individual models into your report, choose "Edit -> Rows/Columns -> Get row/column model...".

Formula editor

You can define formulas to calculate a column, row or cell.

Changing text

You can make subsequent changes to column and row texts. Position on the desired object and choose the text function.

Changing characteristic values

You can make subsequent changes to characteristics of columns and rows. Position on the desired object and choose "Edit -> Change char.values".

Expanding rows

To expand groups down to the single value level, choose "Edit -> Rows -> Expand". You can then maintain totals levels. If you do not provide for expanding groups in the rows, the groups cannot be expanded in the report display.

Note

Formatting defined for expanded rows of a group is carried out for all sub-groups of the same summation level (indicated by the identical number of asterisks). Formatting includes color and underlining, for example.

Markings for cell calculation undertaken in the expanded rows of a group are always based on the highest summation level of the group. If you require a subgroup, you must define an additional report row for the subgroup, mark the desired cell, and afterwards hide the additional row again.

Show or hide rows/columns

You can show or hide one or more rows or columns. You can show hidden rows/columns again, change them or delete them.

Number formats

With this function you can define the scaling and the number of decimal places (only for columns).

Delete
To delete rows or columns, position on the object to be deleted and choose the delete function.

Select
You can select one or more rows or columns to then delete, copy, cut, etc. the selected set.

Maintain report texts
You can enter a title page, last page, header or footing for each report.

Note

It is much easier to enter report texts in the finished report after you have finished defining it.

Overview function
With this function you can create an overview of all characteristics, indicators, predefined columns and rows with details (name, last person to change it, date of change).

Goto
You can branch between the sections of a report as well as create new sections. You can combine multiple rows and columns of a report.

Format changes
Report Painter provides five column formats, corresponding to the print classes of Report Writer.
You can assign a standard layout to a report, as well as additional format changes, such as reversing the sign, row format changes or column width. Format changes always affect all columns with the same format; this means columms cannot be changed individually.

Note on transport

To transport Report Painter reports, see the IMG activity Transport Report Writer Objects in the IMG for Financial Accounting under *Special Purpose Ledger -> Tools -> Transport*.

For more information on user-defined reports, see the *SAP Library* under *Financials -> CO Controlling -> Cost Center Accounting -> Information System -> Defining Reports*.

Generate Reports

You must *generate* the reports that you created in the current client or in a different client. Having defined the report, it only by generating it that a program capable of being run in the information system is created.

Those reports that you created in a different client must first be imported into your current client.

You have the following generation options:

Generate some reports
From a list of all reports, you select those that you want to generate.

Generate all reports
To generate all reports, you should create a background job for times of low system use.

Activities

Enter one or more report groups for generation.

Use selection criteria to further delimit the reports to be generated.

If you want to generate only a small number of reports, proceed as follows:

Choose *Program -> Execute*.

a) Select the report groups that the SAP System is to generate and choose *Generate*.

To generate all reports, create a background job by choosing *Program -> Execute in background*.

Further notes

A report created with Report Painter is automatically generated when the report is started from report definition using *Report -> Execute*. In do doing, you assign a report to a report group.

You can also generate report groups by choosing *Report Painter -> Report Writer -> Execute report group*.

User Settings

In this activity, you define the default settings for calling up Report Painter reports.

You can store the default settings either as a default setting for all users or as a user-specific setting.

The user settings include:

Settings for the report currency and for currency translations (report currency)

Presettings for the selection criteria during the report call (selection criteria)

Agreements on the work with extracts during the report call (settings for extract management)

Specify User Settings

In this IMG activity, you specify the following user settings for the information system:

Basic data

Planning time frame

Report time frame

Report currency

Other information, such as version and actual valuation

You can store the basic data, planning and report time frames as user- specific or standard settings. The standard settings are valid for all users without user-specific settings.

You thus determine the default values for the report selection screens.

These settings are only valid for reports in components within Controlling or Cost Element Accounting.

In the **basic data**, you can set the following default values:

Controlling area

Report objects, such as cost center groups, statistical key figure groups, activity type groups, cost element groups, or individual values or intervals for cost centers.

You can determine the **planning time frame** as follows:

Fiscal year

The fiscal year can be the current year, previous year, or a year that you defined.
If you choose *No profile*, the system takes the user-profile parameters for the selection.

Note

Maintain the *User profile* as follows:

Choose *System -> User defaults -> User data* and the *Parameters* tab index.

Period

The period can be the current period, previous period, or a period interval that you specified.

You can decide on the interval from period one to the current, or previous period. The current period, or the previous period is therefore defaulted for reports that you do not run during a period interval.

If you choose *No profile*, the system uses the user-profile for parameter selection.

You can specify the **report time frame** as follows:

Fiscal year

This can be the current fiscal year, the previous year, or an interval that you specify. If you choose *No profile*, the system uses the user-profile for parameter selection.

Period

The period can be the current period, previous period, or a period interval that you specified.

The period can be the interval between period one to the current or previous period. The current or previous period is therefore defaulted for reports that you do not run during a period interval.

If you choose *No profile*, the system uses the user-profile for parameter selection.

You can store the **report currency**, either user-defined, or as a standard setting. The standard setting is valid for all users without user-defined settings.

You use the report currency to specify which currency is used for Report Painter reports, line item reports or planning overviews, and to determine how the currency is translated.

The settings are valid in Controlling and Cost Element Accounting for all planning overviews and Report Painter reports that have the *Cost*, *Secondary cost*, *Actual cost*, and *Variable cost* key figures, in which the currency is not defaulted

In line item reports for Controlling, the settings are valid for the following columns: *Cost in report currency*, *Variable costs in report currency*, and *Fixed costs in report currency*.

These settings are valid, regardless of the component used to define the report currency.

You can display reports

in Cost Element Accounting in:

The company code currency

The group currency

The controlling area currency - A target currency that you specified - The Overhead Cost Controlling components in: - The controlling area currency

The object currency

The transaction currency

A target currency that you specified

In totals reports using report currency, if you call up another report using the report-report interface then the system displays both reports in the same currency.

When you enter a target currency, specify which reference currency is to be used for the currency translation. In Cost Element Accounting, the reference currency can be the company code currency, group currency, or controlling area currency. In the Controlling components, it can be the controlling area currency, the object currency, or the transaction currency.

You also need to enter the following:

Key date for translation

Translation for each exchange rate date

Translation on a fixed date

Period-specific translation on the last day of each period

The exchange rate type that you require

You can use the exchange rate type to differentiate between buying rate, bank selling rate, or the average rate.

To display reports in euro for all users, for example, you need to specify this in the standard settings.

Further entries

Versions

Default the plan version that you require for the reports.

Actual valuation

You enter settings for either legal, group, or profit center valuation.

Requirements

You need to process the Currencies IMG activity in the Implementation Guide under *Global Settings*.

Activities

Make default settings

If you want to create or change default settings, you do not have to enter a user. Choose *Execute*.

Choose *Change standard*.

Make your entries choose *Confirm* to exit the dialog box.
Save your entries.

Make settings for one, several, or all users

If you want to create or change the settings for one or more users, enter the corresponding user or users.

To enter several users, choose *Multiple selection*.

The system then displays a list of all users.

Select the users you want to edit, then choose *Copy* to leave the dialog box. The settings of all selected users can now be edited.

If you want to edit the settings for all users with user-specific settings, enter "*". The system displays a list of all users with user-specific settings.

Choose *Execute*.

If you selected users without any settings, you can transfer the settings from the default settings by choosing "Yes".

If you want to enter new settings, choose "No".

To create new user settings, proceed as follows:

You want to create new settings for a user.

Choose *Create* and enter the name of the user.

You want to copy the settings for a user from those of an existing user.

Select the existing user. Choose *Copy* and enter the name of the new user.

You want to copy the settings for a user from the standard settings. Choose *Copy from standard* and enter the name of the user.

To change user settings, proceed as follows:

You want to change the settings of a user. Double-click the relevant line.

You want to edit the settings of several users.

Select the relevant lines and double-click one line. In the dialog box, you can display the settings for the selected users by choosing *Previous user* or *Next user*.

You want to make the same settings for several users.

Mark the relevant users.

You can select all users, for example, with *Select all*.

Position the cursor on a line in the column you want to change and choose *Multiple replace*.

You want to change a certain setting for all users, who fulfill certain filter criteria. Upon fiscal year change, for example, you changed a cost element group and you would like to store the new group as a selection criterion for all users, who have used the old cost element group up to now.

Select the column header to apply the filter to that column.

Choose Set filter.

Enter the filter criteria and choose *Copy*. The system displays a list of the users who fulfill the filter criteria.

Choose *Select all*.

Position the cursor on a line in the column you want to change and choose *Multiple replace*.

Enter the required settings, and choose *Copy* to exit the dialog box.

Save your entries.

Notes on transporting

To transport the default settings, choose *Default settings -> Transport*.

To transport the settings for individual users, mark the corresponding users, and choose *User settings -> Transport*.

Further notes

To edit lists, use the ABAP List Viewer functions. For information on these, see the SAP Library: *Cross-Application Components -> General Application Functions (CA-GTF)-> ABAP List Viewer*.

Generation of Virtual InfoProvider Cost Centers

Use

In this activity, you can generate a virtual InfoProvider on the basis of a controlling area.

Using a virtual InfoProvider, you can execute queries for cost center line items in your ERP system by accessing the embedded BW functions available without having to first extract these from a BI system. Consequently, you can use for your data analyses not only the classic cost center line item report but also all SAP BusinessObjects BI clients, BEx tools, and other BI clients that are certified on the MDX interface for BW.

Authorization Management

Define Authorizations and Profiles

Introduction to Procedure for Creating Activity Groups

The following information describes the standard procedure for creating simple activity groups. It covers processing of an activity group with the option **Basic maintenance** in transaction **PFCG**.

Step 1

Create the activity group.

Step 2

In the **Description** field, enter a description of the function the activity group is to perform.

Step 3

On the **Menu** tab, assign transactions to the activity group.

You can either enter the transactions directly.

Alternatively, you can use the **Menu selection** key to assign menu options from the company menu (provided that this menu has already been generated in the current release).

The activities selected from this menu are displayed in the session manager for all users assigned to the activity group as a **user menu**.

Step 4

On the **Authorizations** tab, choose **Change authorization data**

Depending on which transactions you selected, a dialog box may appear on which you are requested to maintain the **Org. levels**. These organizational levels are authorization fields that appear simultaneously in many authorizations and which can be maintained together this way. An example here is the company code, which appears in many authorization objects. By assigning values to the organizational levels, you are also maintaining the corresponding authorization fields for all authorizations in the overview tree that follows.

The system displays an overview tree of all authorizations that SAP suggests for the transactions selected. Some of these authorizations already contain values.

For those authorizations where an amber traffic light is displayed, authorization values must be manually entered. You enter these values by clicking on the white line to the right of the authorization field. Once you have maintained the values, the authorizations are classed as manually modified and are not overwritten if you include more transactions and reprocess authorizations. By clicking on the traffic lights, you can assign the full authorization for all non-maintained fields for the hierarchy level in question.

A red traffic light indicates that **organizational levels** exist that do not yet contain any values. You can enter/change these values by choosing **Org. levels**.

If you require further functions in the overview tree like copying or combining authorizations, you can display additional functions by choosing **Utilities -> Settings**.

Generate an authorization profile for the authorizations. To do so, choose **Authorizations -> Generate**.

The system now asks you to enter a name for the authorization profile that now arises and defaults a name that exists in the customer name range.

Once the profile has been generated, exit the overview tree.

If you make changes to the menu selections and then call up the overview tree for the authorizations, the system tries to add the authorizations for the new transactions to the existing authorizations. In so doing, traffic lights can be changed back to **amber** becauseauthorizations that are not fully defined appear once more in the overview tree. You then need to enter values manually for these authorizations or to delete them if they are not required.

To delete an authorization you must first deactivate it.

General authorizations like spool display and printing are not generally defined for the transactions. For this reason, authorization templates exist that you can add to the existing data. To do so, from the menu choose **Edit -> Insert auth. -> From template... and choose one of the templates from (for example SAP_USER_B Basic authorization for application users or (for example SAP_PRINT Print authorization). Alternatively, you can also create a separate activity group for these general authorizations, simplifying handling.**

Step 5

On the **User** tab, assign users to the activity group.

For the users assigned, the menu items belonging to the activity group are displayed in the session manager as a user menu.

In addition, the generated authorization profiles are automatically

entered in the user master record when you carry out the **User master comparison**. To do so, choose **User compare** on the **User** tab and then choose the option **Cpmplete compare**.

If you do not narrow down the selections by specifying a particular period, but instead use the period defaulted by the system (current date to 12/31/9999) no further action is necessary. If you specify a particular period, then you need to ensure the report program **PFCG_TIME_DEPENDENCY** is scheduled periodically every day. This report automatically updates the user master records. You also need to schedule this report if using Organizational Management (no further details on this are entered into here).

It is extremely important that you never enter generated authorization profiles directly in the user master records (as is the case for manually created authorization profiles). You can only link generated profiles to users by assigning the users to the corresponding activity group and then running a compare on the user master data. When the system runs the compare, it enters the profiles of the activity group for all users belonging to the activity group.

Step 6

If you want to transport the activity group into another system, you now need to enter the activity group in a transport request.

To do so, choose **Activity group -> Transport**.. You can now specify whether the user assignment should also be transported.

The authorization profiles are also transported (unless you specified that you do not want them to be transported).

Following the import in the target system, you then need to carry out a full user master compare for the imported activity groups. You can either start this comparison yourself or it can be carried out automatically by report program **PFCG_TIME_DEPENDENCY** (assuming this report is scheduled to run periodically in the target system).

Detail information

See also the general documentation on the Profile Generator in the SAP Library. Choose: *Basis Components -> Computing Center Management System -> Users and Roles* or in the Implementation Guide (IMG), choose: *Basis Components -> System Administration -> Users and Authorizations -> Maintain Authorizations and Profiles using Profile Generator*.

Develop Authorization Enhancements for Periodic Reposting and Allocations

The following SAP enhancements are available for authorization checks during periodic transfer, distribution, assessment and indirect activity allocation:

SAPMKAL1 Allocations: Authorization check during cycle maintenance This enhancement includes the following enhancement component:

EXIT_SAPMKAL1_001
Customer exit for the cycle maintenance authorization check

SAPMKGA2 Allocations: Carry out authorization check for cycle This enhancement includes the following enhancement component:

EXIT_SAPMKGA2_001
Execute customer exit for cycle authorization check

Activities

Create the enhancement

To do so, either create a new project or use an available project.

Activate the project.

Your enhancement becomes effective only through activation.

Further notes

Unlike modifications, enhancements are compatible with any release because they are not part of the SAP original and reside in a namespace reserved for the customer.

Information on the procedure when using enhancemnts can be found in the enhancement transaction CMOD under "Utilities -> Online manual" in the section "Function exits".

For more information on the enhancement, refer to the documentation of the enhancement. You find it in the CMOD enhancement transaction by choosing "Display SAP documentation".