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INTRODUCTION

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

Enterprise Controlling

This section contains all the information you need to implement Enterprise Controlling.

Executive Information System and Business Planning

This IMG step describes the possible settings in the Executive Information System (EC-EIS) and Business Planning (EC-BP). Unless otherwise indicated, the information and settings apply to both components.

Before you make these settings, you should be familiar with the concepts of these components. You can find more information in the online documentation 'Executive Information System and Business Planning'. You can display this documentation in this window under ('Help' ->) 'SAP Library' -> 'Accounting' -> 'Enterprise Controlling' -> 'EC Executive Information System and EC Business Planning'. For more information about reporting in EC-EIS, see 'Cross-Application Functions' -> 'Drilldown Reporting'.

Basic Settings

In this section, you make settings that affect the entire SAP-EIS module:

- Under 'Number ranges', you create the number ranges used in SAP-EIS.
- Under 'Foreign currencies', you make settings for exchange rates and exchange rate types.
- Under 'Logical file names', you can store physical file names under logical file names.

Number range: Maintain record number

Every SAP-EIS aspect has a field 'Record number'. Using this unique number, every data record can be identified.

Actions

- 1. Maintain the number range "Record number in SAP-EIS".
- 2. Enter the interval '01' for range '00000001' to '99999999' with current number 1.

Further notes Transport of settings Foreign Currencies

You need to make the settings covered in this section if you wish to display data in different currencies or if you want to translate the currency during data transfer.

Requirements

You must have defined the currency keys in IMG under 'Global settings' -> 'Currencies' -> 'Check currency codes'.

Further information

Currency concept in SAP-EIS

Currency translation in drill-down rep.

Currency translation during data transfer

Maintain Currency Translation Key

In this step, you maintain the currency translation types which are independent of the aspect and sender structure. You can use these currency translation types for each report and sender structure.

When executing a drill-down report, you can translate the currency columns into other currencies under *Settings -> Currency*. To do this, you must enter a "currency translation type" which you can define here. The translation date is important for currency translation types. Here, you can choose between three options:

- the current date
- a date defined here
- a date resulting from a characteristic value.

These characteristics may be the fixed characteristics "Period" and "Fiscal year" included in every aspect, or other characteristics (of type "D" (date)) defined by yourself. You must create translation types if a currency translation is to be carried out based on this characteristic. **Actions**

You create a translation type by selecting an exchange rate type, with either a normal or inverse exchange rate and either a fixed or variable translation date.

A currency translation type with an inverse exchange rate is useful if the amounts have already been translated and the original values are likely to be displayed again in a drill-down report.

Example

You have, for example, maintained the following exchange rates:

DEM USD 10 USD DEM 03

CSD DEM 05

When translating from USD to DEM using an inverse exchange rate, the exchange rate 1/10 = 025 is used and not the exchange rate 03.

Further notes Transport of settings

Units of measure

There are three ways of defining in which quantity unit, data is to be stored.

- 1. When creating an aspect, you can define a quantity unit for a key figure. The values of this key figure can then only be stored in this quantity unit.
- 2. When creating an aspect, you can enter a reference table and a reference field for a key figure, from which the system can read the quantity unit. The reference table must be the check table of a characteristic of the aspect. The quantity unit of the key-figure is therefore dependent on the characteristic value.

Example:

The activity quantity for a cost center will be stored in the same unit as that defined in the master record of the activity type. So, for the activity type 'direct labor hours', the appropriate unit would be 'hours'.

3. If you do not choose either of the two options listed above, you can set the quantity unit whenever you store a data record. In reporting, the quantities will be added regardless of their units.

File Names

In this section, you define the file names which you use in various parts of SAP-EIS.

- 1. When putting reports from files into the report portfolio, the system accesses these files using logical file names.
- 2. It is also possible to write the sender records which are transferred using CPIC during data transfer to a file.

Using logical file names, you can access files with easy names.

Actions

- a) Check under which physical file names data for the report portfolio is to be made available.
- b) Enter the relevant physical file names under the logical file names you assigned.
- c) For tracing the data transfers, maintain the logical file name 'EIS_COMMUNICATION_TRACE'.
- 3. Using logical file names you also define the directories for printing with Microsoft Word for Windows 6.0.

The logical file name 'EIS_PRINT_DEFAULT' specifies a default directory under which the files for printing with WinWord are stored.

In addition, you can specify directories for reports with the logical file name 'Z_EIS_REPORT_
report name>' (for example, Z_EIS_REPORT_PRODUKTION).

The logical file names for report classes are compiled as follows: 'Z_EIS_CLASS_<report class number>' for example, Z_EIS_CLASS_00001234 (Note that the report class number must be 8 characters long).

User groups are named as follows: 'Z_EIS_GROUP_<user group>', for example, Z_EIS_GROUP_CF.

Users are named as follows: 'Z_EIS_USER_PRINT_<user>', for example, Z_EIS_USER_PRINT_MUELLER if the logon name of the user is Mueller.

Note

If you wish to print from MS Word without needing to control the mode interactively in the dialog box 'Enter print control parameters', the directory specified with logical file names must correspond to the directory specified in the macro 'BatchStart' in WinWord. Directory 'D:\SAP_REP' is delivered with style SAP_REP.DOT.

Platform-Independent File Name Allocation Cross-Client Maintenance of File Names and Paths

This activity (transaction FILE) is for cross-client maintenance of logical filenames and file paths and includes the following:

- Logical file path definition
- Assignment of physical paths to logical path
- Logical file name definition, cross-client
- Definition of variables
- Syntax group definition
- Assignment of operating system to syntax group

Choose one of these in the navigation area of the screen to see the corresponding view of the values to be maintained. You can examine existing entries and enter new values. Depending on the data you need to maintain, you can either work in the overview or you may need to go to the details view by pressing F2 or the "Details" push button in the application toolbar.

Note

Release 3.0C introduces cross-client logical filename maintenance. In addition to cross-client maintenance you can still choose to maintain filenames for a specific client. You must maintain a logical filename across clients before you can maintain it for one client. Then you can maintain it for particular clients as required.

Use program RSFILE01 to transfer filenames from the client-specific maintenance (available before Release 3.0C) to cross-client maintenance. Client-specific data is not affected.

Activities

- 1. Verify that existing definitions meet your needs.
- 2. Change the definitions (and, if necessary, the structure of your file system).
- 3. If necessary, define additional filenames and paths.

Maintain Additional Client-Specific File Names

Data Basis

In the section 'Data basis'

- Aspects are edited (data structures and environment)
- characteristics and basic key figures, and field groups are defined,
- key figures are defined,
- comment tables are maintained,
- values of the fixed characteristics are maintained,
- summarization levels are defined,
- data entry layouts are created for actual data,
- derivation rules and validations for data entry and transfer are maintained, data slices are defined.

The structure settings (data structures, key figures, field attributes) are valid for all clients.

Characteristics

In this section you create the characteristics and characteristic groups you require.

A characteristic is an evaluation group; for example, division, region, department, or company. Characteristics are criteria against which key figures are held and evaluated; for example, revenues by division.

Edit Characteristics

Create characteristics

You can create characteristics in the field catalog and import them into your aspect later, or you can create them as you maintain the aspect. In either case the fields are held in the field catalog and can be used for other aspects.

Each characteristic is uniquely identified by its field name. Meaning, type, and length are properties of characteristics that you can enter directly or define by assigning a data element or domain.

Data elements and domains are ABAP Dictionary objects that act as a central store of table field properties. A data element defines the meaning of a field in business terms with texts and a reference to a domain. A domain describes the technical properties of the field and defines permissible values for the characteristic if either of the following conditions is met:

- There is a list defining fixed values
- There is a reference to a check table

Normally data element and domain assignments are used to refer to check tables (for example, Domain BUKRS refers to T001, which is the check table for company codes). You can, however, create a characteristic without any validation or texts by assigning a standard domain (for example CHAR07, NUM12).

Ways to create a characteristic:

1. Assigning a data element

Specify the field name and assign a data element. The domain assignment is made by assigning the data element.

2. Assigning a domain

Specify the field name and meaning, and assign a domain. By assigning a domain you define the type and length of the characteristic, and possibly you refer to fixed values or a check table.

- 3. Referencing a characteristic Specify the field name and meaning, and set a reference to another characteristic. This has the effect of assigning the domain of the referenced characteristic.
- 4. Creating a characteristic with a new data element and check table Specify the field name, meaning, type (character, numeric, date, time), and length (1-32). The system generates a new check table for the characteristic.
- 5. Creating a characteristic without a check table (using a standard domain) Specify the field name, meaning, type (character, numeric, date, time), and length (1-32). The system does not generate a check table.
- 6. Copying table fields

Copy a characteristic or several characteristics from any ABAP Dictionary table. The data element assignment for the table field is imported too.

You can subsequently select any of the characteristics in the field catalog as characteristics for your aspect.

Caution: Assigning data elements or domains, or copying fields from tables, does not itself ensure that validation, reading characteristic value texts, and Possible Entries Help will work as expected. The domain must have a check table or fixed values, and there must be a text table with a texts referenced to the check table (or the texts must be in the check table itself). These conditions are always fulfilled by fields in the standard field catalog and by fields that are imported from the sender structure of a standard data retrieval program.

Compound characteristics

Some characteristics are dependent on other characteristics; that is, the characteristic value is meaningless in the absence of values for other characteristics. They are called compound characteristics in EC-EIS.

Example: The Region characteristic (check table T005S) forms a compound characteristic with the Country characteristic, because a region can be maintained or interpreted only if a country is specified. Compound characteristics are implemented technically as multilevel check table keys.

In the Detail Screen, you define any other characteristic with which the characteristic you are maintaining forms a compound characteristic. Compounds of characteristics with EIS-generated tables are freely definable. Compounding of characteristics with data elements or domains assigned is controlled by the applicable check table. In the Detail Screen for the Region characteristic, you would see compound sequence "Country - Region".

Note: You do not use compound characteristics to create regular assignments between fields (Salesperson H is active only in Area S). A compound characteristic describes the structural dependency of one field

on another (Storage Location 1000 in Plant A is not the same storage location as Storage Location 1000 in Plant B).

Other properties of characteristics

You can define more, optional, properties:

- "Conversion routine" assigns ALPHA conversion to the characteristic.
- "Time dimension" identifies the characteristic as being a time (for example Posting day, Calendar week).
- A Constant value can be assigned to a characteristic, so it always has this same value in every record. It is then not needed in reports. Constant value characteristics occur only in compound characteristics and only in data entry, where they are used to validate multilevel check tables.
- You can set Display options, for example key with text, text only, key only.
- For characteristics without a generated check table, you can enter a text table, a text field of the Character type, and a text length. You can also specify a view name, usually a view of the check table and text table.
- If the system fails to determine the transaction codes automatically for displaying and changing the master data, you can specify them.

Characteristic attributes

As well as properties, you can assign characteristic attributes to your characteristics.

Once you have created your characteristics in the field catalog and saved them, you need to activate them.

Then you can assign them to one or more Field groups as you wish.

Generation of master data modules

For the characteristics you have created you need master data modules in order to transfer master data, read characteristic value texts, and maintain characteristic values in views. These modules are generated by the system when you activate the characteristics.

Change characteristics

You can use this transaction to find and change any or all characteristics. The characteristics selected are displayed in a list. You can enter changeable characteristics in this screen or in a detail screen. You can also change the texts of EIS-generated characteristics.

Delete characteristics

You can delete fields that are not used in any aspect. Choose "Characteristic -> Delete". When you delete a field from the field catalog, the system deletes all associated subobjects such as generated data elements, domains, check tables, views, characteristic values and remarks.

Activities

- 1. Create characteristics
- 2. If required, define compound characteristics
- 3. If required, create attributes for your characteristics
- 4. Save the characteristics and activate them The system generates the master data modules.
- 5. Assign your characteristics to Field groups if required.
- 6. Assign your characteristics to aspects (see Edit aspect).

Further notes

You can only change those properties of a saved characteristic that refer to a report. A characteristic can be deleted from the field catalog only if it is not used in an aspect.

Characteristic Attributes

It can be useful to group certain characteristics, for example, articles into article groups and divisions, or cost centers into departments or areas. The maintenance of additional information on a characteristic, for example, the article group for an article or the responsible person for a cost center, is achieved using characteristic attributes. You can store various types of attributes for this purpose:

- Navigation attributes
- Display attributes
- Currency/unit field as display attribute

The advantage of these characteristic attributes is that the information is stored in the master data rather than in the transaction data. If, at a later date, you reorganize your company and want to change the assignments, the changes take effect immediately in the report without a database conversion.

Maintain navigation attributes

In the report the navigation attributes are treated like the characteristics of the aspect. As with other characteristics, you can carry out navigation functions with an attribute.

You can only create navigation attributes for user-defined characteristics with generated check tables (generated characteristics). The navigation attributes are also generated characteristics that you assign to the characteristic.

Creating navigation attributes

You access the attributes for a characteristic by choosing 'Goto -> Attributes' when maintaining the characteristic. If attributes have already been created, they will be listed on this screen.

To create a new attribute, choose the function 'Insert new attribute'.

1. Select an existing generated characteristic and select the field "Copy as characteristic from the field catalog". The new attribute appears directly in the list and can be maintained there directly.

- 2. Under "Meaning navigation" enter the text to be displayed in the report. This text should not be the same as the text of the underlying characteristic. This way you can report on the attribute and the underlying characteristic at the same time in the same report, for example, 'article group' and 'article group of the article'.
- 3. Save your new attribute. When you have created all the attributes, activate the characteristics.

Multilevel navigation attributes

In many cases the system can derive several attributes for a characteristic from one attribute, for example the characteristic article has the article group as an attribute. The article group in turn has the division as an attribute, and the division has its responsible person as an attribute. These attributes are available to you as multilevel attributes and you can copy some or all of them.

- 1. On the attribute screen choose 'Attributes -> Multilevel attributes'. A dialog box appears containing the attributes determined by the system and the relationships between them. Example: article -> article group -> division -> person responsible for division.
- 2. Select the multilevel attributes which you wish to report on.
- 3. Enter text in the field 'Meaning navigation'.

Since several attributes can be displayed in a report, it is important that the meaning makes clear the relationship between the attribute and characteristic, for example division to article. Note, however, that it is possible for the system to determine the same responsible person in different ways. Example:

The attributes 'business area' and 'cost center' are assigned to the characteristic 'project'. Using the business area, the system determines the same field for the responsible person as it does using the cost center. In this case it is important to use the text to accurately describe the origin of the attribute, for example, responsible person/ business area, responsible person/cost center.

Assignment of the attribute to the aspect

When you assign a characteristic (to which an attribute is assigned) to an aspect, the attribute is also assigned automatically to the aspect. When you save the aspect, a report structure for the aspect is created. This is called 'IF<Aspect number>', for example, IF001. This table contains the characteristics and navigation attributes for the aspect.

Note

If you add attributes after activating the aspect, you must save and activate the aspect again after maintaining the attributes. This allows the new attributes to be incorporated into the report structure.

You can add or change attributes to a characteristic at any time. However, before you delete an attribute, you must make sure that it is no longer used in an aspect. Note also that when you delete an attribute you can no longer evaluate the additional information.

Maintenance of attribute master data

After you have assigned navigation attributes to a characteristic, you must maintain/copy the attributes for each characteristic value in the master data maintenance. Note that if you have copied multilevel attributes, these are automatically assigned to the characteristic values.

Maintenance of Display Attributes (EC-EIS)

You can display the display attributes in the report as additional information on a characteristic but you cannot use them to navigate.

Display attributes can be created for user-defined characteristics with generated check tables ('generated characteristics'), characteristics delivered from the system field catalog, and other characteristics which refer to SAP tables.

You maintain the attribute for the characteristic when maintaining the characteristic itself. Choose the function 'Attributes'.

Display attributes for user-defined characteristics with generated check tables

In addition to the navigation attributes, which you create for generated characteristics, you can create display attributes. These attributes are not available in the field catalog and you can define them as you wish.

- 1. To do this, choose the function 'Insert new attribute'.
- 2. Enter a name for the attribute.
- 3. Choose 'Create display attribute: create new without reference to the field catalog'. Choose 'Create'.
- 4. Enter the description, type and length of the attribute. As default all letters are saved as capitals. You must decide if small letters are to be allowed, for example in an address.
- 5. Save and then activate the attribute.
- 6. Maintain the attribute for each characteristic value in the master data maintenance.

Display attributes for characteristics delivered from the system field catalog

SAP supplies certain display attributes for delivered characteristics. Choose 'Attributes' to display these.

Display attributes for other characteristics which refer to SAP tables

You can copy fields from the characteristic check table as attributes. To make sure that each attribute is filled by the system, you must create a function module (for exceptional cases, see below) and enter it in the appropriate field on this screen. You can find an example of a function module in the F1 Help for this field.

- 1. Choose the function 'Copy attributes'.
- 2. Select fields from the template table and copy them using the 'copy' key.
- 3. Enter the name of the function module.
- 4. Save and then activate the attribute.

You can copy display attributes from the following tables without creating a function module: T001, T014, FM01, TKA01, T005, TVKO, T880, T881, T852V.

Maintenance of Currency/Unit Fld as Display Attrib. (EC-EIS)

You can define a currency or unit field as a display attribute for a characteristic. It is used as a characteristic-specific reference field for the currency or quantity unit of a key figure. It is stored in the check table for the characteristic for this purpose. These attributes are always the same and cannot be maintained. They can be displayed in reporting.

Creating a currency or unit field as a display attribute

You create these attributes when maintaining characteristics under 'Goto-> Attributes'. Choose "Define currency field" or "Define unit field". The attribute will appear in the list.

Maintenance of Characteristic Groups (EC-EIS)

With this function, you define groups of characteristics. You can use characteristic groups when creating reports in order to limit the possible characteristics of a certain aspect, and to specify the drilldown path more closely.

Further notes Transport of settings

Basic key figures

In this section you create the basic key figures you require.

A basic key figure is a quantity that cannot be derived or calculated from other quantities; for example, sales, fixed costs, variable costs, number of employees, quantity produced. Data for basic key figures is held with characteristics in aspect databases.

Edit Basic Key Figures

Creating basic key figures

You create basic key figures similarly to the characteristics either in the field catalog and transfer them later into the aspect or you create them directly in the aspect maintenance. In both cases, the fields are saved in the field catalog and are available for other aspects.

Each basic key figure is uniquely defined by the field name and contains certain properties according to it's use.

When creating basic key figures you have the following possibilities:

- 1. Entry of field names, name and selection of type number / amount / quantity (see section 'currency or unit of measure').
- 2. Transfer of a basic key figure from any ABAP dictionary table (texts transported too).

If you select basic key figures for your aspect later, you can use any basic key figures from your field catalog.

The basic key figures appear in the data structure of the aspect after the saving in the data part as a series of fields in the sequence of the entry.

Currency or unit of measure

You have four possibilities when assigning a currency or unit of measure to a basic key figure.

- 1. If you select the type 'Amount' or 'Quantity', you can:
 - assign a fixed currency or unit of measure to a basic key figure.
 If you assign a fixed currency/unit of measure, this value is dragged into each data record.
 - make an assignment for the aspect currency or no automatic assignment for the unit of measure.

In this case, amounts are posted in the aspect currency. With quantities you must enter a unit of measure.

- create a reference to a table with currency /unit field. In order to create such a reference, you can refer to a characteristic whose check table bears a currency / unit field or (if such a characteristic does not exist) directly enter a reference table with reference field. In the last case, however, suitable characteristics must be available for a complete foreign key formation for the reference table. With the entry of a characteristic or a reference table the key of the reference table is formed from the characteristic values of the data record and the currency / unit of measure read externally.
- 2. If you highlight the 'number', the basic key figure is saved without a unit. In this case, you cannot enter a currency or a unit.

See also Currencies.

Further properties of a basic key figure You

can determine further optional properties:

- You can maintain the currency translation types that appear in drilldown reporting as default values, if 'Currency translation' is selected for a basic key figure. Select a "translation type" and a "target currency" for the respective key figure. If the translation type already contains the target currency or nothing is entered in the target type, the target currency remains empty.
- With the field "key figure group" you assign the basic key figure to groups. The group provides a better overview when creating reports. The prerequisite for this is that you have already maintained Key figure groups in the step *Data basis -> Key figures -> Create key figure groups*.
- With the property "Decimal places" you determine the number of places after the decimal point.
- The field "Display factor" allows you to display the value in another scaling.
- The properties for aggregation determine how the values are aggregated with respect to characteristics. See also: "Aggregation" or the online documentation for EC-EIS or EC-BP.

If you have created and saved your basic key figures in the field catalog, you must activate them.

Then you can assign your basic key figures to one or more field groups.

Changing basic key figures

This transaction allows you to search for and edit several or all basic key figures. The selected basic key figures are displayed in a list. You can enter changeable properties directly on this screen or in a detail screen. In addition, you can change the texts on the EIS- generated basic key figures.

Deleting basic key figures

You can delete fields that are not directly used in an aspect using 'Basic key figure -> Delete'. If you delete a field from the field catalog, all affected sub-objects such as generated data elements, domains, check tables, text tables, views, characteristic values and comments are also deleted.

Activities

- 1. Create basic key figures.
- 2. Save and activate the basic key figures.
- 3. Assign your basic key figures to field groups if required.
- 4. Assign your basic key figures to an aspect (see also Edit aspect).

Further notes

You can only change the report-based properties with a saved key figure. A basic key figure can only be deleted from the field catalog if it is not used by any aspect.

Edit Field Group

A field group consists of a selection of characteristics and basic key figures from the EC-EIS/BP field catalog. It simplifies the maintenance of aspects by giving you a preselection of the available fields.

You can group the fields as you wish, and also assign several field groups.

Standard settings

The field groups 0SAP-R/2 and 0SAP-R/3 are delivered by SAP.

Activities

- 1. Enter a name for your field group. Note: your field group names may not begin with '0'. This name type is reserved for delivered field groups.
- 2. Copy the desired characteristics from the field catalog. To do this proceed as you would when copying fields to the aspect. If you select a compound characteristic, the higher-level characteristic is automatically copied with it.
- 3. Then copy the basic key figures.
- 4. Choose'Field group -> Check', to check dependencies between fields.
- 5. Choose 'Field group -> Activate'. Further notes

Transport of Settings

Aspect

This section explains how to configure the aspects according to your requirements. The steps necessary here are purely for definition purposes; no programming is required.

Every aspect represents a business data area. The aspect concept separates the EC-EIS/BP data basis into independent evaluation areas. One aspect could, for example, contain key figures which focus on the financial situation, another on human resources and a third on market data.

Technically speaking, an aspect consists of the following objects:

- an SAP table description (ABAP dictionary definition)
- the corresponding relational database table
- an aspect environment for creating and displaying data and routines and modules for administering the master data.

The first step for setting up an aspect is to define the data structure and then to generate the environment and master data modules in step *Edit aspect*.

Edit aspect

In this step, you can process EC-EIS or EC-BP aspects, their data structures, environments and master data modules online.

Maintaining the data structure for an aspect is the major part of creating, modifying and deleting an aspect. The data structure is stored as a table in the ABAP dictionary.

The components of the data structure are the individual fields which are divided up into aspect-specific characteristics and basic key figures. The characteristics represent the objects which can be evaluated using key figures and displayed in presentation.

You can enter the aspect-specific fields either during the maintenance of the data structure or directly in the field catalog (see below)

When creating an aspect you allot a number between 500-999. The aspect numbers between 001-449 are reserved for delivered aspects.

Aspect attributes

When creating a new aspect you must enter certain properties.

- The fiscal year variant controls the number of periods of a fiscal year and is determined per aspect.
- You can define the characteristic 'data area' (VERSO) as an alternative to the fiscal year variant, as a FYV-bearing characteristic. The fiscal year variant is attached to this characteristic and is valid for the aspect. This possibility is only used for aspects that were created up to and including Release 3. For new aspects, it it is recommended that you directly enter a fiscal year variant.
- The aspect currency is assigned to all basic key figures of the aspect, for which no other currency has been established, by default.

Field catalog

The field catalog contains the fields of all aspects that have already been defined. Fields from the field catalog can be transferred with the definition of the aspect data structure.

If a field is in the field catalog once that it can no longer be changed, up to report-based attributes.

Fixed characteristics of the aspect

Each aspect contains the fixed characteristics

- Plan / actual indicator
- fiscal year
- period
- version You do not need to enter these fixed characteristics because they are automatically generated when you save the data structure. Check tables for these characteristics are delivered with the system and the contents can be maintained by the user. Fixed characteristics are explained in further detail under section 'Master data' in the EC-EIS and EC-BP online documentation.

Definition of the characteristics for an aspect

You can find information on the definition of characteristics in the section Creating characteristics.

After you have created your characteristics, assign them to your aspect. Proceed as follows for this:

- 1. Select a field group if applicable. As default all the fields in the field catalog will be offered. With filter conditions you can use certain criteria, data element, description, data structure, to search for fields within a field group.
- 2. Highlight the desired characteristic in the template. (You can display the definition of a field by highlighting the field and selecting 'Extras -> Characteristics -> Detail info.')
- 3. Select 'Transfer fields'. The field appears at once in the data structure.

The characteristics appear in the data structure of the aspect after the saving, as a series of fields, in the sequence in which they were entered. Using the functions 'Edit -> Edit -> Cut / set', you can change the sequence of the fields. After you have saved the aspect you can no longer change the sequence.

Definition of basic key figures for an aspect

You can find information on the definition of basic key figures in the section Creating basic key figures. After you have created your basic key figures, assign them to your aspect. You do this in the same way as the transfer of the characteristics.

With the function 'Change view', you can get a view of the most important attributes and fields of the data structure.

Saving/activating the data structure

The function "Save" creates or changes the aspect's data structure in the ABAP dictionary.

When you choose "Activate" all the dictionary objects are activated with the help of the mass activation program; the tables that correspond to the ABAP Dictionary description are created or modified on the database. The aspect cannot be posted to nor analyzed in the info system until it has been set to 'active'.

Deletion of the database table

With the function 'Data structure -> Delete DB table(s)' the aspect table can be deleted on the database and (optionally) recreated. The aspect's transaction data are then, of course, lost.

The function can be used to:

- delete fields from the structure table (only possible when the CM table does not exist);
- delete test data and prepare the aspect for productive start.

View aspects (only in EC-EIS)

A view aspect enables you to evaluate data over more than one table. When you define a view aspect, you must choose the aspects to be included in it. Then you can choose the characteristics and basic key figures which interest you from the fields of these aspects.

When creating a view aspect, note the following:

- The affected aspects must possess the same fiscal year variant.
- When you select transaction data for reporting a database inquiry is generated for each 'physical' aspect attached to the view aspect if certain conditions are fulfilled (see below).
- If, when you defined the report, you did not choose any key figures from the 'physical' aspect, a database inquiry is not generated.
- The selection conditions for these database inquiries contain the conditions for the characteristics contained in the 'physical' aspect. What happens if you choose a characteristic in a report which does not exist in a 'physical' aspect? If the characteristic is based on **one** characteristic value for the whole report, a database inquiry for this 'physical' aspect will not be generated and therefore, no records will be read. Otherwise, a database inquiry for this 'physical' aspect will be generated and the transaction data will be classified as **not assigned** as soon as you drill down this characteristic.
- If a basic key figure is contained in more than one 'physical' aspect, it will be read for each 'physical' aspect as soon as a database inquiry has been generated. This can lead to the totaling of the key figures from the affected aspects and should be avoided.
- You can create key figures for a view aspect.

View aspects are useful because the number of fields in relational databases is limited. This means that, in particular, the number of basic key figures was insufficient for certain applications. View aspects are especially useful if they use aspects which have many **similar characteristics** and **differing basic key figures**.

Generating the aspect environment

You can generate the environment for an active data structure. The environment includes update programs for data entry and a program for displaying raw transaction data. These objects are generated automatically. The environment must have been generated before you can maintain the transaction data.

Deleting an aspect

You can delete an aspect as a unit. This function deletes the data structure, database table, data structure (ABAP dictionary table) and aspect environment.

The fields of the aspect remain in the field catalog as individual objects. If you wish to delete fields which are no longer referenced from the field catalog, you can do this in the characteristic or basic key figure maintenance.
When you delete an aspect, remember to delete objects such as key figures and reports which are no longer of relevance if the aspect table no longer exists. However, while you are setting up a new aspect, you can store these objects for reference.

Activities

Configure the EC-EIS or EC-BP data basis according to your informational needs. Proceed as follows:

- 1. Transfer the desired characteristics.
- 2. Transfer the desired key figures.
- 3. Save the aspect data structure.
- 4. Activate the aspect data structure.
- 5. Generate the environment objects Further notes Currency concept Technical hints Transport of settings

Display aspect structure

In this step, you can display the data structure for an aspect.

The system displays the information stored in the ABAP/4 dictionary and field catalog for the aspect.

Actions

Choose an aspect whose data structure you wish to display.

Create currency translation type for aspect

When executing a drill-down report, you can translate the currency columns into other currencies under *Settings -> Currency*. To do this, you must enter a "currency translation type" which you can define here. The translation date is important for currency translation types. Here, you can choose between three options:

- the current date
- a date defined here
- a date resulting from a characteristic value.

These characteristics may be the fixed characteristics "Period" and "Fiscal year" included in every aspect, or other characteristics (of type "D" (date)) defined by yourself. You must create translation types if a currency translation is to be carried out based on this characteristic. **Actions**

You create a translation type by selecting an exchange rate type, with either a normal or inverse exchange rate and either a fixed or variable translation date.

A currency translation type with an inverse exchange rate is useful if the amounts have already been translated and the original values are likely to be displayed again in a drill-down report.

Example

You have, for example, maintained the following exchange rates:

DEM USD 10 USD DEM 03 When translating from USD to DEM using an inverse exchange rate, the exchange rate 1/10 = 025 is used and not the exchange rate 03.

Further notes Transport of settings

Key Figures

In this section, you maintain the key figures which, in EC-EIS BP, expand the basic key figures of an aspect with formula-calculated values. Key figures are regarded as specific business-oriented fields in addition to the more data base-oriented fields in the data structure.

Example:

If the basic key figures "Sales" and "Employees" are defined in an aspect, the sales per employee can be defined as a key figure (ratio) using the formula "sales/employee".

Valid components of a key figure formula are the basic key figures of an aspect, constants and any key figures already defined for an aspect. This means that you can build up tree-shaped key figure hierarchies.

In presentation, a distinction is no longer made online between basic key figures and key figures.

Maintain key figure

In this step, you maintain the key figures.

The basic key figures of an aspect are the value and quantity fields in the relevant data structure. In order to prevent redundant data being stored, you should only save values/quantities on the database which cannot be calculated from other values/quantities. Calculated key figures can be defined using the key figure transaction.

You need to enter an arithmetic formula to form a calculated key figure. Valid components of the formula are the basic key figures of the aspect, constants and key figures already defined.

Note

Key figure formulas may be up to 4096 bytes long. Note that key figures in the info system are substituted internally.

Actions WHATSAPP +255738656506

- 1. Choose an aspect for which you wish to maintain key figures.
- 2. Enter a new key figure or edit an existing one.
 - Maintain the short text, the description and enter a formula.
 - You can assign the key figure to a key figure group which is used in reporting when defining reports. Each key figure is attached to a particular aspect, however, if all the basic key figures used in it are also available in a second aspect, the resulting key figure can also be used in the second aspect if you enter it in table TKCTA.

Further information

Using the function 'Display basic fields', you can display the possible components for the formula. Using the function 'Switch basic fields', you can switch between basic key figures, existing key figures and constants.

The following operators are supported in the formula:

<u>Operator</u>	Description
+, -, *, /	Basic arithmetic operations
%	Percentage variance
%A	Percentage
**	Raise to a power
=	Assignment
ABS	Absolute amount
COS	Cosine
DIV	Division (of integers)
EXP	Exponential function
LOG	Logarithm
MAX	Maximum
MIN	Minimum
MOD	Remainder (of division of integers)
SIN	Sine
SOT	Square root

Before saving, you should execute the 'Check formula' function. The formula is then checked for correct syntax, the formula stages are generated and the technical attributes are set to default values. The formula stages are the different steps which build up the complete formula.

To reset the formula to that saved in the database or the last saved version, you can use the function 'Reset formula'.

When you choose the function 'Substitute formula', the key figures are replaced by the formulas behind them until the formula contains only basic key figures and constants.

Using the function 'Get formula(s)', you can display or hide the formulas for the key figures in the lower section of the formula area. You can specify the key figures by entering the name or subgroup.

Using the function 'Switchover paging', you can switch between the upper and lower formula areas.

Using the function 'Evaluate formula(s)', you can enter values in the basic key fields and have the system evaluate the formula ('Calculate key fig.'). The system displays the calculated values on the formula stage screen (you may have to switch between the value and attribute display).

Using the function 'Check recursive act.', you check whether recursive relationships exist between key figures.

The function 'EIS stage forms' is for internal purposes only.

If you choose the function 'Formula stages', you branch to another screen. Here, the system displays in which stages the key figure is calculated. In addition, you can set the time-based and non-time-based aggregation rules, reference field, 'No aggregation' flag and the display (number format).

The 'No aggregation' flag specifies how the key figure is to be calculated in the results row. It is either aggregated or calculated according to the rules of the formula from the aggregated basic key figures.

Example

A B	В	A/B			
1	10	0			
10	1	10	 11	11	10 or 1 ?

The 'No aggregation' flag must be set if:

- 3. operators other than '=', '+' and '-' are used in the key figure,
- 4. a key figure used in the formula has the flag 'No aggregation' set,
- 5. a time-based or non-time-based aggregation rule other than 'SUM' is used in a key figure used in the formula.

The (non-time-based) aggregation rule determines how the data is to be summarized. The following functions are available:

Function	Description
MAX	Maximum
MIN	Minimum
NOP	No aggregation
SC+	Summation where > 0
SC-	Summation where < 0
SUM	Summation

The time-based aggregation rule determines how the key figures are summarized with respect to time. If you have chosen a rule other than 'SUM', you need to enter a reference field. You can enter '&PERI' if the time-based aggregation should be based on fiscal year and period. The following functions are available:

Function	Description
AVG	Average
CNT	Counter
FIR	First value
LAS	Last value
MAX	Maximum
MIN	Minimum
NOP	No aggregation
SC+	Summation where > 0
SC-	Summation where < 0
STD	Standard deviation
SUM	Summation
VAR	Variance

You can maintain time-based and non-time-based aggregation separately. For stock (e.g. average warehouse stock), you may wish to choose time-based aggregation 'AVG' and non-time-based aggregation 'SUM'.

For any time-based aggregation other than 'SUM', you must enter a reference field. This can either be '&PERI' (for fiscal year and period) or a valid characteristic of type 'D'.

Further notes Transport of settings

Display key figures

In this step, you can display the calculated key figures in an aspect. You can also delete key figures using this function.

Actions

Have the system display all the key figures for an aspect (with or without the formulas) or delete key figures.

Note that the same calculated key figure can be used in various aspects. If you delete this key figure it will be deleted in all aspects.

Further notes

The deleting of key figures is not transported with Transport of settings. If you want to transport the deletion of key figures from a source system you can do the following:

- 1. Write the key figures to be deleted on the transport order (please see Transport of settings).
- 2. Delete the key figures in the source system.
- 3. Export the transport order and import it into the target system. The key figures which do not exist any more with the export are deleted in the target system.

Please note that:

When you delete key figures with a transport in the target system, an ionconsistent state can exist. This inconsistency exists when you delete a key figure with a transport, which is still used in a report in the target system.

Attributes for Key Figures

In this section you maintain the parameters that affect the Key figures you defined.

The aggregation of key figures must be maintained when creating or changing calculated key figures. **Maintain number format**

In this step, you maintain:

- the number of decimal places with which the numbers are to be displayed,
- the scaling factor with which the numbers are to be displayed (e.g. thousands, millions).

Actions

Maintain the key figure display.

Further notes Transport of settings

Assign Key Figure Group (EC-EIS)

In this step, you can assign each key figure to one or more key figure groups. You define the key figure groups under Creating key figure groups

When creating reports you can use key figure groups to limit the choice of possible key figures for an aspect.

Actions

Assign key figures to one or more key figure groups as required. Here determine the order in which the key figures should appear when creating a report.

Further notes Transport of settings

Assign default currency translation types to key figures

Here, you maintain the **currency translation types** which are to appear as defaults in drill-down reporting if you choose 'Currency translation' for a key figure.

Activities

Choose a **translation type** and a **target currency** for the key figure. If the translation type already contains the target currency or if you do not enter a translation type, the target currency remains blank.

Further notes Transport of settings Create Key Figure Groups (EC-EIS)

In this step, you define key figure groups. These are used to structure the key figures.

Under Assign key figure group each key figure can be assigned to one or more key figure groups.

When creating a report, you can limit the selection of key figures to a certain group.

Actions

Define the key figure groups according to your requirements.

Further notes Transport of settings

Create Constants

In this step, you create constants that can be used to define key figures.

Actions

Define the constants according to your requirements.

Further notes Transport of settings

Edit Comments Table

When entering actual data and executing reports, the possibility exists of entering and displaying comments for transaction data. These comments can be stored in SAP script or called up from any application that you have on your PC, such as Microsoft PowerPoint.

The comments are stored using a comments table, that contains the selected fields of the aspect structure. In this step, you create the comments table and select the corresponding characteristics. Later, you can create the comments for transaction data, that contain these characteristics in the key.

Afterwards you assign the comments table to one or more aspects. You can create and assign one comments table per aspect or assign one comments table to several aspects. **Activities**

- 1. Create the comments table and enter a corresponding name, for example "Aspects 501-599", so that you can assign the comments table to the right aspect later. You can enter a reference aspect. In this case, the characteristics of this aspect are automatically entered in the data structure.
- 2. Select the characteristics from the field catalog and assign them to the comments table. You use this transaction in a similar way to the aspect editing.
- 3. Save and activate the table.
- 4. Call up the aspect editing of the corresponding aspect and assign the comments table to the aspect.

Fixed Characteristics

Each aspect contains the following fixed characteristics (in addition to the characteristics freely defined by you): version, plan/actual indicator, fiscal year, and period.

Each data record that is updated in an aspect also has fixed characteristics in the key, in addition to the characteristics which you defined. The fixed characteristics are 'required fields' in transaction data entry.

Programmed functions are linked to these fixed characteristics.

In this section you define the characteristic values for the following fixed characteristics: version, fiscal year, and period. Values for the plan/actual indicator characteristic do not need to be maintained.

Define fiscal years

During data entry and the data transfer a check is made whether just data for the fiscal year entered here is posted.

Actions

Create the fiscal years you require.

Further notes Transport of settings Set period

You define the number of possible periods in the fiscal year variant which you maintain here. You must assign this fiscal year variant to a version.

The fiscal year variants maintained here are also used in Financial Accounting (FI).

Actions

- 1. check whether you can use the fiscal year variants defined in FI.
- 2. If necessary, create further variants by specifying the number of posting and special periods.
- 3. Assign these fiscal year variants to versions.

Create versions

The version allows the parallel holding of different data statuses. For the planning it serves as the plan version, but the actual data can also be held in different versions.

Note The version and the plan/actual indicator in Release 4.0 replace the version and the value type of earlier releases. The version from older releases has been renamed as 'data area'. Neither the data area nor the value type are fixed characteristics in release 4.0. However, they can continue to be managed as user-defined characteristics in the aspect. (See also information on Release conversion 3.x -> 4.0).

Action

Create the versions you require.

Further notes Transport of settings

Summarization levels

In this section, you learn how to improve the response times of your report using Summarization levels. **Generate database statistics**

With this program, you get an overview of the statistical distribution of your transaction data. Furthermore, you can determine which user last changed the transaction data.

- If you check off 'Master data statistics', two statistics are created. The first statistic shows how many values there are in the master data table. The second statistics show how often a value appears in the transaction data records for a characteristic. For this, you get notes telling you how you build

Summarization levels. It is only worth summarizing across a characteristic if it contains many different values and these various values are also used in the transaction data.

- If you check off 'Change statistics', a list will be constructed of who last changed the transaction data (according to a characteristic).

Activities

Check the statistical distribution of your master data before you create the summarization levels.

Further notes

With large quantities of data you must schedule the report to run in the background.

Define summarization levels

The maintenance of the Summarization levels is described in the following.

Requirements

You have read the corresponding section in the Online handbook on EC-EIS and EC-BP.

You have analyzed the distribution of your master data with the Database statistics.

Activities

Initial screen

After getting into the definition of the summarization levels you see a list of the defined summarization levels with a text description and the current status. The Status of a level shows whether a level can be used or not. Only those summarization levels with the status "Active" can be used.

Characteristics

On the characteristic list, you enter which characteristics should be summarized and which should not for each summarization level. You can find further information in the field documentation for Characteristic value in the catalog of the summarization level.

Use fixed values sparingly, e.g. for a summarization level which only contains the data of a single company code. This summarization can only be used by the applications if this fixed company code is identically entered.

A later change to the characteristics in the summarization level results in all summarization levels which contain data being deleted. You must rebuild the summarization level accordingly after the change.

Indices WHATSAPP +255738656506 Indices offer you the chance to optimize the access to the summarization levels. At first you do not need to define any indices. The system creates a suggestion when you create the summarization levels, which is sufficient in most cases. It is not until the volume of data in the key table goes above several tens of thousand of records (see detail screen) that an optimization is sensible at this juncture. Please maintain the characteristics before you define the indices.

Creating a suggestion

Under 'Extras -> Create suggestion', you can automatically create summarization levels for reports. Please enter a number from which the summarization levels should be created.

Select the desired report. The system analyzes the reports and suggests a summarization level for each report. As a rule, you should check the suggestions. In addition to this, please read the recommendations below and the rules of thumb given in the online handbook.

Please note that unnecessary summarization levels can be created with the function 'Create suggestion'. These may be contained in other summarization levels.

Saving and activating the summarization levels

Go back to the initial screen in order to save your summarization levels. After creating or changing, the summarization levels are first in 'To be created anew' status. Data structures in the ABAP/4-Dictionary are created for the summarization levels during saving. After you have saved the summarization levels, they are in the 'Active without Data' status.

So that the summarization levels can be used by reports, they have to be supplied with data. To this effect, plan a job for the Building of summarization levels in the background processing (Report RKCTRERU). It is only that the summarization levels are 'Active' and can be used by reports.

Note for the system administrator

Tables are created in the ABAP/4-Dictionary and on the database with all new summarization levels. You can find the name of the created tables on the detail screen of the summarization levels. **Further notes**

If you suspect that there is incorrect data in the summarization levels you can deactivate their use for test purposes under 'Extras -> Test mode'. This enables you to compare the data from the summarization levels with the data from the transaction database.

Run the report once with and once without the test mode. The same numbers must be displayed in both cases. When the test mode is turned on all of the summarization levels remain in 'Active' status and are updated; but they are not used by a report anymore. Do not forget to turn the use of the summarization levels back on after a test.

Recommendation

Notes for optimizing the summarization levels

Under 'Goto -> Detail' you can find statistical information about a summarization level, such as the number of accesses to a level or the number of available records.

Under 'Extras -> Overview' you can compare the characteristic definitions with their levels.

This information will help you to decide whether a level should be changed or deleted.

In the following, some rules of thumb explain when there is potential for improvement for your summarization levels and how you can optimize them:

Define as few summarization levels as possible

Attempt to use as few summarization levels as possible as the required memory space increases with the number of levels. You can create further summarization levels later and delete the ones no longer in use.

Use fixed values sparingly in the definition

Because of fixed values an existing summarization level cannot be used by new reports if the report does not contain all of the limitations. You should overwrite the fixed values with a '*' with summarization levels suggested from reports, so that the summarization levels can be used more generally.

Level is contained in another level

On the overview screen you can compare the characteristics of several summarization levels, in order to find out if one summarization level is contained in another.

Two situations are explained in the following example. The table represents a table from the overview screen, the row 'Number of record records' is the "Number of totals records" from the detail screen.

Characteristics	Level 1	Level 2	Level 3
Company code	*	*	0001
Customer group	*		*
Customer	*	*	*
Number of records	5000	5000	5.000

In level 2, unlike in level 1, the characteristic customer group is summarized. Therefore, the number of records in summarization level 2 should be a lot less than in summarization level 1. This is not the case as the customer group depends on the characteristic customer. The slightly higher number of records in level 1 may be due to the fact that there are customers which are sometimes viewed as wholesalers and sometimes as retailers. As level 1 is more detailed than level 2 it can be used instead of level 2 for the reading process. As the number of records in level 1 is hardly more than the number in level 2 there is almost no noticeable difference in performance when calling up a report. In this case you can delete level 2. The advantage is that the data must be updated one level lower.

In level 3 we are dealing with a summarization level with the same summarization as level. The level 3, however, only contained the data from one company code. A report which reads its data from summarization level 3, no longer has to read records from level 1 as it only needs the data from company code 0001. Level 3 can be deleted. In order to improve the selection of data from level 1, an index can be created about the field company code.

Result: Summarization levels 2 and 3 are contained in level 1 and can be deleted. When calling up the summarization levels level 1 must then be updated less.

Level is not being used

If a level is not used it can be deleted. You can glean this from the date of the last access and the number of access (on the detail screen).

Length of access is long

The total time for accesses to a level is shown on the detail screen. The number of accesses is also shown

If the quotient (total time / number of accesses) is markedly more than on other levels this can be a sign that a too-detailed level is being used for a report, meaning a level that contains more information than is needed. In this case a more highly summarized level can bring improvements in performance.

Set up summarization levels

In this activity you supply the summarization levels with data. If you have defined a new summarization level, this level will stay in 'Active' status 'Without data', until you have carried out a rebuilding. **Activities**

Select 'Build new levels' in order to select and then activate the data for a new summarization level.

Select 'Delete and rebuild' in order to delete, reselect and then activate the data for an existing summarization level.

After the data is put together for a level, the summarization has a status 'Active'.

Further notes

The summarization levels are built with report RKCTRERU. As the building can take up quite a lot of time, it is recommended that you plan the report in the background processing.

Fix Currency Translation Type for Data Entry/Planning

In this step, you establish the currency translation types for use in the data entry and planning. They are used in the translation of an entry currency to the currency on the database. If you do not maintain any currency translation types here, the translation will be automatically carried out using type 5.

You can determine a currency translation type for certain key figures of a work area, for example plan data in version 001 in aspect 001.

Activities

Determine the currency translation types for the data entry and the planning.

Edit Data Entry Layout (EC-EIS)

Create, change or display Data Entry Layout.

In this step you define the screen layout, i.e. the data entry layout for manual transaction data entry. These layouts are called **Layouts** and are defined similarly to forms in the Report painter. It is thereby possible to define entry layouts for your individual situation.

1. Layout possibilities

You can position the rows and columns freely in the layout and define them as you like. You can also define the columns across several screen pages.

When creating a layout you can, for example, set values of a desired characteristic in the rows, while the key figures and if necessary further characteristic values (i.e. different periods of time) appear in the columns. Or you set the key figures in the rows of the layout and, if necessary, different characteristic values or periods of time in the columns. As a further possibility, you can define one or more lead columns, in which you enter characteristic values during data entry. In this case the key-figures are in the remaining columns and the rows are not defined when creating a layout, but dynamically during the entry, determined by the entered characteristic values.

a) Version

The Version will appear as a query when creating a layout. It is created together with a layout and is then only changeable within the same fiscal year variant.

b) Data area

If you wish to enter data for an aspect, that contains the character- istic 'data area', the data area is requested when creating the layout.

c) Plan/actual indicators and version

You can enter the actual data of a version in the data entry layout. Actual data of other versions can be displayed as reference data.

If you include the plan/actual indicator in the general data selections, you must limit it to actual data.

d) Fiscal year

The fiscal year must also be specified in the layout.

e) Layout header

The header area of the Plan layout can be individually configured from the general selections via the selection of certain characteristics. Here Value type and Fiscal year should be limited. (Menu path: Edit --> Gen. data selections Display/Change).

f) Lead Columns/Rows

There are, in principle, two different possibilities for defining the rows: By double-clicking on a row you can select desired characteristics and where necessary key figures for this row. Exactly the same characteristics then have to be selected in the further rows. The values of these characteristics in the individual rows are arbitrary. In this case the characteristic values for which data is to be entered are fixed after all variables have been entered (as far as they are available). If you want to define the characteristic values for which the data is to be entered once the data entry is under way and wish to enter as much data as you like, then you can define a lead column by selecting a characteristic values will not be entered into this column until the data entry. The rows will then be set dynamically during the data entry. The key-figures sit in the remaining (normal) columns. You can define as many lead columns as you like. (Menu path: Edit --> Columns --> New lead column..). It is also possible in this case, to delete data - not just that which has been recently entered but also data which exists on the database. Parametrization of the characteristics

With the definition of a Layout you can control characteristics and their values in the rows and columns or to fix them as gen. data selections for the entire data entry. The values of these characteristics can be pre-allocated with either fixed values or variables. In the last case, the

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g)

variables are queried at the start of the data entry. Variables can be defined for characteristic values and texts.

Each normal column automatically gets a corresponding unit column. Columns and their commensurate unit columns identify themselves with identical selection criteria;

i.e. the same key figures, characteristics and characteristic values. The period should be taken out here. You can also delete unit columns belatedly, if you do not wish to see any units during data entry. However, no entries can be made for quantity key figures without fixed or reference units of measure. Unit columns should at least be available for these key figures.

2. Restrictions

a) Compounding

With compounded characteristics the superior characteristic must either be limited to one value in the general data selections or it must be defined in a lead column. In the last case as many characteristic values as you like can be entered for the superior characteristic.

b) Texts in lead columns

If a compound characteristic should happen to appear in a lead column with text, then the superior characteristic must be restricted to one value.

c) Period in the rows or columns

If the period is not selected in the gen. data selections, but rather in the rows or columns, no unit can be entered for quantity key figures without fixed or reference unit. In this case, you must set the unit to 'not input-ready'. (Menu path: Format --> Ready for input y/n)

- 3. Settings
 - a) Decimal representation and value representation

Both the number of desired places after the decimal point and the scaling factor (e.g. entry in 1000's) per column can be pre-allocated with the definition of the layout. (Menu path: Formatting --> Number format...) A change to this point in time setting is possible.

 b) Ready for input (y/n)
 You can decide whether rows and (normal) columns can have entries made in them (Menu path: Formatting --> Ready for input y/n)

Further notes

Transport of settings

Maintain Derivation with Data Entry and Transfer

From the derivation it is possible to supplement missing characteristic values with manual entry and data transfer. Similar rules to those for automatic data transfer have to be maintained for the derivation. The rules are valid across aspects for characteristics. Simply for reasons of clear arrangement, the maintenance on the initial screen is limited to an aspect.

The characteristic values are constantly checked with the derivation. If a field is already filled with a characteristic value, it will not be written over. If a characteristic value cannot be assigned because of the rules, the initial value remains in place.

Derivation is carried out in two places with manual entry in the data entry layout.

- 1. Before reading the available transaction data records, the selection conditions are derived.
- 2. Before posting, the entered / checked objects are derived or only records are displayed which correspond to the derivation rules at present.

Derivation runs after the specific rules for the sender structure have been processed in the automatic data transfer.

Further notes Transport Settings

Validations

In this section, you learn how you can check both manually entered and automatically transferred data using Validations and Rules.

Maintain/activate validations

Overview

There are two different types of Validations:

- Single record validations
- Matrix validations

With the **Single record validation** every new or changed data record is individually checked. A test can be executed, for example, as to whether the sum of 2 key figures is smaller or the same as a third.

With the **Matrix validation** however, the entirety of the data records is checked. You can, for example, check whether the sum of the credit is the same as the debit.

After defining the validations they can be activated for the following points in time:

- Before the update in the manual data entry
- After the summarization and before the update in the data transfer

If big errors occur, the data cannot be updated. However, if only warnings or information appear the data is updated, but the messages are written in the log which you can check later.

Activities

Create your validations and rules.

Preparations

- 1. Enter an aspect, for which you wish to maintain validations. Validations are always valid for one aspect. It is possible to copy validations, in order to use them in other aspects. If you are using the transaction for the first time for an aspect the validation environment (table entries and program code for the validation) is generated. This process can take some time but is omitted with the next start of the transaction.
- For the desired type of validation, select the function 'Maintain validation'. Then select 'Validation -> Create' and enter a name for the validation.
 The system then asks which message classes you wish to use in the aspect (or Boolean class). You

can maintain 1000 messages per message class, which are then given in the case of an error in the validation.

3. Define a new message class with the function 'Create', it should start with a 'Z'. You can use various areas for various aspects in this message class (e.g. Message 1 ... 50 for aspect 900, 51 ... 100 for

aspect 901 etc.). In this way you only have to create a new message class once. The assignment of the message class only takes place when you are maintaining a validation or rule for the first time for a particular aspect.

4. Select 'ENTER' to leave the dialog window. You then get to the maintenance of validations.

Maintaining validations

Each Validation consists of several steps (up to 1000) and each validation step consists of a prerequisite, a check and a message. The steps are worked through with one check after another. The message is always given if the prerequisite is fulfilled but the check is not.

Enter a name and select 'Edit -> Insert entry' in order to get to the editor.

Expert mode

If you know the syntax of the Boolean rules, you can enter the formulas directly on this screen in the socalled expert mode.

You can list the permitted fields of the aspect using the key 'Fields for cond.' and transfer them to the rows.

You can get an exact overview of the syntax and the possibilities if you put the cursor on a row of the validation and press F1.

Formula Builder Using the formula builder you can create formulas without having to learn the syntax. You can select the characteristics and key figures of the data records and calculate with these fields and set up comparisons. In addition you access the following system fields: User

(SYST-UNAME) Date (at time of validation) (SYST-DATUM) Time (at time of validation) (SYST-UZEIT) Logon language (SYST-LANGU) Transaction code (SYST-TCODE)

- You can select the operators and formula symbols using pushbuttons. If you wish to use a number in your formula, choose the function 'Constants'. You can find an exact description for creating a formula under 'Edit -> User information'.

In the following **Example** with the prerequisite, a check is made as to whether sales are greater than zero. This check ensures that the sales are greater than the sum of the volume-based rebate and sales provision. The formulas are written here with the technical name of the expert mode.

Prerequisite:

<CF001> \$REVEN > '0' "Check only if sales are greater than zero!"

Check: CF001-REVEN > (CF001-BONUS + CF001-VPROV) "Revenue must be greater than volume-based rebate and sales prov."

Message:

Type E No. 003 Text Division &1: Revenue is smaller than rebates and sales prov. Output fields: 1 CF001 - DIV Among others you should note the following rules:

Please note the following:

- Currencies and decimal places

If you use amounts (e.g. CF001-REVEN > '1000'), the number 1000 is interpreted as an amount with 2 places behind the decimal point. If the revenue is given in Lira, which has no places after the decimal point, you must enter CF001 -REVEN > '1000 (ITL)'. Note: If you use reference currencies, which depend on the values of a characteristic and different places after the decimal point occur, several validation levels must be defined, which keep apart the cases with the different places after the decimal point using the validation condition. The same goes for the units.

Maintaining messages

With the key 'Maintain messages' you go to the editor for messages. Here you can enter message texts in the message classes you created. Then you van use them in the validation steps.

You can define up to four variables with the placeholders &1 to &4. These variables are filled and displayed using the fields from the data record - i.e. the value of a characteristic - in the validation. So, in the example above the column in which the error appeared is displayed in the message. These message variables only make sense in the single record validation, as in the matrix validation the fields from the last record are set in the message variables. There are four types or grades of messages:

- Type 'A': Termination
- Type 'E': Error
- Type 'W': Warning
- Type 'I': Information

In the above, messages of type 'A' and 'E' are real errors which prevent the posting of the data. Messages of type 'W' and 'I' are only extra information, which is logged. The posting of the data is still allowed.

Maintaining rules

In Rules you can store parts of validations, which you use more regularly or which you want to use in several validations at the same time.

Example

You often ask if the value type equals '1' and whether the division only takes the values '00000001' to '00000010' and '00000020' to '00000030'. So that you do not have to always enter this condition (or even longer ones) each time, define the corresponding rule.

You can either do this directly in maintenance of the validation (function 'Maintain rules') or going from the starting screen of the transaction.

Then you can combine this rule in validations or in further rules from the rule list. The rules are valid for one aspect respectively and and cannot be used in other aspects. Furthermore, a rule which has been defined for single record validations cannot be used in a matrix validation and vice versa. There is, however, a Tool for copying rules to other aspects or from matrix to single record validation.

The following **Example** shows a matrix validation, which uses two rules and in which a check is made as to whether plan data for 1998 does not vary by more than 20% from actual data for 1997. Thereby, the total volume of the record is limited using the where-condition on the actual values for 1997 or plan 1998. It is because of the Group statement that the variance of the respective total sums is not checked, rather the sum of the revenue for each combination of division and period is formed and the variance checked. The group statements should, therefore, be identical on both sides of the comparison operator.

- Rule 'ACT97' : CF001-PLACTI = '0' "Act." AND CF001-YEARB = '1997'
- Rule 'PLAN98' :

CF001-PLACTI = '1' "Plan" AND CF001-YEARB = '1998' AND CF001-VERSIO = '001' "(Version 1) " Validation 'PREVYEAR': SUM (CF001-REVEN) WHERE ACT97 "Use of rule 'ACT97'" GROUP_BY CF001-PERIO CF001-DIVIS <= '10' * SUM (CF001-REVEN) WHERE PLAN98

GROUP_BY CF001-PERIO CF001-DIVIS) "For all combinations of period and division, the sum of the actual revenue '97 of all data records is calculated with this period and this column and compared with 1,2 times the corresponding plan revenue sum '98."

AND SUM (CF001-ERLOS) WHERE IST97 GROUP_BY CF001-PERIO CF001-DIVIS >= 0 * <CF001> SUM(\$REVEN) WHERE PLAN98 GROUP_BY CF001-PERIO CF001-DIVIS

Note: With such a check, you must guarantee that the data for the previous year is available.

i.e. There must be display columns with the previous year's values in the data entry layout or that the actual data from the previous year is transferred with the data transfer. If you do not desire the latter, you can run the aspect summarization after the actual data transfer and select the actual data of the previous year and the plan data of the current year. The aspect summarization would then update the data 1:1 again, but before the update the validation would run and check the plan data against the actual data from the previous year. You can only compare corresponding periods using this method. If, for example, you wish to compare the previous quarter you can only do it if you stay in the same fiscal year. If the last three periods should be accessed anyway for all years you will need the help of a user exit.

Activating the validations

After you have created the validations you must then establish when and which validation should be used for checking. From the starting screen of the transaction you select 'Validation -> Activate for -> 'Data entry / Planning / Data transfer.

Activating the validations for the data entry and planning

When activating for the data entry or planning you can assign a validation and/or a matrix validation to each data entry layout of the current aspect. The validations which are assigned to the entry layout or planning layout then run in the layout entry before the data is saved. Thereby, only the new and changed data records are transferred to the single record validation as opposed to all data records in the matrix validation.

Note: Only period values are checked. If you enter values on the overview screen, which are distributed across periods then the numbers of the period screen are checked rather than the visible ones.

Saving is only executed if there is, at worst, a message of type 'W' (Warning) or 'I'

(Information). In this case a log is written with the messages. If only a message of type 'A' (Termination) or 'E' (Error) is available then the data cannot be saved. In order to test the running of the validation during the data entry, select 'Transaction data -> Validation'. In this way you can view the messages and correct them where necessary before saving.

You display the validation log in the application menu using 'Transaction data -> Data entry -> Display logs' or on the initial screen of the maintenance screen using 'Extras -> Log display -> Data entry or planning'.

Activating the validations for the data transfer

With the activation for the data transfer, you can assign a validation and/or a matrix validation to each sender program which updates data in the current aspect. If data is then transferred with this sender program, the validation is executed after the summarization of the data, meaning with the receiver records. Here, both the single record validation and the matrix validation transfer all data records.

If messages of type 'A' or 'E' are present the data is not updated and it is noted in the transfer log that the validation has announced some errors. If no messages, or only those of type 'W' and 'I', are present then the data is updated. In both cases, the messages which the validation has produced are written in the

validation log. You display the validation log in the application menu using 'Transaction data -> Transfers -> Transfer log' or on the initial screen of the maintenance transaction using 'Extras -> Log display -> Data transfer'.

Copying validations and rules

If you wish to use the same validations for several aspects, you can do so under 'Goto -> Rules/Validations -> Copy' (please see Validations/Copying rules).

Authorizations

You can find a list of the authorizations, which are checked in connection with the validations under Authorizations.

User exits

If the functionality of the validations does not suffice you can use User exit and program the necessary functions yourself. You can find further information about this under Userexits for the validation.

Correcting errors

Due to erroneous validations or inconsistencies, syntax errors can occur in the generated program. The data transfer and saving is then terminated, in as far as the validations are run. You can read more about this in Correcting errors.

Copy validations

Copying validations and rules

If you wish to use the same validations or rules for several aspects, you can copy them. With this the contents of the validations or rules are automatically adapted to the target aspect. **Requirements**

- 1. All of the characteristics and key figures of the validation/rule must also be available in the target aspect.
- 2. The validation environment has to be generated for the target aspect (where necessary call up trans. 'Maintain rules/Val. and enter the target aspect).

Notes

Please note the following:

- 1. A matrix validation can only be copied to a matrix validation and a single record validation can only be copied to a single record validation.
- 2. Rules for single record validations can also be copied to matrix validations and vice versa. (even within an aspect).
- 3. If the validation rules to be copied are used, the system which rule of the target aspect should be substituted. It therefore makes sense to first copy the rules of a validation and the validation itself.

- 4. When using User exits or Sets you must ensure that the new validation still makes sense. Otherwise syntax errors may occur in the generated program. (See User exits in validations for further information).
- 5. The validations of the target aspect should use the same message class as the source aspect.
- 6. Using copying means that there is no reference. Therefore, changes to the validation, which was copied, do not have any effects in the copy itself.

Activities

Copy the rules and validations which you require.

Data Slices

With a data slice you can partition your dataset into subsets. A data slice enables the following:

1. Protection of your data from unauthorized changes

Data slices are a type of authorization for automatic transfer or manual maintenance of actual or plan data. The existing EC-EIS or EC-BP authorization objects allow protection of certain characteristics. They are, however, always active. This means that the user can decide to either display the transaction data for a characteristic value, or not. At certain times, however, it may be necessary to simultaneously lock data against changes, but have it available for display in reporting. In this case using an appropriate data slice is easier than regularly changing the authorizations of all users. Note that, whenever data slices exist, it is extremely important that the data goes into an unlocked data slice so that it can be updated. If necessary, therefore, create a dummy data slice so that you can update data.

- 2. Obtaining an overview of the completeness of the datasets In Customizing you can produce an overview list of the imported data. You could use this to check at the end of a month which companies have not yet submitted their data.
- 3. Deletion of data before importing new data

You can mark certain characteristics which split up the dataset. Company code, company or project are examples of these characteristics. When data is imported you can choose whether the data from the relevant data slice should be deleted. For this, the characteristic values of these partitioning characteristics are collected. Then, all data which contains both these characteristic values, and the characteristic values of the other characteristics from the data slice description is deleted. The sender records are saved in each case, and should errors occur, you can find these in the log and then import the records again using the restart functions.

You can find further information on the use of data slices in the online documentation on EC-EIS and EC-BP.

Create data slice

In this step you create a data slice. You also specify the status of the data slice.

Activities

Create your data slice.

Assign user group

In this step you determine for a particular data slice which users are allowed to change the data of the data slice. You also flag certain users as responsible for the data slice. A responsible user may carry out changes at times when other users may not.

Activities

Assign the users to the data slice. Choose one or more responsible users.

Assign table

In this step you determine which tables data slices refer to. A data slice can refer to one aspect (table CFnnn, where nnn describes the aspect), or to several.

Activities

Assign tables to the data slices.

Maintain requirements

In this step you define the contents of the data slice. These settings represent the requirements that are used to maintain or import data.

You can limit the characteristics by either entering the characteristic values or by entering intervals or variables. The advantage of a variable is that you can change the characteristic values without having to create a new data slice. This is especially helpful with the period and year (for example, current period/year). You can maintain variables using 'Goto -> Define variables'.

Important information is contained in the names of some files. It is possible to interpret the characters from a specific offset in a specific length and to use them to separate the data within a data slice. An example: a file is called PLAN0031999, the data contained in this file (offset 5 in length 7) must be imported in period/year 003999.

Before importing new or changed data, it is often necessary to delete some of the existing data to guarantee the consistency of the data. For this reason you can flag certain characteristics in a data slice that separate the dataset into related parts. Examples include company code, project or company. When data is imported, the characteristic values of these partitioning characteristics are collected. Then all data that contains these characteristic values, in addition to the characteristic values of the other characteristics from the data slice description, is deleted.

Example

The relationship between two companies in a group was incorrectly maintained and data has already been imported. The error is corrected and new records are imported. If the data that was initially imported was not deleted, the old records would remain in the database.

Activities

- 1. Select the partitioning characteristics.
- 2. Limit the characteristics.

Data Transfer

Data transfer

In this section, you make the settings that affect the automatic transfer of data into the EC-EIS/BP database:

- Under external systems, you set the transfer methods to other systems.
- Under 'Transaction data', you set in which format the data records with transaction data are delivered to SAP-EIS, and according to which rules transaction data is be summarized and assigned to receiver records in SAP-EIS. You can also create currency translation types that are used for the transaction data transfer.
- Under 'Master data', 'Comments' and 'Master data hierarchy' you define the format in which master data is delivered to SAP-EIS.
- Under 'Transfer procedure', you specify when the data transfers to SAP-EIS are to take place.
- You can set parameters under step 'Reports' for filling the report portfolio (only in EC-EIS) with data from files, spool requests (R/2 and R/3) and the list printout of R/3 programs.

The central term in the area of data transfer is the 'sender structure'. For data transfer from both R/2 and R/3, the sender structure is identified with the data collection program because the name is the same. For data transfer from a file, you can choose the name of the sender structure. You save transfer rules for summarization for the sender structure.

The second important term is the transfer method. This is the system from or to which a sender program sends data. If data is imported from afile, the method is automatically 'FILE'. The transfer method is necessary because identical sender programs can send data from different systems. It enables us to see in the transfer log when and from which system data was transferred.

In addition, it is possible to keep a log of all data records sent via CPIC. To do this, you must

- 1. maintain the logical file name 'EIS_COMMUNICATION_TRACE' in step *Environment -> Logical file names.*
- 2. Switch on the trace function by setting the system parameter value in system parameter 'MODE' of parameter group 'TRACE' to 'ON' (using table T2420 in transaction SM31).
- 3. Make sure the SAP system can access the files by setting up the access authorizations for the files correctly.
- 4. Make sure there is enough hard disk memory available in the file system.

Importing currencies

During data transfer, amounts can be translated from other currencies into the target currency.

Currencies are saved in SAP-EIS in packed numbers with two decimal places. If, however, a different number of decimal places is stored in table TCURX, this number is used. There is no entry for 'USD' in table TCURX therefore 15 USD are saved as 15.00 USD. On the other hand, zero 1500 LIT are written on the database as 15.00 LIT. The interface for importing transaction data takes this into account, however, other interfaces require the data to be delivered in the correct format.

Hints on organizing data transfer

The sender programs which collect data either write the data in a queue (in R/3) or to table DOUT (in R/2). A mechanism exists which ensures that the data is automatically sent by driver programs. In order to avoid mixing data from different sender programs, you should define different logical units in R/2 or queues in R/3. It is, however, possible to transfer data, originating from different runs of the same sender program but written in a single queue, together. However, if the queue contains data from various sender programs, the transfer will terminate.

Deletion of transaction data in the back ground before carrying out the new transaction. Old values often have to be deleted before new transaction data are carried out. A background job can be carried out for this, as follows:

- 5. Delete available transaction data
- 6. Carry out new transaction data

What does one have to know in order to carry out the deletion of transaction data in the background? A program is generated for each aspect, which can delete or display transaction data. This program is called RKCSENNN, where NNN is replaced by the number of the current aspect. No parameters exist on the selection screen of this program in order to control whether the program displays or deletes data. This parameter is set dark by the program which calls up program RKCSENNN. The parameter is called MODE.

This causes problems in the background processing, because the parameter MODE has to be set to 'D' in order to delete. You can then make entries on the selection screen and save them as variants. When you check the values of the created variants, you will see that the parameter MODE is set to 'D'.

External Systems

In this section, you maintain the EC-EIS/BP -specific settings for communication with sender programs from other R/2 or R/3 systems or for data collection within a system.

The step 'Maintain transfer rules' is also relevant for the data transfer within one system. The other steps are only relevant if data transfer is to be set up with CPIC from another SAP System (R/2 or R/3).

Set up network

For more information on communication at network level see *Help -> SAP Library -> Basis -> Services / Communication Interface -> SAP Communication: Configuration.* The R/2 document S41 is identical to this documentation.

The CPIC communication uses symbolic destinations, which you maintain in the menu under *Tools ->* Administration -> Admin.-> Network -> TXCOM Maintenance (see the

above-mentioned documentation). If you require further information on these entries for an SAP system, select *Tools -> Administration -> Monitor -> System monitoring -> Gateway monitor* or get in touch with your system administrator.

In order to test whether the network communication works, you can start the ABAP Program ACPICT1 using *System -> Services -> Reporting*. Note that this program always logs on in client 000 in the target system.

The program 'ACPICT1' should run error-free in every system, from which a CPIC communication is to be built. So, in all cases from the source system and optionally in the target system, if namely the data transfer is to be started from the partner system with the program RKCSUB00.

Program 'ACPICT1' exists in R/3 and R/2.

Activities

Test the CPIC communication with the test program 'ACPICT1'. **Create CPIC user**

The user administration recognizes various user types. Users of type CPIC are required for CPIC communication. CPIC users are required so that the source system can logon to the target system, to transfer the data.

Activities

- 1. Create a CPIC user in the target system.
- 2. Give the CPIC user the corresponding Basis and application authorizations.
- 3. If you want to start the data transfer from the target system in the source system using program RKCSUB00, you also have to create a CPIC user in the source system.

Maintain transfer method

During the data transfer from one system to another, you must differentiate between the source system and target system. The source system contains the operative data which is selected from a sender program and transferred to the target system. There are three possible ways of starting the sender program:

- You can start the sender program from the target system using program RKCSUB00.
- You can start the sender program from the source system online.
- You can schedule the sender program for background processing from the source system.

Depending on whether you are in the target or source system and how you wish to start the data transfer, you must maintain the transfer method differently.

- You must maintain the transfer method in the source system. This involves maintaining section 'Target system' where you enter with which user and client the source system should log onto the target system and section 'Queue' where you define a queue name and enter driver program RKCDRIVE.
- You should create a transfer method in the target system which has the same name as the transfer method in the source system. If you start the sender program in the source system, you only need to enter a transfer method in the target system. You do not need to make entries in sections 'Target system' and 'Queue'.
- If you start the sender program from the target system using program RKCSUB00, you need to enter how the target system is to log onto the source system. You do this in the target system when you enter the transfer method on the selection screen of RKCSUB00.

Using different transfer methods, you can differentiate between data transfer logs of transfers from various source systems or clients in a source system. The transfer paths must match in the source and target systems. There must be a transfer path of the same name in the target system to match the transfer path in a source system. This is how a data transfer is identified from the source system in the target system.

Prerequisites

The user you enter in the target system must exist in the relevant system as a CPIC user.

You must have maintained the symbolic destination from the main SAP menu under Tools -> Administration -> Network -> TXCOM Maintenance.

Action

Create a queue *System -> Services -> Queue*. This step is not necessary in an R/2 source system. The data to be transferred is written in the queue. In addition, a leading record containing information about the sender program and closing record are written. The queue should be type 'A' as should the start mode. You can choose other modes, however, in that case you need to make sure that the queue data is transferred periodically. To do this, you schedule jobs for program RKCDRIVE. - Queue driver program RKCDRIVE

- Program SAPFKCIM
- Form RECEIVE_AND_TRANSFER

Maintain the transfer paths.

You can access several examples.

Special transfer methods

Certain transfer methods have been predefined:

- Transfer method 'FILE' is used to import data from a file.
- Transfer method 'SELEC' is used to summarize an aspect.
- Transfer method 'LOCAL' is used for data transfers using ABAP/4 query within one system.

Further notes

For more information on maintaining Table TXCOM see, *Help -> SAP Library -> Basis -> System administration -> R/3 Network configuration -> SAP communication: Configuration.* Transport Settings

Maintain R/2 transfer parameters

You must maintain table T2420 using transaction TM31 in a sender R/2 system. The group from table T2420 must correspond to the transfer method maintained in the target system. You must make the following entries:

- QABAP = Receiver program = SAPFKCIM,
- QAPPL = Target system
- QDEST = Logical unit, link to TXCOM
- QDPAS = Password
- QDUSR = User name of CPIC user in R/3
- QMAND = Client in receiver R/3 system
- QMODU = Receiver routine = RECEIVE_AND_TRANSFER for transaction data or
- QMODU = Receiver routine = REC_AND_TRANS_TEXTS for master data The user entered in QDUSR must be a CPIC user.

If you wish to start a data transfer from the target system, you need to set the transfer method in the target system so that the target system can log on to the source system.

Further notes

Data collection from R/2

Transaction Data

This section tells you which settings are needed to transfer transaction data automatically into EC-EIS/BP.

Data Collection

In this chapter the delivered possibilities are summarized, to transfer data into EC-EIS or EC-BP.

With the following steps, you can set up the data acquisition from other components.

Standard collection programs

In the following steps, you set up data collection from other components.

To provide EC-EIS/EC-BP with transaction data from other SAP modules you can use, on the one hand, the general connection to ABAP query and, on the other, application specific data collection programs.

Depending on the SAP component from which data is to be collected, the collection programs are either delivered directly and provide a standard sender structure or they are generated during Customizing. In the latter case, the sender structure also depends on the Customizing settings.

This is a list of the data collection programs from R/2:

Application Data collection program Sender structure

RF	RFBILA00,RI	FSERG00	Balance sheet position, Account,
		Company co	ode, Business area,
Reportir	ig year, From-rej	porting	month, To-reporting month,
Currenc	y, Amount.		
RK-E	TK75	Gener	rated

RK-S	SAPK021V	KIDS
	RKCKSTKS	RKCKSTSP for generation sender
structu	re	

RK-P RXSEIPSA EIPS (DDIC)

Others ABAP Query Generated Here is a list of the data collection programs from other components:

Application	Data collection program	Sender structure
FI-LC	RGCEISS1	FILCEIS (DDIC)
FI-GL	RFBILA00	EISFI (DDIC)
PS (RW)	RKPSEIS1	PSGENACC (DDIC)
PS (LO)	RKPSEIS1	PSGENLOG (DDIC)
EC-CS	FICEIS00	FC07EIS (DDIC)
TR-LO	RFTEIS1	FTI_EIS_LO(DDIC)
TR-TM	RFTEIS2	FTI_EIS_SE (DDIC)
CO-PA	Generated by	Generated
	basic report	
CO-OM	Generated by	Generated
EC-PCA	Report Writer	"
FI-SL		"
Others	Generated by	Generated
	ABAP Query	

You will find further information on the selection programs in R/2 in the R/2 program and parameter documentation.

Activities

Create the sender structures for the R/2 data collection programs delivered by SAP or your own selection programs. You carry out the customizing for SAP R/2 collection prgrams in R/2. The sender structures created in R/2 can be transferred to R/3 automatically. With the data transfer using ABAP Query and TK75 the sender structures are generated together with the procurement programms, when a query or a TK75 report is created. The data transfer to EIS using a parameter is initiated by the ABAP query. You can start the generation of the EIS transfer program in TK75 on the last screen of the report definition (Dynpro 907: Save report) via PF17. Reports for the transfer of actual data must begin with the name 'RKCUI' and those for plan data transfer with 'RKCUP'. Reports for actual data transfer can only transfer the values for any one month. The values of several periods can be transfered as month values in plan data reports. A thorough description of the R/2 procurement programs can be found as program and parameter documentation in R/2.

To collect data from R/3 components for which data collection programs and sender structure are generated (CO-PA, Report Writer, ABAP query) see the following chapter in the implementation guidelines.

You can have the system enter the sender structures automatically for the delivered collection programs (FI, FI-LC, PS and EC-CS).

ABAP/4 query

In this step, you can create ABAP/4 queries. Queries can be used to collect data if they are created as single-line queries.

Activities

- 1. Create a query which displays the data you require in EC-EIS or EC-BP.
- 2. Execute the query.
- 3. If you created a single-line query, the function is active. You can start the transfer to SAP-EIS oe EC-BP with it. On the selection screen, you can check this off and the data transfer will be started directly.
- 4. In the online system, you can choose whether the query is to be used for master or transaction data collection. If you schedule the query for background processing with a variant in which the transfer to SAP-EIS is checked off, the system checks whether the sender structure for master or transaction data has been maintained and then decides where the data is to be transferred to.
- 5. If the internal query names of the query fields are not unique, you must assign unique field names. This can occur in statistics, for example.
- 6. Choose the target aspect / characteristic or the target system.
- 7. When you have entered the target aspect, you need to maintain the transfer rules.

When you have made the settings, you can decide whether you want to transfer the data directly. This dialog box only appears in future if the settings have not been correctly maintained. This makes it possible to maintain the settings when you limit the data selection of the query and to execute the data transfer itself in the background with longer selection times the next time you call it up.

Further notes Transport of settings

You transport the ABAP/4 queries to data collection with the transport means of the ABAP/4 query (see query handbook). You can transport the settings within EC-EIS or EC-BP with Transport of settings

Data Transfer from SAP Consolidation

The transfer of consolidation data from the EC-CS component is one of the options for data transfer to EC-EIS that is delivered with the Standard. The transfer occurs using collection program FICEIS00, the sender structure FC07EIS, and associated transfer rules. When transferring consolidation data, you should note the following points:

Problem description

When carrying out elimination of IU profit and loss in the Consolidation, it is important to note time dependencies: For example, a case might occur where a subsidiary SUB1 has been acquired during the fiscal year being consolidated. In this case, it is important to separate the business transactions that occur between SUB1 and other subsidiaries before SUB1's acquisition from those that occur after the acquisition. An elimination of IU profit and loss may be made here only for transactions occurring after the acquisition. At the same time, however, it may be desirable to have another view of the IU profit and loss: for example, it may be of interest how the business results for a particular fiscal year would appear if the underlying group structure had been different. It should be possible to accommodate both commercial law and internal requirements.

Activities

In order to satisfy the requirements above, you should include two independent time periods in the target aspect:

- The time period in which the business transactions occur. This is done implicitly via the fixed characteristic period that is mandatory for each aspect.
- The time period for which the subsidiaries' attachment to the group is ascertained. Include two additional characteristics in the aspect for this: Period for consolidation group breakdown and year for consolidation group breakdown.

As reference currencies, you also require both the consolidation unit currency (local currency) and the consolidation group currency (group currency). The required tables are TF164 (local currency), TFEIS (a view of the tables TF184 (consolidation groups version/year-dependent) and TF200 (consolidation versions)), and T881 (ledger currency).

For the data transfer, use DDIC structure FC07EIS in association with sender structure FICEIS00.

Two cases are distinguished with regards to the transferred periods:

- No task is specified when the data transfer is executed:

In the selection screen of the collection program, ensure that periods 000 to 016 are transferred. Period 000 contains the balance carried forward from the previous fiscal year, whereas periods 001 to 016 contain the inventory changes during the selected fiscal year. Note: When no task is specified, no validation takes place at all.

A task is explicitly specified when data transfer is executed:
 A single value must be specified for the period and the cons chart of accounts. Note: When one task is specified, the system validates and, if applicable, updates the status of the consolidation unit or group. For more details see the documentation on SAP Consolidation.

Further notes

Note that after setting up the data transfer, you must set up a data slice for the reversal procedure. You must define the data slice conditions as follows:

Field nameMeaning		Lower limit	Report parameters	
VERS	SIO Version		VERSIO	
PLAC &PER	TIPlan/act Ind RIPeriod/year PERIO	0		
xyz1 xyz3	View xyz1 xyz2 consolidation unitxyz3 xyz	consolidation group z4 Version xyz4	xyz2	
xyz5	cons chart of accounts	xyz5		

There should be no settings for any other SAP Consolidation fields (e.g. item or document type).

Profitability Analysis: Set up data transfer reports

In this step, you can generate a program from a basic drilldown report in CO-PA to transfer the report data to EC-EIS or EC-BP.

Activities

Set up transfer from CO-PA

- 1. Create a basic drilldown report in Profitability Analysis.
- 2. Establish the variables in your report, by creating variants.
- 3. Generate the CO-PA / EC-EIS/BP interface for transfer.

When executing the function a program for transferring report data to EC-EIS or EC-BP from the CO-PA drilldown report is created. The program asks which aspect the data should be imported into. Independently of the report definition a sender structure and a rule suggestion for the data transfer are created. The name of the sender structure consists of the operating concern and the name of the drilldown report. You can correct or supplement the rule suggestion manually. If you wish to overwrite the already transferred data for a key figure when repeating the data transfer on a later occasion, highlight the field 'Overwrite' when maintaining the transfer rules.

4. After executing the function you can start the transfer of the CO-PA data from the EC-EIS or EC-BP application menu. When starting the data transfer you can decide whether only the differences from the last run or the whole data packet should be transferred again for the case of the repeated transfer (repeat run).

Change transfer from CO-PA

If you change the drilldown report, you must delete the data transfer report and set up again. If the sender structure has changed because of the changed drilldown report, you must change the transfer rules accordingly.

Further notes

Transport the CO-PA drilldown reports for data collection with the transport means of CO-PA. You can transport the settings within EC-EIS or EC-BP with Transport of settings.

CO Cost Center Accounting

Using Report Writer or Report Painter reports, data can be transferred to EC-EIS/BP from CO-OM, EC-PCA and FI-SL. Example reports for CO-CCA (Report groups 1EI1 to 1EI4) and EC-PCA (8AE1 and 8AE2) are contained in the delivery.

In order to carry out this data transfer you need some knowledge of Report Writer or Report Painter. You can find detailed information about this in the online handbook 'FI-SL Report Writer'.

Requirements

Reports can be recreated or changed for data transfer using the Report Writer or Report Painter. There are some guidelines you must adhere to:

- The columns must contain key figures exclusively.
- The evaluation characteristics are controlled in the report rows.
- The characteristics in the rows are expanded in the Report Painter or must have detailing level 0, 1or 2- in the Report Writer which means that only the elementary characteristic combinations can be transferred into EIS.
- If values are to be summarized in set hierarchies (for example, cost centers or cost element hierarchy/OAS rows) and transferred to summarized levels, you can use the variation of the selection. A prerequisite is, that the summarization level sets have a representative value, under which the data can be updated in EIS. This is defined in the hierarchy maintenance.
 Furthermore, the 'from' level must be the same as the 'to' level of the variation at the start of data transfer. This check ensures that the data is taken from exactly one level of the hierarchy and not from several, thereby avoiding multiple transfers.
- Each report is only allowed to contain one row block, which means that the same characteristics must be selected for all rows.
- A newly created report is assigned to one report group. A report group is only allowed to contain one report.
 Activities

If you have assigned a report to a report group, you should then generate the report group.

Choose 'data transfer to EIS' as the output medium for the transfer of the report group data to EC-EIS/EC-BP, when executing the report group.

Then create an extract and save the data permanently.

The first time you carry this out you will be asked which aspect the data should be transferred to, as in ABAP queries. A sender structure and rule proposal is then created for the data transfer. You can then edit the generated transfer rules.

With repeated data transfer the steps for configuring the EIS transfer toolbox do not arise.

Further notes

Transport the Report-Writer reports for EIS data collection with the transport means of the Report-Writer. You can transport the settings within EC-EIS/BP with Transport of settings.

Define sender structure for transaction data

CONCEPT INFORMATION

For every sender structure, you need to define the makeup of the records which will be transferred from a source system into R/3. This depicts the data record structure of the data to be transferred, which includes the order and technical description of the fields (field category, length, and text). In defining these structures, you can use existing structures and tables from the ABAP Dictionary (for example, receiver structures), or define your own sender structure. When using SAP structures and tables please note that these can change with a new release.

This Customizing function as well as the one for defining the transfer rules are used in various applications (such as EC-EIS, CO-PA, TR-TM and IS Banking). For each individual application there are several small differences in the functions, each of which is noted in the application.

Initial screen

On the initial screen you see a table of the sender structures already defined. When you implement R/3, this may be empty.

Overview screen

The input fields on this screen are divided into three areas:

- The upper part contains the input fields for the name (user-defined) of the sender structure to be defined, and for a short descriptive text.
- The middle part differs in the individual applications. It serves, for example, to assign the sender structure to an object (transfer type, aspect, characteristic, etc.), and also to enter necessary details.
- The lower part shows a table (in EC-EIS, several tables) in which you input the names of structures which already exist in the ABAP Dictionary, or the names of ones which you wish to define as new. If you use an existing structure, it has the disadvantage that you can not change it subsequently. If you want to define and include a new ABAP dictionary structure, the name always has to begin with 'RKCT'. You must then add three additional alpha-numeric characters of your choice. You define the new ABAP Dictionary structure in a detail screen.

Detail screen

In the detail screen you can define a new ABAP Dictionary structure or change one that you defined before.

To define the structure, you can either use a template in this screen, or define the structure yourself. The system will automatically generate a receiver structure based on the specifications for the object in the middle part of the previous screen.

If you want to define the sender structure yourself, you have two options. You can either define the sender fields yourself or use ones from the ABAP Dictionary.

In the first instance, you can choose the name yourself. Then you have to complete the following entries in the column:

- *Meaning*, as a short descriptive text;
- Category, field category (C, N, P, X, D, T, I, F);
- *Length* of the field;
- Decimal place, the number of decimal places (only for field category P).

In the second instance you enter the name of a field from the ABAP Dictionary in the column *sender field* in the table, and the name of the table in which it is found (reference table) in the column *table*. The entries are then automatically taken from the ABAP Dictionary.

For general information on creating structures see the SAP Library: BC-ABAP Workbench -> BC-ABAP Dictionary.

Actions

Edit the transfer structures in the following steps:

- If you wish to edit an already existing sender structure, select the structure on the initial screen and choose Goto -> Select. If you wish to create a new sender structure, choose Edit -> New entries. In both cases you go to the initial screen for defining sender structures.
- 2. Enter the following information in the upper part of the initial screen:
 - To create a new sender structure, determine the technical name and a descriptive text.
 - To import data into an aspect in the current system, enter the number of the aspect. In this case you must leave the transfer category field empty.
 - To export data from the current system enter the transfer category field. In this case you must leave the aspect number field empty.
 - If you wish to have a validation carried out during data transfer, enter the name of a validation or matrix validation. (see also Maintain validations).
 - If you wish to allow records with double keys in data transfer, set the indicator *Double key*. If the indicator is not set, data records whose keys already exist in the target system, will not be transferred.
- 3. In the bottom part of the screen enter one or more Dictionary structures. A Dictionary structure can be either a table, a structure or an EIS Dictionary structure. If you are using only a Dictionary structure in your sender structure, you can ignore the other fields in this area. If for example, you wish to transfer data from a file with header and position data, you must enter several Dictionary structures.

Example:

You wish to transfer data from an invoice. The invoice number, invoice date, customer number and company code are all contained in the invoice header. The positions contain the product number, the respective sales volume and the revenue. You wish to form data records in an aspect. These records should contain the information from both the header and the positions. In this case, you create one Dictionary structure for the header data and one for the position data.

Each structure is indicated by a certain characteristic value from one specific position and in a defined length. Therefore it can be uniquely identified. When importing the data the system assumes that each record is formed exactly according to one of the structures.

Internally, the different records are summarized to one logical record and processed. If you use several Dictionary structures, enter the position and, depending on the structure of the file, the offset, the length and the characteristic value, that should identify a record.

- If there is a table in the ABAP Dictionary which has an identical structure to the sender structure to be defined, you can refer to this table or structure. If you refer to a structure defined in the ABAP Dictionary, you can generate a remote function call (RFC) for this sender structure and use the RFC for a user-defined data transfer program. If the ABAP Dictionary structure contains only fields of type CHAR and NUMC, you can generate a C environment in the development environment. This C environment will call up the function module from C programs. The function modules are called:

EIS_DATA_TRANSFER<ABAP Dictionary structure>.

See also 'Programmer notes for data transfer'.

- If a sender program exists that uses a similar transfer structure, you can use it as a reference.
- If a structure exists in the ABAP Dictionary which has a similar structure to the structure which is to be maintained, you can enter this Data Dictionary structure under 'reference table'.

In the upper section of the maintenance screen, you must enter: the aspect to be supplied with data OR the transfer path that determines the type of data transfer. the name of a validation or a matrix validation, if you wish to employ

- 4. To define a Dictionary structure that you have just generated, highlight it and select 'Goto -> File'. On the next screen the structure of the sent record is described field by field. You must now maintain the following data for each field:
 - the name of the field
 - (if there is a field with the same properties in the Data Dictionary), the table in which it occurs (reference table).
 In this case, data from the ABAP Dictionary is put into the remaining fields of the line.
 If there is no field with the same attributes in the ABAP Dictionary, you need to enter
 - the field name
 - the field type (C, N, P, X, D, T, I, F),
 - the length of the field and
 - the number of decimal places (field type 'P' only).

Notes:

With the functions Sender structure -> Comparison with R/3 and Sender structure -> Comparison with R/2, you can transfer a sender structure from an R/2 System or another R/3 System. When comparing with R/2, you must enter the system's transfer method in the following dialog box. When comparing with R/3, you must select an RFC destination. (You maintain the possible RFC destinations in the SAP R/3 menu under Tools -> Administration -> Administration -> Network -> RFC destinations).

5. Save the changes.

Further notes Transport of settings

Create currency translation type for sender structure

When automatically transferring data, amounts can be translated into other currencies. The target currency of the key figure is automatically determined. For the currency translation, you must specify a currency translation type for the data transfer rules which you can define here. The translation date is important for currency translation types. Here, you can choose from three options:

- the current date
- a date that can be defined here
- the end of the fiscal year, the beginning or end of the period
- a date derived from a field of the sender structure, i.e. fields of type "D" (date).

The fiscal year end is derived from the value of the fiscal year in the receiver record. If you chose the beginning or end of the period for the translation, the date is derived from the period of the receiver record. (In EC-EIS and EC-BP, the fiscal year variant is also derived from the information of the receiver record. The fiscal year variant is determined in the aspect or in the field data area (VERSO).)

Actions

- 1. You create a currency translation type by specifying an exchange rate type and choosing between a normal or inverse exchange rate, a fixed or variable translation date and a fixed or variable initial currency.
- 2. A currency translation type with an inverse exchange rate is useful if the amounts have already been translated and the original values are likely to be displayed again in a drill-down report.
- 3. For a variable translation date, you must specify a field in the transfer structure from where the translation date is to be derived. The field must be of type 'D'.
- 4. If you use a variable initial currency, you must specify a field in the sender structure where the initial currency is stated. This field must be of type 'C' and length 5. The currency key must be entered in Table **TCURC**.

Further notes Transport of settings

Define transfer rules

In this step you specify how fields of a source object are mapped onto a target object. Objects can, for example, be master data, a transaction data record or an IDOC segment. The rule maintenance is used for different purposes. For example, it serves to define how the records of a file are mapped to master data or to define derivation rules for transaction data. With a derivation a transaction data record is supplemented with missing characteristic values (derived). Another application is the definition of the conversion of IDOC segments. Here, the values of the fields of a segment are changed.

Different options per object

The objects have different structural properties. For example, the validity of transaction data depends on master data. Therefore, the option of validating the values against master data is offered with the maintenance of the rules for transaction data. With the rule maintenance for master data this option is not necessary and is not offered. This means that different options are offered with the rule maintenance, depending on which object is being edited.
Sender and receiver structure

With the maintenance you determine how the fields of the sender structure are mapped to fields of a receiver structure. We refer to a receiver structure as we are dealing with a number of selected fields that define an object in R/3. The sender structure displays the record layout of the transferred data. It describes the formation of the transferred data byte for byte. Contrary to this, the fields of a receiver structure are derived from the object that is to be updated. Either you enter this object in the sender structure maintenance or it is fixed for some applications. Therefore, some fields do not appear, such as the client, the last changer, the change date or the currency keys that are supplied on an application-specific basis. You assign a variable to the receiver field. This allows you to enter the field when executing the data transfer. You could, for example, enter the company or the company code for each file to be imported.

The initial screen

The initial screen is application-specific. On the first screen, you establish either the sender structure for the data transfer, or the conversion rule for the segment conversion or the aspect for the derivation. You have to decide on the type of the editing.

The overview screen

On the second screen you will find a tabular arrangement of the fields of the receiver structure. Here, you can enter the most commonly used rules. These rules differ depending on the type of the field:

- With characteristic fields you can enter a sender field that should be transferred. Characteristic fields are those that have the role of characteristics, attributes or evaluation groups in R/3, such as company code, posting date, order number. Technically speaking, we are dealing with fields that have data type 'C', 'N', 'D', or 'T', and as a rule are not unit or currency keys and do not have a purely technical meaning like the client.
- With fields that take on the role of key figures, values or balances in R/3, you establish a formula. Technically speaking, we are dealing with fields that can be calculated. The data type is usually 'P'. In addition, you can determine a currency translation key or a target unit. You must enter a total operation. The total operation determines what happens to the values if several records are mapped to the same receiver. The sender field has a different meaning here to in the characteristic fields. The entry of a sender field only makes sense together with the entry of a sender field value. The entries mean that a value for the receiver record can only be calculated if the sender field possesses the sender field value.

If you want to define other rules, you must highlight the field in order to get to the detail screens of the rule maintenance.

The detail screen of the rule maintenance of characteristics

You can use the following rules for characteristics:

1. Transfer sender field

You assign the values of the sender field to the receiver field. You can not assign every sender field. The system checks whether the types are compatible. For example, a type 'C' field (various combinations of letters) may not be assigned to a type 'T' field (used for storing times). This prevents fields from receiving invalid values. With *Restrict value area* you can restrict the values of the sender field that are to be transferred to the receiver field. In addition, you can enter the conditions for other fields so that the data transfer only takes place if the data record also contains certain values.

2. Set constants

You assign a fixed value to the receiver field.

3. Set variable

You assign a variable to the receiver field. This allows you to enter the field when executing the data transfer. For example, you can enter the company or the company code per file to be imported. In addition, it is possible to supply the variable with a fixed value.

4. **Convert sender fields**

You assign certain values of the sender field to a value of the receiver field. Within 'Sender fields to be converted' you establish the selection conditions for the values of the sender fields, that should be assigned to the receiver field value. For this, you must enter the sender fields that are to be converted.

With the entry of an offset and a length, you can determine that only part of the sender field is used. It is also possible to enter a conversion routine. This is executed before the conversion to the sender field value. The conversion routine can be required for filling fields with leading zeros. With *Conditions* you get to a screen upon which you fix which values the sender fields should have for values of the receiver field. In the left column you enter the (target) values of the receiver field. In the following columns you enter single values or intervals for the sender fields. So that a receiver gets a values, all sender fields must accept the specified values. If it should be allowed to accept more than one value, you can highlight the rows and depress the push-button on the right of the field indicates that there are several conditions. You can maintain several rows for a receiver field value. With the rule processing, the first suitable rule is used. However, the sequence of the rules in the processing is not defined. The initial value can be explicitly set for a receiver field value as well.

5. Using the general rule

You enter a rule that should be used for several transfers. For example, you want to always assign company code 0002 to company code 0003 with transfers from an R/2 System to an R/3 System. You have created a general rule for this that you now reference for the characteristic company code. If you choose this rule the sender fields to be converted of the general rule will be displayed.

You can decide that the rule that you are currently maintaining should be used as a general rule. Enter a name and description for it in the field 'Use rule defined here as general rule'. As soon as this rule is referenced it can no longer be deleted. If you want to delete the rule anyway you can reassign it to the referencing rule.

See also: Examples of transfer rules Application-dependent options

With some applications you can decide what happens if a characteristic value does not contain any values, in spite of rules:

- 1. Set to initial value The field contains the initial value.
- 2. Classify as error
 - The case is registered as an error.
- 3. **Set constants** A constant value is assigned to the field.
- 4. Transfer sender field

The value of an exceptional sender field is transferred.

Depending on the application, it is possible to establish whether a receiver field value should be validated or whether the receiver field value should run through a special (output) conversion routine. You can find detailed information on conversion routines in the F1 help.

Application-specific peculiarities

If you maintain transfer rules for compound characteristics, you should note some peculiarities:

- a) You must maintain rules for each field. Therefore, no differences are made between compound and non-compound characteristics. If you convert sender fields, the characteristic value that is converted, is not validated in the rule maintenance. You must make sure that this characteristic value is correct.
- b) However, with the data transfer a complete validation is carried out for the compound characteristic. Meaning, a check is made as to whether a characteristic and the values of the characteristic upon which it depends form a valid combination.

The detail screen for rule maintenance for key figures

In the detail screen you determine how key figure values should be aggregated, how currencies or units are to be translated and how the key figure is to be mapped to the receiver key figure.

You can determine whether the key figure on the database should be overwritten or not, If the key figure on the database should be overwritten, then the value that is determined from the sender records overwrites the value on the database. If the key figure should not be overwritten then the key figure value is read from the database. With the total operation it is taken as the start value. Whether this option is desired depends on the application.

Enter a total operation. The following total operations are available:

- SUM
- MIN
- MAX
- LAST
- FIRST
- COUNT

They have the following meanings: the key figure formula is evaluated and a result calculated. Then, currency or unit translations are undertaken. In the case where several sender records are mapped to a receiver record, the sum of the results is added with **SUM**. With **MIN**, the smallest, with **MAX** the largest, with **LAST** the last, with **FIRST** the first result is taken. With **COUNT** the number of records is counted. With the total operation **COUNT** a sensible formula consists of the number '1'. In this case, the number of sender records that are mapped to a receiver record is counted.

With quantity fields enter a unit if no default value exists.

It is possible to carry out a unit translation or currency translation with currency fields.

With the currency translation you can determine, among other things, with which exchange rate type and with which currency the target currency should be translated. Here, you can either enter fixed values for the currency and the translation date or the reference fields, in which the currency and the translation date can be found. You can also use a variable for the translation type.

Define a formula. The key figure formulas are formed according to the ABAP/4-valid rules for print outputs. You can calculate with the sender fields. In order to get an overview of valid sender fields position the cursor on the entry field and press F4. You can also use formula variables in the formula.

With the help of conditions you can determine that a key figure is only filled if a sender field accepts certain values. This function is necessary in the following example:

The sender structure contains the fields balance sheet item and balance. The receiver structure contains the key figures **ASSETS** and **LIABILITIES**. You can now make a definition so that the key figure **ASSETS** is only filled, if the value **10000000** is in the balance sheet item field.

As with the transfer rules for characteristics you can save the current rule as a general rule by entering a name for the rule in the field 'Use as general rule'.

If you wish to use a general rule for the transfer enter a name in the field 'General rule'. The sender fields to be converted will appear.

Creating variables

You can create variables for characteristic values, formulas and currency translation keys for use in the transfer rules. Variables for formulas and translation keys can be used globally. Variables for characteristic values can only be used for the object that you are currently editing. In order to create variables select 'Goto -> Variables' in the detail screen. On the next screen select 'Edit -> Insert rows'. A '&' is placed in the field. Enter the name of the variable directly after this sign. Select the required replacement type. With replacement type 2 you can enter the variables at the start of the transaction. At the moment, this is only supported with the importing of a file and aspect summarization. You must enter a fixed value with replacement type 5. In order to use replacement type 3 you must activate the function module EXIT_SAPFKCIM_003 in the framework of a user-exit. Enter a description of the variable. Save your entries.

Further notes Transport of settings

SAP enhancements for data transfer

Programming hints for user-defined data transfer programs

Interfaces for sender programs

If you write programs in an R/2 or R/3 system to collect data and send it to an R/3 system, you must use the following interface:

- OPEN_QUEUE(SAPFKCIS) USING GRPID Data transfer is started. Field GRPID is only contained in the parameter list for purposes of upward compatibility. If it is not filled, the transfer method is determined by the sender structure.
- TRANSFER_TO_QUEUE(SAPFKCIS) USING REC Record REC is transferred.
- CLOSE_QUEUE The transfer is ended.

The functions are contained in module pool SAPFKCIS. The routine OPEN_QUEUE only needs to be called for R/3 - R/3 communication. No routine is required for R/2 - R/3 communication.

The interface for master and transaction data is identical.

Example for a data transfer

You want to transfer records with structure I_CF001. In the data declaration portion of your program, you declare the structure as follows:

DATA: BEGIN OF I_CF001, VERSO(2) TYPE N, GJAHR(4) TYPE N,

```
PERDE(3) TYPE N,
MERKMAL(8) TYPE N,
KENNZAHL(8) TYPE P,
END OF I CF001.
```

If you wish to send data from an R/3 System, define parameter GRPID and call up function OPEN_QUEUE:

PARAMETERS: GRPID LIKE T242X-GRPID DEFAULT 'CPIC' OBLIGATORY MEMORY ID HRK.

PERFORM OPEN QUEUE (SAPFKCIS) USING GRPID.

In the selection portion of your program, fill structure I_CF001 with data and send each record with the command:

PERFORM TRANSFER_TO_QUEUE(SAPFKCIS) USING I_CF001.

When all the data has been selected, close the transfer with:

PERFORM CLOSE QUEUE(SAPFKCIS).

Remote Function Call (RFC)

You can use a further interface if the sender structure in the target system is stored in the ABAP/4 dictionary and the ABAP/4 dictionary structure was referenced during sender structure maintenance. In this case, you can generate a remote function call module (RFC) in the target system during sender structure maintenance under 'Environment', transfer the calling interface to the source system and include it in the data collection program there. The name of the function module is

EIS_DATA_TRANSFER_<ABAP/4 dictionary structure>. This interface is available for both R/2 and R/3. If the ABAP/ dictionary structure contains only CHAR and NUMC fields, C code can also be generated for the generated RFC. This can be used to call up the RFC from any program.

R/2 program interfaces

In R/2 as of Release 5.0F, there are the following additional interfaces

1. To collect data in an extract before it is written in the queue, there are the routines below:

<code>PERFORM TRANSFER_TO_QUEUE_EXTRACT(SAPFKCIS) USING VALUE(I_CF001).</code> and

PERFORM CLOSE QUEUE EXTRACT (SAPFKCIS).

In order to be able to use these calls, no other extract can be used in the data collection program. The advantage of this call is that you can carry out a broader selection of data. There are some limits where the above call is concerned because a task cannot be interrupted after an ABAP statement OPEN QUEUE and therefore the loop counter parameter limits the selection.

2. In order to summarize R/2 data in advance, you can use the following rou

PERFORM COLLECT_TO_QUEUE(SAPFKCIS) USING VALUE(I_CF001). and PERFORM CLOSE COLLECT QUEUE(SAPFKCIS).

The data records are collected in an internal table and summarized with the ABAP statement COLLECT before they are written in the queue.

If you have created a query in R/2 with a list of statistics which you wish to use to collect data, you can copy the query and, for example, instead of using routine %DOWNLOAD AT PF15, use call

PERFORM QUERYEIS_TRANSFER(SAPFKCIS) TABLES T01.

Internal interfaces

If you want to transfer data from an R/3 system to SAP-EIS, you can use the same interfaces which the programs for importing data or summarizing aspects use. The interface requires a sender structure and transfer rule s to have been maintained. Initialization takes place using call:

PERFORM OPEN EIS POOL(SAPFKCIM) USING REPID GRPID SUBRC.

- 1. REPID is the name of the sender program
- 2. GRPID is the transfer method
- 3. SUBRC is the return code. The return codes are explained in the routine.

Records REC are transferred using call

PERFORM TRANSFER EIS SENDER (SAPFKCIM) USING REC.

If the sender record contains fields of type 'I' or 'F', the following call is necessary: PERFORM CONVERT TO INTERN FORMAT (SAPFKCIM) USING REC.

Fields of type I are changed into fields of type P (as in R/2) with a length of 6 bytes and without decimal points. Fields of type F are changed into fields of type P with a length of 8 bytes and 5 decimal places. This is necessary for technical reasons.

Summarization and update are triggered by call:

PERFORM CLOSE EIS POOL (SAPFKCIM) USING SUBRC.

SUBRC is the return code. Possible values are commented in the routine.

Read in Data

Data is read in with report RKCFILE0, which has parameter NOLOCK. If youset this value to X, no SAP locks can be set. You may set NOLOCK to X only if you are certain that only disjunctioned data is updated. If you start RKCFILE0 from another program, you can view whether the data transfer was successful by importing field SUBRC from the ABAP/4 memory. Field SUBRC is stored under the ID RKCFILE0 and has the value 0 after a successful data transfer.

Organization of data transfer with events

A succesful data transfer activates event **SAP_EIS_DATA_IMPORT**. (See transactions **SM62** and **SM63** and their documentation.) You can use this event, for example, to regenerate the report data after you have transferred data or to transfer data to a summarization aspect. The event passes on the parameters sender structure and transfer method (8 bytes for the sender structure, 1 byte for ',' and 5 bytes for the transfer method).

Activities

- 1. Define a job under System -> Services -> Background jobs -> Job definition
- 2. Choose start time After event
- 3. Enter event **SAP_EIS_DATA_IMPORT**
- 4. Enter the above parameters

Master Data

This section explains which settings are needed to transfer master data automatically into EC-EIS/BP.

Define sender structure for master data

The master data consists of the characteristic values and their descriptions. You maintain the sender structure for the master data in the same way as you maintain the sender structure for the transaction data.

Further notes Transport of settings

Maintain transfer rules

You maintain the transfer rules for the master data in almost exactly the same way as the transfer rules for the master data. The difference is that you do not need to maintain key figures for master data.

Further notes

Transport of settings

Comments

This section explains which settings are required to import comments automatically into the EC-EIS/BP system.

Create sender structure for comments

You maintain the sender structure for comments in the same way as you maintain the sender structure for transaction data.

Further notes

Transport of settings

Maintain transfer rules for comments

You maintain the transfer rules for comments in almost exactly the same way as you maintain the transfer rules for transaction data. The difference is that you do not need to maintain any rules for key figures when you are working with comments.

Further notes Transport of settings

Master Data Hierarchy

Description

This section explains how to transfer hierarchy information from other systems to EC-EIS/BP.

Note that the transfer of hierarchical master data takes place in two stages:

- 1. The master data is transferred to EC-EIS/BP during the master data transfer.
- 2. The hierarchy information is transferred during the master data hierarchy transfer.

In other words, before the hierarchy information can be transferred, the appropriate master data must have been transferred as the system carries out a check against the master data.

Requirements

In order to fully understand the following steps, you should read more about the concept of the master data hierarchy contained in the online documentation on EC-EIS/BP.

Further notes

Contrary to master data which has to be collected in a separate transfer procedure, non-chargeable nodes are transferred with the hierarchy information. This means that each node whose characteristic value is not found in the master data, is considered to be a non-chargeable node and is updated as such. This is the only way to collect non-chargeable nodes.

Create sender structure for master data hierarchies

Description

EC-EIS/BP data transfer is record-based, i.e. each record can be checked and updated independently of all others. As hierarchies always indicate links between their records, the records in the hierarchy cannot be updated independently. The whole hierarchy has to be updated at once.

However, in the SAP system, the hierarchy data must be transferred independently. In order to keep the relationship between the records, additional information is required with each record.

Example

The following example illustrates which additional information is required to transfer this hierarchy. The example hierarchy is structured as follows:

M This hierarchy can be displayed as follows:

1. Level numbers: Each level of the hierarchy is assigned a level number. The first number is 1.

Level	Char. va	lue
1	А	
2	В	3
	С	3
	D	
3	E	2
	F	
3	G 3	
Н		
2	J	
3	Κ	
4	L	
4	М	
1	Х	
2	Y	
2	Z	

The sequence of the records combined with the level number indicates the exact position within the hierarchy.

2. Reference to the superior node (parent):

Char. value Parent

	А		(Parent = blank: i.e. no parent)
	С	В	D
В			
	E	В	
L			K
	Κ	J	
	Х		
Y			Х
Ζ			ХВ
			Α
	F	А	
	J	А	
G			F
Н			F
М			Κ

Note that the sequence of the records is insignificant. The hierarchical relationship is determined by the parent. As the sequence of the nodes on any one level is not defined, it is not guaranteed that node B will be positioned left of node C. This does not matter for many hierarchies where the position of the nodes on any one level is unimportant.

3. Reference to the superior node (parent) and previous node on the same level (left brother):

Char. value Parent Left brother A (blank: does not exist) D B C C B E B D L K

Κ	J		
Х			
Y	Х	ζ.	
Z	Х	X Y	
В	А		
F	А	В	
J	А	F	
G	F	1	
Н	F	G	
М	ŀ	K L	
-	0		

The sequence of the records is insignificant here too because the reference to a left brother ensures that all the hierarchy information is available.

The above display types are supported by SAP data transfer.

Requirements

Each of the transfer formats illustrated in the above examples can be transferred, however, the relevant additional information must also be available. The following fields are required in the sender structure (i.e. per record):

1. For example 1:

Field Value range Hierarchy level 1 to 999 Char. value String of length 32

2. For example 2:

Field Value range Char. value String of length 32 Parent String of length 32

3. For example 3:

Field	Value range
Char. value	String of length 32
Parent	String of length 32
Left brother	String of length 32

You cannot change the transfer format (1, 2 or 3) during the transfer of hierarchy.

Further notes

If non-chargeable nodes are transferred at the same time, it is also possible to transfer the appropriate texts. The following fields are required to do this:

Field Value range

Language 1 character Short text String of length 20 WHATSAPP +255738656506 Long text String of length 40

If these fields are filled for chargeable nodes, they will not be taken into account as the master data texts take priority in this case.

The simultaneous transfer of several hierarchies is not supported.

Activities

Define the format of your sender structure. The individual steps to be performed correspond to those for the sender structure for transaction data. Make sure that all necessary additional information and fields have been defined.

You can choose any sequence of fields and field names in your records.

Further notes Transport of settings

Maintain transfer rules for master data hierarchies

Description

The receiver structure for master data hierarchies is fixed. Using rule maintenance, you assign the fields in your sender structure to the corresponding field in the receiver structure.

Requirements

Read about the maintenance and transfer formats available in step Sender structure for master data hierarchy.

Activities

Assign each field in your sender structure to a field in the receiver structure on the basis of the following matrix:

Receiver fi	eld Format 1 Format 2 Format 3
FIELD	Characteristic from sender structure or constant
HVERS	Hierarchy variant from sender str. or constant
HSTEP	Level number Constant 0 Constant 0
KEYID	Characteristic value from sender structure
PARNT	Blank constant Parent Parent
LEFTK	Blank constant Blank constant Left brother
LANGU	Language from sender str. or blank constant

|TXT_M | Short text from sender structure or blank constant |

| TXT_L | Long text from sender structure or blank constant |

The transferred hierarchy's name is made up of the characteristic text and the hierarchy variant.

The individual steps to be performed correspond to those for the maintenance of the transfer rules for transaction data.

Further notes

The receiver structure is stored in the ABAP/4 dictionary under the name TKCHIEDM. Transport of settings

Transfer Procedure

This section covers the scheduling of data collection orders from other systems.

Define sender structure package

A sender structure package consists of a combination of several sender structures. These structures are to transfer data from the same file in the same run. The package represents an organizational simplification of the importing of files. The advantage is that you can send a file to various receivers (for example, aspects) in a certain sequence with various sender structures.

In this step you create the package.

Activities

Enter the name and description of the new package.

Maintain sender structure package

In this step you assign the relevant sender structures to the package and determine the order in which the sender structures are processed by the system.

Requirements

You have maintained the sender structures für the transfer of the data. WHATSAPP +255738656506

Activities

Assign the sender structures to the package. As you do so, specify the order in which the sender structures are to be processed.

Further notes

In the next step you will import the file. For this see Import file.

Organize Transfer Run with Variants

To be able to start programs from this R/3 System in other SAP Systems (R/2 or R/3) in the background, you must create variants for the program RKCSUB00. You must specify the program to be started in another system in the variant for program RKCSUB00. Enter a variant for the sender program.

Using the transfer method, specify in which system the sender program is to be started.

Actions

- 1. Find out which programs for data collection are to run on other SAP systems.
- 2. Create variants for these programs; you can then schedule these during job definition.

Further notes

To transport a variant, choose Variants - Transport request from the initial screen.

Automatic recording of transport requests is provided for variants that begin 'CUS&'.

Schedule background job

In this step, you schedule the data collection orders.

Requirements

- The transfer parameters must have been maintained.
- The sender structure and transfer rules must have been maintained.

Actions

- 1. Maintain the selection variant of the program to be started in the other SAP System.
- 2. Maintain the selection variant of start program RKCSUB00.
- 3. Schedule start program RKCSUB00 for background processing in this step.

Display job overview

In this step, you can display an overview of scheduled collection orders.

Actions

Enter the name of the job you wish to display.

File name

In this section you can import files and define uploads from MS Excel.

Import File

Description

Using this function, you import data from a file. In order to import larger datasets periodically, you can schedule program RKCFILE0 in the background.

Requirements

You must have maintained the sender structure and the transfer rules and if applicable the Sender structure package.

Parameters

Program parameters

You need to enter either a physical file name or a logical file name.

File system

Under 'File system', you define whether the file is on the presentation server or application server. Make sure that the process which is to read the data has the right access authorization for the file. The path must also have been entered correctly. If you wish to read data from the application server, make sure that you enter the path from the point of view of the user who started the application server. You should enter an absolute path. Note that only files from the application server can be imported in the background.

Options

Under 'Options', you can choose whether you wish to

- execute a data transfer,
- display the file and
- display the assignment of fields from the sender record to field contents.

If you check off 'Display fld assignment for sender rec.', the system displays a list of which value is contained in which sender record. Using this list, you can see whether the sender structure is correct or not. Note that the output list is stored in the main memory and can require a lot of space with large files.

File type

Under 'File type', you determine whether you wish to import a text file. With this type of file, there is a Newline at the end of each line. For the binary file, you need to choose SAP binary format. Caution: Binary files cannot be read from the presentation server. For TXT format, the fields in the lines must be separated by tabs. For CSV format, the fields must be separated by semicolons. For MC format, the file to be imported is split into two parts: Lines at the beginning with characteristic values which are valid for

the rest of the record and individual records. The fields in these individual records are separated by a field separator (either a comma or a semicolon).

Example

Here is an example of a file in MC format, in which all the records are for fiscal year 1994 and period 002:

1994

002

00000001;PROFITC;00004543000;00000004534500;00000004000430

00000001;PROFITC;00004555000 ;00000004523000 ;00000004800000 The field separator in this file is the semicolon.

In a text file with field separators, the individual fields in the file are assumed to be separated by the sign which you entered as the field separator.

Number format

If you wish to import numbers of type 'P', you can define whether these numbers are to be stored in the file in double length as characters '0123456789+- ' or in the SAP format (packed). Internally, the system usually works with packed numbers during a data transfer. If the numbers are stored in single length in the file, the system assumes that the numbers do not need to be packed into SAP internal format. If the numbers are stored in double length on the file, the system converts the numbers into packed format. The minus sign can be placed before or after the numbers. Apart from binary and text files, the default defines that packed numbers are always stored in double length in the file and therefore need to be converted. You can choose whether the numbers have no editing character or have a decimal point (or comma).

1. If the numbers have a decimal point, it is assumed that the points are only present for display purposes. If you have indicated that there are no editing characters in the file, the number of places after the decimal point is determined from the specification of the decimal place in the sender structure.

If you are importing master data or comments for master data, this option is not valid and is therefore not offered.

Integer and floating point numbers must have 12 or 16 bytes in the file.

Date format

Under 'Date format', you decide which format the date is to be in: YYYYMMDD or DD.MM.YYYY. You only have this choice for TXT / CSV / MC format. For all other formats, the date must be in format YYYYMMDD.

Other settings

Under 'Data format', you can check off whether the data is in ASCII or EBCDIC format. In EBCDIC format, all fields apart from packed fields (type P) and hexadecimal fields (type X) are converted from EBCDIC to ASCII. If your file has comment lines that are not to be imported you can indicate them as such here. Enter the character with which the comment lines begin. The system will ignore these lines when importing the file.

Settings for repeat fields

In many information systems, the period is locked for transaction data. In such cases, the period is not contained in the key of the transaction data record, however, key figures are then stored n times in the non-key portion, where n is the number of periods. During data transfer, records in such structures cannot be transformed into transaction data records in which the period is stored in the key and the key figure only once in the non-key portion of the record.

Example

The records in an example file have the following structure:

Field	Description
GJAHR	Fiscal year
BUKRS	Company code
WERKS	Plant
KOSTL	Cost center
WTA01	Value A Period 1
WTA02	Value A Period 2
WTA03	Value A Period 3
WTA04	Value A Period 4
WTA05	Value A Period 5
WTA06	Value A Period 6
WTA07	Value A Period 7
WTA08	Value A Period 8
WTA09	Value A Period 9
WTA10	Value A Period 10
WTA11	Value A Period 11
WTA12	Value A Period 12
WTB01	Value B Period 1
WTB02	Value B Period 2
WTB03	Value B Period 3
WTB04	Value B Period 4
WTB05	Value B Period 5
WTB06	Value B Period 6
WTB07	Value B Period 7
WTB08	Value B Period 8
WTB09	Value B Period 9
WTB10	Value B Period 10
WTB11	Value B Period 11
WTB12	Value B Period 12

This record must be transformed into 12 records with the following structure:

<u>Field</u>	Description
GJAHR	Fiscal year
PERDE	Period
BUKRS	Company code
WERKS	Plant
KOSTL	Cost center
WTA	Value A
WTB	Value B

The second record differs from the first in two ways:

1. It contains the field PERDE. You enter this field in parameter 'Index field' on the selection screen.

2. Instead of 24 fields WTA01, ..., WTA12, WTB01, ..., WTB12, it contains two fields WTA and WTB.

In order to carry out the data transfer, the structure of the second record must be defined. To transform the first record into 12 records of the second structure, you must make the following entries on the selection screen:

<u>Parameter</u>	<u>Entry</u>
Index field	PERDE
Repetition factor	12
Start value for index field	1
Increment for index field	1
Repeat fields	WTA
	WTB

The result of the transformation of the first record into the second can be described as follows:

- 1. Twelve records are created. The number of records corresponds to the repetition factor.
- 2. The index field of the first record is the start index. The following records are calculated from the <start index> + <increment for index field> * m. m is the following number of the record. The following number of the first record is zero. The following number of the twelfth record is eleven. In this example, the field PERDE is numbered from 1 to 12.
- 3. In the first record, field WTA is filled with the value of WTA01 and field WTB with the value of WTB01. In the second record, field WTA is filled with the value of WTA02 and WTB with the value of WTB02. In the twelfth record, field WTA is filled with the value of WTA12 and WTB with the value of WTB12.

Note

Note that in TXT, CSV and MC format, fields of type 'C' which are not text fields are automatically converted into capital letters.

Output

If you checked off 'Display file', the system displays a list of transferred records. If you checked off 'Display fld assignment for sender rec.', the system displays additional information about how the individual fields of the sender record were filled. If you have transferred the data, you receive a message informing you of the success of the operation. You will find more detailed information about the update and summarization in the log.

Control File Import Using Events

You can start a file import from within the operating system by triggering events in the SAP System using program **SAPEVT**. You can create events using transactions **SM62** and **SM63**.

Activities

1. Define an event using transaction SM62.

- 2. Define a job under System -> Services -> Jobs -> Job definition.
- 3. Enter program **RKCFILE0** as the step.
- 4. Choose start time **After event**.
- 5. Enter the event you defined.

Further notes

The events are not connected to the transport. In order to transport an event you have to you have to make the following entries in a transport order:

R3TR TABU BTCSEV

R3TR TABU BTCUEV R3TR TABU BTCSED R3TR TABU BTCUED

Define flexible upload

In this step, you define how data from text files in ASCII format is assigned to one or more sender structures so that it can be imported to the SAP System.

The data in such files usually originates from a Microsoft Excel sheet and has been exported as a text file. The fields in these text files can be separated as follows: - by a tabulator character (ASCII Code 9) (TXT format)

- by a comma or semicolon (CSV format; comma-separated values)

Upload from a text file enables you to select any data, assign it to the fields of a sender structure, and then to transfer it to one or more EC-EIS aspects. See also Define sender structure of transaction data.

Note: You can only import data from Excel tables if you have previously created a text file with the appropriate properties in the context of Microsoft Excel. The XLS files, generated by Excel cannot be imported directly into the SAP System.

Requirements

- You have decided which cells of your Microsoft Excel sheet you wish to transfer into which aspect.
- You have saved the sheet in CSV or TXT format.
- If a relevant sender structure sender structure did not exist, you have created one.

Activities

1. Enter the path of the file to be transferred or the file that is to serve as a reference for other files, e.g. c:\excel\sales.txt.

Note: The file name extension must be either '.CSV' or '.TXT'. Modify the file name if necessary before you start the upload. Otherwise, you will get an error message.

- 2. Enter any name to describe the data to be loaded. The file description that you create in the following steps is stored under this name in the system.
- 3. If you load a CSV file, you must specify whether the fields are separated by a comma or semicolon. Choose 'Program -> Execute'. The system opens the specified file and reads the data contained in it.

On the next screen you will see a compressed version of your Microsoft Excel sheet. This is a copy of the row and column structure of the original file. The character 'X' indicates those cells for which the file contains no values.

To create the file description, you must determine the type of the data read from the file. You do this by splitting the entire volume of read data into various cell ranges, and then combining these with one another. The following area types exist:

- Key areas: A key area contains cells which hold characteristic values (e.g. the period).
- **Header areas**: A header area contains cells which hold characteristic values that are valid for several key areas and value areas (e.g. the fiscal year to which the periods listed in the key areas belong).
- **Value areas**: A value area contains cells which hold key figure values (e.g. sales, number of employees).

The following rules apply when defining the different areas :

- There must always be a value area; in addition, there must be either a header area or a key area.
- You can create as many areas of each type as you wish.
- A header area is always restricted to a single cell. If you select more than one cell, you cannot define the area as a header area.
- Key areas and value areas always consist of corresponding rows or columns of the same dimensions; this means that key areas and value areas, laid on top of each other, would correspond exactly. If the areas are defined in column form, for example, then key areas and value areas that refer to each other must begin in the same row and they must extend over the same number of rows.
- Key areas cannot extend to more than one column and row at once.
- For each header area or key area, you must specify which value area(s) it refers to.
- When creating a value area, the system automatically allocates a sequential number for the area. The area is identified by this number if you define dependencies between areas of different types (see below).

To split the data that has been read into areas, proceed as follows:

Defining value areas:

- 1. First define a value area that contains data by double clicking to select the top left cell and the bottom right one of the area. The area is highlighted in color.
- Select 'Edit -> Value area'. A dialog box appears containing the number of the value area that has been automatically generated. Note this number, as you will need it when you define the key areas. The coordinates of the area you have just selected are also displayed. You can change these coordinates later.
- 3. Specify whether the data to be imported is master data or transaction data.
- 4. Enter the name of the sender structure that you wish to use. Then, from the sender structure fields, choose that field that is to receive the imported data from the selected value area. Note that only key figures are appropriate for a value area. You select a sender structure for each value area separately. With one upload you can distribute the data imported from a file to various aspects in the system. Note: If the technical name of the field is itself in a cell in the Microsoft Excel sheet, you need not specify a sender structure field. Instead, you can define a key area for the Excel cell that contains the field name and then link this to the value area. This is also possible for many joined cells that you can define together as a key area.

- 5. Determine if initial values are to be supressed. If you set this indicator, fields that do not receive data are not updated. You should use this setting if the delivered data is incomplete.
- 6. The other dialog fields are meant for special purposes: You can choose whether you wish to save the name of the imported file also, and if the numbers of the original columns and rows are to be retained in the sender structure. This may be of use later to check exactly where the imported data originated; in some cases the file name itself contains relevant information (for example, on time period to which the data refers to). However, this does result in redundant information being generated since the file name is saved in a specific field every time a data record is delivered during import.
- 7. Proceed similarly for all value areas that you wish to define.

Defining key areas:

- 8. Select a column or row area that contains the values of a characteristic. This can be a single cell, an entire row or column, or part of a row or column. However, it is important that you observe the rule mentioned above, whereby key and value areas must be congruent.
- 9. Choose 'Edit -> Key area'. A dialog box appears. Using the automatically assigned area number, enter the value area(s) that the key area refers to. If the key area is to refer to all value areas, you can enter an asterisk ("*") instead of the area number.
- 10. Enter the name of the sender structure field that is to receive the values. Note that, for a key area, only characteristics are appropriate.
- 11. Proceed similarly for all key areas that you wish to define.

Defining header areas:

- 12. Select a single cell containing a characteristic value that is valid for several or all value areas.
- 13. Choose 'Edit -> Header area'. A dialog box appears. Using the automatically assigned area number, enter the value area(s) that the header area refers to. If the key area is to refer to all value areas, you can enter an asterisk ("*") instead of the area number.
- 14. Proceed similarly for all header areas that you wish to define.

After you have defined all the areas, you assign a generic file name to the file description. This enables the system to link a file to be imported with the file description.

Note: Depending on which generic file name you create, some problems regarding data import may arise which are difficult to trace. Therefore, you should read the explanatory notes on generic file names.

When you have made all the required settings, save them. Then you can import files into the system using the flexible upload function.

Further notes

Importing large files and importing data from files with changing numbers of data records

If the files you are importing using a file description, do not have a uniform length (that is, differing numbers of data records are being delivered), you can allow for this when defining the value and key areas: In the dialog field for defining the value areas, enter the maximum value of 999 for the field "to row". This means that the system dynamically adjusts the number of data records to be imported to the file to be imported. This way, you ensure that no data records are lost because the value for the last row was set too low. However, you can never read more data records than the maximum value of 999. If you wish to import larger files, you must first split these into two or more smaller files.

Note that you only need to modify the field "to row" for the value areas of the file description. The key areas that refer to the value areas adapt automatically to the settings for the value areas.

Further functions

When editing file descriptions, you have the following additional functions at your disposal:

- **Copy**: You can generate a copy of the file description that you are currently editing. This can be useful if you wish to import data from different sourse files whose structures differ only slightly. You can create a copy that serves as a template for the new file description and then modify the copy. To do this, choose 'File description -> Copy'. In the following dialog field, enter the name of the new file description that you want to create as a copy of the current one. The copy you create in this way is identical to the original including all area definitions, the links between the areas, and assignment of sender structure fields. **Important**: After you have confirmed your entries, the newly created copy becomes an active file description. Any changes you now make affect the new copy and not the original.
- **Delete**: In order to delete the file description that you are currently editing, choose 'File description -> Delete'. The file description is deleted permanently with this function and cannot be restored.
- **Reset**: If you have selected a cell range and realize that too many or too few cells have been selected, you can use the Reset button to cancel the selection and then make a new selection.

Control Report Portfolio (EC-EIS)

In this IMG activity, you maintain how reports from files, spool requests or the printouts of SAP programs are transferred to the report portfolio.

- Reports from files
 When you maintain the parameters for files, you must specify 'FILE' as the transfer method. You can enter any variant.
- Reports from spool requests
 Where spool requests are concerned, you can enter the transfer method and variant.
- Reports from printouts of SAP programsIf the printout of other SAP programs is to be transferred to the report portfolio, you enter the program name as the method and the variant name as the variant for the program to be run.

Actions

1.Check

- who (user group) should have
- which (report origin and variant) reports transferred from the sources named to the report portfolio and from
- where (report class).

Requirements

- If the output of a program is to be transferred to the report portfolio, the default printer must be maintained in the user master of the user who carries out the function. System -> User profile -> User defaults "Output device".
- The user groups and the report classes must have been created

Further notes

Files which are to be stored in the report portfolio are given logical file names. You need to maintain physical file names for these logical file names. (See *Basic settings -> Logical file names*.)

Transport Settings

Steps when setting up a data transfer

To set up the various data transfers, you need to perform the following steps:

The network needs to be set up if data is to be transferred between two systems. You need to make the network settings in both the source and the target system.

You can activate logs for all types of data source so that the transfer is logged whether errors are found or not.

Data sources	Transfer	Sender	str. Transfe	<u>r</u>	Program
	method		rules		<u>for jobs</u>
File	no (FILE)	yes	yes		RKCFILE0
R/2 system	yes R/2	yes	yes		Program
	and R/3	yes	yes		RKCSUB00
R/3 system	yes in source	yes	yes		Program
	and target sys	st.			RKCSUB00
ABAP/4 query (SELEC)	no (LOCAL) yes yes	yes	yes RKCDM	Querys Aspect	no
Own yes	yes	yes]	Program Programs	

With a data transfer between the various systems, the following preparations have to be made:

Work step source system target system Transfer path

all entrie necessar	s see Exa y	mple
Sender structure	e identical ir	n both systems
Transfer rules	no	necessary
Jobs	possible	possible for RKCSUB00

Data transfer from R/2

Target system maintenance in R/2

The target system to which the data should be sent is stored in the R/2 table T2420 in a parameter group. With the R/2 sender structure maintenance (table T242S), the target system is linked with the parameter group from table T2420.

Sender structure for transaction data in R/2

You maintain the sender structure in the R/2 system using table T242S (Transaction TM31). Tables T242I and T241S are automatically maintained at the same time and must exist in the current client.

The sender structure is also identified in the R/2 system with a sender program.

Sender structure for master data in R/2

- 1. When maintaining the sender structure for master data records, you enter the:
 - name of the sender program,
 - target system (transfer method)
 - language field name (any)
 - sender field name (any)
 - type and length of the sender field,
 - name of the receiver field, length of the text field.
- 2. The data records to be transferred must have the following structure:

Language field Sender field Text field

Example

A data record containing master data for company codes in English would, for example, look like this:

E001Company code 1

Collecting data from R/2

An R/2 sender program reads data and writes this data into the R/2 table DOUT. A system program (RSDRIVER with IMS or BS2000, or an assemler program) sends the data from table DOUT to the target system. The system program is automatically started, it logs onto the target system and transfers the data. As soon as the data has been transferred without an error message, it is deleted from DOUT.

You can display the status of the queue using transactions TMQD and TMQM.

If, in your R/2 - R/3 communication, the automatic sending of records from table DOUT is not supported (e.g. in DC system IMS), the sender records can be picked up by the R/3 system. This procedure is controlled by program RKCIMSST. The program requires a transfer method and a parameter group with the same name in table T2421. The parameter group, and therefore the transfer method, should begin with 'CP'.

You need to specify system control parameters 'GRPID' and 'DEST' for the parameter group in table T2420. For parameter 'GRPID', you enter the origin, e.g. CPBS1. For parameter 'DEST', you enter the LU (logical unit in R/2), in other words the value which you maintained in the R/2 system under system

parameter value 'QDEST'. You should also note that the receiver routine in R/3 is called 'IMS_REC_AND_TRANS' for this type of communication. You enter it in the R/2 system under system parameter 'QMODU'. This is true for both master and transaction data.

If you have to collect data from R/2, you should set up the data transfer from R/2 so that different sender programs use different LUs.

Blocked data transfer from R/2 as of Release 5.0 F

As of R/2 Release 5.0F, it is possible to set the parameters for data transfer from R/2 so that several logical data records are transferred to a physical record. Blocked data transfer has the advantage of considerably improving response times.

To set up data transfer, you need to make the following entries in R/2 in table T2420:

<u>Group</u>	<u>Abbr.</u>	<u>Param.val.</u>	Parameter description
BLOCK	MODE	ON	Block data transfer (ON/OFF)
BLOCK	CPIC	16027	CPIC block size
BLOCK	LUW	9999999	Number of transfer blocks for a LUW
			LUW (Logical unit of work)

If anything other than **ON** is entered for **BLOCKMODE**, the data will not be transferred in block.

The greatest possible parameter value for **BLOCK CPIC** depends on the R/2 operating system and net configuration. The maximum size is 16027 bytes. If a greater number is entered, the maximum block size remains 16027 bytes. If the program RSDRIVER is used to send the data (with IMS and BS2000) the maximum size is 3900 bytes; this must also be entered.

The entry **BLOCK LUW** determines after how many physical records the queue is implicitly closed and reopened. In the R/2 operating system a LUW is not completed until the queue is closed. To prevent the LUWs becoming too big, you can limit the LUW block size with the entry **BLOCK LUW**.

In the log in R/3, this is indicated by the message 'Pause'. This is the same as the effect as when data is written in a queue from various program runs (variants). If the data transfer terminates and a part of the LUWs were transferred but another part were not, you can import the data in the transferred LUWs in the R/3 SAP-EIS menu under *Tools -> Transfer log -> Edit* and you can start the transfer again for the LUWs which were not transferred using R/2 transaction **TMQD**.

Repetition of data transfers

Tool for finding, analyzing and correcting errors

Under *Transaction data -> Transfer -> Transfer log.* in the application menu or with ABAP report program **RKCDLMON** you can determine whether data transfers have run without errors, or whether errors occurred.

- 1. Enter a sender structure or a transfer path and highlight 'Display'. Select 'Execute'.
- 2. Limit the period accordingly and, where necessary, enter other selection criteria. Select 'Execute'. A list of the logs is displayed.
- 3. Position the cursor on a line and choose 'Goto -> Display message' in order to read the log messages.
- 4. Position the cursor on the external number of the log and select 'Goto -> Detail' in order to analyze and edit the errors.

Temporary saves during the data transfer

During a transfer, all records received are saved temporarily before being summarized. All sender and receiver records with errors are saved temporarily after summarization. The update is only started if no errors occurred. Before the update, all summarized receiver records are saved temporarily. If a sender program used the same logical unit several times during a transfer using CPIC and the data is transferred in a block, the transferred records will be saved temporarily for each block. These records will, however, be summarized and updated at the same time.

Error analysis and repeat of transfer

This temporary saved data enables you to import the sender records or summarized receiver records again and analyze the errors. Depending on the type of the error, it may be useful to work with the sender or summarized records.

If a problem occurs in the update, you can update the receiver records afterwards. You can also update all temporarily saved receiver records. There may already be records on the database with the same key as the receiver records to be updated. For this reason, you can specify for each key figure whether the values on the database should be overwritten or not. You do this when you are maintaining the rules for the data transfer. The system carries out the following steps:

- 1. When processing the data transfer rules, the key of the receiver record is formed from the sender record.
- 2. If you have defined the transfer rules such that at least one key figure is not to overwritten, the system checks whether a record with the same record exists on the database. The record is then read.
- 3. If the key figure values of a record are not to be overwritten, this is taken into account in the total operation. If the total operation for a key figure is SUM and key figure is not to be overwritten, the key figure value from the database is taken as the start value.
- 4. The appropriate key figure values from all sender records summarized on the same key are totaled using this start value. The procedure for other total operations is similar.
- 5. If you have defined summarization levels, you must delete these Summarization levels and build them again.

This procedure ensures that the receiver records from the last transfer can be posted to as often as you wish.

You can import sender records with errors again. This is useful if the transfer rules had been maintained incorrectly, for example. You can, however, import all sender records again. If you wish to cumulate the key figure values, however, you should only import the sender records once.

Note

If you wish to update or import a large quantity of data records after the error analysis, you must carry out the function in the background processing. For this, select 'Functions for background processing'. The ABAP report program RKCCOMON is called up. The log number is automatically controlled in the corresponding field. You can create a variant before you update or import the data record in the background processing.

Delete logs

The number of transfer logs that can be saved, depends on the quantity of the data. (The tables INDX and BAL_INDX are updated). Therefore, we recommend that you schedule a job that deletes the logs weekly.

Organization of data transfers and problems

Notes on organization

Data transfer to an Executive Information System or a Business Planning system must be organized differently to data transfer to an information system in an operative system. An EIS is unlike an operative information system in that data is not written to EC-EIS/BP every time a posting takes place, nor can a flag be set in the sender system that data has already been read. For this reason, it is important to limit the data in any one transfer and to make sure that a reversal is possible. In addition, data from many sources is usually transferred to EC-EIS/BP at period close. The following tools are available to help you organize data transfer:

- 1. The **version** in EC-EIS/BP can be used to separate datasets from one another. Set up your own version for data transfers.
- 2. Using limited datasets, create **test reports** with which you can check the completeness and correctness of the data transfers.
- 3. Use **aspect summarization** to copy the data into the productive version.

Typical problems

- Data transfer using CPIC terminated for technical reasons. Summarization and an update will not yet have taken place. If the data was collected in **one** queue, it will not have been deleted from the queue. The data can be transferred again. This is activated automatically. If data was collected in several queues, the blocks of data which were transferred without errors have been saved in the receiver system and can be imported with the function *Transaction data -> Transfer -> Transfer log* in the application menu or directly using program **RKCCOMON** under **Import all sender records**.
- 2. The summarization or update was unsuccessful.

This is probably due to the fact that a characteristic value was not contained in the master data. Correct the master data or the sender records and import them again.

3. Valid keys which are semantically incorrect were imported.

For example, country key FRA (France) and town MUN (Munich) were entered for a plant. In order to find such errors, you should set up test reports for the data imported. In addition, you should keep the sender records as small as possible and derive characteristics which need to be derived from other characteristics using the 'Convert sender fields' rule. In this example, you could derive the country key and town for the plant from the plant number. The problem of deleting records written to the database also occurs here. You can only do this if the records in a data transfer can be separated from other records using selection conditions.

Business Planning (EC-BP)

In this section you define the planning environment that you need for Business Planning (EC-BP).

Create planning layout

In this step, you define the planning layout or change those that are already available.

With the planning layout you determine what is contained in the header, rows and columns (elements) of the planning screen, depending on the business requirements of your planning.

You define the planning layout in a similar way to how you define a Layout for the entry of actual data.

The following differences to the creation of a data entry layout exist:

Cross-fiscal year planning

So that it is possible to plan cross-fiscal year data, enter a charact- eristic 'Period/fiscal year', such as 012997 instead of 'Period' and 'Fiscal year'. This allows for a rolling planning with the entry of the time frame 010997 to 003998, for example.

Plan and actual versions

You can enter plan data for a version in a planning layout. Plan data of other versions or actual data can be displayed as reference data.

If you include the plan/actual indicator in the general data selections, you must restrict it to plan data.

Seasonal distribution

In the planning layout, you have an additional attribute column. Apart from the unit column, you can insert a distribution key. Therefore, you distribute cumulated values to period values. Using the distribution key you have the possibility of displaying seasonal trends using the plan periods of a fiscal year. If you do not select the attribute 'Distribution key' for a column, an analog distribution takes place, meaning if no data is available yet, you get an even distribution. If data is available, the distribution is similar to this (see also Creating distribution keys).

Calculated key figures

You can include not only characteristics and basic key figures in the rows and columns in a planning layout, but also calculated key figures, meaning key figures that are stored as formulas. For example, sales per employee or contribution margin. In planning, the time-based aggregation rules SUM, AVG, LAS, NOP and the non-time-based aggregation rule SUM are supported. Therefore, you should only use calculated key figures that have been defined with these aggregation rules.

In the planning session you can change calculated key figures which consist of a ratio, for example, price (revenue/sales quantity). If you change the price, the revenue will be redetermined automatically within the planning session. You can find more information on this in the online documentation on Business Planning.

Formulas in the planning layout

You have the opportunity to define formulas in the planning layout, that calculate values from other columns or rows in the planning session. Both basic key figures and calculated key figures are supported as formula components. Two types of formula are supported in the planning layout:

- Formula column
- Inverse formula
- Definition of a formula column or row
 Proceed as follows to define a formula column, meaning a value column that results from values of already defined columns:
 Double-click on the free field to of a value column and select "Formula" as element type. In the following window you can create a calculation formula from the already defined value columns that are offered to you there; using the formula components. The column is automatically set to 'not ready for input'.
- Definition of an inverse formula

In planning, an inverse formula allows you to enter values in a formula column from which the system calculates the values of an other column of the planning layout, for example the sales revenue can result from the sales quantity and the price. The price is not a calculated key figure on the database and is ready for input in the layout:

Example

Value column 1: (ready for input) Price (plan sales/plan quantity) Value column 2: (calculated) Plan sales

To define an inverse formula proceed as follows:

- Create a column 'plan quantity' and a column 'plan sales'.
- Create a formula column 'Price' (plan sales/plan quantity) as described above.
- Using 'Format -> Readiness for input on/off' make column 'price' ready for input.
- Highlight the column 'plan sales' and select 'Inv. formula'.
- Enter the inverse formula (Price * plan quantity).
- Make the column 'plan sales' not ready for input.

The price can be entered in the planning session, but is not saved on the database. In the planning layout you determine that a database field should be calculated from it. In the example, this is the plan revenue, which should only be displayed for information purposes.

Navigation attributes

In planning you can specify fixed navigation attributes using the general selections or define them as variables for the selection. Note that, since the attributes are non-chargeable, the underlying characteristic in the planning layout nust be specified. This function enables the selection of data for the planning session using an attribute, for example, you can select the plan data for customers using the attributes country and sales region. You can find further information on the maintenance of attributes under Navigation attributes.

Master data hierarchies in planning

For characteristics which are assigned to a EC-EIS or EC-BP master data hierarchy, you can enter a hierarchy node or variable instead of a characteristic value or variable. You can also specify a hierarchy node in the general selections or enter one as a variable for the selection. If you wish to create a variable you must still specify the hierarchy variant.

Note that, since the nodes are non-chargeable, the underlying characteristic in the planning layout nust be specified.

Further notes

Transport of settings

Maintain planner profiles

In this IMG activity, you define planner profiles that selectively control the planning process. In a planner profile you determine which planning layouts are used and with which preset parameters. You can store as many planning layouts as you wish. Using the profile position, that determines the order of

the planning layouts within business planning, you can assign the same planning layout to a planner profile several times, however with different preset parameters each time.

Note that you can enter plan data in layouts without specifying a planner profile.

Planner profiles are structured hierarchically:

- General planner profile
- Business planning
- Business planning layouts
- Default parameters

- General planner profile

You can assign an authorization group to each planner profile.

Using a combination of authorization groups and default parameters that the user cannot change (see "default parameters"), you can ensure a very detailed allocation of authorizations for the entry of data.

Independent of the component from which you call up the planner profile editing, all planner profiles in the system are made available to you. This way you can define planner profiles from other components for the selected component.

- Business planning The planning areas in business planning are the aspects. You can enter new rows with other aspects.
- Layouts business planning

In each aspect you determine which planning layouts are made available and in what order. You must define at least one position for each aspect and assign a planning layout to it. The "Deflt" flag indicates whether parameters have a been preset for a planning layout. This flag is automatically set after you maintain the preset parameters in the next step. If you deactivate the flag "Overw" (Overwrite preset parameters), the users are tied to their preset parameters and may not overwrite the variables with other values. If the flag is activated, the entries are to be seen as proposed values that can be overwritten when planning is commenced.

If you activate the flag "Excel Integration", you can use this profile to enter your plan data in Microsoft Excel rather than via the SAP interface.

A file description is a generic name for use with Excel or the flexible upload. It determines the field assignment of the Microsoft Excel cells to the planning layout. The file description is generated automatically during the presetting of parameters with Excel in Place. The field "file description" is filled automatically when you save this description (see "Default parameters"). If you wish to use the same layout more than once, you can enter the saved file description directly.

- Default parameters

For each item in the planning area, you can define default parameters for the assigned planning layout.

When you enter planning, the system proposes these values for the planning layout variables . If you have used master data hierarchies in the planning layout, and wish to have these displayed automatically in the planning session, you can save the settings for the display here.

If you have selected "Integrated Excel" for your planning screen and want the system to generate a file description, choose "Goto -> Overview screen" from the "Default Parameters" screen. (Note that you first need to enter values in the fields on this screen before you can choose this function.) The system calls up Excel and displays the planning layout in Excel. Here you can move parts of the layout around, enter your own area for external calculations, change formattings, and so on. Using the function "Save file description", you save the assignment of the fields in the SAP layout area between the SAP system and Microsoft Excel. Using "Save Excel Layout", you can save the layout information (formulas defined in Excel, formattings, and so on) of the Excel worksheet.

Planner profiles help you structure your organization's planning process, especially if your organization uses a decentralized planning process. You can assign your users planning layouts in which the objects they are allowed to plan are predefined and nonchangeable.

Requirements

To create a planner profile, you first have to have defined all the planning layouts that you want to use in that profile. If you have not already done so, carry out the step Create planning layout.

Activities

If you want to assign planner profiles to authorization groups, you first need to carry out the step "Maintain authorization groups" to define these. Authorization groups determine which users can maintain which planner profile. You can assign authorizations using the authorization object "CO: Planner profiles" (K_TKA 50).

To create planner profiles, choose the step "Maintain planner profiles" and proceed as follows:

- 1. General planner profile
 - a) To create a new planner profile, choose "New entries".
 To copy an existing profile, select the existing profile and then copy it using the "Copy as" function.
 - b) Enter a name and a short text for the planner profile.
 - c) If desired, assign an authorization group to the profile.
- 2. Business Planning
 - a) Select the planner profile that you want to maintain, and then choose "Business Planning".
 - b) If desired, change the default distribution keys for currencies and quantities. Enter a document type for plan data.
 - c) If you want to select an aspect, choose "New entries".
- 3. Business planning layouts
 - a) Select the planning layout you want to process and choose "Business planning layouts".
 - b) Choose "New entries", and enter an item and an existing planning layout.
 - c) Activate the "Overw." indicator if you want to define default parameters for the variables in that layout, and if you want users to be able to overwrite these parameters.
 - d) Select "Integrated Excel" if you want to use Microsoft Excel as your planning screen. Enter a file description manually or save the automatically generated one in the default parameters.
 - e) Save your entries
 - f) Select a planning layout for which you want to define default parameters and choose "Default parameters".
- 4. Default parameters
 - a) Enter the desired values in the initial planning screen.
 - b) If you are using a master data hierarchy in the planning layout, choose 'Settings -> Lead column' to display the level in the planning session and to save it as default.
 - c) Make the desired settings for working with Excel in Place.

- 5. Optional steps:
 - Authorizations

In the section "Authorization Management", you can define authorizations for authorization object K_TKA50 and assign these to users by placing the authorizations in authorization profiles.

- User profile

Assign the desired planner profiles to individual users by entering them in the user parameters using parameter ID "PPP" (*System -> User profile -> Own data*).

Edit Distribution Key

In this step, you can store your own key for the distribution of yearly plan values to a monthly level.

Using the Distribution key you can distribute values that you enter on the overview screen for the entire planning period, according to a pre-defined seasonal distribution, to the periods.

You can create various seasonal distributions using the distribution key, in order to display quarterly or half-yearly trends, for example. Therefore, you assign a relative factor to each period, according to which the entered plan values should be distributed. The number of periods in the year is determined from the fiscal year variant of the aspect.

Using the field 'cyclical', you can indicate the distribution key for the planning in as many fiscal years as you like.

Standard settings

In the SAP standard delivery there are Distribution keys that are pre-defined and cannot be changed.

Activities

As required, define individual distribution keys that correspond to your needs.

Change Revaluation Factor

In this step you determine the revaluation factors, that carry out a percentage change with the values of selected key figures.

You can use the revaluation factors when copying existing data to the automatic planning.

Activities

Determine the revaluation factors

Maintain forecast profiles

In this step you create forecast profiles. You use a forecast profile to execute a projection of existing data. You can find further information on forecasts in the online documentation on Business Planning.

A forecast profile represents a strategy and a grouping of parameters, according to which, existing plan and actual data are forecast into the future. Using a profile you can project plan values for several combinations of characteristics and key figures.

The system supports various forecast models such as constant, trend and seasonal models.

Activities

- 1. Maintain the name and description of your forecast profile.
- 2. Select a forecast strategy.
- 3. Maintain the other parameters.
- 4. Save your forecast profile.

Further notes

You can find more detailed information on the various forecast procedures in the online documentation on sales and operations planning.

Maintain weighting group

In this step you determine weighting groups which you can use in your forecast.

The use of a weighting group makes sense only if you wish to use forecast strategy 14 ("moving weighted average") in a forecast profile. Here, in the weighting group, the previous periods to be considered for the forecast are individually weighted with factors to determine the future values.

The numbers in the weighting group have the following meanings:

- 1 = current period less one (= last period)
- 2 = current period less two (= second last period)
- 3 = current period less three (= third last period) All further numbers follow the same principle.

Activities

Determine your weighting groups.

Object-Dependent Parameters

Object dependent parameters are planning aids for combinations of characteristic values.

When several characteristics are being planned automatically: a revaluation, distribution or forecast will be executed with a single parameter as default (revaluation factor, distribution key or forecast profile). In many cases you will require more than one revaluation factor, for example, for all characteristics and characteristic values in the planning session. Object dependent parameters enable you to store specific revaluation factors for certain characteristic values.

You can create object dependent parameters for the following objects:

- Revaluation factors
- Distribution keys
- Forecast profiles

You can save several variants per parameter. This allows you to store several planning scenarios for these characteristic combinations. The variants are called 'planning aid accesses'.

Define planning help access

In this step you create planning aid accesses. When you are planning using object dependent parameters, planning aid accesses allow you to plan various scenarios for each characteristic combination. For example, you can execute an optimistic and a pessimistic revaluation.

Here you define planning aid accesses for revaluation factors, distribution keys and forecast profiles. After you maintain object dependent parameters assign an access to each parameter.

If you wish to use an object dependent parameter in the planning session, do this using the planning aid access. The derivation rule will not be displayed.

Example

You wish to create two revaluation factors for company code 0001 and fiscal year 1999. If it is a good year, turnover will grow by approximately 10%. If it is not so good, growth may be 5%. You wish to store the scenarios in two versions.

You create two planning aid accesses for revaluation factors. The first is called OPT (optimistic) and the second PES (pessimistic). You then create two object dependent revaluation factors. You assign the revaluation of 10% to the planning aid access OPT and the revaluation of 5% to the planning aid access PES.

In the planning session you carry out two different revaluations using these accesses.

Activities

Define your planning aid accesses for object dependent revaluation factors, distribution keys and forecast profiles.

Derive revaluation factor

Using derivation rules, you can determine that a specific revaluation factor is referred to when you plan certain characteristic values.

The source fields are the characteristics whose characteristic values will derive the revaluation factor. Note that the field Period is not available as a source field.

The target field is the revaluation factor.

When you create a derivation rule the source field PLSZ (planning aid access) the target field REVAL (revaluation factor) are entered automatically.

Requirements

You have created planning aid accesses.

Activities

- 1. Enter a name for the rule. Choose the characteristics that you wish to use as a requirement for the revaluation factor.
- 2. Choose 'Maintain rule values' to enter the characteristic values.
- 3. Select a planning aid access. Only the planning aid accesses for the corresponding parameter types are available.
- 4. Select a key figure whose value is to be distributed.
- 5. Enter the characteristic values. You can enter either individual characteristic values or intervals.
- 6. Assign your entries to a revaluation factor.
- 7. Save the rule.

Derive seasonal distribution

Using derivation rules, you can determine that a specific distribution key is referred to when you plan certain characteristic values.

The source fields are the characteristics whose characteristic values will derive the distribution key. Note that the fields Period and Fiscal Year are not available as source fields. When you create a derivation rule, the source fields PLSZ (planning aid access) and FIELDNAME (key figure) are entered automatically. You must assign each derivation rule to a planning aid access and to a key number.

The target field is the distribution key. When you create a derivation rule the target field SPRED (distribution key) is entered automatically.

Requirements

You have created planning aid accesses. Activities

- 1. Enter a name for the rule.
- 2. Choose the characteristics that you wish to use as requirements for the distribution key.
- 3. Choose 'Maintain rule values' to enter the characteristic values.
- 4. Select a planning aid access. Only the planning aid accesses for the corresponding parameter types are available.
- 5. Select a key figure whose value is to be distributed.
- 6. Enter the characteristic values. You can enter either individual characteristic values or intervals.
- 7. Assign your entries to a distribution key.
- 8. Save the rule.

Derive forecast profile

You can use derivation rules to determine that a specific forecast profile is referred to when you plan certain characteristic values.

The source fields are the characteristics, whose characteristic values will derive the forecast profile. Note that the characteristics Period and Fiscal Year are not available as source fields. When you create a derivation rule, the source fields PLSZ (planning aid access) and FIELDNAME (key figure) are entered automatically. You must assign each derivation rule to a planning aid access and to a key figure.

The target field is the forecast profile. When you create a derivation rule, the target field PRPFL (forecast profile) is entered automatically.

Requirements

You have created planning aid accesses.

Activities

- 1. Enter a name for the rule.
- 2. Choose the characteristics that you wish to use as requirements for the forecast profile.
- 3. Choose 'Maintain rule values' to enter the characteristic values.
- 4. Select a planning aid access. Only the planning aid accesses for the corresponding parameter types are available.
- 5. Select the key figure whose value is to be forecast.
- 6. Enter the characteristic values. You can enter either individual characteristic values or intervals.
- 7. Assign your entries to a forecast profile.
- 8. Save the rule.

Maintain calculation formulas for basic key figures

In this step you create a formula for a basic key figure. This formula serves as a planning aid and allows you to calculate a plan value and to save it in the database. You can let the formula be calculated during the planning session.

Example

The planned sales commission amounts to 6% of the revenue.

You create a calculation formula for the basic key figure VPROV (sales commission): VPROV = Revenue *0.06

You can use this formula to calculate a plan value for the sales commission.

Activities

- 1. Select an aspect to maintain basic key figures.
- 2. Choose a basic key figure.
- Enter a formula.
 Note that the elements of the formula can be basic key figures and constants only.
- 4. Check the formula and save it.

Further notes

You can find more information on calculation formulas in the online documentation on Business Planning.

Information System (EC-EIS)

In the steps that follow,

- you define the structure of the report tree for the display of a reports,
- you make the necessary settings for printing with Microsoft Word, maintain how hierarchies are to be shown in reporting.

Maintain report selection

For EC-EIS you have to maintain the report tree 'EIS'.

Here, you specify the name of the tree to be used for report selection in the application menu. SAP supplies one default tree per application, but customers can create their own trees and overwrite the SAP tree.
Under *Extras -> Control*, you can define whether the reports in the tree are to be displayed in a selection window or on a separate screen. To suppress the processing of report trees for the relevant application by choosing **Inactive**. When you call report selection in the application menu, the list selected in the report list is then displayed.

It is also possible to deactivate the report tree for any end-user in any application by setting the user parameter 'KBT' to 'X'.

Transporting the Tree Sructure

When you change a tree, it is included in a transport request (transport object R3TR SRTR). The following are then transported:

- The tree structure all the texts
- Node entries (the names of the reports and variants) The following are not automatically transported:
- User-specific settings (initial position, sub.trees, visible entries)
- Saved lists

When you change a node, it is also included in a transport request. The following are then transported:

- Node entries (the names of the reports and variants)

Manual Transport (for Special Cases)

The tree structure is stored in the table SERPTREE. A tree structure can only be transported as a whole, and the transport request should contain the following entry:

- R3TR TABU SERPTREE and SERPT. Function R transports all trees from the source system and overwrites those in the target system.
- R3TR TABU SERPTREE und SERPT. Function K transports only those trees specified on the next screen. You must enter function R. You can only specify the tree ID; the node ID must be specified generically.

If you want to overwrite a tree structure in the target system, the node contents (table SREPOVARI, see below) and the user-specific views (table SERPENTR and SREPOUSER, see below) should also be transported, or at least deleted in the target system.

Transporting Node Contents

The contents of report tree nodes (reports and variants) are stored in the table SREPOVARI. In this case, you should make the following entry in the transport request:

- R3TR TABU SREPOVARI. Function R transports the contents of all nodes of all trees from the source system and overwrites those in the target system.
- R3TR TABU SREPOVARI. Function K transports only the node contents specified in the next screen. You enter function R here.

If you want to overwrite a node in the target system, the user-specific views (table SREPOUSER, see below) should also be transported, or at least deleted in the target system.

Transporting User-Specific Views

The views of the report tree are stored in the table SERPENTR. You must make the following entry in the transport request:

- R3TR TABU SERPENTR. Function R transports the views of all users of all trees from the source system and overwrites those in the target system.
- R3TR TABU SERPENTR. Function K transports only those views specified on the next screen. You enter function R here.

The views of the nodes are stored in the table SREPOUSER. You must make the following entry in the transport request:

- R3TR TABU SREPOUSER. Function R transports the view of all users of all nodes from the source system and overwrites those in the target system.
- R3TR TABU SREPOUSER. Function K transports only those views specified on the next screen. You enter function R here.

Print in MS Word for Windows

In the information system you have the option of making a printout using Word for Windows 6.0.

This step tells you which settings you can make and what to be aware of during installation.

This print option is only available under Windows or Windows NT as a presentation server, since Microsoft Word 6.0 only runs on these servers.

The logical file name 'DRILLDOWN_PRINT' contains a default directory in which you can store the files to be printed with Word.

You must have installed Microsoft Word 6.0 for Windows on the presentation server in the language versions English, French or German. You can add other languages via the function 'GetLanguageDependency' in the macro 'library' of the Word template SAP_REP.DOT, which is delivered with the system.

Activities

To install the SAP_REP.DOT template, proceed as follows:

- 1. Copy the file SAP_REP.DOT to the directory (template directory) specified in theWINWORD6.INI file under the following parameters:
- 'USER-DOT-PATH' or
- 'WORKGROUP-DOT-PATH'
- 2. Call up MS Winword.
 - a) Choose 'Extras -> Macro' 'Organize ...'.
 - b) Open the template 'SAP_REP' on one side of the dialog box and the template 'NORMAL' on the other side.
 - c) Copy the macro 'BatchStart' from the template 'SAP_REP'
 - d) Close the dialog box.
 - e) Choose 'Extras -> Macro'.

- f) Select the macro 'DefinePaperformat'
- g) Execute the macro.
- h) Save the changes in the 'Normal' template and close Word.
- 3. Change the SAP_REP.DOT template to meet your own requirements. Make sure that you make a backup copy of the original SAP_REP.DOT file. Once you have carried out these preparation activities, Microsoft Word 6.0 for Windows is set up for printing from a report.

Further notes

If you want to use Word to print a drilldown report without making any further changes to Word (on the dialog box 'enter printer control parameters' set the mode to non-interactive), the folder specified via logical file names must correspond to the folder specified in the Word macro 'BatchStart'. In the template SAP_REP.DOT delivered with the system, the default directory is 'D:\SAP_REP'.

Maintain Hierarchy Directory

In this step you can maintain the display of the master data and reference hierarchies in reporting.

You can recognize the master data hierarchies created in EIS with the hierarchy class EIS. The variant is stored as part of the hierarchy name e.g. COUNTRY1 COUNTRY1 001.

The other hierarchies are standard hierarchies from other applications that can be used for reporting purposes, if you have created a characteristic with the same domain in EIS. Possible reference hierarchies, that you can use in EIS are

Cost center hierarchy (domain KOSTL)

Cost element hierarchy (domain KSTAR)

Profit center hierarchy (domain PRCTR)

Company grouping (domain RCOMP)

Financial statement version (domain ERGSL)

HR Organizational unit (domain ORGEH)

In the field "med-length key" you can enter a text, that is displayed with the selection of the hierarchy in reporting. This is especially important, if several hierarchies or variants exist for the same characteristic.

In the field "H mode" you enter whether is not allowed to be selected (0), can be selected (1 or 2) or must be selected (3) in the maintenance of the report. The last possibility is mainly used with hierarchies in applications, in which a so-called compulsory hierarchy is present.

In the "H. displ." field, you determine with which structure display the hierarchy should be displayed in the report. If you do not make an entry here a linear display will be used as a default.

In the "Level" field you enter to which level should be exploded when executing the report.

Activities

Set how the master data and reference hierarchies are to be displayed in reporting.

Tools

You can use the tools in this section to:

- Create and assign authorizations
- Reorganize and process the objects belonging to an aspect (for example relationships between client and aspect, regeneration of programs, reorganization of the field catalog)
- Reorganize summarization programs and transfer rules
- Process data (summarize aspects) and reorganize comments and documents
- Convert reports
- Transport EC-EIS/BP settings to another client or system.

Conversion to Release 4.0

The change to the fixed part of the Aspect structure for release 4.0 requires a conversion of the aspect tables.

Requirements

You have created the necessary Versions.

Activities

Proceed as follows:

(The activity list can be found in the implementation guidelines in the menu path EIS -> Tools)

- 1. In conversion table TKCUM set how the new fields plan / actual indicator and the version depending on the values of the fields value type and data area should be filled. Assign a combination of plan / actual indicator and version uniquely to each combination of value type and data area (will be checked). Please also remember to maintain the tables in all clients in which the aspect has data.
- 2. Save the aspect structure in the aspect editing. The aspect now has the structure of Release 4.0 in the saved version. If the aspect contains data, you are informed that the aspect has been entered for the conversion for the mass processing.
- Using the database utility of the ABAP dictionary for the conversion of the aspect table, schedule a job in the background processing.
 When converting the data, a copy of the original table is generated, the data in the original table is deleted, the original table in the ABAP dictionary is activated and the data reloaded from the copy. In reloading a conversion routine of EIS is run, that determines the values for the new fields independent of Customizing. The status of the conversion can be seen from the job

overview and in detail from the object log of the database utilities. If errors should occur, you can restart the job after removing the cause.

- 4. After successful database conversion go back to the aspect editing and select the pushbutton 'Release upgrade', in order to convert the formulas for the aspect (for the data entry and for reports). Therefore, the new fixed characteristics are inserted in all places in which the value type occurs and provided with a variable or a fixed value depending on what value type was set. The fixed value is determined from the conversion table.
- 5. Next generate the aspect environment.

Authorization Management

In this section, you determine which functions users can execute in the SAP System using the SAP authorization concept.

To do so, you must define authorizations and assign these profiles to individual users via Profiles.

Authorizations are made for authorization objects, which are predefined by SAP. You can group authorizations belonging to a specific area into a profile, and can also group these profiles together into composite profiles.

For the users who work with the SAP System, you must

- create user master records
- create authorizations for authorization objects
- group the authorizations for the authorization objects together into authorization profiles
- assign one or more profiles to the user master records for individual employees

For this you need to decide

- who is responsible for creating the user master records in your company
- who defines and manages the authorizations for the authorization objects
- who assigns authorizations to profiles and assign those profiles to the users
- which authorizations the users should receive for other SAP components

Requirements

To maintain users, you must have the authorization for the following authorization objects:

S_USER_GRP (Maintain user master data: User groups)

This authorization object controls the access to authorization groups and activities.

You need authorization for this object if you want to create or change a user in the SAP System.

S_USER_AUT (Maintain user master data: Authorizations)
 This authorization object controls the access to authorization objects, authorization names and activities.

You need authorization for this object if you want to maintain authorizations or to group authorizations into profiles.

S_USER_PRO (Maintain user master data: Authorization profile)
 This authorization object controls the access to authorization profiles and activities. You need authorization for this object if you want to edit profiles or assign profiles to users.

Note

As different SAP System modules are integrated, users in CO also need display functions in other components, particularly in Financial Accounting (FI).

You can find more information about authorizations required in the Implementation Guide for the individual applications.

Recommendation

As it is possible to assign different authorizations for user maintenance according to specialized areas and user groups, SAP recommends that you maintain users and manage authorizations locally instead of centrally.

Maintain User Parameters and Fixed Values

The relevant menu can be defined for each user in the user master record as the start menu. Choose *System -> User profile -> User defaults* and enter one of these menus as the start menu:

- KCCF EC-EIS Executive menu
- KCMN EC-EIS Application menu
- KCMD EC-BP Application menu
- OKCM EC-EIS/EC-BP Configuration menu

In addition, you can enter EC-EIS/BP -specific parameters for each user. You make these settings under *System -> User profile -> User parameters*. The following user parameters are available:

Paran	<u>neter value</u>	<u>Short text</u>
ASC		Aspect
FSY		Fiscal year
HID		User group
HRK		Transfer method
PRD	Period	
REI	Report name	
SRP	Sender structure	
VAT	Value type	
VRS	Data area	
RC1	Form	
RFC	Remote Call Function destination	n
	(data transfer)	

Create Role and Assign Users

In this step, you can create roles and use the profile generator to generate authorization profiles.

Activities

To assign an authorization profile to a user, do the following:

- 1. Create a role
- 2. Enter a description
- 3. Select transactions
- 4. Create and edit authorizations
- 5. Assigns users and compare the user master (in doing so, the profile is entered in the user's master record)
- 6. Transport roles, if desired

Detailed documentation

For more information about the procedures, see transaction documentation

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.

Note

You can also use authorization profiles you created manually or were delivered by SAP, in roles. You can create a role without a menu and include the corresponding profile in the authorization data of the role.

In the fourth step, choose "Edit -> Add authorization -> From profile" to add the authorization profile data to the role.

Example

Requirements

Standard settings

Recommendation

Activities

Further notes

EIS Aspect-specific authorization objects

In this step, you define authorization objects which are used for validation in the info system.

From Release 4.0 you can assign a user object to several aspects. Therefore, the same authorization object in drilldown reporting or single record entry can be checked in several aspects.

Each authorization object consists of up to 10 selected fields which you can define yourself. These fields can be the characteristics of an aspect or a place holder for key figures. All other characteristics oder key figures which are not specified in the authorization object are allowed.

You can create a number of authorization objects which are linked to one another by selecting up to 10 objects several times. However, it is recommended that you create one authorization object with many fields instead of several with just a few fields. The "AND" relationship between the objects can lead to difficulties when you create authorizations for the individual users. See also "Example for the use of authorization objects".

The system checks the user's authorization before he or she executes a report. If the user lacks authorization for even one object, the system denies access.

The authorizations are also checked in the data entry and the planning.

You define a user's authorizations using Tools -> Administration -> Maintain users.

The following authorizations are allowed for objects:

- normal values
- "*"

This means that the user has authorization for all the values of the characteristic or all key figures. If intervals are defined in the form, the user needs the authorization "*" for these fields. It would be better, however, to use the "More" function and enter the individual values of the interval. The user also needs the authorization "*" for all the drill-down characteristics in the list. If at the same time the user should only have authorization for some of the characteristic values, you need to use another characteristic. This characteristic must be used in all the reports and at least one authorization object.

- ":"

This means that the user is only allowed to see total values for this characteristic.

- "#"

This means that the user is not authorized for any values of the characteristic. That is, he or she can only see data records to which no value of that characteristic is assigned.

The following tables demonstrates how the system checks your entries against an authorization object:

Field content Authorization:	*	Y	#	does not exist
*	Х	Х	Х	X
(A,Z)	-	Х	-	-
Х	-	-	-	-
#	-	-	Х	-
:	-	-	-	х

Note

Through creating an authorization object with the characteristics "Customer" and "Product", you can prevent reports which could slow down your system significantly:

1. Customer * Product 01000000 to 01900000 (or the valid characteristic values)

2. Customer 04500000 to 04800000 (or the valid characteristic values) Product *

These two authorizations let the user create a list of products for the selected customer and a list of customers for the selected product. However, he or she cannot create a single list of all the customers and products, something which would load down your system significantly.

Examples for the utilization of authorization objects in the info system

The authorization object consists of the fields 'Product' and 'Key figure'. User X should be authorized to display key figures ABSMG and UMSAT for product 00001000. To do this, (s)he needs the following authorizations:

 Product
 00001000

 Key figure
 ABSMG (sales qty), UMSAT (sales rev.)

 User Y may display all key figures for all characteristics. (S)he requires the following authorizations:

 Product
 *

 Key figure
 *

An example of how you can use one object instead of two.

A user is supposed to execute two reports: one report on the company 1000 broken down by company codes (which belong to this company), and one report on the company code 0001 broken down by business areas. However, the user is not allowed to execute a report for any random company code.

1st case: You created an object with the fields "Company" and "Company code" and another object with the fields "Company code" and "Business area".

User X has the following authorizations:

Company	1000,:
Company code	* and
Company code	0001
Business area	*

The user cannot run the first report on company 1000 broken down by company codes, even though he has authorization for the first object, because this report also requires him to have authorization for company code "*" and business area ":" in the second object. If the user had this, however, he or she could run reports on any company code.

2nd case: You created only one authorization object with the fields "Company", "Company code", and "Business area".

The user has the following authorizations:

```
Company 1000,: Company
code * Business area :
and
Company :
Company code 0001
Business area *
Here the user can execute a report of
```

Here the user can execute a report on company 1000 broken down by company codes and a report on company code 0001 broken down by business areas.

By combining the three fields in the same object, you can achieve greater control than if you create more than one object.

Actions

Define your authorization objects for the info system.

Data Basis

The tools listed in this section are used for:

- postprocessing, correcting, listing and deleting subobjects of an aspect
- reorganizing the field catalog
- determining the consistency of the data basis client-specific handling of the aspects

Aspect

In this section you can show or hide aspects in the current client, which were created in another client.

Switch on aspect in client

In this step, you activate an aspect in the current client. This is necessary if you have created an aspect in a client other than the current client and means that a reference to the client-specific aspect library is made. An aspect can have client-specific names (see *Data basis -> Aspect -> Maintain update type*). An evaluation is always carried out per client.

Caution

If you have planned to copy the entire client, you do not need to enter the aspect into another client with this function.

Actions

- 1. Check in which clients the aspect is to be used.
- 2. Log on to the relevant clients and choose steps Tools -> Data basis -> Aspect -> Switch on in client.

Further notes Transport of settings

Switch off aspect in client

In this step, you switch off an aspect in the current client, that is, the reference to the aspect in the clientspecific aspect list is deleted.

Further notes

Transport of settings Display structure and environment of an aspect

In this step, you can display lists of generated objects for an aspect.

Reorganize aspect tables

In this step, you can make a comparison between the ABAP/4 dictionary and aspect control tables.

When you perform this function, the system marks those aspects in the control tables for which a data structure (table) exists in the ABAP/4 dictionary.

Further notes

Using transaction **OKXE** you can enter an aspect in the aspect control table and using transaction **OKXF** you can delete individual aspects from the aspect control table.

Both of these transactions are not normally required.

Aspect Environment

In this section you can generate, display and delete objects from the environment of an aspect (programs). Programs that have been generated or deleted using *Data basis -> Aspect -> Edit* are edited.

Generate Programs

When defining a data structure in EC-EIS or EC-BP, environment objects (programs) are generated. If these objects were not created or only partially so (for example, because of timeout), you can regenerate the programs.

Actions

- 1. Regenerate the objects if you get the appropriate error message (e.g. Report program ... missing).
- 2. You can also generate in the test mode.

Display / Delete Programs

The environment objects (programs) created when defining an aspect data structure can be displayed or deleted with this function.

Field Catalog

In this IMG activity, you can reorganize the field catalog.

Reorganize field catalog

When defining a data structure, alongside the attributes which are defined for the structure in the ABAP/4 dictionary, some EC-EIS/EC-BP -specific information is required (e.g. the separation of the fields of a structure into characteristics and basic key figures or attributes for the info system). This information is stored in separate tables (so-called field catalogs).

When editing aspect data structures directly with ABAP/4 dictionary functions which escape the automatic control of the SAP-EIS data basis, or when the generation of the structure abends, some entries in one of the field catalogs may no longer correspond to current structures in the ABAP/4 dictionary.

Note

Using this function, you can reorganize the field catalog for a specific aspect or for all aspects. You are recommended to perform this function in test mode first and then to check the log.

This function is only required if errors have occurred in the field catalog.

Master Data

This section explains how to regenerate programs for processing master data. These programs are generated when you edit characteristics. It is therefore not necessary to execute these functions. Should a problem (such as a time-out) occur when the aspect environment is being generated, you can generate the master data programs again here.

Generate maintenance routines

Maintenance routines are used to update master data imported from a file or transferred via CPIC.

In this step, you can regenerate the maintenance routines.

Generate text modules

The texts for master data in the info system are read with text read modules.

In this step, you can regenerate the text read modules.

Prepare documentation connection

In this step you can generate function modules for characteristics. These are needed for the connection to the document administration of EC-EIS and EC-BP.

Further notes

In order to activate the document connection you still have to undertake special settings in the document administration.

The generated function modules are not transported consistently. Generate the function modules in each system in which you want to use a document connection.

Reorganize view maintenance modules

You maintain master data manually using view maintenance modules. In this step, you can regenerate view maintenance modules. If the view maintenance modules have been assigned to the wrong function group, you reorganize the function groups.

You either reorganize the view maintenance modules for aspects, the system type or the appropriate function groups.

Activities

If you choose **reorganization for aspects**, enter the aspects for which the view maintenance modules are to be reorganized. The view maintenance modules for all characteristics which occur in the aspects specified are deleted and then defined again for the correct function group.

If you choose **reorganization for system type SAP**, all the view maintenance modules for characteristics of this type will be deleted and created again. In other words, the function groups 0KV0 to 0KV4 are reorganized.

If you choose **reorganization for system type User (CUS)**, all the view maintenance modules for characteristics of this type will be deleted and created again. In other words, function groups 0KV0 to 0KV9 and 0KVA to 0KVJ are reorganized.

If you choose **reorganization for function groups**, enter the function groups for which the view maintenance modules are to be reorganized. These function groups and their view maintenance modules will then be deleted and defined again.

Further notes

If you want to reorganize all view maintenance modules, choose 'reorganization for function groups' but do not make any entries for the function groups.

The reorganization for many aspects or function groups may last a long time. If necessary, you should schedule a background job.

The assignment of check table to function group is defined as follows:

Check tables/v	views	
T2600 T2609, V_	T2600 V_T2609	0KVB
2610 V_T2619	0KVC	T2620 T2629,
0KVD	T2630 T2639,	V_T2630 V_T2639
T2640 T2649, V_	T2640 V_T2649	
T2700 T2709. V	T2700 V T2709	
T2710 T2719, V_	T2710 V_T2719	
T2720 T2729, V_	T2720 V_T2729	
T2730 T2739, V_	T2730 V_T2739	
T2740 T2749, V_	T2740 V_T2749	
T2750 T2759, V_	T2750 V_T2759	
T2760 T2769, V_	T2760 V_T2769	
T2770 T2779, V_	Г2770 V_Т2779	
T2780 T2789, V_	Г2780 V_T2789	
T2790 T2799, V_	Г2790 V_Т2799	
	Check tables/ T2600 T2609, V_ 2610 V_T2619 0KVD T2640 T2649, V_ T2700 T2709, V_ T2710 T2719, V_ T2720 T2729, V_ T2730 T2739, V_ T2740 T2749, V_ T2750 T2759, V_ T2760 T2769, V_ T2770 T2779, V_ T2780 T2789, V_	Check tables/views T2600 T2609, V_T2600 V_T2609 2610 V_T2619 0KVC 0KVD T2630 T2639, T2640 T2649, V_T2640 V_T2649 T2700 T2709, V_T2700 V_T2709 T2710 T2719, V_T2710 V_T2719 T2720 T2729, V_T2720 V_T2729 T2730 T2739, V_T2730 V_T2739 T2740 T2749, V_T2740 V_T2749 T2750 T2759, V_T2750 V_T2759 T2760 T2769, V_T2760 V_T2769 T2770 T2779, V_T2770 V_T2779 T2780 T2789, V_T2780 V_T2789 T2790 T2799, V_T2790 V_T2799

Check consistency

Using this function, you can check the data basis for consistent references. The system generates a test log which contains general messages, warnings and an error report for one or all aspects.

Caution

This function has a negative influence on response times where large volumes of data are concerned. You are recommended to perform individual tests (one aspect or section) where possible.

Note

This function is not normally required.

Data Transfer

The tools listed in this section are used for the reorganization of objects in the data transfer and for generating the summarization programs.

Define aspect summarization

In this step, it is possible to generate a program and table entries which make it possible to summarize an aspect in itself (or in another aspect). You can thus carry out the following:

- Data can be transferred from one version to another.
- Master data has changed. The records with the transaction data have the old master data characteristics and must be reorganized.

- Transaction data can be transferred from an old aspect into a new aspect.

The generated program uses the interface for transferring transaction data. This means that a transfer structure and transfer rule must be maintained. The transfer rules can be predefined. If data from one aspect is copied into the same aspect again (e.g. when the version is changed), the user only needs to maintain one transfer rule manually and to enter the new aspect in the transfer structure.

The generated program is handled like a normal sender program during the transaction data transfer. You can choose the name of the program yourself or it can be derived from the program name RKCDMxxx, where 'xxx' represents the aspect. Thus, transfer program "RKCDM001" is created for the aspect "001 Profitability Analysis".

Example

You want to summarize data from aspect 901 in aspect 9. To do this, generate a summarization program for aspect 901. The program receives the name RKCDM901. You also need to generate the transfer structure. You must maintain the transfer rules manually. Before you maintain the transfer rules, enter aspect 9 in the transfer structure on the maintenance screen. Now maintain the transfer rules.

Further notes

Ideally aspect summarization programs are regenerated in each system. You can transport the transfer rules into another system using Transport of settings.

Reorganize/Check consistency of data transfer

In this step, you can check and restore the consistency of the data transfer rules, sender structures and monitor entries. This function is particularly important if you have changed the structure of an aspect and rules still exist for fields which no longer exist.

Data

This section contains functions with which you can process data.

Reorganize comments

In this step you carry out a reorganization of the comments.

You can provide various objects with comments. If you delete these objects at a later date, the relevant comments are not automatically deleted at the same time. Using this function, you can reorganize comments on reports, the field catalog, key figures, master data, system control parameters, pictures and report portfolio reports. You can let the reorganization run in the test first.

Activities

If you delete objects that have been provided with comments, carry out a reorganization of the affected objects.

Reorganize Documents

In this step, you carry out the reorganization of your documents.

For performance reasons the presence of a document in the master data is saved in the master data. If documents are saved for master data, but the document indicator is not set, or the document indicator is set but no document is saved, you can set the document indicator correctly with this function.

Requirements

You only need this function if you establish that documents on master data are not found.

Activities

If documents on master data are not found, you carry out a reorganization of the documents.

Information System (EC-EIS)

The tools listed in this section are used for deleting objects in the info system that are no longer needed.

Convert reports

Enhancements in a new release sometimes mean that the internal structures of reports have to be converted. Further details can be found in the release notes. If conversions are necessary in a new release, the system issues a message when you call up a report.

Requirements

When you convert a report, the old structure is not deleted automatically. Check that the report runs correctly with the new structure and then delete the old structure under step 'Delete reports'.

Activities

If a release note or a system message require a conversion, perform the conversion after the release upgrade.

Import Delivered Settings

In this activity you can copy objects delivered by SAP (such as forms or reports) into the current client.

Transport Settings

In this step, you create a transport request for transporting into a target system.

After you have made the EC-EIS or EC-BP settings, you can place all the objects which belong to these settings (table entries, data elements, domains, tables etc.) onto one transport request.

The source system collects all the dependent objects and places them onto a transport request. After they have been imported into the target system, the necessary generations are carried out automatically to activate the settings from the source system.

Requirements

The source and target systems must have the same SAP release (maintenance upgrade). **Recommendation**

In this step, you create a transport request which is based on the current settings. For this reason, you should not add any new SAP-EIS objects or make any other settings while the transaction is running. It is possible to perform the following two steps separately: 'Create transport request' (what is to be transported) and 'Export' (database copy). If you make further settings between the time you create the transport request and perform the export, the changed objects will be processed, however, no new objects will be accepted in the transport request. This can lead to inconsistencies in the target system after the import.

You are therefore recommended not to make further changes to settings in EC-EIS or EC-BP between these two steps.

When the objects are collected for the transport request, the system cannot test which of the objects to be exported already exist in the target system. This means that objects can sometimes be imported and overwrite objects created in the target system. To avoid such problems, you are recommended to set up a single source system from where you can send to one or more target systems. However, you should not create any new EC-EIS or EC-BP objects (aspect, characteristic, key figure etc.) in the target system.

Activities

- Make the basic settings for the transport (see "Further notes" below).
- Choose a transport object class.
- Enter a transport request.
- Choose the objects to be transported.

- Choose the dependent object classes.
- Transport the request.

Further notes

You can use the transport tool more effectively if you make certain basic settings to begin with. Choose **Goto -> Settings**. You can determine the request type, ask for a splitting of the transport into Workbench and Customizing requests, set a simultaneous transport of all language versions of the objects to be transported, and have the system create the required transport requests automatically. After you have carried out and saved these basic settings, the settings remain effective for all future transports - until you change the settings again.

Reports whose names contain special characters cannot be transported for technical reasons. To transport such reports, you need to create a new report without special characters using the original report as a reference (Copy from).

To guarantee the consistency of the entire system, some of the tables and table entries which are referenced in EC-EIS and EC-BP are not transported. Only those ABAP/4 development workbench objects generated in EC-EIS or EC-BP, and the table entries administrated in EC-EIS or EC-BP, and changed during configuration are transported. Any settings which can be made in EC-EIS or EC-BP but which also have effects outside the application are not transported. This is to protect the consistency of the target system.

The following lists contains the objects which are not transported:

- All non-EC-EIS/EC-BP master data tables
- Fiscal year variants
- Authorization objects
- Distribution keys
- Revaluation factors
- Forecast profiles
- Weighting groups
- Object dependent parameters
- Planning aid accesses

Transaction data is not transported either.

Transport of Distribution Key (EC-BP)

In this step you can determine which distribution key should be transported.

Activities WHATSAPP +255738656506 Enter the name of the distribution key which is to be transported.

Consolidation

This Implementation Guide (IMG) contains information concerning the customization of the SAP Consolidation component.

Define Global Parameters

In this step, you specify the global parameters that will apply to your Customizing settings. Nearly all of the following Customizing activities require that these parameters are set.

Requirements

The following global parameter fields exist:

- Dimension
- Version
- Consolidation chart of accounts
- Ledger.

Before you assign values to these parameters, these values must exist in the current system. You have the following options to do this:

- You can copy client 000.
- You can copy the standard system from client 000 to your client.
- You create the global parameter values prior to specifying them here. See the following steps.

Activities

Specify your global parameters.

Check Global System Settings

In this step, you can make specifications that apply to the global functions used in various areas of the **Consolidation** component. The settings you make here therefore apply throughout the system.

Standard settings

As a default in the standard system, SAP has made what it anticipates to be the most common settings for the use of the component.

Activities

If you want to use the functions of the system in a special way, change the default settings as required.

Add Characteristics

The SAP standard consolidation database includes various preset characteristics, such as the consolidation unit, the financial statement (FS) item, the subitem, etc. If the information requirements of your group demand additional fields, you can define your own socalled **custom characteristics**. This step shows you two ways to add characteristics to the consolidation database:

- You can add up to five subassignments to the FS item.
- You can add navigation attributes to the characteristic *consolidation unit*. The system then automatically assigns the same attribute to the characteristics *partner unit* and *investee unit* as well.

After adding a characteristic, the system generates the associated ABAP Dictionary objects and maintenance views.

To the consolidation database, you can also add characteristics based on structures that already exist in the SAP system (e.g. Region). However, you can also add characteristics, the structures of which still need to be generated.

Recommendation

Since custom characteristics extend the consolidation database, you should carefully examine which characteristics are to be added. SAP recommends, in particular, that you first finish creating the new characteristics, and that you make sure that want to use this set of data, before you activate the new characteristics and start the generation. This way you can avoid time-consuming deletions if a characteristic must be removed. Also, keep in mind that you can no longer delete a characteristic once you have posted data with the characteristic.

Example

- Examples of subassignments for FS items are the Product Group and the Geographic Region.
- An example of an attribute for consolidation units is the Company Type.

Standard settings

The standard SAP system already includes the following subassignments for FS items:

- Partner unit
- Subitem category and subitem
- Transaction currency
- Acquisition year
- Acquisition period
- Unit of measure

The standard SAP system already includes the following attributes for the consolidation unit:

Country

- Company
- Consolidation business area
- Profit center
- Controlling area

The attributes company, cons business area, profit center and controlling area are particularly useful when you use the integrated collection of reported financial data from your consolidation units.

Activities

- 1. Reorganize the field catalog. When this is done, the system copies the system field catalog into the customer field catalog. Choose *Extras -> Field catalog -> Reorganize*. If you use integrated collection of reported data, during the reorganization you should include SAP's standard attributes in the selection. Note that, initially, these attributes are not included in the Reorganization selection screen.
- 2. If desired, create one or more new characteristics.

Enter the technical name (field name) of the new characteristic. The technical name must begin with the letters "ZZ".

Also set the appropriate indicator to define how the structure of the characteristic is to be built.

Technical Background Information:

Description, type, and length are properties of characteristics that you can enter directly or define by assigning a data element or domain. Data elements and domains are ABAP Dictionary objects that act as a central store of table field properties:

- A data element defines the meaning of a field in business terms with texts and a reference to a domain.
- A domain describes the technical properties of the field and defines permissible values for the characteristic if either of the following conditions is met:
- There is a list defining fixed values
- There is a reference to a check table

Normally data element and domain assignments are used to refer to check tables. You can, however, create a characteristic without any validation or texts by assigning a standard domain (for example CHAR07, NUM12).

Ways to create a characteristic:

a) Assigning a data element

Activate this indicator and assign a data element. The domain assignment is made by assigning the data element.

Note: If you run the elimination of IU profit/loss in transferred inventory and the system reads the required additional financial data from the totals database, you need to create the characteristic "product group" and assign it to data element FC_PRGRP.

b) Assigning a domain

Activate this indicator, then specify the meaning and assign a domain. By assigning a domain you define the type and length of the characteristic, and possibly you refer to fixed values or a check table.

- c) Referencing a characteristic Activate this indicator, then specify the description and set a reference to another
 - characteristic. This has the effect of assigning the domain of the referenced characteristic.
- d) Creating a characteristic with a new data element and check table

Activate this indicator, the specify the description, type (character or numeric), and length (1-32). The system generates a new check table for the characteristic.

e) Creating a characteristic without a check table (using a standard domain) Activate this indicator and specify the description, type (character or numeric), and length (1-32). The system does not generate a check table.

Caution: Assigning data elements or domains does not itself ensure that validation, reading characteristic value texts, and Possible Entries Help will work as expected. The following conditions must be given:

- The domain must have a check table or fixed values.
- There must be either a text table with references to the check table, or the texts must be in the check table itself.

These conditions are always fulfilled by fields in the standard field catalog.

3. If needed, define compound relationships between characteristics in the detail screen of Characteristic Maintenance.

Some characteristics are dependent on other characteristics; that is, the values of dependent characteristics are meaningless in theabsence of values for independent characteristics. Such a relationship is called a characteristic compound. Technically, a check table then contains a key that consists of two parts.

Example: The *Region*, a dependent characteristic (check table T005S), forms a compound characteristic with the *Country*, an independent characteristic, because a region can be maintained or interpreted only if a country is specified.

Note the following restrictions when defining compounds:

- Compounds can only be defined for characteristics that have a check table. When a data element/domain is assigned, a compound is predefined by the existing check table.
- Compounds can only be defined while creating a dependent characteristic. You do this by specifying the independent characteristic in the detail screen.
- Only single compounds are permitted. Multiple compounds cannot be made.
- The compound must be defined while creating a new characteristic, and before the new characteristic is saved. This is because the save process generates the check table for the characteristic.

Note: You do not use characteristic compounds to create regular assignments between two fields (such as, consolidation unit A having the local currency USD). Rather, a compound characteristic describes the structural dependency of one field on another (as in FS item 1111 in cons chart of accounts 01 being a different item than FS item 1111 in cons chart of accounts 02).

- 4. Specify further properties of the characteristic:
 - Define the display options and the sequence number of the characteristic for reports and so forth.
 - Activate the *Subassignment* indicator for all characteristics used as subassignments for FS items.
 - Activate the *Fixed value in breakdown category* indicator for all subassignments whose value is determined by the breakdown category (e.g., as with the characteristic *subitem category*).

- Activate the *Default value* indicator if applicable. Then the characteristic appears in the implementation step Define Default Values. A default value is not necessary and cannot be set if you activate the *Fixed value in breakdown category* indicator
- 5. Enhance the checking specifications if needed:
 - For characteristics without a standard check table, you can enter a text table, a text field, and a long text field. The text fields must use the field type *character*. You can also specify a view name, usually a view of the check table and text table.
 - If the system fails to automatically determine the transaction codes for displaying and changing the master data, you can specify them manually.
- To the characteristic *consolidation unit* assign any newly created characteristics as an attribute. Only independent characteristics can be assigned as attributes to consolidation units. These attributes are used for sorting your consolidation units.

Note: Prerequisite for assigning attributes is the reorganization of the field catalog, that is, you need to have copied the field catalog into the customer field catalog. To do this, choose *Extras -> Field catalog -> Reorganize*.

- 7. Save and activate the new characteristic.
 - The Save process stores the new data and, if applicable, creates new tables and views in the ABAP Dictionary.
 - The Activation process sets the status of the tables, views, data elements, etc. to "active". It also generates the objects that are necessary to enable the consolidation functions to process the new characteristics.

You can activate several characteristics in one step by choosing characteristic maintenance of all characteristics in the initial screen, selecting and activating the inactive characteristics.

8. After activating the characteristic, you are asked whether to generate the view modules. Confirm the generation.

If you exit Characteristic Maintenance and want to ensure that all view modules were generated correctly, choose *Environment -> View maintenance modules -> Reorganize*.

 Assign the new characteristics to field groups, if applicable.
 Field groups are groupings of characteristics. These let you structure the fields in the field catalog. Individual fields may belong to multiple field groups.
 Further notes

Choose Extras -> Log display to display the logs for the activities Save, Activate and Delete.

Master Data

In this section, you set up master data for Consolidation.

Define Dimensions

In this section, you define the dimensions that you require for your consolidation purposes. You typically use one dimension for each consolidation type. This is not a requirement, however. Multiple consolidation types can reside in a single dimension.

Example

You might need a dimension for company consolidation, one for business area consolidation, and one for profit center consolidation.

Recommendation

SAP recommends that you only manage one consolidation type per dimension.

Standard settings

In the standard system, one dimension is set up for each of the following: company consolidation, business area consolidation, and profit center consolidation. A freely-definable dimension is also preset.

Dimension-dependent settings predefined in the standard system, such as tasks, methods, and so on, are only maintained in the dimension for company consolidation. If you use other dimensions, you can copy the predefined settings by copying the dimension for company consolidation.

Activities

Create any new dimensions that you require in addition to those preset.

Further notes

You can display the master data of the defined dimensions, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Define Versions

You can use various versions in the Consolidation component in order to:

- Simulate consolidation using different financial data, control parameters, and master data
- Perform consolidation using different categories of data, such as actual and plan data
- Restate financial reports

In this step, you define the versions you require. The version concept in the SAP component encompasses various "version modules" that enable you do mangage data simply and efficiently. For more information on the version concept, see the Consolidation documentation in the SAP Library.

Standard settings

An actual and a plan version are preset in the standard system. Both versions use the same special versions, with the exception of the special version for exchange rates.

Activities

Decide whether you need other consolidation versions in addition to the ones supplied in the standard system. If necessary, define a new version:

1. Make the appropriate technical settings.

- 2. If you want to use the consolidation version as an add-on version, enter a base version, the data from which you want to include in reports run for the add-on version.
- 3. If you do not want to make use of the add-on function, specify the consolidation version as the base version.
- 4. Assign special versions to the consolidation version. You can enter existing special versions or new ones. The system automatically creates any new versions you specify. For the special version 'Structure', you can specify a base structure version.

Further notes

- You can use the copy function to help you create any new versions you require.
- You can display the master data of the defined versions, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Currencies

In this section, you ensure that the currencies used by your corporate group exist in the system, and define one or more ledgers.

Check Currencies

In this step, you make sure that the following currencies are defined:

- All the currencies in which your consolidation units report financial data to group headquarters
- The currency in which your consolidated financial statements are created

Standard settings

All standard currencies are preset in the standard system.

Activities

Check the currencies preset in the standard system, and add any others that you require.

Define Ledgers

In this step, you define one or more standard ledgers for Consolidation.

You need multiple ledgers if you consolidate consolidation groups in different currencies, since each ledger can be managed in one ledger currency only. This currency must be identical to the group currency.

Example

If you want to consolidate one consolidation group in USD, and another in DEM, you need one ledger with ledger currency USD and one with ledger currency DEM.

Standard settings

The ledger 1C with currency USD is preset in the standard system. You use this ledger as a template for creating your own ledger. Do not use 1C for consolidation.

Activities

- 1. Make a list of currencies in which you manage your consolidation groups.
- 2. Create a ledger for each of your group currencies.
- 3. Specify the valuation of the ledger. You can choose between legal, group, and profit center valuation. Legal valuation is most commonly used. You only need a different valuation if you are integrating Consolidation with a transaction application. Note that only currencies with the same valuation as the ledger can be transferred into the consolidation processing ledger, and, more specifically:
 - For realtime update, the data is posted to the ledger that has the same valuation as the currency concerned.
 - Rollups can only take place between ledgers that use the same valuation. Currency determination therefore only reads values with this valuation.
 - Periodic extracts select values from the consolidation staging ledger (ledger 09). This ledger has a legal valuation. If you use periodic extract as a data transfer method, the consolidation processing ledger must also have a legal valuation.
- 4. Make the following settings:
 - Determine whether it will be possible to do realtime updates from the General Ledger system.
 - Specify whether it will be possible to roll up data from other ledgers.
 - Specify whether line items (journal entries) will be managed in the ledger. The *Write line items* indicator refers to journal entries from realtime updating. You should therefore only set this indicator if you use this data transfer method.

Bear in mind the advantages and disadvantages of setting this indicator Journal entries can be helpful if you need to subsequently post FI data. The system recognizes from the journal entries which documents have already been posted to the consolidation processing ledger. However, journal entries generate a large volume of data, since each document that is created in General Ledger Accounting is created in parallel in the consolidation processing ledger.

- Specify whether the ledger will be productive. Note that you cannot delete transaction data from a ledger marked as productive.
- 5. As the second currency, select the currency of the consolidation unit. As the third currency, select the group currency or the ledger currency; if you select the ledger currency, also specify the currency key.

Organizational Units

In this section, you define the organizational units that exist within your corporate group.

The Consolidation component is based on the following organizational units:

- Dimensions

- Hierarchy of consolidation groups
- Consolidation groups
- Consolidation units

This structure enables you to flexibly map your actual groups structures onto objects in the system. **Example**

The following structure of organizational units is conceivable:

- Dimension: Company consolidation
- Hierarchy of consolidation units: Corporate group by regions, with four different hierarchy levels enabling you to divide the consolidation group "World" into regions Consolidation groups:
- Consolidation group "World" on the highest level (top consolidation group)
- Consolidation groups "America" and "Europe" on the second level
- Consolidation groups "North America", "South America", "Northern Europe", and so on, on the third level
- Consolidation units: Companies on the lowest level

Consolidation Groups

In this section, you define the consolidation groups in your dimension.

You can maintain consolidation groups in various ways:

- From within the hierarchy of consolidation groups
 This method allows you to create and maintain consolidation groups using a hierarchy graphic.
- Individually
- By making mass changes to master data of existing consolidation groups.

Furthermore, you can define your own consolidation frequencies in this section if the consolidation frequencies preset in the standard system do not meet your requirements.

Define a Logical File Name

You need to define logical file names in order to transfer data using data transfer method 'flexible upload' or 'offline data entry'.

Logical file names are used to determine the physical file path in which data is stored. Logical file names and physical file names have the following relationship: You assign a logical file path to a logical file name. Depending on the individual operating system, a physical file path can be assigned to this logical file path.

In this step you make the following assignments:

- 1. Definition of logical file names and paths that are cross-client This involves the following steps:
 - involves the following steps:
 - Define logical file paths.
 - Here you define logical file paths that are cross-client.

- Assign physical file paths to logical file paths.
 You make assignments using syntax groups, to which individual operating systems are assigned. These syntax groups must already exist.
- Define logical file names that are cross-client.
- When defining a logical file name, you enter the name of the logical file, a short description, the physical file name, data format "ASC", and the logical path name. You may also want to specify the application area. This allows a more precise determination of the use of the file name, but is not an extra function in itself.

In general, you specify a variable for the physical file name. The variable can consist of several reserved words, which are replaced with current values during the upload. See the field documentation. Here a sampling of a few reserved words:

, <date></date>	Date reflected by SY-DATUM
, <client></client>	Client reflected by SY-MANDT
, <param_1></param_1>	Dimension and cons unit

,<PARAM_2> Fiscal year and period

For example, you might specify the filename "<PARAM_1><PARAM_2>.txt". When creating the upload files, you must ensure that the reserved words will produce the predefined naming conventions. For example, if you want to upload a file that represents dimension 01, cons unit A01, fiscal year 1998 and period 003, the name of the file must be "01A011998003".

If you always upload files into SAP from only one operating system, e.g. MS-DOS, you do not need to use a logical file path. Instead, when defining the logical file name, enter the entire physical file path for the physical file name, for example,

"c:\temp\<PARAM_1><PARAM_2>.txt". You do not enter a logical file path. Then the system determines the physical file path via the logical file name. For further information, see the documentation for the step Cross-client maintenance of filenames and paths in the Basis Implementation Guide.

2. Definition of logical file names that are client-specific

Before you maintain a file name for a specific client, you first must have completed the steps listed in point 1. The file name must be created in a cross-client fashion before client-specific maintenance can take place.

As with the logical file name, in client-specific maintenance you enter a short description, the physical file name, data format "ASC" and the logical path name.

See also the documentation concerning step Additional client-dependent filename maintenance in the Basis Implementation Guide.

Requirements

Syntax groups must already exist for the applicable operating systems.

Standard settings

The logical file path *ECCS_PATH* and the logical file name *ECCS_FILE* are preset in the standard system.

Activities

First, do the activities described in "Definition of logical file names that are cross-client", including each of the sub-activities. Then, do the activities described in "Definition of logical file names that are client-specific".

Further notes

- In the master data of consolidation units, assign a logical file name to each unit, which collects data using flexible upload or offline data entry. Also, determine if the upload file resides on the application server or the presentation server. If any of this information is not defined in master data, it must be entered each time the data transfer is executed.
- You can use an analysis to find out more about definitions already created in the system. To do this, run the step Run analyses in the Basis Implementation Guide.

Maintain Hierarchies

In this step, you maintain consolidation groups and their units within the hierarchy of consolidation groups.

If Consolidation is integrated with General Ledger Accounting or Profit Center Accounting, you must generate the consolidation units and groups from the organizational units used in these transaction applications. See the section 'Copy organizational units.'

Example

The following consolidation hierarchies are conceivable:

- In a dimension for company consolidation, you could define one hierarchy for consolidation to meet your legal requirements, and another hierarchy for internal consolidation purposes.
- In a dimension for business area consolidation, you could define a hierarchy with consolidation groups comprised of companies and another hierarchy with consolidation groups comprised of business segments.

Requirements

You have created a dimension in the step Define dimensions.

Activities

- 1. Choose the activity **Maintain number ranges for sets of cons groups/units** Create the number range 01 for the object **FIMC_SETNR**. The system requires this number range in order to allocate set numbers when generating sets (see step 2 .f).
- 2. Choose Maintain consolidation group hierarchies, and proceed as follows:
 - a) To create consolidation group hierarchies, place the cursor on the dimension and choose "Org. unit -> Create".

In the dialog box, enter the name and description of the hierarchy.

Note: You can create multiple consolidation group hierarchies in a single dimension. Furthermore, a consolidation group can be included in more than one hierarchy. This enables you to structure consolidation groups to meet different requirements within a single dimension.

By double-clicking on a hierarchy, you can access its master data. If you specified the use of hierarchy levels in the master data, you can assign these levels to the hierarchy. To do this, choose "Goto -> Assign levels".

Using the "Check" function, you can make sure that you entered a valid name without invalid symbols.

b) To create a consolidation group, place the cursor on the consolidation group hierarchy or on the upper-level consolidation group in a hierarchy, and choose "Org. unit -> Create".

Enter a name and description for one or more consolidation groups in the dialog box that appears.

If desired, from the dialog box you can go directly to master data maintenance for the first consolidation group you enter. Your settings in the master data are automatically copied to the other groups in the dialog box.

Furthermore, you always have the option of accessing master data by double-clicking on an organizational unit.

- c) Create consolidation units for each consolidation group (as described in 2 b).
- d) If you have created organizational units in the steps Maintain consolidation groups individually or Maintain consolidation units individually, you can insert entire ranges of the organizational units into the hierarchy. To do this, choose "Org. unit -> Create range".
- e) If you want to change the structure of a hierarchy after you have created groups and units, you can do this by reassigning these organizational units as follows: Select the groups or units that you want to reassign by choosing "Edit -> Select/deselect".
 Place the cursor at the position to which you want to move the organizational unit(s). Choose "Org. unit -> Reassign".
- f) Using the hierarchy information, the system can generate sets of consolidation groups and units for Report Writer reports. To generate these sets, choose "Edit -> Generate".
 If you change the hierarchy, the system allows you to regenerate sets.

Note on transport

- Hierarchy maintenance does not support transports in this R/3 release.
- In order to transport number ranges (see step 1), choose "Interval -> Transport" in number range maintenance. Your number range objects are automatically transported.

Maintain Consolidation Groups Individually

As well as maintaining consolidation groups from within the hierarchy of groups, you also have the option of creating and maintaining them individually.

Individual maintenance is particularly useful if you want to access the master data of a consolidation group that you have already created. For example, you might only want to go into the master data to change an indicator or entry in a field.

When you create a consolidation group in individual maintenance, only master data for that group exists initially. In order to establish hierarchical relationships between groups and units, you need to assign your consolidation units to consolidation groups, and also consolidation groups to other consolidation groups.

Activities

Maintain your consolidation groups individually, as required.

Further notes

- You can use the SAP enhancement "FMC10001" to develop your own screens for maintaining master data. These screens can contain additional fields that belong to tables you have defined yourself.

If you want to do this, choose the activity **Define enhancement**. After the enhancement project is activated, you will be able to go to your custom screen from within master data maintenance.

For more information, see the documentation provided in the Enhancement transaction. Note that you need to have a working knowledge of the ABAP language in order to implement enhancement projects.

- You can display the master data of the defined consolidation groups, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Carry Out a Mass Change

You can use this step if you want to modify the master data records of several consolidation groups in the same way. You can carry out a mass change in one step, replacing old master data values by new master data values.

Example

You might want to change the consolidation frequency for a number of consolidation groups. **Activities**

- 1. Specify which consolidation groups are to be included in the mass change within a dimension:
 - Specify a group as a hierarchy node: By default, all of the lower-level groups will be included in the mass change.
 - Specify a group as a hierarchy node and include only a specific range of lower-level groups.
 - Specify a range of groups.
- 2. Specify the version and time period.
- 3. As old values, specify the master data values to be changed.
- 4. As new values, specify the new master data values that are to replace the old values. Alternatively, you can delete old values by setting the appropriate indicator.

Copy Cons Groups from File using Flexible Upload

As an alternative to manually creating consolidation units in the system, you can copy consolidation groups from a PC file in this step. In order to indicate the data format of the file, you need to define an upload method in the SAP System. You can then copy the consolidation units.

Standard settings

An upload method is preset in the standard system.

Activities

Proceed as follows:

1. Specify the file format in an upload method. Check whether you can use the preset upload method for this.

Since the master data of consolidation groups and consolidation units is similar, the same procedure for defining an upload method is used as for consolidation units. For detailed information, refer to the documentation Upload Method for Consolidation Units.

2. Copy the consolidation groups from a data file to the SAP System.

If you have already defined master data for a cons group in the SAP System, note that if master data for this consolidation group is subsequently uploaded, all the "old" master data for the group is overwritten. You therefore cannot use an upload merely to adjust certain elements of the master data.

Further notes

If you have copied consolidation groups and units to the SAP System using a flexible upload, you also need to create consolidation group hierarchies. You have the following alternatives to do this:

- Manual entry of the consolidation group hierarchies
- Collect Consolidation Group Hierarchies with Flexible Upload Collect Consolidation Group Hierarchy from Data File

Collect Consolidation Group Hierarchy from File

Use

After transferring the consolidation groups and consolidation units into the SAP System using flexible uploads, you still need to set up consolidation group hierarchies. As an alternative to manually maintaining hierarchies or to transfers with flexible uploads, you can collect hierarchy information from a data file into the SAP System. Note that this interface is **not** a flexible upload, instead this interface requires a **predefined fixed** file structure.

Building a File for Uploading Consolidation Group Hierarchies

The file must use the following format in order to transfer consolidation group hierarchies into the SAP system:

- The fields of the file must be separated by one of the following separators:
- Semicolons (;)
- Tabs (ASCII code 9)
- The first row (header row) must contain the fields Dimension, Consolidation Version, Year, and Period.
- The remaining rows (data rows) represent the hierarchies from top to bottom. Here we distinguish between a row that declares a new hierarchy and the subsequent rows that reflect the entries in that hierarchy. A row that declares a new (partial) hierarchy must contain the fields Hierarchy and Top Consolidation Group. The rows for hierarchy entries must contain the following fields in the order listed here:
- Consolidation group
- Consolidation group or unit

- Year of first consolidation
- Period of first consolidation
- First consolidation at end of period
- Organizational change at first consolidation (indicator) see remark 1
- Organizational change at first consolidation see remark 1
- Year of intention of sale *see remark 3*
- Period of intention of sale see remark 3
- Year of discontinued operations see remark 3
- Period of discontinued operations see remark 3
- Year of divestiture accounting
- Period of divestiture accounting
- Divestiture accounting at beginning of period
- Organizational change at divestiture accounting (indicator) see remark 1
- Divestiture accounting due to merger *see remark 2*
- Parent indicator

Remark 1: The file may contain the fields for an organizational change only if the "Organizational Change" function is activated in system utilization for consolidation of investments. Remark 2: The file may contain the "Divestiture Accounting Due to Merger" field only if the "Merger Activities" function is activated in system utilization for consolidation of investments. Remark 3: The file may contain the "Year of Intention of Sale", "Period of Intention of Sale", "Year of Discontinued Operations", and "Period of Discontinued Operations" fields only if the "Assets Held for Sale" function is activated in the dimension being used.

The rows must be arranged in the same way as they would appear in the fully expanded hierarchy display of manual creation. Hence, each group is always exploded in the subsequent rows down to the units before the next group is listed. A new hierarchy can be started only once the preceding hierarchy is complete.

A hierarchy is recognized as such only if there is no consolidation group in the SAP System that has the same name.

- Blank rows are ignored, but also permitted.
- All hierarchies, consolidation groups and units that occur in the file must already exist in the system. However, it is not required that the top consolidation group already be assigned to the hierarchies being loaded. This can be done by the upload itself.
- The date of first consolidation is optional. If this field is blank, the corresponding year and period values are taken from the header row.
- Indicator-like fields in the data record can be set to ' (space character) or 'X'. The parent indicator is optional. **Example of the Structure of a Text File**

Abbreviations used:

Hn: Hierarchy CGn: Consolidation group Cnnnn: Consolidation unit 01;100;1999;012

H1;CG1

CG1;C9000;2000;003;	;X;123	345;9999;999;	;X;X
CG1;CG2; 2000;003;	; ;	;9999;999;	; ;
CG2;C1000;2000;003;	; ;	;9999;999;	;X;
CG2;C2000;2000;003;	; ;	;2002;006;	; ;
CG2;C2200;2000;006;	; ;	;2002;009;	; ;

Requirements

You have created the consolidation units and consolidation groups in the SAP System.

Activities

- 1. Create a file that contains the hierarchy information according to the structure mentioned earlier.
- 2. Choose Collect Consolidation Group Hierarchies.

The file information can be written only if it is fully consistent. If errors are found in update mode, the system automatically switches into test mode.

The system only uploads complete hierarchy information for a given combination of dimension, version, year, and period. The upload replaces any hierarchy data that already exists in the SAP System. However, the upload does not affect hierarchy data that belongs to time periods that precede the date specified in the header row.

Define Consolidation Frequencies

In this step, you can define consolidation frequencies. You only need to do this if you perform consolidation at intervals that are not covered by the frequencies preset in the standard system.

Standard settings

Consolidation frequencies are preset in the standard system for annual, semi-annual, quarterly, and monthly consolidation.

Activities

- 1. Find out at which intervals in time consolidation will be run.
- Check the consolidation frequencies preset in the standard system, and maintain the descriptions and period intervals as required. NOTE: There may be no gaps between individual period intervals within a consolidation frequency.

Further notes

You can only start consolidation posting for a consolidation group in the last period of a period interval.

- You can display the master data of the defined consolidation frequencies, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Consolidation Units

As with consolidation groups, you can maintain consolidation units in various ways, too:

- From within the hierarchy of consolidation groups
- Individually
- By making mass changes to the master data of existing consolidation units

In this section, you can maintain consolidation units individually, make mass changes, maintain tax rates and define reasons for inclusion in and exemption from consolidation. If you want to maintain units from within the hierarchy, choose Maintain hierarchy.

Define a Logical File Name

You need to define logical file names in order to transfer data using data transfer method 'flexible upload' or 'offline data entry'.

Logical file names are used to determine the physical file path in which data is stored. Logical file names and physical file names have the following relationship: You assign a logical file path to a logical file name. Depending on the individual operating system, a physical file path can be assigned to this logical file path.

In this step you make the following assignments:

- 1. Definition of logical file names and paths that are cross-client This involves the following steps:
 - Define logical file paths. Here you define logical file paths that are cross-client.
 - Assign physical file paths to logical file paths.
 You make assignments using syntax groups, to which individual operating systems are assigned. These syntax groups must already exist.
 - Define logical file names that are cross-client.
 - When defining a logical file name, you enter the name of the logical file, a short description, the physical file name, data format "ASC", and the logical path name. You may also want to specify the application area. This allows a more precise determination of the use of the file name, but is not an extra function in itself.
 - In general, you specify a variable for the physical file name. The variable can consist of several reserved words, which are replaced with current values during the upload. See the field documentation. Here a sampling of a few reserved words:

, <date></date>	Date reflected by SY-DATUM
, <client></client>	Client reflected by SY-MANDT
, <param_1></param_1>	Dimension and cons unit

,<PARAM_2>

Fiscal year and period

For example, you might specify the filename "<PARAM_1><PARAM_2>.txt". When creating the upload files, you must ensure that the reserved words will produce the predefined naming conventions. For example, if you want to upload a file that represents dimension 01, cons unit A01, fiscal year 1998 and period 003, the name of the file must be "01A011998003".

If you always upload files into SAP from only one operating system, e.g. MS-DOS, you do not need to use a logical file path. Instead, when defining the logical file name, enter the entire physical file path for the physical file name, for example,

"c:\temp\<PARAM_1><PARAM_2>.txt". You do not enter a logical file path. Then the system determines the physical file path via the logical file name. For further information, see the documentation for the step Cross-client maintenance of filenames and paths in the Basis Implementation Guide.

2. Definition of logical file names that are client-specific

Before you maintain a file name for a specific client, you first must have completed the steps listed in point 1. The file name must be created in a cross-client fashion before client-specific maintenance can take place.

As with the logical file name, in client-specific maintenance you enter a short description, the physical file name, data format "ASC" and the logical path name.

See also the documentation concerning step Additional client-dependent filename maintenance in the Basis Implementation Guide.

Requirements

Syntax groups must already exist for the applicable operating systems.

Standard settings

The logical file path *ECCS_PATH* and the logical file name *ECCS_FILE* are preset in the standard system.

Activities

First, do the activities described in "Definition of logical file names that are cross-client", including each of the sub-activities. Then, do the activities described in "Definition of logical file names that are client-specific".

Further notes

- In the master data of consolidation units, assign a logical file name to each unit, which collects data using flexible upload or offline data entry. Also, determine if the upload file resides on the application server or the presentation server. If any of this information is not defined in master data, it must be entered each time the data transfer is executed.
- You can use an analysis to find out more about definitions already created in the system. To do this, run the step Run analyses in the Basis Implementation Guide.

Maintain Consolidation Units Individually

In this step, you can create and maintain consolidation units individually.
Individual maintenance is particularly useful if you want to access the master data of a consolidation unit that you have already created. For example, you might only want to go into the master data to change an indicator or entry in a field.

When you create a consolidation unit in individual maintenance, only master data for that unit exists initially. In order to establish hierarchical relationships between groups and units, you need to assign your consolidation units to consolidation groups.

Activities

Maintain your consolidation units individually, as required.

Further notes

- If you want to specify a reason for inclusion or exclusion in the master record, or if you want to specify a characteristic value for a custom attribute, you need to have defined these values beforehand. You can do this in Define Reasons for Inclusion or Exclusion and Custom Attributes: Define Values.
- You can use the SAP enhancement "FMC10001" to develop your own screens for maintaining master data. These screens can contain additional fields that belong to tables you have defined yourself.

If you want to do this, choose the activity **Define enhancement**. After the enhancement project is activated, you will be able to go to your custom screen from within master data maintenance. For more information, see the documentation provided in the Enhancement transaction. Note that you need to have a working knowledge of the ABAP language in order to implement enhancement projects.

- You can display the master data of the defined consolidation units, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Carry Out a Mass Change

You can use this step if you want to modify the master data records of several consolidation units in the same way. You can carry out a mass change in one step, replacing old master data values by new master data values.

Example

You might want to change the financial data type for a number of consolidation units.

Activities

- 1. Specify in which dimension and which consolidation group you want to select the units for the mass change. If applicable, select only a range of units.
- 2. As old values, specify the master data values to be changed.
- 3. As new values, specify the new master data values that are to replace the old values. Alternatively, you can delete old values by setting the appropriate indicator.

Assign Tax Rates

You may need to allocate deferred income taxes when posting standardizing entries and consolidation entries. In the definition of the document types used for these entries, you determine how deferred taxes will be posted.

Before posting deferred taxes, you need to maintain tax rates for your consolidation units. The system calculates the deferral as follows:

- Standardizing entries use the tax rate of the consolidation unit.
- Two-sided entries use a composite tax rate.
- Consolidation-group-based consolidation entries use the tax rate of the upper unit.

In this step, an overview of the tax rates of all consolidation units is displayed, and you can maintain the rates as required. Alternatively, you can maintain the tax rates directly in the master data of each individual unit.

Activities

If you want to post deferred income taxes, maintain the tax rates for your consolidation units.

Copy Cons Units from PC File by means of Flexible Upload

Instead of creating consolidation units in the system, you can use this step to copy them from a PC file. You need to define an upload method in the SAP System in order to specify the format of data to be uploaded from the file. You can then run the upload.

Standard settings

An upload method is predefined in the standard system.

Activities

Procede as follows:

- Check whether you can use the upload method predefined in the standard system. If not, specify the data format in a new upload method.
- Copy the consolidation units into the SAP System from the file.

Define upload method

An upload method specifies the data format of a file from which you want to upload consolidation units into the SAP System.

Example

The consolidation units in the following Excel file are to be uploaded into the Consolidation application:

#1	Dim	CU Ve	ers. Country Desc		Eff.Yr	Eff.Prd	L/Cur
#2	Lang.	ang. Short Medium text					
1	01	S1 100	DE Galaxy 1	998	012	DEM	
2	DE	Galaxy	Galaxy Möbel				
2	EN	Galaxy	Galaxy Furniture				
1	02	S1-01 100	DE G/Leim 1	998	012	DEM	
2	DE	G/Leim	Galaxy Leim				
2	EN	G/Glue	Galaxy Glue				
			-				
1	02	S1-02 100	DE G/Holz 1	998	012	DEM	
2	DE	G/Holz	Galaxy Holz				
2	EN	G/Wood	Galaxy Timber				
			·				
1	01	S2 100	US SuperN 1	998	012	USD	
2	DE	SuperN	Super Nova Feuerwerk	k	012	0.5.5	
2	EN	SuperN	Super Nova Fireworks				
Notes on the file structure							
		THE DE DELLE					

- The file contains more than one header row. These are identified by record type 1. The layout of the header rows is described in the comment row that begins with '#1'.
- Data rows exist for each header row. The layout of the data rows is described in the comment row that begins with '#2'.
- The file is stored as file type "Text (tabs separation)", and has the extension "txt".

An upload method could be defined in SAP as follows:

- 1. A method is created with a name of up to 5 characters (e.g., UPLCU),
- 2. The following general characteristics are defined:
 - a) The method uses variable column widths.
 - b) The field separator is the tab character "T", which coincides with file type "Text (tabs separation)".
- 3. The following fields are selected from the "Remaining fields" area:
 - a) The 'Dimension', 'Consolidation unit', 'Version', 'Country', 'Description 1', 'Effective year', 'Effective period', and 'Local currency' fields are moved to the "Header row" area.

b) The 'Language key', 'Short text' and 'Medium text' fields are moved to the "Data rows" area.

Activities

File

Check the structure of the upload file. When file the is created, ensure that the system is able to identify the rows. The system uses the first digit to identify the rows:

- Row type 1: Leading digit is **1**

These rows are identified as header rows. Header rows contain data that is valid for all of the data rows that follow. Such data might be the dimension and the language key. Upload files can contain several header rows, each followed by data rows.

Row type 2: Leading digit is **2** These rows are identified as data rows of a flexible layout. They follow the header row and their layout is identical. You can include in the rows any fields that are available in the upload method definition (see below).

Upload Method

Define an upload method for the file:

- 1. Create a new method with a meaningful text.
- 2. Define the general characteristics for the data structure (column width and field separator).
- 3. The *Remaining fields* area lists all of the fields that belong to the master data of consolidation units. Choose the appropriate fields for the file and move these to the *Header row* area or the *Data rows* area. Note that the fields highlighted in gray must be used (Dimension, Version, Effective year, Effective period, Consolidation unit, Language key, and Short text). Note: You can use the field help to display information on the fields. The following applies for each of the above areas:
 - a) Header row

In order to be recognized, each header row must contain the leading digit **1** (as described above).

Find out which fields are in the header row of your file, and move these into the "Header row" area. Make sure you move them in the same sequence as they appear in the file from left to right.

b) Data rows

In order to be recognized, each data row must contain the leading digit **2** (as described above).

Find out which fields are in the data rows of your file, and move these to the "Data row" area. Make sure you move them in the same sequence as they appear in the file from left to right.

Note: You move a field by selecting it, (choose *Edit -> Select*), placing the cursor on the target area, and choosing *Edit -> Move*.

Further notes

- Rows with a leading digit other than 1 or 2 are interpreted as comment rows.
- The master data of consolidation units has different dependencies:
- Master data such as the Name is only dependent on the Consolidation Unit it defines.

- Master data such as the Data Transfer Method is dependent on the Consolidation Unit and the Version.
- Master data such as the Financial Data Type is dependent on the Consolidation Unit and the Effective Year.
- Master data such as the Tax Rate is dependent on the Consolidation Unit, the Version, the Effective Year, and the Effective Period.

You must take these dependencies into consideration when designing your upload file: If you upload for a given consolidation unit master data for different versions or time periods, you must make sure that the master data dependent on time periods or versions is identically repeated in the data rows.

Example:

Say, the data rows contain the following fields: consolidation unit, language, short text, effective year, effective period, version, data transfer method, financial data type, and tax rate.

You insert the following values into the data rows:

2 E1 EN Unit1 1998 001 100 U 1 40.0000

2 E1 EN Unit1 1998 001 200 P 1 42.0000

2 E1 EN Unit1 1998 001 100 U 2 44.0000

2 E1 EN Unit1 1998 001 200 P 2 41.0000

Copy consolidation unis

Once the upload method is defined, you can copy the consolidation units into the SAP System.

Activities

Upload the consolidation units.

Further notes

Note the following if master data for a consolidation unit already exists in the SAP System: Uploading the master data (again) for such a consolidation unit overwrites the "old" master data. Thus, you cannot use the upload to merely maintain a portion of the master data at a later point in time.

Define Reasons for Inclusion in/Exemption from Consolidation

For information purposes, you can specify a reason for inclusion in or exemption from consolidation for each consoldation unit.

In this step, you can define these reasons for inclusion and exemption.

These reasons can be assigned to consolidation units in their master data.

Example

One or more of the consolidation units in your dimension may not necessarily be included in the consolidated financial statements of your corporate group. If this is the case, you could define a reason for exemption and assign it to these units in their master data.

Standard settings

Various reasons for exemption are preset in the standard system.

Activities

If you want to assign reasons for inclusion in and/or exemption from consolidation to your consolidation units:

- 1. Find out why the consolidation units in your dimension are included in or exempt from consolidation.
- 2. Check the reasons predefined in the system, and add any others that you require.

Further notes

You can display the master data of the defined reasons for inclusion in or exemption from consolidation, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Define Display Options for Inactive Consolidation Units per Cons Group

Use

You use this activity to have the system visually mark with gray-colored type those consolidation units and groups that are inactive in the consolidation group hierarchy. The system considers the following as inactive:

- Consolidation units whose globally-set period lies outside of their consolidation time range.
 Specifically, this is when the globally-set period of the consolidation unit in the given consolidation group is prior to the date of first consolidation or after the date of divestiture accounting.
 The system automatically shows these consolidation units as inactive. Thus, the user does not need to make any settings for these consolidation units.
- Consolidation units which, for technical reasons, need to remain assigned to their original consolidation group after (horizontal or vertical) total transfers have taken place, and similar cases.

Note: After a **horizontal or vertical** total transfer of a consolidation unit to a **higher-level** consolidation group, you can remove the consolidation unit from its original consolidation group at the beginning of the next fiscal year. (A horizontal total transfer is between two consolidation groups at the same hierarchy level, whereas a vertical total transfer is between two consolidation groups at different hierarchy levels.)

By contrast, when a **vertical** total transfer takes place into a consolidation group, which is **subordinate to** the currently-assigned consolidation group, the consolidation units must remain assigned to the original consolidation group until they have been totally divested in the new consolidation group.

- Consolidation groups that exclusively contain inactive consolidation units.

Which periods are inactive always depends on the dimension and version currently set in the global parameters.

Standard settings

The table for the definition of inactive consolidation units and groups is delivered empty. Therefore, all consolidation units and groups in the hierarchy are displayed as active.

Activities

Start the activity and insert the desired periods of inactivity for the consolidation groups and for the consolidation units **directly assigned** to the respective consolidation group. To set an entire consolidation group as inactive - including all consolidation units that are directly assigned to it, enter an asterisk (*) for the consolidation unit.

For your reference, the system shows the current global parameters that apply to your settings.

Custom Attributes: Define Characteristic Values

In Customizing step Add Characteristics you can extend the consolidation data structure with socalled custom characteristics. For example, you can define characteristics that are assigned as attributes to the characteristic *consolidation unit*. Then the system automatically assigns the attribute to the characteristics *partner unit* and *investee unit*.

In this step you define the characteristic values for the custom attributes.

Example

You could define the characteristic *consolidation unit type* and assign it as an attribute to the characteristic *consolidation unit*. You could then enter the following characteristic values:

- CU Type Description Long Text
- 01 Production Production firm
- 02 Sales Sales firm
- 03 Services Services firm
- 04 Finance Financial institution

Activities

Define the characteristic values for the custom attributes of the consolidation unit.

If the characteristic already exists and was just added as a new characteristic, the system shows a list of the components that feature a maintenance program for the characteristic values. In this list you can go to the respective Customizing activities. In order to maintain the characteristic values, you need to have the respective authorizations for maintaining master data in these components.

Further notes

For every custom attribute which you have created with a new check table, you can load the values into the system via flexible upload. In screen Select Custom Characteristics for Value Maintenance choose the menu entry Characteristic-> Flexible Upload. You can define the upload methods via the menu entry Environment -> Upload Methods.

Organizational Change

Determine Consolidation Groups for Organizational Changes

Use

In this step you define in which consolidation groups, and from which period on, it is possible to perform organizational changes. Each entry you make also applies to lower-level consolidation groups. Thus, you only need to enter the highest consolidation group (top consolidation group) to allow for organizational changes in an entire branch of the consolidation group hierarchy.

Define Organizational Change Numbers and Sender-Receiver Relationships

Use

In this activity you define organizational changes, in which investment holdings are transferred between two consolidation units within the same consolidation group.

To organizational changes you assign pairs of receiving and sending consolidation groups along with the period this takes effect. In any case, you need to create the standard organizational change 99999. This is used when no explicit entries exist for the sender and receiver group, and the sender-receiver relationship is automatically determined. The assignments for the standard organizational change may not include an effective period.

Financial Statement Items

The component **Consolidation** uses its own charts of accounts, which are usually prescribed by corporate headquarters.

You can define multiple charts of accounts for your consolidation purposes. This enables you to create consolidated financial statements using charts of accounts which comply with different legal requirements, for example the German Commercial Code and US GAAP. Furthermore, you can create charts of accounts for internal accounting purposes, for example contribution margin accounting.

You can create define consolidation charts of accounts as follows:

- Use the consolidation charts of accounts preset in the standard system and make any additions and modifications that are necessary.

- Create your own charts of accounts manually.
- Copy charts of accounts from existing structures in transaction systems.

Consolidation charts of accounts are valid in all dimensions.

There are two ways of maintaining the financial statement (FS) items in a consolidation chart of accounts:

- From within the hierarchy of items
- Individually

User-Defined Consolidation Chart of Accounts

This section contains information about how to manually create your own consolidation charts of accounts using item hierarchies.

Note: If you create your own charts of accounts instead of using the consolidation charts of accounts supplied by SAP, a great deal of Customizing work is required for financial statement items. For example, you will need to specify differential items.

Define Consolidation Chart of Accounts

In this step, you define the consolidation charts of accounts that you want to use.

Standard settings

The following consolidation charts of accounts are preset in the standard system:

Acctg std	Sector	IS version	ARE
Comment			
US GAAP Ind	dustry	Cost of sales	B/S see 1.
EU dir. Indu	stry	Period acctg	I/S see 1.
EU dir. Indu	stry	Period acctg	B/S see 1.
JP GAAP	Industry	Cost of sales	B/S see 2.
Comments:	-		

- 1. In the standard system, subsequent Customizing definitions (for example, data entry layouts) have been made using financial statement items that correspond with these charts of accounts.
- 2. The chart of accounts for Japanese GAAP contains English item texts.

Activities

You have the option of making a copy of an existing chart of accounts by choosing the activity "Change chart of accounts". Within the activity, choose "Chart of accts -> Copy".

Define your own charts of accounts here, if you do not want to copy an existing one.

Further notes

You can display the master data of the defined cons charts of accounts, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Edit Item Hierarchies of Consolidation Chart of Accounts

In this step, you can maintain the financial statement items in a consolidation chart of accounts from within the FS item hierarchies. In this screen, you can create and maintain both items and item hierarchies, and also maintain master data.

Example

You create FS items in a chart of accounts for company consolidation to meet your statutory requirements.

You split the chart of accounts into the two item hierarchies "Balance Sheet" and "Income Statement".

In the "Balance Sheet" hierarchy, you create the totals items "Fixed Assets" and "Current Assets". Beneath these items, you create value items or lower-level totals items, and so on. **Requirements**

You have created the chart of accounts in the step Define Consolidation Chart of Accounts.

Activities

Maintain the FS items in the consolidation chart of accounts as follows:

- To create an item hierarchy, place the cursor on the chart of accounts and choose "FS Items -> Create".
 In the dialog box that appears, enter the name and description of the hierarchy. You can create multiple hierarchies simultaneously.
 You can use the "Check" function to make sure that you entered a valid name, which only uses valid characters.
- To create an item in a hierarchy, place the cursor on the hierarchy and choose "FS Items -> Create". As in the previous step, enter a name and description for one or more items in the dialog box that appears.

You can then go directly from the dialog box into master data maintenance for the first item you enter. The master data you define for the first item is automatically copied to the other items listed in the dialog box.

You can create totals items to extend the hierarchy structure of your chart of accounts.

- 3. If you create items in single maintenance, you can insert entire ranges of these items into the hierarchy. To do this, choose "FS Items -> Create Ranges".
- 4. If you want to change the structure of a hierarchy after you have inserted the items, you can do this by reassigning the items as follows:
 - a) Select the items that you want to reassign by choosing "Edit -> Select".
 - b) Place the cursor at the position to where you want to insert the items.
 - c) Choose "FS Items -> Reassign".

- 5. To go to and maintain an item's master data, double-click on the item.
- 6. If you change the master data for an item, the system runs consistency checks when you save the hierarchy, to see if any existing transaction data is affected. The system deals with the problems of changes to master data as follows:
 - a) If you assign a different breakdown category to an item, changes to subassignments may be necessary. A conversion of the transaction data is necessary depending on the breakdown type of the subassignments. The system lists in a dialog box a statistic about the data to be converted, and if applicable, prompts you to enter values for the subassignments. After saving the entries in this dialog box, the system converts the data. If a conversion is not possible, then you have to change the breakdown category.
 - b) You cannot delete an item if transaction data already exists for that item.
 - c) If standardizing entries or consolidation entries have been posted to an item, you can no longer change the item's where-applied indicator from "asset item", "liability item", or "income statement item" to "statistical item", or vice versa.

You can run these checks before you save by choosing "FS Items -> Consistency Check". Similar checks are made if you change breakdown categories in other customizing steps or if you delete subitems.

Note: You can deactivate the consistency check in step Check Global System Settings.

7. Using the hierarchy information, you can generate sets of FS items for Report Writer reports. To generate these sets, choose "Edit -> Generate Item Sets".

If you change the hierarchy, the system automatically prompts you to re-generate sets.

Maintain FS Items Individually

In this step, you can maintain the FS items in the consolidation chart of accounts individually.

Individual maintenance is particularly useful if you want to access the master data of an item that you have already created. For example, you might only want to go into the master data to change an indicator or entry in a field.

When you create an item in individual maintenance, only master data for that item exists initially. In order to include an existing item in an item hierarchy, you need to create it once again in the hierarchy.

Activities

Maintain your FS items individually, as required.

Further notes

You can display the master data of the defined financial statement items, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Carry Out a Mass Change

This step can be useful if you want to change the master data of several FS items in the same way. You can perform a mass change all in one step, replacing old master data definitions with new ones.

Example

You may want to change the FS item category for a number of FS items.

Activities

- 1. Specify the consolidation chart of accounts, in which the items are to be changed. If desired, specify a range of items.
- 2. For the old values, specify the master data values that are to be changed.
- 3. Specify the new master data values, which are to replace the old values. There is also an option to only delete the old values.

Define Item Categories

In this step, you define the FS item categories that you require. You can assign these to FS items in their master data.

FS item categories have an informational purpose. However, they are also used in the definition of document types to indicate that items of a certain category cannot be posted to when that particular document type is used.

Example

You could define an item category "Key figure", and specify that document types for standardizing and consolidation entries cannot post to this category of item.

Activities

Define the FS item categories that you require.

Further notes

You can display the master data of the defined FS item categories, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Copy FS Items from Integrated Application

As an alternative to (a) using a Consolidation chart of accounts that is delivered by SAP in the standard system, and (b) manually creating a consolidation chart of accounts, you can copy the financial statement items from a Chart of accounts or from a financial statement version in Financial Accounting. A help function is available for this.

Copying a consolidation chart of accounts from a chart of accounts or a financial statement version is especially helpful when you use the integration feature of consolidation to collect financial data from transaction applications.

Activities

See section Integration: Preparations for Consolidation -> Preparations in the Consolidation System -> Tools: Cons Chart, Group Chart, Financial Statement Version.

Copy FS Items from PC File by means of Flexible Upload

In this step, you can copy FS items from a file into the SAP System. You need to define an upload method in the SAP System in order to specify the format of data to be uploaded from the file. You can then run the upload.

Standard settings

An upload method is predefined in the standard system.

Activities

Procede as follows:

- Check whether you can use the upload method predefined in the standard system. If not, specify the data format in a new upload method.
- Copy the FS items into the SAP System from the file.

Define upload method

An upload method specifies the data format of a file from which you want to upload financial statement items into the SAP System.

Example

The FS items in the following Excel file are to be uploaded into the Consolidation application:

Row	type	Chart	La	nguage			
1		01	EN				
Row	type	FS ite	m	Туре	Sign	Used	Short text
2		100000		2	+	А	Total Assets
2		100100		2	+	А	Inventory
2		110000		2	+	А	Cash & Equivalents
2		110100		1	+	A	Cash
2		110200		1	+	A	Securities etc.
Row	type	FS ite	m	Lang	. Lon	g text	
3		110000 etc.		EN	Cas	h and	Cash Equivalents
Row	type	FS ite	m	From	То		
4		01		BS			
4		BS		1000	000		
4		10000	0	1001	100		
4		10010	0	1100	000		
4		110000		110003	1 11	0999	
etc.							

Notes on the file structure:

- The header row (row type 1) contains the consolidation chart of accounts 01.
- The data rows of row type 2 contain (an excerpt of) the FS items of consolidation chart 01, with master data as well as the short text. The medium text is not shown here in order to simplify the example.
- The data row of row type 3 contains the long text of FS item 110000 because this long text differs from the medium text.
- The data rows of row type 4 show the item hierarchies.
- If the same totals item is used in two or more different hierarchies, the information concerning this totals item is transferred if this item is used in a different place.

An upload method could be defined in SAP as follows:

- 1. A method is created with a name such as UPLIT.
- 2. The following general characteristics for the method are defined as follows:

- a) The method uses variable column widths.
- b) The field separator is the tab character "T", which specifies the file type "Text (tabs separation)".
- 3. The following fields are selected from the "Remaining fields" area:
 - a) The 'Cons chart of accts' and 'Language key' fields are moved to the "Header row" area.
 - b) The 'FS item', 'Item category', 'Dr./Cr. sign', 'Where-used indicator', 'Short text', and 'Medium text' fields are moved to the "Data rows" area.

Activities

File

Check the structure of the upload file. When the file is created, ensure that the system is able to identify the rows. The system uses the first digit to identify the rows:

- Row type 1: Leading digit is 1

These rows are identified as header rows. Header rows contain data that is valid for all of the data rows that follow. Such data might be the cons chart of accounts and the language key. Upload files can contain several header rows, each followed by data rows.

- Row type 2: Leading digit is **2**

These rows are identified as data rows of a flexible layout. They follow the header row and their layout is identical. You can include in the rows any fields that are available in the upload method definition (see below).

- Row type 3: Leading digit is **3**

These rows are identified as data rows for uploading long texts. The layout of these data rows is fixed, and must contain the following columns:

- a) FS item
- b) Language
- c) Long text

If an item's long text consists of multiple lines, you need to provide a data row for each of the lines in the upload file. A maximum of 10 lines of long text can be uploaded per FS item.

The system uses the consolidation chart of accounts information provided in the rows of types 1 or 2, which precede the long texts, and associates this data with the long texts. Which row type is used, 1 or 2, depends on whether the cons chart data is provided in the header row or the data rows.

- Row type 4: Leading digit is **4**

These rows are identified as data rows for loading FS item hierarchies. The layout of these data rows is fixed, and must contain the following:

- a) FS item
- b) From item
- c) To item

In order to build item hierarchies, the system must be able to identify every hierarchy node. You can ensure this by using the following logic:

- In the first data row, specify the cons chart of accounts (top level node) in the FS item column. Specify the lower-level nodes in the 'From' column.
- In the next data row, specify the item hierarchy in the FS item column. Specify the top totals item in the 'From' column.

- Continue in this fashion until you reach the lowest hierarchy level.
- At the lowest level, specify the lowest totals item in the FS item column, and the corresponding range of value items in the From and To columns. Keep in mind the following:
- Item hierarchies can only be built for one cons chart of accounts per upload file.
- If more than one item hierarchy is to be built for a single cons chart of accounts, each item may occur in only one of those hierarchies.

Upload Method

Define an upload method for the PC file:

- 1. Create a new method with a meaningful text.
- 2. Define the general characteristics for the data structure (column width and field separator).
- 3. The *Remaining fields* area contains all of the fields that are available for uploading FS items. Choose the appropriate fields for the file and move these to the *Header row* area or the *Data rows* area. Note that the fields highlighted in gray must be used ('Cons chart of accts', 'FS item', 'Item category', and so on).

Note: You can use the field help to display information on the fields.

The following applies for each of the above areas:

a) Header row

In order to be recognized, each header row must contain the leading digit **1** (as described above).

Find out which fields are in the header row of your file, and move these into the "Header row" area. Make sure you move them in the same sequence as they appear in the file from left to right.

b) Data rows

In order to be recognized, each data row must contain the leading digit **2** (as described above).

Find out which fields are in the data rows of your file, and move these to the "Data row" area. Make sure you move them in the same sequence as they appear in the file from left to right.

Note: You move a field by selecting it, (choose *Edit -> Select*), placing the cursor on the target area, and choosing *Edit -> Move*.

Further notes

Rows with a leading digit other than 1, 2, 3, or 4 are interpreted as comment rows. **Copy FS items**

Once the upload method is defined, you can load the FS items into the SAP system.

Activities

Load the FS items.

Subassignments

In order to perform consolidation tasks, certain assignments must be made in transaction data. In addition to the assignment of the consolidation unit, FS item, fiscal year, period, and so on, the system supports the following subassignments:

- Partner unit
- Transaction currency Year of acquisition
- Period of acquisition
- Subitem category and subitem
- Unit of measure

Furthermore, as a customer you can define additional subassignments, so-called custom subassignments.

In this section you make the necessary settings for the subassignments you use.

Define Breakdown Categories

Depending on the FS items posted, different Subassignments are necessary for the transaction data.

For example, payables and receivables items require partner unit subassignments so that interunit payables and receivables can be eliminated. Some items require several subassignments, for example partner unit and transaction currency.

In this step, you group subassignments into breakdown categories, which you assign to FS items in their master data. Breakdown categories are defined for a particular chart of accounts.

When defining a breakdown category, the system offers you all standard subassignments and all custom subassignments. You specify the following per subassignment:

- Breakdown type

You determine through the breakdown category whether the FS item values should be expanded while creating and posting to this subassignment and how rigorously the system should check the account assignment of each subassignment. Inform yourself via the entry help about which breakdown types the system offers.

Fixed value

When you specify an optional breakdown or a required breakdown for the subassignments *Subitem category* and *Unit of measure*, then you enter a fixed value. This means that the characteristic value of the subassignment is determined by this value, to be precise for all FS items with this breakdown category.

In exactly the same way you enter a fixed value with custom subassignments, if you have specified this in the definition of this custom subassignment (see also step Add characteristics).

Default set

You can specify a Set for all subassignments with optional or required breakdown, which have no fixed values. The system draws these sets from the Online-entry and the Online-entry of reported data as default values for item breakdowns, provided that you have set this appropriately.

Fixed value

When you specify an optional breakdown or a required breakdown for the subassignments *Subitem category* and *Unit of measure*, then you enter a fixed value. This means that the characteristic

value of the subassignment is determined by this value, to be precise for all FS items with this breakdown category.

In exactly the same way you enter a fixed value with custom subassignments, if you have specified this in the definition of this custom subassignment (see also step Add characteristics).

 Default set You can specify a Set for all subassignments with optional or required breakdown, which have no fixed values. The system draws these sets from the Online-entry and the Onlineentry of reported data as default values for item breakdowns, provided that you have set this appropriately.

Standard settings

Various breakdown categories are preset in the standard system.

Breakdown category names consist of 4 freely definable numbers. Categories predefined in the standard system are named according to the following logic:

Position	Breakdown Value per Characteristic
1	Subitem Subitem category number
2	Partner 1 (breakdown type 4) or
	2 (breakdown type 3)
3	Currency 1
4	Year of acquisition 1

If a breakdown category is not intended for a breakdown by subitem, partner unit, transaction currency and/or year of acquisition, its digit has the characteristic value 0.

For example, the breakdown category "1200" has a breakdown by transaction types (subitem category 1) and a breakdown by partner units, which allows a default value.

Activities

Check the preset breakdown categories, and make any necessary additions or modifications.

Further notes

When you change breakdown categories, the system carries out consistency checks while saving. The system checks whether existing transaction data is affected. Changes could have the following effects:

- If you remove a subassignment from a breakdown category, the item values broken down by this subassignment must be balanced in the totals database. The system can do this automatically.
- If you add a new subassignment to a breakdown category, the affected transaction data must be broken down using this subassignment. According to breakdown type, the system either restarts the default value or asks you to enter values for the subassignments. According to the subassignment, it uses the following default values :
- Partner unit, subitem and custom subassignments (where the *default value* indicator is activated in Characteristic Maintenance):
 Default value (see Customizing step Define Default Values for Subassignments)
- Transaction currency: Local currency of the consolidation unit
- Year of acquisition: Valid year for the totals record Note: you can deactivate the consistency check in step Check global system settings.
- You can not delete a breakdown category which is used by an FS item.

You can display the master data of the defined breakdown categories, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Collect Breakdown Categories from File Using Flexible Upload

Use

In this step, you can collect the breakdown categories from a file into the SAP System. To let the system know which data format the file has, you need to define an upload method in the SAP System. Then you can import the breakdown categories.

Activities

Do the following:

- Define the format of the file in an upload method. See if you can use the predefined upload method for this purpose.
- Collect the data from the file into the SAP System.

Define Subitem Categories and Subitems

In this step, you can define subitem categories and subitems.

Subitems are dependent on the subitem category. Subitem categories are *not* dependent on the consolidation chart of accounts.

Example

You could require subitem categories for transaction types, regions or divisions. For the subitem category "Transaction types", you usually need the subitems "Opening balance", "Acquisitions", "Retirements", and so on.

Standard settings

In the SAP standard system, subitem categories are preset for:

- Transaction types for fixed assets
- Functional areas
- Regions
- Transaction types for provisions
- Transaction types for equity

Subitems are predefined for each subitem category that is provided with the consolidation charts of accounts in the standard system.

Activities

Specify which subitem categories and subitems you require. Check the subitems preset in the standard system and make any necessary modifications and additions.

Further notes

- You specify the length of the input fields in the step Check global system settings. They can be a maximum of 3 characters.
- You can display the master data of the defined subitem categories and subitems, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Copy Subitems from PC File by means of Flexible Upload

Instead of using subitems preset in the standard system or manually defining your own subitems, you can use this step to copy them from a PC file. You need to define an upload method in the SAP System in order to specify the format of data to be uploaded from the file. You can then run the upload.

Standard settings

An upload method is predefined in the standard system.

Activities

Proceed as follows:

- Check whether you can use the upload method predefined in the standard system. If not, specify the data format in a new upload method.
- Copy the consolidation units into the SAP System from the file. **Define upload method**

An upload method specifies the data format of a file from which you want to upload subitems into the SAP System.

Example

The subitems in the following Excel file are to be uploaded into the Consolidation application:

#1	SICat	Language				
#2	SU	Medium text	Sign	CF-SI		
Transaction Types for Fixed Assets						
1	1	EN				
2	100	Acq.Co	ost O/B +	100		

2	120 etc.	Acquisitions	+	100
Func	tional Areas			
1	2	EN		
2	0001	Sales	+	
2	0002	Marketing	+	
etc.				

Notes on the file structure:

- The file contains subitems that belong to two subitem categories: transaction types and functional areas.
- The file contains several header rows, which are identified by record type 1. The layout of the header rows is described in the comment row that starts with '#1'.
- A set of data rows belongs each header row. Their layout is described in the comment row that starts with '#2'.
- The file is stored as file type "Text (tabs separation)", and has the extension "txt".

An upload method could be defined in SAP as follows:

- 1. A method is created with a name like UPLSI.
- 2. The following general characteristics are defined:
 - a) The method uses variable column widths.
 - b) The field separator is the tab character "T", which coincides with file type "Text (tabs separation)".
- 3. The following fields are selected from the "Remaining fields" area:
 - a) The 'Subitem category' and the 'Language' fields are moved to the "Header row" area.
 - b) The 'Subitem', 'Dr./Cr. sign', 'Carryforward subitem', and 'Medium text'fields are moved to the "Data rows" area.

Activities

File

Check the structure of the upload file. When the file is created, ensure that the system is able to identify the rows. The system uses the first digit to identify the rows:

- Row type 1: Leading digit is 1
 These rows are identified as header rows. Header rows contain data that is valid for all of the data rows that follow. Such data might be the subitem category and the language key. Upload files can contain several header rows, each followed by data rows.
- Row type 2: Leading digit is 2
 These rows are identified as data rows of a flexible layout. They follow the header row and their layout is identical. You can include in the rows any fields that are available in the upload method definition (see below).
- Row type 3: Leading digit is 3
 These rows are identified as data rows for uploading long texts. The layout of these data rows is fixed, and must contain the following columns:

- a) Subitem
- b) Language
- c) Long text

If a subitem's long text consists of multiple lines, you need to provide a data row for each of the lines in the upload file. A maximum of 10 lines of long text can be loaded per subitem. The system uses the subitem category information that is provided in the rows of types 1 or 2, which precede the long texts, and associates this data with the long texts. Which row type is used, 1 or 2, depends on whether the subitem category is provided in the header row or the data rows.

Upload Method

Define an upload method for the PC file:

- 1. Create a new method with a meaningful text.
- 2. Define the general characteristics for the data structure (column width and field separator).
- 3. The *Remaining fields* area contains all of the fields that are available for uploading subitems. Choose the appropriate fields for the file and move these to the *Header row* area or the *Data rows* area. Note that the fields highlighted in gray must be used ('Subitem category', 'Language key', and so on).

Note: You can use the field help to display information on the fields.

The following applies for each of the areas:

a) Header row

In order to be recognized, each header row must contain the leading digit **1** (as described above).

Find out which fields are in the header row of your file, and move these into the "Header row" area. Make sure you move them in the same sequence as they appear in the file from left to right.

b) Data rows

In order to be recognized, each data row must contain the leading digit **2** (as described above).

Find out which fields are in the data rows of your file, and move these to the "Data row" area. Make sure you move them in the same sequence as they appear in the file from left to right.

Note: You move a field by selecting it, (choose *Edit -> Select*), placing the cursor on the target area, and choosing *Edit -> Move*.

Further notes

Rows with a leading digit other than 1, 2, or 3 are interpreted as comment rows.

Copy subitems

Once the upload method is defined, you can load the subitems into the SAP system.

Activities

Load the subitems.

Custom Subassignments: Define Characteristic Values

In step Add Characteristics you can extend the consolidation data structure with socalled custom Characteristics. For example, you can define characteristics that are assigned as Subassignments to the characteristic *financial statement item*.

In this step you define the characteristic values for the custom subassignments.

Example

You could define the subassignment *distribution channel* as an FS item characteristic. You could then enter the following characteristic values:

- Distr.Ch. Name
- 01 Direct sales
- 02 Wholesale
- 03 Retail
- etc.

Activities

Define the characteristic values for the custom subassignments.

If the characteristic already exists and was just added as a new subassignment, the system shows a list of the components that feature a maintenance program for the characteristic values. In this list you can go to the respective Customizing activities. In order to maintain the characteristic values, you need to have the respective authorizations for maintaining master data in these components.

Further notes

For every custom subassignment which you have created with a new check table, you can load the values into the system via flexible upload. In screen Select Custom Characteristics for Value Maintenance choose the menu entry Characteristic-> Flexible Upload. You can define the upload methods via the menu entry Environment -> Upload Methods.

Define Default Values for Subassignments

In this step you define the default values for the following characteristics:

- Partner unit
- Subitem
- Custom characteristics whose *default value* indicator has been activated in Customizing step Add Characteristics.

These default values are used when information is missing for the given characteristic and the breakdown type permits the use of default values.

Example

You might specify which default partner unit is to be inserted whenever the partner unit value is missing, for instance during the realtime update of reported financial data.

Standard settings

The standard system contains preset default values for the following subitems and subitem categories:

-	Ca	teg. Default	Description
-	1	120	Acquisitions
-	2	9999	Dummy functional area
-	4	999	Dummy region
-	5	520	Allocation
-	6	120	Equity acquisitions

Make sure you edit the defaults for the functional area and the region if these subitem categories are used.

Activities

Define the default values.

The default values for independent characteristics are entered in the overview screen, whereas those for dependent characteristics are entered in the detail screen, and one default is entered per dependency.

Note that you can only enter values that already exist in the system.

Specify Selected Items for Posting

For automatic entries, the system requires information about certain financial statement items. In this step, you specify the FS items that the system uses to post financial statement Financial statement imbalances and Deferred taxes.

You also specify a balancing adjustment item and several items for carrying forward retained earnings at fiscal year end.

The items you specify are only valid for the chart of accounts and consolidation version in the global parameters currently set for this Customizing activity.

Requirements

The items you specify here must already be defined in FS item maintenance.

Standard settings

The standard SAP system has predefined selected items for consolidation charts 01, 11 and 12.

Activities

- 1. Check the items that are already defined as selected items and make any necessary modifications.
- 2. If applicable, enhance the selected items with values for the subassignments. When defining the *Other items* you must enter a value for every subassignment that is contained in the breakdown category of the given selected item.

When defining the selected items for the automatic line items for financial statement imbalances and deferred taxes, you can use the *Default value* indicator to manipulate the subassignments as follows:

a) If the default indicator is NOT activated for a given subassignment, you must enter a value for the subassignment. In this case the system inserts this subassignment in the automatic line item.

Exceptions: If it concerns an optional breakdown, then you do not have enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If the default indicator is activated, the system checks whether the value can be clearly derived from the document. If so, this value is inserted in the automatic line item.
- c) If the default indicator is activated and the subassignment value in the document is ambiguous, the system proceeds as follows:

If a value is specified in addition to the default indicator, this value is inserted. If no value is specified in addition to the default indicator, then the default value specified in Add Characteristics is inserted. If not value is found there either and the item's breakdown category requires a breakdown, an error message is displayed.

Further notes

The selected items you specify here are valid for all automatic and manual entries in the Consolidation component.

Maintain Hierarchies for Characteristics

You can define hierarchical relationships for the characteristic values of your custom characteristics. These relationships can then be used for analyses in drilldown and interactive excel reports. Within one hierarchy you can only specify the values for one characteristic. Each characteristic value may appear in a hierarchy once only, that is each value must remain unambiguous within the hierarchy. For simulations you can create multiple hierarchy variants for each characteristic.

If different characteristics use the same master data table, only one hierarchy is permitted for these characteristics.

Example

You may want to portray a hierarchy of products or regions.

Activities

Define hierarchies of characteristic values if desired.

Define Sets

In Customizing for Consolidation, there are several instances where you need to maintain sets. For example, you need sets when you define data entry layouts, interunit elimination, currency translation methods, and so on.

Within the relevant Customizing activities, you are usually given the opportunity for maintaining sets. In this step you can define sets for all other cases.

Standard settings

The standard SAP system includes predefined sets for various uses.

Activities

Define the sets that you require.

Note on transport

In order to transport your settings, in set maintenance choose Utilities -> Transport.

Further notes

Set maintenance also features the following utilities:

- You can delete sets of items and organizational units that were generated during hierarchy maintenance. Choose *Environment -> Delete generated sets*.
- You can copy sets as follows:
- consolidation unit sets from dimension to dimension
- FS item sets from cons chart to cons chart subitem sets from subitem category to subitem category

Choose Environment -> Copy sets .

- You can display and print the master data of the defined sets. To print the master data, choose *Print* and enter the selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use List Viewer functions to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Data

Consolidated financial statements are created on the basis of financial data reported by consolidation units and any standardized financial data that is posted in the Consolidation application.

In this section, you make the necessary settings that enable you to:

- Collect data reported by consolidation units in Consolidation
- Post any necessary standardizing and correcting entries
- Translate currencies
- Check the consistency of data

In order to perform these activities, you define tasks, which can be executed in the Data Monitor. The Data Monitor can be accessed from the Consolidation application menu.

Data Monitor

The Data Monitor is used for the following:

- Monitoring the collection and standardization of financial data reported by the consolidation units in a dimension:

In order to ensure that these tasks are executed correctly, in general you need to execute them in a certain order. For example, data must be validated before it can be used for further tasks. It is also important to ensure that tasks can only be executed once the preceding tasks have been completed without errors.

This is controlled by the status management function which belongs to the monitor. However, it is also possible to run a provisional update for tasks:

- When you successfully run a task in update mode and the preceding tasks are not blocked, the monitor returns the task status "Pendent" (pending completion of preceding task).
- When you successfully run a task in update mode and the preceding tasks are blocked, the monitor returns the task status "Without Errors".
- Executing tasks:

All tasks can be started from the monitor, either in test or update mode. The tasks you want to execute must be contained in the task group assigned to the dimension, however. You also have the option of starting tasks individually from the application menu.

In this section, you define the settings for the Data Monitor. For each dimension, you define a task group that contains the tasks you require, and you define the order in which the tasks can be executed.

Furthermore, in step Check global specifications you make the following basic settings:

- You can deactivate Status Management to prevent the system from controlling the execution of the tasks.
- You can specify that the periods containing tasks you want to perform must be explicitly opened. If you don't specify this, the periods are open by default.

You cannot execute any tasks in closed periods. An authorization object is available for opening and closing periods, allowing you to assign the authorization to specific staff members.

Define Task Group

In this step, you define task groups for the data monitor. You assign the tasks that you want to want to execute in the monitor to these task groups. You can divide the task groups into: Global task group This is a task group which you assign to the dimension. You assign all tasks, which you need for the data collection process in total, to this global task group. Consolidation group dependent task group This is a task group, whose tasks represent a partial quantity of the global task groups. You assign this task group to one or more consolidation groups. When you enter the consolidation group in the global parameters while executing the data collection, then the consolidation monitor only shows the tasks of the consolidation group dependent task group. While defining consolidation group dependent task groups you must observe the following criteria: The first task of the consolidation group dependent task group must match the first task of the global task group. There must not be any gaps in the consolidation group dependent task group: the preceding task must be included for every task. This means in particular that you transfer the first task of the global task group into the consolidation group dependent task group. In general you require this restricted task group, so that an administrator can transfer, validate and, if required, convert the reported financial data, possibly with web access. When you assign and save the group in the master data of the consolidation group, then the system checks whether the consolidation group dependent task group meets the criteria. Note that the system does not carry out this check, if you

change the consolidation group dependent task group or the global task group later. If for example you change the sequence of the tasks in the global task group.

In general, all assigned tasks must also be executed for each of the consolidation units. The only exceptions to this are tasks for manual posting and data collection (which you can manually block without completing) and tasks that the system designates irrelevant for a unit.

Example

You could define a task group for the Data Monitor containing the following tasks: CARRY_FOR Data carryforward

DATA_INPUT Data collection
LOCAL_VAL Validation of reported data
MAN_POST Manual standardizing and correcting entries
CURR_TRANS Currency translation
CORP_VALID Validation of standardized financial data

Requirements

Tasks need to be defined before you can assign them to a task group. In the following IMG sections, you can define tasks for the individual consolidation activities. There is a link back to this step from the task definition steps in the individual sections.

Recommendation

Once you have started the consolidation process for a particular period, you **should not change** the task group you are using. Make sure that you have included all of the tasks you need in the task group before you begin your tasks.

Standard settings

The standard SAP system includes several task groups for the data monitor which can be used for various consolidation scenarios.

Activities

- 1. Check the predefined task groups and create a new one if necessary.
- 2. Assign tasks to the task group. Specify how each task will be handled in the monitor:

the system closes the milestone measures and goes to the next task.

- a) Specify whether you want the task to be automatically blocked once it has been completed without errors.
- b) Specify whether the task should be a milestone. This means that the system stops before this task with a successive execution (run successive tasks). In this way you get back control over the execution . For example it can make sense to specify measures for Online-entry or for manual posting as milestones.
 Nevertheless when you specify milestones you can still choose a successive task run, where the system does not stop before the milestone (run successive task without stopping). Instead
- c) Specify the order in which tasks that are at an equal position in the task sequence will be displayed in the monitor (see step 3). Specify which task should be carried out last in the data monitor. This task cannot have any preceding tasks. When you include the task for the

validation of the standardized financial data in the task group, then the system always regards this task as the last task in the data monitor. In this case you cannot select any other task as the task monitor.

- 3. Specify which task precedes each of the tasks. The following logic applies to the overall task sequence:
 - a) Status Management prescribes a mandatory task sequence. The tasks are allocated among seven internal blocks, the numbers of which dictate their sequence. However, the tasks within a block can be executed in any order. The internal blocks and their respective tasks are listed as follows:

Block Task

- 1 Carrying forward balances
- 2 Data collection
- 3 Validation of reported data
- 3 Item substitution/Retained earnings
- 3 Rollup into consolidation groups
- 3 Manual posting
- 4 Item substitution/Retained earnings
- 4 Preparations for change in consolidation group
- 4 Rollup into consolidation groups
- 4 Reclassification
- 5 Currency translation
- 5 Manual posting
- 5 Item substitution/Retained earnings
- 5 Preparations for change in consolidation group
- 5 Rollup into consolidation groups
- 5 Reclassification
- 6 Apportionment adjustment
- 6 Rollup into consolidation groups
- 7 Validation of standardized data
- 7 Rollup into consolidation groups

Status management also lets you execute custom tasks at any point in time. You can insert custom tasks into any of these 7 blocks.

Notes

The following tasks may appear only once in a task group - even if the preceding table shows tasks that can belong to multiple blocks: Carrying forward of balances, data collection, validation of reported data, currency translation, item substitution/retained earnings, apportionment, rollup to consolidation groups, validation of standardized data.

The tasks 'manual posting' and 'reclassification' can appear more than once in a task group. When this is true, they must have differing document types.

b) Due to business practice or for organizational reasons, it may also be necessary to specify a sequence within a block. To do this, you can assign preceding tasks, which must be blocked before you can execute a subsequent task.

Furthermore, with respect to the monitor you can define the order of tasks that are allocated to multiple blocks, but may only appear in one task group, by using a preceding task. For example, you might specify the 'data collection' task as the preceding task for the 'item substitution/retained earnings' task.

In order to insert custom tasks into a task group, you need to ensure the correct arrangement of these tasks by defining preceding tasks and, if needed, by specifying a number (see sub-step 2). (If you specify a number, you should assign a number for all tasks, taking into account the other conditions affecting the sequence.).

c) In part 2 of this step, you can specify the sequence in which the remaining tasks in a block are displayed in the monitor. The system displays any such tasks from left to right, according to their number.

The order above does not dictate the sequence in which you can execute the tasks, however. You can execute them in any order.

Further notes

- This Customizing activity is also included in the section Consolidation Functions for the Consolidation Monitor.
- You can display the master data of the defined task groups, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

This list and print function is also available for tasks (in the relevant task definition steps).

Assign Task Group to Dimension

Assign the task groups that you have defined for the data monitor and consolidation monitor to the dimension.

Activities

Assign the task group to the dimension for each version and period, effective as of a certain date.

Further notes

See the step Define period categories for further information on maintaining period categories.

Consolidation Cycle for Multi-Period Consolidation

You use multi-period consolidation if you want to consolidate over multiple periods.

Multi-period consolidation provides the following capabilities:

- In the data monitor and the consolidation monitor you can scroll among different periods within a consolidation cycle.
- When flexible upload is used, you can upload the reported financial data for several periods simultaneously.
- In the data monitor and the consolidation monitor you can perform the following functions across both monitors:
- Bundle and execute tasks
- Bundle the remaining periods of a consolidation cycle
- Initialize the status in the remaining periods
- Block or unblock tasks in the remaining periods

To activate multi-period consolidation, make the following settings:

- Create a consolidation cycle in step Define Consolidation Cycle.
- In step Assign Consolidation Cycle to Version, assign the cycle to a version and define the starting year of the cycle.

Define Consolidation Cycle

Activities

- 1. Create a consolidation cycle and enter a suitable description.
- 2. Assign one or more delta years to the consolidation cycle. Specify a consolidation frequency for each delta year.

The delta years determine the entire length of the consolidation cycle. The delta year is a two-digit number. The minimum number of delta years is "00" (which reflects the starting year). The consolidation frequency determines the valid periods of the consolidation cycle.

Further notes

In the next step, Assign Consolidation Cycle to Version, you assign each consolidation cycle to a version. **Assign Consolidation Cycle to Version**

You assign a consolidation cycle to a version.

Requirements

You created one or more consolidation cycles in step Define Consolidation Cycle.

Activities

Assign each consolidation cycle, which you have defined and want to use, to a version.

Specify a starting year and starting period in each consolidation cycle assignment. This determines when the cycle is to be valid in the assigned version.

Data Collection

Various methods are available for collecting reported financial data in the Consolidation component. In this section, you make settings for the methods your corporate group uses.

Online and Offline Data Entry

In this section you define the settings for Online Data Entry of financial data, which takes place in the SAP system, as well as Offline Data Entry of financial data, which is done with a PC entry program based on MS ACCESS.

Most of the settings apply to online as well as offline data entry. Additional settings are required for offline data entry.

Settings for Online and Offline Data Entry

In this section, you make the necessary settings for the entry of reported data both online and offline.

These settings are valid for all consolidation units and groups whose financial data you want to enter using these methods of data collection.

Activities

You define:

- financial data types
- data entry layouts
- data entry groups
- data entry profiles

Define Financial Data Types

You need to assign financial data types for consolidation units and groups whose financial data you enter online in the SAP System or offline using MS Access.

Financial data types enable you to make a distinction between different levels of detail for data and the reporters of the data.

The financial data types you create are valid in all dimensions, charts of accounts, and consolidation versions in your Consolidation system.

Example

If you perform company and profit center consolidation, data reported for the cons units included in company consolidation is different to that reported for the consolidation units included in profit center consolidation. You therefore require different financial data types.

Standard settings WHATSAPP +255738656506 One financial data type is preset in the standard system for each of the cons charts of accounts 01, 11, and 12.

In the step Define data entry groups, one data entry group is preset for each financial data type (in version 100 and period category 1). This group contains all the data entry forms for the cons chart of accounts concerned.

When you assign a particular financial data type to a consolidation unit, data for the unit can only be entered in those data entry forms that are assigned to the financial data type by means of a data entry group.

If you enter data for cons units in parallel using different cons charts of accounts, you can define a single financial data type, to which you assign a data entry group containing data entry forms for all of the charts of accounts concerned. When you start data entry for one of the units with this data type assigned, only those data entry forms can be used that are contained in the relevant data entry group and that have the same specified in their definition as you have set in the global parameters.

Activities

- 1. Find out if data for your consolidation units and group is to be collected at different intervals and/or with different levels of detail.
- 2. Define the appropriate financial data types.

Further notes

You can display the master data of the defined financial data types, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Assign Financial Data Types

You assign financial data types to those consolidation units and groups whose financial data you enter online in the SAP System or offline using MS ACCESS.

The system uses the financial data type to determine the data entry profile of a consolidation unit or group when you start data entry.

Activities

- 1. Decide:
 - Which consolidation units and groups you need to assign a financial data type to
 - Which financial data types are appropriate for each unit/group
- 2. Assign the financial data types.

Define Period Categories

You use period categories to group together those periods in a fiscal year for which you have the same requirements regarding data entry and consolidation.

Period categories enable you to:

- Use different data entry profiles in different periods for entering data reported by your consolidation units and groups.
- Assign different task groups to your dimension in different periods.

The period categories that you define are valid in all dimensions in the Consolidation application, and all consolidation versions.

Example

Your requirements could be as follows: You need to perform a simple consolidation each month, using summarized values, and a full half-year and end-of-year consolidation. You would define two period categories:

- Category "Summarized" with the months 1,2,3,4,5,7,8,9,10, 11
- Category "Detail" with the months 6 and 12

Standard settings

Various period categories are preset in the standard system.

Activities

Look at the preset period categories and modify them as required.

Further notes

You can display the master data of the defined period categories, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Enable Data Entry for Consolidation Groups

Since data entry for consolidation groups is not always a required function, you need to expressly allow it.

In this step, you specify the period categories for which data entry is allowed for a consolidation group. You do this for a particular version.

Example

You could specify that data entry for a consolidation group is allowed semi-annually.

Activities

- 1. Find out whether you need to enter data for any consolidation units.
- 2. Use period categories to determine the periods in which data entry is allowed.

Define Data Entry Layouts

Using data entry layouts, you can enter financial data reported by consolidation units online in the SAP System or offline using MS Access.

You can define various data entry layouts, depending on the group/unit for which you are entering data and the level of detail involved.

You define data entry layouts using the Report Painter tool. Only those functions of the tool that are relevant for the definition of the layouts are used. You also have the possibility to integrate **Microsoft Excel**: you can edit the defined entry layout with Excel functions and subsequently create them in Excel layout reported financial data.

Example

You could define the following layouts:

- Layout for the entry of balance sheet values
- Layout for the entry of income statement values
- Layout for the entry of quantities (for example number of employees)

You could define layouts for summarized values and layouts for detailed values.

Standard settings

Several **data entry layouts** are predefined in the standard system for consolidation chart of accounts 01, 11, and 12. There are no conventions for the naming of data entry layouts, however the following logic has been used for naming layouts in the standard system:

- The first two digits are the name of the chart of accounts for which the layout is assigned.
- After a hyphen, the next digit is the item type of the items for which data is entered in the data entry form (1 = assets, 2 = liabilities and stockholders' equity, 3 = income statement, 4 = other, 5 = quantities). This grouping is not always consistent, it is only intended as a means of orientation.
- The last four digits indicate the breakdown, in other words the most detailed or the most frequently used breakdown category for the items.

Example: 01-30000 Income statement

Item sets and subitem sets are also predefined for data entry:

- Predefined items sets are named using the following logic:
- The first two characters are "CS".
- The third and fourth digits correspond with the name of the relevant cons chart of accounts.
- After a hyphen, the next four digits indicate the contents of the set by reference to an item number. Example: CS01-1000 Balance sheet
- Predefined subitems sets are named using the following logic:
- The first two characters are "CS".
- The third and fourth digits are "01" (cons chart of accounts).
 - Subitems are not dependent on the cons chart of accounts; they are valid for all charts. However, if you use sets containing different subitems for different charts of accounts, for example, due to different statutory requirements, you can indicate the relevant chart of accounts using the third and fourth places.

The digits after the hyphen provide information about the contents of the subitem set by reference to the subitem or breakdown category.
 Example: CS01-1000 All transaction types for subitem category 1

Activities

Define your data entry layouts as follows:

Creation of a data entry layout

Enter the ID and description of the layout. You can use one layout as a template for creating another.

On the next screen, the layout master is displayed. One lead column and one value column are preset for data entry.

General data selection characteristics

Define the general data selection characteristics:

- 1. Choose "Edit -> Gen. selection data -> Gen. selection data".
- 2. In the next window select the characteristics fiscal year, period, version, dimension, consolidation unit and cons chart of accounts.

Note: As an alternative, you can enter the characteristics fiscal year, period and version during the definition of the value columns later on. This is especially useful when using comparison value columns (see below).

- 3. Enter values for the characteristics you selected, or activate the variables indicator
 - You always need to enter a value for the characteristic chart of accounts, since layouts are defined for a specific cons chart of accounts.
 - If you enter literal values for the characteristic partner unit when defining lead columns, you need to enter a value for the characteristic dimension. This is to enable the system to check that you have entered valid partner units for a particular dimension on definition of a layout. The layout is valid only for the dimension you specify here.
 If you enter a variable for the partner units, you can also enter a variable for the dimension.
 - For the characteristics fiscal year, period, version and consolidation unit you normally enter variables, which are derived from the values found in the global parameters and the specifications you make on the initial screen.

Only enter literal values for these characteristics if you want to further restrict the validity of your layout.

Header characteristics

Define the characteristics for the header of the layout:

- 1. Choose "Edit -> Gen. data selection -> Header layout...".
- 2. The general data selection characteristics that you previously selected are displayed. You can change their sequence, specify that they should be hidden, and redisplay them at a later date.

First lead column

Define the first lead column:

 Double click the lead column that is displayed. Various dialog boxes are displayed, in which you define the lead column.
2. Select the characteristic for the column. You can choose from the FS item, unit of measure and all subassignments (partner unit, subitem, transaction currency, year of acquisition, period of acquisition and all custom subassignments).

Note: If you choose a custom subassignment that is part of a compound and is dependent on another characteristic, you must also choose the other (independent) characteristic. For example, you need to choose both the characteristics region and country, if these are compound characteristics and the region is dependent on the country.

This does not apply to the characteristic subitem - you can choose the subitem without choosing the subitem category.

3. Enter values for the characteristic you selected.

- Characteristic: FS item

You can enter a single item, a range of items, or a set of items. Usually, you enter either a range or set.

You cannot enter a variable for this characteristic.

When entering data with this layout, if you want to display the FS item hierarchies, that is, the totals items, the characteristic value must contain an item set that was generated in Maintain item hierarchies for cons chart of accounts. Select the list of possible entries. Choose a single set. Names of single sets, which were generated by the system, contain the top totals item and end with '-0'. Note that you can only enter one item set. For example, if you consolidation chart of accounts contains the hierarchy "Balance Sheet" with the top totals items "Assets" and "Stockholders' Equity & Liabilities", you can only choose either the generated item set of asset items or the set of equity & liability items.

- Characteristics: Subitem, partner unit, transaction currency, year of acquisition, and custom subassignments

You can enter a single value, value range, set, or variable. The system proceeds as follows: If you enter a variable in place of a single value or a value range, you will need to enter a value for the variable when you start data entry.

If you enter a variable in place of a set, the system uses the sets that you specified in the breakdown categories of the items for which you enter data. The advantage of this is that you can use the breakdown category to control the default characteristic values for each breakdown. You can define a separate set of subitems, transaction currencies or years of acquisition per breakdown category.

Special procedure for the characteristic partner unit

For the characteristic partner unit, you can also enter a variable instead of a set. Note the following: Partner unit sets consist of a set prefix, a hyphen, and a set suffix. You specify the set suffix in the breakdown category, and the set prefix in the master data of the individual consolidation units.

The system forms a set using the set prefix and suffix, and by automatically inserting a hyphen.

The advantage of this procedure is that you can maintain different default partner unit values for different consolidation units, using the set prefix. You find out which business relationships exist, and create the appropriate sets. Each set has it own set prefix, the set suffix can be identical.

Note: The characteristic values for the subassignments are used as defaults in the data entry layout. In addition to the items included in the layout, you can also add new rows with additional breakdowns. The empty rows at the end of the layout are intended for this.

4. Edit the texts for the column heading. To do this, choose the icon "Change short, medium and long texts".

Also, determine the structure of the lead column. Click on the "Lead Column" button. You can specify how the characteristic value is displayed in the data entry layout: with its ID, its name, or both.

Example for characteristic FS item: Characteristic value displayed with

- ID: 1033030
- Name: Investments
- Combination ID/name: 1033030 Investments
- If you select ID and name, the lead column is shown with two columns in the entry layout.

Additional lead columns

Define any additional lead columns you require:

1. Choose "Edit -> Columns -> New lead columns".

Each new lead column is inserted in front of the other lead columns. When you define a new lead column, the system displays all the characteristics that you have not yet used for selection in a dialog box.

2. If necessary, change the sequence of the lead columns. Choose "Edit -> Columns -> Sort lead columns...". Usually you specify that the column with the characteristic FS item is the first column.

Defined rows in lead columns

You can also form your data entry layout by defining characteristic values per row in a lead column. Per row you can define one item value and a value for the subassignments used. In each row, select all subassignments you use and if necessary, fill them with the spacing character "#". For example, in the first row you could define the item 'Earnings from Affiliated Companies' and the product group 'Commercial Vehicles' as custom subassignment. In the next column you would define the item 'Earnings from Affiliated Companies' and the product group 'Cars'. For each row you should choose an explanatory text so that it is clear, which values are to be entered per row.

To define rows, position the cursor on the row in the lead column and double click.

First value column

Define the first value column:

- 1. Double click the value column that is displayed.
- 2. Select a key figure. You can select either group currency, local currency, transaction currency or quantity. In addition, you can select the characteristics version, year, period, item and subassignments under the following prerequisites:

The characteristics version, year and period are then offered in the selection, when you have not defined them in the lead columns.

For example, you could select the custom subassignment 'Product group' and enter an itemized value or a variable for it. This means that in the value column, only reported financial data should be entered for a certain product group, for example commercial vehicles.

But you could also define an item per value columns. You would then select a subassignment as lead column.

Attention: If you define different items in value columns, then the data entry layout is only allowed to consist of either one lead column, or of individually defined rows. The items must also have the same breakdown category.

3. Maintain the text for the column heading: Choose the icon "Change Short, Medium and Long Texts".

Additional value columns

Define any other value columns you require:

- 1. Double click the space next to the existing value column.
- 2. Choose one of the following: key figure, characteristic (see first value column), formula (see below) or attribute (see "Debit/Credit Sign").

 Sort the value columns if necessary. Choose "Edit -> Select" and then "Edit -> Selected area -> Move".

Debit/credit sign

In value columns, you can display the debit/credit sign as an attribute. The sign of the item or subitem is then displayed during data entry.

Comparison value columns for fiscal year, period or version

You perhaps want to create comparison value columns in addition to value columns. In these comparison value columns, comparison values to another fiscal year, to another period, or to another version would be displayed. But you can also create such comparison value columns to enter values, for example comparison values in a plan version.

Prerequisite for this is that the characteristics fiscal year, period and version are not defined as general selection characteristics.

Say, for example, you want the first value column to reflect the local currency values for the fiscal year, period and version that are currently set in the global parameters. The next column is to reflect the local currency values of the prior year for the same period, but for version 100. Here are the steps you would perform:

- In the first value column you select the key figure local currency, and you select the characteristics fiscal year, period and version.
 (The characteristics are listed because they are not defined as general selection characteristics.)
- 2. You set the variables for the characteristics characteristics fiscal year, period and version. (These variables are populated by the global parameters when you call up the data entry layout.)
- 3. You define the comparison column to the right of the first column. You choose the key figure local currency along with the characteristics fiscal year, period and version. You specify the following values for the characteristics fiscal year, period and version:
 - a) Fiscal year: variable 1 (= the prior year)
 - b) Period: variable
 - c) Version: 100

Note: You can use fixed values for characteristics fiscal year, period and version (for example, 100 for the version, or 1998 for the fiscal year), or you can determine the values using a variable or a simple formula.

To have the column heading show which fiscal year, period and version is being entered or displayed in the value column, you define the heading with variables that represent these characteristics:

- d) For example, you define the heading text as "HW $1/\frac{2}{3}$ ".
- e) You choose "Extras -> Variables -> Variables definition". The variables \$1, \$2 and \$3 are displayed as being text variables. For each variable double click the variable to go to the detail screen. There, you assign the desired characteristic to the variable, for example the fiscal year to variable \$1, the period to variable \$2, and the version to variable \$3.
- 4. Specify whether comparison columns should be entered: Choose "Formatting -> Ready for input Y/N".

Formulas

You can also specify a formula for the value column. For example, you could define a value column with a formula so that the column shows the difference between the values of the first value column (current local currency values) and the second value column (prior year local currency values).

Do the following: Create the third value column and choose the type "formula". An editor appears in which you can choose the parts of the formula: "ID of column 1" - "ID of column 2 "

Checking the data entry layout

Choose "Data entry layout -> Check". The system checks your layout for consistency, for example it checks amongst other things that no variables are set for the characteristics item and chart of accounts. This check is for informational purposes only. The system always checks the layout when you save it.

Saving the data entry layout

Finally, you save your data entry layout.

Processing the layout with Microsoft Excel Choose the step Define data entry groups for this. Further notes

Identification of variables

You can change the preset identifiers for variables. Choose "Extras -> Variables -> Characteristic value -> Identifier". If you enter variables for a value range for the characteristic partner unit, you could choose the following identifiers:

- Variable 1: "From" partner unit
- Variable 2: "To" partner unit

These identifiers then appear in the selection screen for data entry.

Locking the Data Entry Layout

When you start data entry, the system locks the layout to prevent other users from entering data simultaneously by accident. The system locks the combination of dimension, consolidation unit, cons chart of accounts, version, year and period. Furthermore, in step Check Global System Settings you can make sure that the data entry layout itself is also locked. If you do this, you are able to simultaneously enter financial data for a consolidation unit using different data entry layouts, as long as the FS items of these layouts do not overlap.

Note on transport

To transport your settings, choose the step Import or transport data entry layouts.

Import or Transport Data Entry Layouts

This step provides the following activities:

- You can import data entry layouts from a source client into a different client. This is particularly needed to copy the standard SAP layouts from client 000 into the client you work with.
- You can transport data entry layouts from system to system.
 This might be needed, for instance, when you want to transport data from a test system to a productive (live) system.

Activities

Import or transport the data entry layouts.

Define Scales for Monetary Amounts

Use

You scale currency amounts to help simplify the entry of currency amounts during online data entry.

Scaling can be set per combination of (a) special version for data entry and (b) currency key.

Depending on which scaling factor you choose, when entering amounts rather than entering the full amount you can enter an amount that is divided by:

- 10 (corresponds a scaling factor of 1)
- 100 (corresponds a scaling factor of 2)
- 1000 (corresponds a scaling factor of 3)
- and so on

Activities

- 1. Specify one or more currency keys.
- 2. Specify the following for each currency key:
 - The scaling factor that is, by which power of ten is the amount to be multiplied with internally
 - The number of decimal places that must be entered during online data entry
 - Which scaling factor is to be used for your entries:
 - the scaling factor from the layout settings
 - the scaling factor from the customizing settings in this step
 - the sum when the scaling factors from the layout and customizing settings are added together
- 3. Save you entries.

Example

Special version: Data Entry Version 100 (actual version) Scaling for online data entry:

- Currency: JPY (Japanese yen)
- Scaling factor: 3
- Decimal places: 0
- Scaling to be used: Customizing setting Result:

If you want to enter the amount 12,000 (twelve thousand) in yen, you only need to enter 12. The system internally converts the amount to 12,000.

Define Data Entry Groups

Data entry groups are used to collect together data entry layouts. Each data entry group contains the layouts that can be used to enter data for consolidation units and groups, provided the data entry profile allows this.

The data entry groups that you define are valid in all dimensions, charts of accounts, and versions in the Consolidation application.

Once you have defined data entry groups, you assign layouts to them. You can assign a layout to more than one data entry group.

With the help of the sequential number, you can arrange the layouts within the group, to get a better overview. In this section you can also decide, per assigned data entry layout, whether you want to use the **Excel integration**. If yes then, you edit the data entry layout with Excel functions.

Example

You might need the following data entry groups:

- Layouts for the entry of summarized financial data
- Layouts for the entry of detailed financial data

Standard settings

A data entry group containing all the data entry layouts supplied by SAP is preset for cons chart of accounts 01, 11, and 12 in the standard system.

Activities

Data entry groups and assignment of data entry layouts

- 1. Decide which data entry groups you need for your data entry profiles, and define them.
- 2. Decide which data entry layouts to include in the data entry groups, and assign them.

Excel integration

Check per assigned data entry layout, whether you want to use the Excel integration and, if required, set the indicator.

Note: To be able to use Excel integration in your planning, you must have the following installed on your PC:

- Windows NT 4.0 or Windows 95
- Microsoft Excel 97
- a current, SAPGui(32-Bit) which corresponds to your SAP release

If you want to edit the data entry layout with Excel functions, then select the layout and choose the pushbutton *Excel layout*. Proceed as follows:

- 1. In the SAP screen *Display data*, enter any consolidation unit whose data entry profile allows the processing of data entry layouts, and choose *Reported financial data*. This means that the Excel table sheet is started on the basis of the data entry layout. The data of the data entry layout are displayed in the upper left corner of the table sheet.
- 2. In order to be able to edit the table sheet, choose Settings -> Excel Layout.

- 3. You can now edit the table sheet. Note the following:
 - The first table sheet is protected. Only the rows which would also be ready for input via a SAP screen template, are excluded from this protection. Therefore if you want to use functions in Excel, which go beyond the processing of cells which are ready for input, then you have to remove the general sheet protection in Excel. You should activate the sheet protection in Excel again after processing.
 - Only move data within the table sheet by means of the corresponding SAP function. To do this select the data to be moved with *Edit -> Select* (in the SAP menu) and select *Edit -> Move* where you want to move it to. You save the connection from the old position to the new position by selecting *Save file description*.
 - You can use Excel's formatting functions to form the Excel template. For example to change the font or color.
 - In Excel diagrams, you can create macros and formulas, for example for additional calculations. SAP recommends that you insert these on a second table sheet, so that it can not result in conflicts with the actual SAP reported data later. (Note: These are always only read from the first sheet into the system.)
 - When you enter formulas in Excel in the SAP data area, these are then overwritten during saving, with the result of the formula, and the formula itself is lost.
 - You save the format in Excel with Save Excel Layout.
- 4. Choose **Save everything**. This function includes saving the file description and the table sheet layout.
- 5. Return to the SAP screen Change the assignment of the data entry layout with File description -> End.
- Save your assignment. Note: Only after this saving is the name of the file description finally assigned to the data entry layout.

Further notes

You can display the master data of the defined data entry groups, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

- The following functions, which the system offers when you create reported data with the data entry layout, are not supported when using the Excel integration:
- Displaying the FS item hierarchies (totals items)
- The following functions under the menu item **Settings**: Number format All key values on/off Header display on/off

Define Data Entry Profiles

The valid data entry profile for a consolidation unit or group determines which data entry layouts can be used for data entry.

You create a data entry profile by assigning a data entry group to a combination of a special versio for data entry, a financial data type, and a period category.

Example

You might need the following data entry profiles:

- Data entry profile 1:
- Version: Actual data for legal consolidation
- Financial data type: Monthly data input

- Period category: Summarized (periods 1,2,3,4,5,7,8,9, 10,11) - Data entry group: Layouts for the entry of summarized financial data - Data entry profile 2:

- Version: Actual data for legal consolidation
- Financial data type: Monthly data input
- Period category: Detailed (periods 6 and 12)
- Data entry group: Layouts for the entry of detailed financial data

Standard settings

One data entry profile is preset for each of the cons charts of accounts 01, 11, and 12 in the standard system.

Activities

Decide which data entry profiles you require and define these.

Additional Settings for Offline Data Entry

In order to enter reported financial data offline, you need to download master data and control parameters from the SAP System into the PC data entry program.

When you do this, you run a general download and a specific download. This separation enables the volume of data to be managed more efficiently:

- If the structure of your consolidation group changes, for example, you only need to rerun the specific download.
- If the chart of accounts changes, for example, you only need to rerun the general download.

In this section, you enter parameters for a general and specific download, and specify the directories in which you want downloaded data to be saved.

Specify Directory

In this step, you specify the directories in which you want to save data from the general or specific download.

You can use various directories for each receiver dimensions and receiver consolidation groups. Each directory is valid for both general and specific downloads.

Directories are specified per receiver dimension and receiver consolidation group for organizational reasons:

If you download the same data for all consolidation units for data must be entered, you only need to specify one directory.
 You can do this per view and consolidation group. This dimension and group then represent all

You can do this per view and consolidation group. This dimension and group then represent all other organizational unis.

- If you download different data for different consolidation groups, you need to use different directories.

Example

You want to download identical data for the consolidation groups CG1 and CG2 (dimension 01) in a general download, however you want to download data for different consolidation group hierarchies in the specific download.

In order to distinguish between the data downloaded by the system, set up a separate directory for each consolidation group:

 Directory "D:\Download_CG1" for dimension 01, consolidation group CG1 - Directory "D:\Download_CG2" for dimension 01, consolidation group CG2

Activities

- 1. Decide how many directories you need for downloading master data.
- 2. Create these directories for the receiver dimension and consolidation group.
- 3. Create the directories on the hard drives of the PCs onto which you want to download data.

Define Parameters for General Download

In this step, you enter your parameters for general downloads. The first two columns of each entry are for the receiver dimension and the receiver consolidation group. In the other columns, you enter parameters for the data you want to download.

The system saves the data that it selects according to you parameters in the directory that you specify in the step Specify directory for the receiver dimension and consolidation group. The file name is automatically generated, and always has the format "DB*.txt".

The general download contains the following control data for offline data entry:

- Dimension
- Version
- Cons chart of accounts and the FS items
- Master data for subassignments (subitems, partners, transaction currency)
- Sets of subassignments (subitems, partners, acquisition years, transaction currency)
- Data entry profile and layouts
- Exchange rates (optional)
- Control data for Interactive Excel

Example

For consolidation group CG1 in dimension 01, you want to download master data and control parameters for dimension 01, version 100, chart of accounts 01, and so on. The system saves the data in the directory "D:\Download_CG1".

Activities

For the receiver dimension and consolidation group, specify parameters for the general download.

Define Parameters for Specific Download

In this step, you enter your parameters for specific downloads. The first two columns of each entry are for the receiver dimension and the receiver consolidation group. In the other columns, you enter parameters for the data you want to download.

The system saves the data that it selects according to you parameters in the directory that you specify in the step Specify directory for the receiver dimension and consolidation group. The file name is automatically generated, and always has the format "DB*.txt".

The specific download contains the following control data for offline data entry:

- Consolidation group hierarchy, cons groups and cons units
- Validations

Example

For consolidation group CG1 in dimension 01 and version 100, you want to download master data and control parameters for consolidation group hierarchies 01, 02 and 03, and so on. The system saves the data in the directory "D:\Download_CG1".

Activities

For the receiver dimension and consolidation group, specify parameters for the specific download.

Copying Data from SAP Systems

If you use the Consolidation component in integration with the SAP transaction applications, you can collect reported financial data from these applications using different data transfer methods:

- rollup
- periodic extract
- realtime update (only when the operational, data providing applications and consolidation work in the same system and client)

Activities

See section Integration: Preparation for Consolidation.

Collect Data from SAP Business Information Warehouse

Edit Logical RFC Destinations

Use

To be able to collect reported financial data from the SAP Business Information Warehouse (BW) into the consolidation system, you need to set up network connections (RFC destinations) to the BW instances.

Activities

- 1. On the screen "Display and Maintain RFC Destinations", choose "Create".
- 2. Enter the name of the RFC destination.
- 3. Choose connection type "3" (Connection to R/3 System).
- 4. Make any further settings, if applicable.
- 5. Save your entries.

Define Data Streams

Use

In this step, you make settings to enable the collection of reported financial data from the SAP Business Information Warehouse (BW) into the consolidation system.

Activities

- 1. Define one or more target InfoCube(s) for each logical RFC destination to a BW instance, which you want to use to collect reported financial data into the consolidation system.
- 2. Define one or more data stream(s) for each combination of RFC destination and target InfoCube. A data stream determines which data is read from a particular destination.
- 3. Activate the data transfer by setting the data streams active.
- 4. If necessary, define further selection conditions for each data stream.
- 5. Assign characteristics (field names) of the Consolidation system to the InfoObjects for each combination of RFC destination and target InfoCube.

Data Collection from Non-SAP Systems

The Consolidation application has an interface that enables you to collect financial data and additional financial data from non-SAP systems. You upload data from files using any data format, provided that the data includes account assignments relevant to consolidation.

In order to copy data from a file, you define an upload method in the SAP System. In this method, you specify the format of data in the upload file.

Define Method for Uploading Reported Financial Data

In this step, you prepare to copy financial data from a file by means of a flexible upload. You need to define an upload method in the SAP System in order that the system recognizes the data format of the file you want to upload. You then copy the data using the Consolidation application menu.

Standard settings

An upload method is predefined in the standard system.

Activities

- Procede as follows:
- Specify the data format of the file in an upload method, and determine whether you can use the predefined upload method.
- If required, define a SAP enhancement for the flexible upload.

Upload Method

You define an upload method to upload data from a non-SAP System into the SAP System. In this method, you specify the data format of the upload file.

You can use row type indicators to also upload rows (or records) with long text and rows with hierarchy information, in addition to the usual header rows and data rows.

Example

An Excel file to be uploaded into Consolidation contains the following data:

1996	01	100	01	CU1
1	30110100	3,489	-	
1	30110201	35,639	-	
1	30110202	1,759	-	
2	30110100	3,519	-	
2	30110201	35,453	-	
2	30110202	1,643	-	
3	30110100	10,000	-	
3	30110201	15,000	-	
3	30110202	20,000	-	

Note on the file's structure:

- The header row (the first row of the file) contains fiscal year 1996, dimension 01, version 100, cons chart of accounts 01 and consolidation unit CU1.
- The data rows that follow contain the columns: period, FS item, local currency, and debit/credit sign.
- The file is stored as file type "Text (tabs separation)", and has the extension "txt".
- The data is cumulative.

The following upload method is defined in the SAP System.

- 1. A method with the name of EXCEL, for instance, is created.
- 2. The following general characteristics are defined:
 - a) The method uses variable column widths.
 - b) The field separator is the tab character "T", which coincides with file type "Text (tabs separation)".
 - c) Digit separation uses the "1,000.00" format.
 - d) "Reset characteristics" is chosen for the treatment of missing breakdowns.
 - e) The comment character "*" is specified. It is not specified in the example, however.
 - f) The sign of values is "Copy from upload file without changes".
 - g) The input type is "cumulative".
 - h) The update method is "Reset/overwrite (all items)".
- 3. The following fields are selected from the "Remaining fields" area:

- a) The Ledger field is moved to the "Dialog box" area.
- b) The fields 'Fiscal year', 'Dimension', 'Version', 'Cons chart of accts' and 'Consolidation unit' are moved to the "Header row" area.
- c) The 'Period', 'FS item', 'Value in local cur.', and 'Dr./Cr. sign' fields are moved to the "Data rows" area.

Activities

Determine the structure of the upload file. Define an upload method accordingly:

- 1. Create a new method with a meaningful text.
- 2. Define the general characteristics for the data structure (column widths, field separator, digit separation, comment character, input type) and the characteristics for data collection (treatment of missing breakdowns, sign of values, update mode).
- 3. The "Remaining fields" area contains all of the fields in the totals table that might be needed for data entry and posting. Determine the fields that are relevant to the file and copy these to the appropriate areas: "Dialog box", "Header row", and "Data rows". Note that at least the following fields must be used:
 - Ledger
 - Version
 - Consoldation chart of accounts
 - Dimension
 - Fiscal year
 - FS item
 - Consolidation unit
 - Period
 - one value or quantity field

Note: You can use the field help to display information on the fields.

a) Header row

This is the first row of the file. Check which fields exist in the header row, and move these into the header row area. Make sure you move them in the same sequence as they appear in the file from left to right.

b) Data rows

These immediately follow the header rows of the file. All data rows have the same layout. Determine which fields are in the data rows and move these to the data row area. Make sure you move them in the same sequence as they appear in the file left to right.

c) Dialog box

Move those fields to this area that are relevant to the file but are not contained in the header row or the data rows of the file.

These fields are entered in a dialog box when the upload is executed.

Note: You move fields by first selecting them (choose Edit -> Select), placing the cursor on the target area, and then choosing Edit -> Move.

- 4. If you also want to upload standardizing entries, you also need to choose the following value fields from the "Remaining Fields" area: - Standardized value in local currency
 - Standardized value in transaction currency
 - Standardized value in group currency

The upload file must contain one data record for each line item of the standardizing entry being uploaded.

During the upload, a dialog box prompts you for the document type to be used for the entry. Choose a document type with the following properties:

- posting level 10
- posted currencies should match those that are uploaded
 SAP recommends using the local currency, transaction currency and the group currency as the posted currency. However, there are no negative side effects if you don't use these currencies.

Be aware of the following peculiarity when posting the uploaded standardizing entries: Only one transaction currency key can be used per posting document. If you upload a standardizing entry that has more than one transaction currency key, the system splits the posting into different documents (one document per transaction currency key). To ensure that each document itself remains in balance, the system can post an adjustment to the selected clearing item for transaction currency splits. Please specify this item in the step Specify selected items for posting.

Further notes

- If an upload file contains data of multiple periods, the 'Period' field must be included as a column in the data rows. Then, the periods are listed vertically (see the example). One the other hand, if a file contains data for one period only, a 'Period' column is not necessary. Then, you would put the period in the header row.
- The sign of the values can be included in the file in the following ways:
- The sign can be contained within each value field. It can be to left or to the right of the value.
- The sign can be listed in a separate column (as in the example). In this way, the sign applies to the values in local currency as well as group currency.

SAP Enhancement for Flexible Upload of Financial Data

After importing the data generated in non-SAP systems into the Consolidation system, the system checks the data as to its compatibility with the master data stored in the SAP system, and then writes the data to the totals database for Consolidation.

You can use SAP Enhancement "FMC10000" to modify the imported data and/or trigger error messages. The modification runs prior to checking and writing the data.

Example

Say, the upload data contained consolidation unit names that do not coincide with the names defined in the corporate system. These would have to be adjusted.

Note

Enhancement projects are designed so that they include call-up points to custom-programmed function modules at certain points in the standard program code. For this reason, enhancement projects can only be realized with knowledge of the ABAP programming language.

Activities

3.

- 1. Create a new project for the enhancement "FMC10000", or use an existing project.
- 2. Customize the function module EXIT_FICUPL00_100 as required.
 - Activate the project. The enhancement only takes effect if the project is activated.

Further notes

In general, enhancements are release-insensitive - as opposed to modifications, because they belong to a namespace that is reserved for customers, which is not affected by SAP releases.

See the general procedure for creating enhancements in the enhancement transaction in menu path: "Utilities - Online Manual".

Each enhancement has its own documentation, which can be found by choosing the "SAP Documentation" pushbutton in the enhancement transaction.

Define Method for Uploading Additional Fin. Data - Investments

In this step, you prepare to copy changes in investments data from a file by means of a flexible upload. This additional financial data is required for consolidation of investments.

You need to define an upload method in the SAP System so that the system recognizes the data format of the file you want to upload. You then copy the data using the Consolidation application menu. **Activities**

File

Ensure that the file you want to upload has a layout that can be interpreted by the system. The type of record is indicated by the first character, the record type indicator:

- Data record type 1 (first digit in the row is **1**):

The system interprets the row with this data record type as the header row of the file. The header row contains data that is valid for all subsequent data rows, for example subitem category and language key. You can use multiple header rows in a file.

Data record type 2 (first digit in the row is 2):
The system interprets rows with this data record type as data rows. These rows should follow the file header, and they all have the same layout. You can include fields available in upload method definition as columns in the layout (see below).

Upload method

Define an upload method for the file:

- 1. Create a method with a description.
- 2. Specify the general characteristics of the file layout (column width, field separator and digit separator).

All fields for changes in investments data are listed in the block *Remaining fields*. Decide which fields you require and move them to the blocks *Header row* and *Data rows*. Note that you must use the following fields:

- All fields marked in gray, such as dimension, version, period, and so on
- At least one of the fields "Investment BV in LC" (investment book value in local currency) or "Investment BV in GC" (investment book value in group currency) Note: You can use the field help to display information on the fields.

Make the following settings for the blocks:

a) Header row

Enter **1** as the first digit in header rows so that the system can identify them as headers (see above).

Find out which fields are used in the file's header row and move them to the block. Move the fields in the same sequence as they appear in the header row of the file from left to right.

b) Data rows

Enter **2** as the second digit in data rows so that the system can identify them as data rows (see above).

Find out which fields are used in the file's data rows and move them to the block. Move the fields in the same sequence as they appear in the data rows of the file from left to right.

Note:

- The system interprets rows that do not begin with 1 or 2 as comment rows.
- You move a field by selecting it (*Edit -> Select*), placing the cursor on the appropriate block and choosing *Edit -> Move*.

Define Method for Uploading Additional Fin. Data - Investee Equity

In this step, you prepare to copy changes in investee equity data from a file by means of a flexible upload. This additional financial data is required for consolidation of investments.

You need to define an upload method in the SAP System in order that the system recognizes the data format of the file you want to upload. You then copy the data using the Consolidation application menu.

Activities

File

Ensure that the file you want to upload has a layout that can be interpreted by the system (using initial digits).

- Data record type 1 (first digit in the row is **1**): The system interprets the row with this data record type as the header row of the file. The header row of a file contains data that is valid for all subsequent data rows, for example, subitem category and language key. You can use multiple header rows in a file.
- Data record type 2 (first digit in the row is 2):
 The system interprets rows with this data record type as data rows. These rows should follow the file header, and they all have the same layout. You can include fields available in the upload method definition as columns in the layout (see below).

Upload method

Define an upload method for the file:

- 1. Create a method with a description.
- 2. Specify the general characteristics of the file layout (column width, field separator and digit separator).

All fields for changes in investee equity data are listed in the block *Remaining fields*. Decide which fields you require and move them to the blocks *Header row* and *Data rows*. Note that you must use the following fields:

- All fields marked in gray, such as dimension, version, period, and so on.
- At least one of the fields "Book value LC" (local currency) or "Book value GC" (group currency).

Note: You can use the field help to display information on the fields.

Make the following settings for the blocks:

a) Header row

Enter **1** as the first digit in header rows so that the system can identify them as a headers (see above).

Find out which fields are used in the file's header row and move them to the block. Move the fields in the same sequence as they appear in the header row of the file from left to right.

b) Data rows

Enter **2** as the second digit in data rows so that the system can identify them as data rows (see above).

Find out which fields are used in the file's data rows and move them to the block. Move the fields in the same sequence as they appear in the data rows of the file from left to right.

Note:

- The system interprets rows that do not begin with either 1 or 2 as comment rows.
- You move a field by selecting it (*Edit -> Select*), placing the cursor on the appropriate block and choosing *Edit -> Move*.

Define Method for Uploading Additional Fin. Data - Affiliate Earnings

In this step, you prepare to copy equity holding adjustments data from a file by means of a flexible upload. This additional financial data is required for consolidation of investments.

You need to define an upload method in the SAP System in order that the system recognizes the data format of the file you want to upload. You then copy the data using the Consolidation application menu.

Activities

File

Ensure that the file you want to upload has a layout that can be interpreted by the system (using initial digits).

Data record type 1 (first digit in the row is **1**):

The system interprets the row with this data record type as the header row of the file. The header row of a file contains data that is valid for all subsequent data rows, for example subitem category and language key. You can use multiple header rows in a file.

- Data record type 2 (first digit in the row is **2**):

The system interprets rows with this data record type as data rows. These rows should follow the file header, and they all have the same layout. You can include fields available in upload method definition as columns in the layout (see below).

Upload method

Define an upload method for the file:

- 1. Create a method with a description.
- 2. Specify the general characteristics of the file layout (column width, field separator and digit separator).

All fields for changes in earnings of affiliates data are listed in the block *Remaining fields*. Decide which fields you require and move them to the blocks *Header row* and *Data rows*. Note that you must use the following fields:

- All fields marked in gray, such as dimension, version, period, and so on.
- At least one of the fields "Book value LC" (local currency) or "Book value GC" (group currency).

Note: You can use the field help to display information on the fields.

Make the following settings for the blocks:

a) Header row

Enter **1** as the first digit in header rows so that the system can identify them as a header (see above).

Find out which fields are used in the file's header row and move them to the block. Move the fields in the same sequence as they appear in the header row of the file from left to right.

b) Data rows

Enter **2** as the second digit in data rows so that the system can identify them as data rows (see above).

Find out which fields are used in the file's data rows and move them to the block. Move the fields in the same sequence as they appear in the data rows of the file from left to right. Note:

- The system interprets rows that do not begin with either 1 or 2 as comment rows.
- You move a field by selecting it (*Edit -> Select*), placing the cursor on the appropriate block and choosing *Edit -> Move*.

Define Method for Uploading Additional Fin. Data - Fair Value Adjustments

In this step you prepare the transfer of fair value adjustments by means of a flexible upload from a file. To inform the system which data format the file has, you have to define the upload method in the SAP system definieren. As a result of this, you can transfer the fair value adjustments via the application menu of consolidation.

Standard settings

An upload method is preset in the SAP standard system.

Activities

Specify the data format of the file in an upload method. Check whether you can use the preset upload methods.

Define Method for Uploading Additional Fin. Data - Goodwill

In this section you prepare the transfer of goodwill data by means of flexible upload. In order to inform the system, which format the file has, you have to define an upload method in the SAP system. Consequently you can transfer the goodwill via the application menu.

Standard settings

An upload method is predefined in the SAP standard system.

Activities

In an upload method, specfiy the data format of the file. Check whether you can use the predefined upload method.

Define Method for Uploading Additional Fin. Data - Inventory

In this step, you prepare to copy inventory data from a file by means of a flexible upload. This data is required for the elimination of IU profit/loss in inventory. You need to define an upload method in the SAP System so that the system recognizes the data format of the file you want to upload. You then copy the data using the Consolidation application menu.

Activities

File

Ensure that the file you want to upload has a layout that can be interpreted by the system (using leading digits).

- Data record type 1 (first digit in the row is 1):
 The system interprets the row with this data record type as the header row of the file. The header row of a file contains data that is valid for all subsequent data rows, for example subitem category and language key. You can use multiple header rows in a file.
- Data record type 2 (first digit in the row is 2):
 The system interprets rows with this data record type as data rows. These rows should follow the file header, and they all have the same layout. You can include the fields available in upload method definition as columns in the layout (see below).

Upload method

Define an upload method for the file:

- 1. Create a method with a description.
- 2. Specify the general characteristics of the file layout (column width, field separator and digit separator).

All fields for inventory data are listed in the block *Remaining fields*. Decide which fields you require and move them to the blocks *Header row* and *Data rows*. Note that you must use at least the fields that are highlighted in gray.
 Note that for inventory data, the inventory managing unit is the consolidation unit and the supplying unit is the partner unit.
 Note: You can use field help to display information on the fields.

Make the following settings for the blocks:

a) Header row

Enter **1** as the first digit in header rows so that the system can identify them as headers (see above).

Find out which fields are used in the file's header row and move them to the block. Move the fields in the same sequence as they appear in the header row of the file from left to right.

b) Data rows

Enter **2** as the first digit in data rows so that the system can identify them as data rows (see above).

Find out which fields are used in the file's data rows and move them to the block. Move the fields in the same sequence as they appear in the data rows of the file from left to right. Note:

- The system interprets rows that do not begin with either 1 or 2 as comment rows.
- You move a field by selecting it (*Edit -> Select*), placing the cursor on the appropriate block and choosing *Edit -> Move*.

Define Method for Uploading Additional Fin. Data - Supplier

In this step, you prepare to copy supplier data from a file by means of a flexible upload. This data is required for the elimination of IU profit/loss in inventoryYou need to define an upload method in the Consolidation System so that the system recognizes the data format of the file you want to upload. You then copy the data using the Consolidation application menu.

Activities

File

Ensure that the file you want to upload has a layout that can be interpreted by the system (using initial digits).

- Data record type 1 (first digit in the row is 1):The system interprets the row with this data record type as the header row of the file. The header row of a file contains data that is valid for all subsequent data rows, for example subitem category and language key. You can use multiple header rows in a file.
- Data record type 2 (first digit in the row is **2**):

The system interprets rows with this data record type as data rows. These rows should follow the file header, and they all have the same layout. You can include fields available in upload method definition as columns in the layout (see below).

Upload method

Define an upload method for the file:

1. Create a method with a description.

2. Specify the general characteristics of the file layout (column width, field separator and digit separator).

All fields for inventory data are listed in the block *Remaining fields*. Decide which fields you require and move them to the blocks *Header row* and *Data rows*. You must use all fields marked in gray, such as dimension, version, period, and so on, at the minimum. Note that for supplier data, the supplying unit is the consolidation unit and the inventory managing unit is the partner unit.

Note: You can use field help to display information on fields.

Make the following settings for the blocks:

a) Header row

Enter **1** as the first digit in header rows so that the system can identify them as a headers (see above).

Find out which fields are used in the file's header row and move them to the block. Move the fields in the same sequence as they appear in the header row of the file from left to right.

b) Data rows

Enter **2** as the second digit in data rows so that the system can identify them as a data rows (see above).

Find out which fields are used in the file's data rows and move them to the block. Move the fields in the same sequence as they appear in the data rows of the file from left to right. Note:

- The system interprets rows that do not begin with either 1 or 2 as comment rows.
- You move a field by selecting it (*Edit -> Select*), placing the cursor on the appropriate block and choosing *Edit -> Move*.

Define Task

You need to define a task for data collection.

Standard settings

Tasks for every activity are preset in the standard system.

Activities

Look at the preset tasks and edit them if necessary. **Further notes**

In the step Define task group, you assign this task to the task group for the Data Monitor.

Copy Tasks

You use the copy task if you want to copy financial data (that is, reported financial data and/or additional financial data) from one version (the source version) to another version (the target version).

Example:

Say, you want to generate financial statements for consolidation group CG1 in a different currency other than the one in consolidation group CG2. To do that, you can copy the financial data.

In the target version, you can assign a new data transfer method called "Copy" in the master records of the consolidation units. These assignments are merely informational. (Significant are the entries you make in the steps "Define Consolidation Groups to be Copied" and "Define Consolidation Units to be Copied".)

The copy task appears in the data monitor of the target version. You may not reassign the source tasks to the task group - instead, the source tasks automatically appear to the right of the copy task for your information. They are reflected by a symbol, which identifies them as copied tasks.

Changes to the data can only be made in the source version. Status management operates across versions.

The system treats a source task as a preceding task to the associated copy task.

To use the copy task, make the following settings:

- You define the copy task, assign one or source tasks, and if necessary specify the scope for copying additional financial data.
- If applicable, you define the consolidation groups to be copied.
- If applicable, you define the consolidation units to be copied.

If you make changes afterwards to the copied organizational units, you must reset the status in the data monitor.

Define Copy Task

In this step you create a copy task for the data monitor. Activities

- 1. Create a copy task and enter a suitable description.
- 2. Assign appropriate source tasks to the copy task.

The following types of source tasks can be assigned: data entry, validation, reclassification, manual posting, item substitution.

- Data Entry:

When you assign a source task for data entry to the copy task, the system copies the totals records with posting levels 00 and space from the source version to the target version. Any existing totals records with these posting levels are deleted.

- Manual Posting and Reclassification:

When you assign a source task for manual posting and/or reclassification to the copy task, the system determines which document types belong to these tasks, and copies the documents of these document types to the target version. If a data entry task is assigned to the copy task, the system also copies the manual documents with posting levels 01 and 10 that are not assigned to any task. Any existing documents in the target version with these document types are reversed or deleted.

- Item Substitution

When you assign a source task for item substitution and determining the retained earnings to the copy task, the system copies the totals records with posting level 08 from the source version to the target version. Any existing totals records with these posting levels are deleted.

If the group currency is the same in both the source version and target version, the system also copies the group currency values. If the group currency in the target version is the same as the local currency of the consolidation unit, the system copies local currency value to the group currency value. In all other cases, the system initializes the group currency value.

Please note that you cannot again assign source tasks, which are assigned to the copy task, in the task group of the target version.

3. Determine the scope of the additional financial data for the copy task. If you specify that investment data is to be copied, the system is able to copy the additional financial data for the investments to the target version.

If the target version does not contain investment data, the system assigns new activity numbers during the copy.

If the target version already contains investment data (for example, the copy is repeated), the system compares the source version data with the target version data. If data records are the same, only the modified values are copied and the activity number is retained. Otherwise, the system assigns new activity numbers. The system deletes all other investment data records contained in the target version.

Further notes

The copy tasks you define in this step can be used for:

- certain consolidation groups (including lower-level consolidation groups and units) and
- certain consolidation units

Define Consolidation Groups to be Copied

In this step you can determine that the copy task is to process certain consolidation groups. The selections also include the lower-level consolidation groups and units, as well.

Activities

Enter the consolidation group or groups to be processed by the copy task.

Also specify the source version.

Define Consolidation Units to be Copied

In this step, you can determine that the copy task is to process certain consolidation units.

Activities

Enter the consolidation units to be processed by the copy task.

Also specify the source version.

And also specify the consolidation group, so that the system may determine the ledger currency.

Manual Posting

As part of the data collection process, you may need to post entries manually. For example, you may need to post correcting or standardizing entries to the reported data collected in the system.

In this section, you make the settings necessary for manual posting.

Further notes

In the section **Consolidation Functions**, you are given another opportunity to make these settings for manual posting.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

1. Document Type

Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals

Enter the number range for allocation of document numbers.
 If you have not yet created the number range you require, choose the function *Define number range*.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

- Indicate whether the document should be automatically reversed in the following period.

3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

- a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.
 Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.
- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks

In this step you define tasks for manual postings.

Standard settings

Tasks for every activity are preset in the standard system.

Activities

- 1. Check the predefined tasks and, if necessary, define new ones.
- To each task assign the document type to be used for the postings. The assignment uses the effective fiscal year and effective period.
 This allows you to assign multiple document types for the same time period. Internally, the system uses an entry number to differentiate the entries.

The system assigns to the data collection task all of the document types that you defined for manual posting but did not assign to any task. Consequently, when you execute the data collection task in the data monitor, the system makes available manual postings with these same document types (in addition to the data entry of reported and additional financial data).

Further notes

Assign new tasks to the task group for the data monitor in step Define task group, for the consolidation monitor in step Define task group.

Define Validations

In this step you define rules for the validation of manual entries. The purpose of a validation is to have the system check certain rules during manual postings to ensure the consistency of the entries.

The validation guarantees the consistency of postings, by checking certain rules through the system.

1. Document header

Common fields such as the ledger, version, fiscal year, period, document type, etc. are checked.

2. Document line items

The fields in the document header as well as line item information such as the FS item, subitem or partner unit can be checked.

3. The update Validations across all line items are performed.

Example

You might define the following posting rules:

- Certain items may only be posted with certain subitems.
- Certain staff members (users) may only post entries that do not exceed certain value limits.
- The total amount of depreciation posted to asset items with certain transaction types must match the total value of the corresponding depreciation items.

Activities

- 1. For each callup point (= document header, item, complete document) determine which validation rules you need for your entries.
- 2. For each validation rule determine the prerequisites for performing the validation and related checks.

If your validation rule uses sets, these must be defined in table FIMC, which contains the fields for the conditions.

- 3. Determine which message is to be displayed when the validation requirements are met or not met. The message features up to four (4) display parameters--for instance, for displaying the user name. If needed, define a message class.
- Save the validation rules.
 You can determine whether the rule applies to each callup point. Available options are: Active, Inactive, and Active except for batch input.

Further notes

The manual FI-SL Validation/Substitution contains additional information. **Automatic Posting**

The system posts automatic entries as part of the consolidation process. For these entries, unlike for manual entries, you do not need to enter line items, because the system generates these automatically using your settings in Customizing.

Currency Translation

The settings you make in this chapter enable you to translate financial data reported by consolidation units and groups into group currency.

Translation Methods

In the following activities, you define the translation methods that you want to use for translating reported financial data, and assign these methods to the reporting consolidation units.

Define Currency Translation Methods

In the methods for currency translation, you specify the exchange rates with which FS items are translated, and how translation differences and rounding differences are handled.

Example

You define translation methods that you commonly use during consolidation, for example, the currentrate method, the temporal method, and so on.

Standard settings

Several **translation methods** are predefined for consolidation charts of accounts 01,11, and 12 in the standard system. There are no conventions for naming methods, however, the following logic has been used for naming the predefined methods:

- The first two digits in the method name correspond with the name of the chart of accounts to which it is assigned.
- After a hyphen, numbers are allocated in increments of 10.

The methods contain item sets (translation sets and rounding sets) and subitem sets:

- Predefined items sets are named using the following logic:
- The first two characters are "CS".
- The third and fourth digits indicate the name of the relevant cons chart of accounts.
- After the hyphen, the next four digits indicate the contents of the set by reference to an item number.

Example: CS01-1000 Balance sheet

- Predefined subitems sets are named using the following logic:
- The first two characters are "CS".
- The third and fourth digits are "01" (cons chart of accounts).
- Subitems are not dependent on the cons chart of accounts; they are valid for all charts. However, if you use sets containing different subitems for different charts of accounts, for example, due to different statutory requirements, you can indicate the relevant chart of accounts using the third and fourth places.
- The digits after the hyphen provide information about the contents of the subitem set by reference to the subitem or breakdown category. Example: CS01-100 Opening balance APC

Explanation of the Predefined Methods

- Method 01-10: Modified current rate (tangible fixed assets and annual net income (ANI) on key date)
- Tangible fixed assets are translated using the current rate. In order to show temporal translation differences between the closing balance of the prior year and the opening balance of the current year in the asset history sheet, some tangible fixed asset subitems are translated with exchange rate (ER) indicator 4 (current rate of prior year) and others with ER indicator 1 (current rate).
- Investment and equity data (excluding ANI) is translated historically on the basis of additional financial data, with translation key 3 or 4.
- Retained earnings carried forward from prior years are not retranslated (translation key 6).

- The remaining balance sheet items (including ANI) are translated using the current rate.
- The income statement is translated using the average rate.
- Rounding of ANI in the balance sheet and income statement causes ANI in the income statement to be adjusted so that it matches ANI in the balance sheet.
- Method 01-20: Modified current rate (ANI weighted) The balance sheet is translated as with method 01-10.
- ANI in the income statement is translated at the current rate.
- The rest of the income statement is translated at the average rate for the month. The difference is posted to the balance sheet item for translation differences in equity.
- The rounding rule for the income statement specifies that the difference between the current rate and the average rate is posted to the ANI item in the income statement. This results in ANI in the income statement being valued at an average rate.
- The rounding rule for ANI in the balance sheet and income statement causes ANI in the balance sheet to be adjusted to match ANI in the income statement.
- 01-30: Modified current rate (tangible fixed assets historically/ANI weighted)
- For the translation of tangible fixed assets, the assumption is made that the Consolidation component is integrated with transaction applications, in which case values already exist in group currency. Tangible fixed assets are not retranslated (translation key 6).
- Investment and equity values (excluding ANI and retained earnings carried forward from the prior year) are translated historically on the basis of additional financial data, with translation key 3 or 4.
- Retained earnings carried forward from the prior year are not retranslated.
- The rest of the balance sheet (including ANI) is translated at the current rate.
- Application integration is also assumed for the translation of amortization and depreciation, which are therefore not retranslated.
- The rest of the income statement is translated as with method 01-20.
- 11-10: Modified current rate (tangible fixed assets and ANI on key date)
- Translation takes place as with method 01-10. However, since the appropriation of retained earnings (ARE) is shown in the balance sheet for cons chart of accounts 11, the methods differ as follows:

Retained earnings in the balance sheet (as part of equity) is translated historically on the basis of additional financial data, with translation key 4.

The rounding rule for retained earnings causes retained earnings in the income statement to be adjusted so that they match retained earnings in the balance sheet. This adjustment causes a imbalance in the income statement that is reversed by a further rounding rule for the income statement (with ARE). The difference is posted to unappropriated retained earnings in the income statement, causing this item to equal retained earnings (historical value) for the prior year.

- Method 11-20: modified current rate (ANI weighted)
- Translation takes place as with method 11-10, with the following exceptions: The income statement (without retained earnings) is translated at an average monthly rate, as with method 01-20.

The assumption is made that unappropriated retained earnings exist in group currency, and therefore no translation takes place for this item.

- Method 11-30: Modified current rate (tangible fixed assets historically/ ANI weighted) Same as method 01-30

- Method 12-10: Modified current rate (tangible fixed assets and ANI on key date) Same as method 11-10, with the exception that unappropriated retained earnings are shown in the balance sheet and are therefore not retranslated.
- Method 12-20: Modified current rate (ANI weighted)

Same as method 11-20, with the exception that unappropriated retained earnings are shown in the balance sheet and are therefore not retranslated.

- Method 12-30: Modified current rate (tangible fixed assets historically/ ANI weighted) Same as method 11-30, with the exception that unappropriated retained earnings are shown in the balance sheet and are therefore not retranslated.

Activities

Check the predefined translation methods and define a new one if needed:

Initial node Translation Methods

Create a translation method with a key and a description. On the detail screen define the reference exchange rate indicator.

Node Method entries

Define the method entries for the translation and for item rounding. Note that these method entries are cons chart-relevant.

- 1. Decide how you want to translate each item.
- 2. Define your translation entries. You need one translation entry for each set of items that you want to translate using the same rules. You also need translation entries for balance sheet items, income statement items, and statistical items.

If you have not yet created item sets, you can do this now by choosing Maintain sets.

- 3. Decide which rounding checks you want to run.
- 4. Make an entry for each rounding check. Indicate that the entry is a rounding entry. Note:
- You can give rounding and translation entries the same numbers, because the rounding indicator enables the system to distinguish between them.
- The sequence of rounding entries determines the sequence in which the rounding checks are run.
- If you want to run rounding checks over two item sets, and the field for the second item set does not appear for you to make an entry, press ENTER. The field will then be shown.
- 5. After you have defined the method entries, choose the node *Translation methods* once more.
- Check the translation methods using the *Check* function.
 The system indicates any errors it finds in your method definitions, for example, if the item sets in the method entries overlap.
- 7. If no errors are found during the check, you can activate the method to indicate that it can be used for translating reported financial data.
- 8. If you want to print out the method definitions, choose *Print*.

Define Posting of B/S Translation Differences in the I/S

You have the option of specifying in your translation method that translation differences in the balance sheet are posted to income statement items. These postings create an imbalance in the balance sheet and income statement.

Generally, this imbalance is posted as a financial statement balancing adjustment to annual net income and retained earnings, which are then increased or reduced. However, you might have a requirement to clear the imbalance in such a way that no adjustment to annual net income or retained earnings occurs. Such a clearing entry could look like this (or vice versa): Transfers to Translation Differences (income stmt) Dr 99 to Translation Differences (balance sheet) Cr 99

This entry causes translation differences to be disclosed separately in the income statement and the balance sheet.

In this step, you can determine whether the imbalance, as a financial statement balancing adjustment, affects annual net income and retained earnings, or whether a clearing entry is posted:

- Balancing adjustment for translation differences

If you choose this option, you fill the balance sheet item and the income statement item with the items, which you inserted in step Define selected items for posting for the treatment of annual net income (if appropriations are shown in the balance sheet) or for the treatment of retained earnings (if appropriations are shown in the income statement). If this is done, the system posts the following:

- If appropriations are on the balance sheet, the imbalance is posted to the annual net income items of the balance sheet and the income statement.
- If appropriations are on the income statement, the imbalance is posted to the retained earnings items of the balance sheet and the income statement.
- Translation difference does not adjust earnings, but is separately disclosed If you choose this option, enter the following FS items:
- Specify the "transfers to currency translation differences" item as the income statement item.
- Specify the "currency translation differences" item as the balance sheet item. Both items must already exist in the consolidation chart of accounts. By posting to the "transfers to currency translation differences" item in the income statement, the imbalance is cleared so that net income is no longer affected.

In subsequent periods, only the translation difference that applies to the current period is posted to the differences item in the income statement. The prior-periods portion is already contained in the carryforward balance. In order to have the system calculate the current-period portion, a statistical item is needed to save the accumulated value of the prior-period translation differences. You also define this item in this step.

Requirements

This step only applies if you have defined translation methods, which post translation differences of the balance sheet to differential items in the income statement.

Standard settings

In standard SAP system, the FS items are defined so that a balancing adjustment affecting earnings is posted for translation differences. A statistical item for the prior-periods portion is defined, too.

1. Check if the translation methods you use post translation differences of the balance sheet to differential items in the income statement.

Activities

- 2. If this is true for one or more methods, decide whether translation differences are to affect earnings, or whether a clearing entry is to be posted.
- 3. Define the balance sheet item and the income statement item accordingly.
- 4. Define the statistical item, which is to store the prior-periods portion of the translation difference. This item is predefined in the standard SAP consolidation chart of accounts.

Further notes

The method entries in the translation methods vary by dimension and consolidation chart of accounts. The items you define in this step only vary by the consolidation chart of accounts. For this reason, you need to ensure that the treatment of financial statement imbalances is the same for all dimensions.

Assign Translation Methods to Consolidation Units

You determine a translation method for those consolidation units whose reported financial data you want to translate.

You can assign a method to each consolidaiton unit.

Requirements

You have defined translation methods.

Activities

Assign translation methods to consolidation units, effective as of a certain year and period.

Exchange Rates

In the following steps, you define the exchange rate indicators necessary for currency translation and assign these to the exchange rate types. Depending on the exchange rate type, you also define the translation ratios and exchange rates.

Define Exchange Rate Indicators

In this step, you define exchange rate indicators for Consolidation. For a certain time and version, you assign these indicators to the exchange rate types that are maintained centrally in the system.

In the following steps, you can maintain translation ratios and exchange rates for individual exchange rate types.

Standard settings

The following are predefined in the standard system:

- Exchange rate indicators for the current rate, average rate, historical rate, and the current rate for the prior year
- Exchange rate types for the Consolidation application

Activities

Create the exchange rate indicators that you require, and assign them to the exchange rate types. If the exchange rate types you require do not exist in the system, you can create them before making this assignment.

Further notes

You can display the master data of the defined exchange rate indicators, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Specify Translation Ratios

You specify translation ratios for each combination of exchange rate type, and source and target currency for translation.

You can use translation ratios to control the number of decimal places used for the exchange rate.

The first digit in the translation ratio relates to the source currency, and the second to the target currency.

Requirements

You have maintained exchange rate types.

Standard settings

Translation ratios are preset for the exchange rate types predefined in the standard system. Specify translation ratios.

Activities Maintain Exchange Rates

You maintain exchange rates in the exchange rate table for combinations of exchange rate type, source and target currency, and date.

The date in the table is the valid-from date. If the exchange rate changes, you need to make a new entry for the same combination of exchange rate type, source currency, and target currency. You use a new valid-from date, however.

Example

You maintained a current exchange rate for translating DEM to USD, valid from 10/31/1997. On 12/31/1997, the current rate changes. You therefore make a new entry with this date.

Requirements

You have maintained exchange rate types and translation ratios.

Activities

Maintain the exchange rates in the exchange rate table.

Define Task

You use a task to run currency translation.

Standard settings

Tasks for every activity are preset in the standard system.

Activities

Check the preset tasks and modify them if necessary.

Further notes

You assign the translation task to the task group for the Data Monitor in the step Define task group. **Reclassifications**

As part of data collection, it may be necessary to post reclassifications for adjusting reported financial data. These entries use posting levels less than 20.
The Consolidation Functions area features the same steps, which let you define reclassification entries that pertain to the actual consolidation process. There, the entries use posting levels equal or greater than 20.

Define Methods

The method for reclassifications specifies which FS item values are to be reclassified.

Additional control options for laying out the reclassification entries are also available. The main options are:

- To reclassify using percentage rates
- To reclassify periodically
- To reclassify based on debit/credit signs
- To post reclassifications at the partner unit

Example

See the examples in the Process of Reclassifications in the documentation (SAP Library).

Activities

- 1. Create the reclassification methods.
- 2. For each reclassification method, define the reclassification rules as follows:
 - Make the settings as to how reclassification is to take place.
 - Specify the Triggering item, the Source item and the Destination item. Keep in mind the available options for inheriting the assignments.
 - If needed, define additional control options.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document

type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

1. Document Type

Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals
 - Enter the number range for allocation of document numbers.
 If you have not yet created the number range you require, choose the function *Define number range*.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

- Indicate whether the document should be automatically reversed in the following period.
- 3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks

Reclassifications require a task. To this task you assign a document type and a reclassification

S

method.

Requirements

The document type(s) and method(s) must already be defined.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

- 1. Check the predefined tasks and modify as needed.
- 2. To each task assign its document type and reclassification method for one or more time periods (using the effective year and period).

Further notes

You assign the task(s) to the task group for the Data Monitor in step Define task group, or to the task group for the Consolidation Monitor in step Define task group.

Consistency Check of Customizing for Reclassification

Use

In this activity, you can check if the Customizing settings for reclassification in the data monitor are consistent.

We urgently recommend that you completely resolve any reported problems to prevent serious errors later on when posting reclassifications.

Apportionment: Define Task

In this step, you create a task for apportioning the data.

Standard settings

S

All executable tasks are predefined in the standard SAP system. **Activities**

Check the predefined tasks and revise them as needed.

Preparations for Changes in the Consolidation Group

Changes to consolidation groups occur when a group makes acquisitions of/divestitures from consolidation units.

The preparation for consolidation group changes involves postings to make adjustments to the reported financial data, standardized financial data, and consolidated financial data that exists for the consolidation unit:

- For balance sheet items that (a) reflect a consolidation unit which is being acquired or divested, and
 (b) are broken down by subitems, you may want to transfer the values to the "Acquisitions by Consolidation Group" subitem or the "Divestitures by Consolidation Group" subitem.
- For income statement (P&L) items, during an acquisition, you may want to transfer the portion concerning the periods prior to the acquisition to the "Retained Earnings Prior to First Consolidation" item.

The postings are always consolidation group-specific.

In this section, you define the settings for posting preparatory adjustments to the reported and standardized financial data. The "Consolidation Functions" area contains the same section for posting preparatory adjustments to the consolidated financial data.

You define document types with posting level 02 (Reported data: Cons group change) and posting level 12 (Standardizing entry: Cons group change). You also define one or more consolidation tasks.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

- Document Type Create the document type and make the following specifications in the detail screen:
 - Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
 - Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals
 - Enter the number range for allocation of document numbers.
 - If you have not yet created the number range you require, choose the function *Define number* range.
 - For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.
 - Indicate whether the document should be automatically reversed in the following period.
- 3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks

You require tasks in order to post entries to prepare for the adjustments of reported, standardized and consolidated financial data:

- Adjustments to reported and standardized data

The tasks for these adjustments are executed in the Data Monitor. You can define separate tasks for adjusting reported data and standardized data, respectively. However, you can also define just one task by assigning document types with posting levels 02 (Reported data for cons group changes) and

12 (Standardizing entry for cons group changes). You assign the task(s) to the task group for the Data Monitor in step Define task group.

- Adjustments to consolidated data

The tasks for these adjustments are executed in the Consolidation Monitor. You assign the document types with posting levels 22 (Two-sided elimination for cons group changes) and 24 (Two-sided elimination for cons group changes with special logic).

You assign the task(s) to the task group for the Consolidation Monitor in step Define task group.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

- 1. Check the predefined tasks and modify them if necessary.
- 2. Assign one or more document types to each task.

Validations for Reported Data and Standardized Data

Before the system posts consolidation entries, the consistency of the reported financial data collected in the system must be checked. Once you have posted correcting and standardizing entries, the consistency of the standardized financial data must also be checked.

In this section, you define validations, which contain rules for checking data in the different value ranges. You assign validations for reported and standardized financial data to the consolidation units.

In the section Consolidation Functions, you have another opportunity to define any further validations you need for checking consolidated financial data. You assign these validations to consolidation groups.

Define Validations

In this step you define validations for reported, standardized and consolidated financial data. Each validation consists of one or more validation steps. Each validation step is made up of the following components:

- Prerequisite

When defining a validation step, you can define a prerequisite that must be met before a validation check is done. However, it does not make sense to define prerequisites for validations of reported, standardized and consolidated financial data, because in these particular validations the prerequisites are NOT taken into consideration. You should therefore define the validations without any prerequisites in this step.

By contrast, however, you can define prerequisites for validations of postings. For more information on this, see the step Define validations in the section Manual Postings.

- Check

In this portion of a validation step, you specify the data which is to be validated, and the operations to be performed with the data.

You enter a mathematical equation (also called formula), which consists of rules for selecting the data, and an operator.

Message
 In this portion of a validation step, you specify which message is to be displayed if the validation finds discrepancies.

You use the following data structures to define a validation step (see below for further details):

- ECCSDAT Structure of data requiring validation
- ECCSPAR Structure for prior year/period comparison
- ECCSEQV Structre for equivalency checks

The step Assign validations distinguishes between validations that are assigned to consolidation units for checking reported and standardized data, and validations that are assigned to consolidation groups for checking consolidated data.

Example

You might define a validation that contains a validation step (among others) to ensure that the total value of assets matches the total value of liabilities and equity.

You would define the validation step as follows:

- Check

SUM (Cumul. local currency) WHERE ASSETS = SUM (Cumul. local. currency) WHERE LIABILITIES

- Rule ASSETS

FS item = '0001000000'

- Rule LIABILITIES FS item = '0002000000'
- Message: Total assets are not equal to total liabilities and equity

Standard settings

A validation is predefined in the standard system for each of the charts of accounts 01, 11, and 12.

These validations only contain a check for totals records in local currency. It is not necessary to define a validation for checks in both local and group currency for each chart of accounts. If you start validation from the data monitor or consolidation monitor, the system automatically runs checks in the correct currency. If you start validation from the application menu, you can specify the currency that you want checked on the initial screen.

Activities

Establish which validation steps you need for the reported, standardized and consolidated data.

Establish how many separate validations you need for the consolidation units and consolidation groups.

Define any new validations that you require as follows:

- 1. Create a validation with a name and description.
- 2. The first time a validation is defined, the system configures the message class. You must specify a message class in the range reserved for R/3 customers (Z*). If a message class dedicated to validations does not yet exist, choose the 'Create' function. If you want to change the message class later on, on the initial screen for defining validations choose "Environment -> Change message class". Enter "043" for the Boolean Class. Then you can replace old message classes with new ones.
- 3. Create the first validation step by choosing "Edit -> Insert entry".
- 4. Leave the prerequisite blank.
- 5. Define the validation check by using the Formula Builder to enter a formula with the following syntax:

SUM (*table field*) WHERE *RULE* *operator* SUM (*table field*) WHERE *rule* Here the variables (or placeholders) are denoted with asterisks (*). Substitute the variables as follows:

a) *table field*

You can substitute this variable with local currency, transaction currency and group currency fields as well as quantity fields. You can insert any of the following fields: Local currency (cumulative value) Local currency (periodic value) Group currency (cumulative value) Group currency (periodic value) Transaction currency (cumulative value) Transaction currency (periodic value) Quantity (cumulative value) Quantity (periodic value) ***rule***

Substitute this variable with the name of the validation rule. To define new rules, see activity 6.

c) *operator*

Substitute this variable with any of the following comparison operators:

< > >= <= =

In addition to using the formula as listed above, you can also define formulas without the second portion **SUM** (*table field*) WHERE *rule*. For instance, you could define the following short formula:

SUM (*table field*) WHERE *rule* >= 0

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b)

The system uses the Formula Builder to convert the formula that you created into the following formula syntax:

SUM (ECCSDAT-*value/quantity field*) WHERE *rule* * operator* SUM (

ECCSDAT-*value/quantity field*) WHERE *rule*

- 6. Define new validation rules if needed.
 - a) Specify a name for the rule and a description, then choose the Formula Builder.
 - b) Specify the fields that are to be selected during the check (Structure ECCSDAT). Keep in mind that you must always specify the field "FS item".
 The characteristics dimension, version, year, period, consolidation chart of accounts,

consolidation unit and consolidation group should only then be used in the validation rule, if the rule should only be valid for a certain characteristic value of this characteristic. As a rule you do not normally specify this characteristic, so that you can execute the validation step for any dimensions, versions, consolidation charts of accounts. The system determines these characteristics at the start of validation via the global parameters and the organizational units selected by the monitor (if they are specified).

Custom characteristics can be used exactly like the characteristics which are delivered by SAP

c) For each field, use the operator '=' (equals sign) to specify the value of the field to be selected. Example: FS item = '0007100000'

Further notes for the definiton of rules

FS item values to be checked

- To cumulate all FS items data, you can enter the FS item = ' ' that is space. The system then selects all value items, that means balance sheet items, income statement items and statistical items.
- You can use FS item sets. In these FS item sets you can enter value items, totals items and other sets. Keep in mind that the system interprets the totals items and selects each cumulated value.
 - Each FS item can only be contained once in the set, otherwise the system selects the item value repeatedly. For example a multiple selection occurs when you include a value item and a totals item in the set and the totals item contains this value item. Sets with item ranges are problematic when the ranges include totals items as well as the value items which belong to it. Then the system interprets and selects the values of the totals items and additionally the values of the value item.
 - To get round the problem of multiple selection, you can use totals items directly in the validation rule, therefore without set.
- You can limit the item values to subassignments, for example with the following rule: FS item = ' ' AND Subassignment = '120'

Consolidation units to be checked

- You can limit the check to certain consolidation units, for example with the following rule: Consolidation unit = 'CUXXX'
- As well as that you can limit the check to consolidation units with a certain attribute, for example the country: Country/Cons unit = 'USA'
- Then exactly those consolidation units are included in the check, to which the 'USA' is assigned.

The advantage is that you can define individual validation steps for certain consolidation units, but can simultaneously assign the validation of a comprehensive number of consolidation units.

Comparisons and Equivalent units

- To compare periods or fiscal years, you can specify comparison fields (data structure ECCSPAR) for the fields "Period" and "Fiscal year" for the (data structure ECCSDAT). Example: Year = Prior year

For equivalent units, you can specify equivalent fields (data structure ECCSEQV) for those in (data structure ECCSDAT). Example: Cons unit = Equivalent cons unit See also the step Specify equivalencies.

For other comparisons you have to specify fixed characteristic values in the validation rule. Example: Version = '900' for Version comparison

- Specify the message to be displayed if the check finds errors.
 To create a new message, choose "Environment -> Maintain messages". The maintenance of new messages is also possible from the maintenance of validation steps.
- 8. Define the other validation steps.
- 9. Define any additional validations you require.

Hierarchical log

The validation log lets you examine the results of the validation step by step through its hierarchical layout.

Note on transport

To transport your settings, choose "Validation -> Transport".

Assign Validations to Consolidation Units

In this step, you assign validations for checking reported financial data and standardized financial data to the consolidation units.

Activities

Assign one validation for reported financial data and one for standardized financial data to each consolidation unit.

Further notes

You make your assignments for a period category. Period categories can be maintained in the step Define period categories.

S

Specify Equivalencies between Cons Units/Groups

You can define validation steps for checking the data of equivalent consolidation units or groups.

Organizational units are **equivalent** if they are contained in different dimensions as different consolidation units or consolidation groups, but are actually one and the same organizational unit.

In this step, you specify equivalencies between consolidation units and groups.

Example

In a business area dimension, a given company might be a consolidation group. However, in a parallel statutory dimension, the same company could be a consolidation unit. Using a validation step, you could check if the annual net income of the company is the same in both dimensions.

In addition to defining the validation step, you would have to declare equivalencies between units/groups in this step.

Activities

For each dimension, specify the consolidation unit or group together with the equivalent unit or group.

Validations that check equivalencies need to check both organizational units/groups involved. Therefore, the equivalencies must be defined for both units/groups in a pair

Define Task

In the Data Monitor, you use a task each for running validations on reported financial data and standardized financial data. The task category determines whether the task validates reported or standardized financial data.

Standard settings

Tasks for every activity are preset in the standard system. **Activities**

Look at the preset tasks and modify them if necessary.

Further notes

Assign the tasks for the validation of reported and standardized data to the task group for the Data Monitor in Customizing step Define task group.

Balance Carryforward

At the end of a fiscal year, the balances of financial statement items must be carried forward into the new fiscal year.

During the balance carryforward, the system carries forward the balances of items into the carryforward period (period 000), using the following logic:

- All balance sheet items are carried forward.
 It may not make sense to carry forward certain balance sheet items. In this case, you can specify that these items are selected items that are not to be carried forward.
- Income statement items are carried forward if they are specified as selected items for carrying forward.
- Statistical items are carried forward if so specified in the master data of the individual items.
- Additional financial data concerning the changes in investments and investee equity are also carried forward.

Make the settings for the balance carryforward in the steps that follow:

- In the steps in this section, you can specify items that you want to carry forward in addition to the standard carryforward items, and also the items you do not want to carry forward, as selected items.
- In the step Maintain hierarchies for cons chart of accounts or Maintain FS items individually, you can specify in the master data of statistical items that you want to carry these items forward.
- In the step Define subitems, you can specify one carryforward subitem for each subitem. If you don't, the system carried data forward to the same subitem.
- In the step Define subitem categories, you can specify how data can be entered for carryforward subitems. You need to do this in order to be able to specify a carryforward subitem in the master data of a subitem.

You can specify a default carryforward item in the master data of the subitem. The system carries forward values onto this default item if they have no breakdown by subitems, although this breakdown is allowed according to the master data of the item (it may have been subsequently added).

Specify FS Items to be Carried Forward

In this step, you specify as selected items those items that normally are not carried forward, but which you also want to carry forward. Please note the following rules:

- You can enter selected items to be carried forward, even though they are not normally carried forward. For example, you can carry forward income statement items. See the example shown below.
- You can specify balance sheet items as selected items to be carried forward, even though these items are carried forward onto themselves by default. If you do this, note the following:
- If you carry forward a balance sheet item into the new fiscal year onto a different balance sheet item, the balance sheet item is not carried forward onto itself. It is only carried forward to the assigned item.

- If you carry forward a balance sheet item into the new fiscal year onto a non-balance sheet item, the balance sheet item is carried forward onto itself, in addition to the assigned non-balance sheet item.

Example

If you show the appropriation of retained earnings at the end of the income statement, specify that the balance of the retained earnings item be carried forward to the unappropriated retained earnings item in the following fiscal year.

Activities

- 1. Decide which items you want to carry forward as selected items.
- 2. Specify an item that you want to carry forward.
- 3. Specify a subitem if:
 - a) The item to be carried forward supports a breakdown by subitem
 - b) You only want to carry forward values that have this subitem account assignment

If the item supports a breakdown by subitem, but you want to carry forward the total value for the item, enter * instead of a subitem.

- 4. Enter the debit and credit item to which the balance will be carried forward.
- 5. Specify subitems for these items if:
 - a) They support a breakdown by subitem
 - b) You always want the carryforward value to be given this account assignment

Note: If a carryforward subitem is assigned to the subitem you specified for the debit or credit item (in the subitem master record), the carryforward value is given the carryforward subitem as an account assignment.

If the item supports a breakdown by subitems and you want each subitem carried forward to be given the carryforward subitem as an account assignment, enter * .

Specify FS Items not to be Carried Forward

In this step, you specify the balance sheet items that you do not want to carry forward as selected items.

Activities

- 1. Decide which balance sheet items you do not want to carry forward.
- 2. Specify the item that you do not want to carry forward.
- 3. Specify a subitem if:

- a) The item excluded from the carryforward supports a breakdown by subitem
- b) You only want to exclude those values that have this subitem account assignment If the item supports a breakdown by subitem, but you do not want to carry forward the total value for the item, enter * instead of a subitem.

Define Task

You use a task to run a carryforward in the Data Monitor.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

Check the predefined tasks and adjust them if necessary.

Further notes

You assign th task for carrying forward balances to the task group for the Data Monitor in step Define task group. Carrying forward balances must be the first task you run in the Data Monitor at the beginning of a fiscal year.

Rollup to Consolidation Groups: Define Task

Performance benefits from compressing the data of consolidation units via rollups to consolidation groups or consolidation group hierarchies. This allows report programs created by the Report Writer to access the data more quickly. The rollup also increases the performance of interunit elimination functions.

If you want to the rollup to substitute the partner units onto higher hierarchy levels, select the corresponding indicator in the step Define dimensions.

Note that this has *nothing* to do with the data transfer method 'rollup'. You will find information on the transfer method in the section on 'Integration'.

You will require a task to execute a rollup onto consolidation groups.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

Check the predefined tasks and modify as needed.

Further notes

Assign the task for the rollup to the task group using the step Define task group for the data monitor and the step Define task group for the consolidation monitor.

Add Tasks

SAP has prepared an assortment of tasks for the consolidation process. When customizing the task group for the data monitor and the consolidation monitor, you can choose the desired tasks for your consolidated statements.

Moreover, you may want to extend the consolidation process with additional tasks. The component features the option to define your own tasks, socalled custom tasks, which you can use with programs that do not belong to the Consolidation component. (The standard tasks cover all of the programs included in the Consolidation component.)

Example

You might want to extend the data monitor with a task that runs a program which transfers the standardized financial data to the SAP component Executive Information System/EC-EIS (program FICEIS00).

Activities

If desired, define a new task as follows:

- 1. Enter a name for the task.
- 2. Choose the task category Custom Task for Data Monitor.
- 3. Enter a short text and a medium text.
- Assign a program to the task in conjunction with the effective year and period. The program may not belong to the consolidation component.
 The program must use the following function modules, which are delivered by SAP and make the

The program must use the following function modules, which are delivered by SAP and make the interface to status management possible:

- FC_USER_AUTHORITY_CHECK
- FC_USER_STATUS_CHECK
- FC_USER_STATUS_UPDATE
- FC_USER_GET_CACTI
- FC_USER_CHECK_FOR_OUTPUT

Further notes

S

For the data monitor you assign the new task(s) to the task group in Customizing step Define Task Group. There you also determine the execution sequence of the tasks.

Consolidation Functions

After the financial data is collected, standardized, translated and validated, you can perform consolidations. You can use various consolidation functions depending on your requirements.

In this section, you define the settings for these consolidation functions.

Consolidation Monitor

The consolidation monitor has the following objectives:

- To control the sequence of the consolidation tasks

In general, the tasks must be executed in a certain sequence to ensure an orderly flow. The tasks that belong to the consolidation monitor can principally only be executed after the tasks of the data monitor are completely executed without any errors. However, it is also possible to run a provisional update for tasks:

- When you successfully run a task in update mode and the preceding tasks are not blocked, the monitor returns the task status "Pendent" (pending completion of preceding task).
- When you successfully run a task in update mode and the preceding tasks are blocked, the monitor returns the task status "Without Errors".
- To execute the tasks

The monitor can be used to execute all of the tasks, either in test mode or update mode. Note that these tasks must be included in the task group assigned to the dimension. In addition to the monitor, you can also execute the individual tasks via the application menu.

In this section, you make the settings for the consolidation monitor. For each dimension, you define a task group, in which you specify the tasks to be run by the consolidation monitor as well as the sequence of the tasks.

The execution of the tasks is controlled by the predetermined status management function of the system. You can deactivate the function in step Check global system settings. There you can also specify for the monitor that accounting periods must be explicitly opened before they can be posted to.

Define Task Group

In this step, you define the task group for the consolidation monitor. In each task group, you assign the tasks to be executed in the consolidation monitor.

You can divide the task groups into:

Global task group

This is a task group which you assign to the dimension. You assign all tasks, which you need for the consolidation process in total, to this global task group.

Consolidation group dependent task group

This is a task group, whose tasks represent a partial quantity of the global task groups. You assign this task group to one or more consolidation groups. When you enter the consolidation group in the

global parameters while executing the consolidation, then the consolidation monitor only shows the tasks of the consolidation group dependent task group.

While defining consolidation group dependent task groups you must observe the following criteria:

The first task of the consolidation group dependent task group must match the first task of the global task group.

There must not be any gaps in the consolidation group dependent task group: the preceding task must be included for every task.

In general, all assigned tasks must also be executed for each of the consolidation groups. The exceptions to this are the tasks for manual postings and the preparation for consolidation group changes. You can manually block these tasks without them being executed.

Example

You might define a task group for the consolidation monitor with the following tasks: INTER UNIT Task for interunit eliminations CONS INV Task for consolidation of investments CONS VALID Task for validating consolidated data

Requirements

You must define each task before it can be assigned to a task group. The following sections describe how to define tasks in the various customizing contexts. From there you can link back to this section.

Recommendation

Once you start the consolidation process for a period, you should no longer modify the task group involved. Therefore, ensure that the task group contains all of the required tasks before starting the consolidation process.

Standard settings

The standard SAP system includes several task groups for the consolidation monitor which can be used for various consolidation scenarios.

Activities

- 1. Check the predefined task groups and create one if necessary.
- 2. Assign the tasks to a task group. Determine each task's attributes for its treatment in the monitor:
 - a) Determine whether the task is to be automatically blocked after an error-free execution.
 - b) Determine whether the system should be a milestone. This means that the system stops before this measure with a successive execution (run successive tasks). In this way you get back the control over the execution. For example it can make sense to specify measures for manual posting as milestones.

Nevertheless when you specify milestones you can choose a successive task run where the system does not stop before the milestone (run successive tasks without stopping). Instead the system closes the milestone-task and goes on to the next task.

- c) If you have tasks with the same sequence level, determine their order in the monitor (see also step 3).
- 3. Determine each task's preceding task (predecessor). The following logic applies to the entire sequence of tasks:
 - a) Status management ensures a mandatory sequence of internal blocks of tasks. The 'data monitor tasks' are allocated to blocks 1 through 7, and the 'consolidation monitor tasks' are allocated to blocks 8 and 9. The mandatory sequence is dictated by the internal block numbers. Within each block, however, you can execute the tasks in any sequence.

The internal blocks 8 and 9 of the consolidation monitor are listed with their allocated tasks: Block Task 8 Manual posting

- 8 Interunit elimination
- 8 Elimination of interunit profit/loss in transferred inventory
- 8 Consolidation of investments
- 8 Reclassification
- 8 Preparations for consolidation group changes
- 9 Validation of consolidated values
- 9 Rollup into consolidation groups

Furthermore, status management lets you execute custom tasks at any point in time. In other words, you can insert custom tasks into any block.

Notes

You can include in the task group the tasks which you require for your consolidation process. A task group can contain a task more than once, with the exception of 'validation of consolidated values' and 'rollups'. For example, the task group for consolidation of investments might contain the same task more than once, each of which performs a different activity or uses a different accounting technique.

You can also differentiate the same types of tasks by the assignment of different document types.

b) For business or organizational reasons it might also be necessary to determine a sequence within a single block. To do this, you can assign a predecessor task to a task. Then you can only execute the task if its predecessor has been blocked. In order to insert custom tasks into the task group you ensure that the task is correctly arranged among the other tasks by defining preceding tasks and, if needed, by specifying a number (see sub-step 2). (If you specify a

number, you should assign a number for all tasks, taking into account the other conditions affecting the sequence.)

- c) In sub-step 2 of this step you can determine the sequence of the remaining same-level tasks within a block in the monitor. If the system finds two or more same-level tasks within a block, the monitor displays the tasks from left to right in ascending order by task number.
- d) However, this sequence does not mean that the same-level tasks need to be executed in this order. They can still be executed in any order.

Further notes

A list of the master data of the defined task groups can be displayed and printed by choosing *Print* and entering the selection criteria for the list. The list is generated using the ABAP List Viewer. You can use the functions of the ABAP List Viewer to set filters or to individualize the data columns (see also the documentation for the ABAP List Viewer in the SAP Library).

This list and print function is also available for tasks (in the respective IMG steps for defining the tasks). **Assign Task Group to Dimension**

Assign the task groups that you have defined for the data monitor and consolidation monitor to the dimension.

Activities

Assign the task group to the dimension for each version and period, effective as of a certain date.

Further notes

See the step Define period categories for further information on maintaining period categories.

Consolidation Cycle for Multi-Period Consolidation

You use multi-period consolidation if you want to consolidate over multiple periods.

Multi-period consolidation provides the following capabilities:

- In the data monitor and the consolidation monitor you can scroll among different periods within a consolidation cycle.
- When flexible upload is used, you can upload the reported financial data for several periods simultaneously.
- In the data monitor and the consolidation monitor you can perform the following functions across both monitors:
- Bundle and execute tasks
- Bundle the remaining periods of a consolidation cycle

- Initialize the status in the remaining periods
- Block or unblock tasks in the remaining periods

To activate multi-period consolidation, make the following settings:

- Create a consolidation cycle in step Define Consolidation Cycle.
- In step Assign Consolidation Cycle to Version, assign the cycle to a version and define the starting year of the cycle.

Define Consolidation Cycle Activities

- 1. Create a consolidation cycle and enter a suitable description.
- 2. Assign one or more delta years to the consolidation cycle. Specify a consolidation frequency for each delta year.
 - The delta years determine the entire length of the consolidation cycle. The delta year is a two-digit number. The minimum number of delta years is "00" (which reflects the starting year). The consolidation frequency determines the valid periods of the consolidation cycle.

Further notes

In the next step, Assign Consolidation Cycle to Version, you assign each consolidation cycle to a version.

Assign Consolidation Cycle to Version

You assign a consolidation cycle to a version.

Requirements

You created one or more consolidation cycles in step Define Consolidation Cycle.

Activities

Assign each consolidation cycle, which you have defined and want to use, to a version.

Specify a starting year and starting period in each consolidation cycle assignment. This determines when the cycle is to be valid in the assigned version.

Manual Posting

You can post manual entries as an alternative to or in addition to posting automatic consolidation entries.

By using manual posting merely as an additional feature, you can utilize the system's automatic postings to the maximum extent.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

1. Document Type Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as

being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.

2. Number Ranges, Automatic Reversals

- Enter the number range for allocation of document numbers.

If you have not yet created the number range you require, choose the function *Define number range*.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

Indicate whether the document should be automatically reversed in the following period.

3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

 Hiding subassignments
 You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks

In this step you define tasks for manual postings.

Standard settings

Tasks for every activity are preset in the standard system.

Activities

- 1. Check the predefined tasks and, if necessary, define new ones.
- 2. To each task assign the document type to be used for the postings. The assignment uses the effective fiscal year and effective period.

This allows you to assign multiple document types for the same time period. Internally, the system uses an entry number to differentiate the entries.

The system assigns to the data collection task all of the document types that you defined for manual posting but did not assign to any task. Consequently, when you execute the data collection task in the data monitor, the system makes available manual postings with these same document types (in addition to the data entry of reported and additional financial data).

Further notes

Assign new tasks to the task group for the data monitor in step Define task group, for the consolidation monitor in step Define task group.

Define Validations

In this step you define rules for the validation of manual entries. The purpose of a validation is to have the system check certain rules during manual postings to ensure the consistency of the entries.

The validation guarantees the consistency of postings, by checking certain rules through the system.

1. Document header Common fields such as the ledger, version, fiscal year, period, document type, etc. are checked.

- 2. Document line items The fields in the document header as well as line item information such as the FS item, subitem or partner unit can be checked.
- The update Validations across all line items are performed.

Example

You might define the following posting rules:

- Certain items may only be posted with certain subitems.
- Certain staff members (users) may only post entries that do not exceed certain value limits.
- The total amount of depreciation posted to asset items with certain transaction types must match the total value of the corresponding depreciation items.

Activities

- 1. For each callup point (= document header, item, complete document) determine which validation rules you need for your entries.
- 2. For each validation rule determine the prerequisites for performing the validation and related checks. If your validation rule uses sets, these must be defined in table FIMC, which contains the fields for the conditions.
- 3. Determine which message is to be displayed when the validation requirements are met or not met. The message features up to four (4) display parameters--for instance, for displaying the user name. If needed, define a message class.
- Save the validation rules.
 You can determine whether the rule applies to each callup point. Available options are: Active, Inactive, and Active except for batch input.

Further notes

The manual FI-SL Validation/Substitution contains additional information.

Automatic Posting

The consolidation process is supported by automatic postings. As opposed to manual postings, automatic postings do not require the entry of line items. The system does this for you in accordance with the settings you make in Customizing.

Interunit Elimination

In this section, you make the settings required for performing interunit elimination. You run interunit elimination from the consolidation monitor by means of tasks.

In the individual steps, you define tasks, task versions, methods and document types for interunit (IU) elimination. The logic behind these settings is as follows:

Tasks

You can define IU elimination tasks for as many business transactions as you like. For example, you could define a task for the elimination of intercompany payables and receivables, revenue and expense, and investment income.

Methods

Using methods, you specify the details of elimination, for example the FS items to be eliminated, the treatment of elimination differences, and so on.

Task Versions

You define a task version for each IU elimination task.

Then you assign a document type and method for IU elimination to the task versions, effective as of a certain year and period.

Finally, you assign the task versions for a task to the existing consolidation version.

Purpose of Task Versions

Task versions enable you to use different methods and document types for each IU elimination task.

You can thereby treat each IU elimination task differently in each different consolidation version. For those tasks that are the same in all the various consolidation versions, you only need to maintain Customizing settings once.

1

Example:

Cons version Task Task version

- 1 Elim. IU pay./rec.1
- 1 Elim. IU rev./exp.
- 2 Elim. IU pay./rec. 1
- 2 Elim. IU rev./exp. 2

Comments on the example:

- Consolidation version 2 only differs from consolidation version 1 in the elimination of IU revenue and expense, which uses a different method, for example using one-sided instead of two-sided elimination.
- Task versions 1 and 2 are created for the task "Elimination of IU revenue and expense". Different methods and/or document types are assigned to these task versions.
- Only task version 1 needs to be created for the task "Elimination of IU payables and receivables". The method and document type which are valid for both consolidation versions are assigned to the task version.

Requirements

You have found out about the "Interunit Eliminations" component and its functions, and decided which functions you want to use and which settings you therefore require.

Define Methods

In the methods for interunit (IU) elimination, you specify how elimination will be performed.

- You determine which item sets are eliminated against each other.
- You determine which items are to be posted with any differences arising from elimination.
- You can also choose additional control options for each elimination. However, this is only necessary if your elimination deviates from the basic techniques.

The methods are not dependent on the consolidation chart of accounts. However, the item set/method assignments are dependent on the cons chart that is set in the global parameters during method definition. If you look at the method definition later on, you see the item sets assigned to the current cons chart of accounts.

Example

You might want to use the following methods for interunit elimination:

- A method for the elimination of IU receivables and payables, in which the A/R and A/P items of different consolidation units are eliminated against each other.
- A method for the elimination of IU revenue and expense, in which the revenue and expense items of different consolidation units are eliminated against each other. For the sake of simplicity, you could perform the elimination of IU revenue and expense on the basis of the income disclosed. However, this is method assumes that the revenue and expenditure amounts match exactly.
- A method for elimination of IU investment income, which eliminates the investment income items of the upper units against the distribution items of the investee units.

Standard settings

The standard SAP system contains predefined **methods** for the elimination of IU payables and receivables, revenue and expense, and investment income. The IDs of the methods can be defined as needed. The methods delivered by SAP use the following ID logic:

- Digits 1 and 2 of the ID are "01".

The methods are not cons chart-dependent; thus, '01' does not stand for the cons chart of accounts. As a result, these two digits can be modified as needed.

Digits 3 and 4 of the ID represent the document type of the method, that is, the document type for the elimination of payables and receivables, of revenue and expense, or investment income.
 All methods that share the same document type differ from each other in their control options.

Example: 01211 Elimination of IU Payables and Receivables

The assignment of the **item set** is cons chart-dependent. When you display a method definition, you always see those item sets that belong to the cons chart specified in the global parameters. The IDs of the item sets delivered by SAP use the following logic:

- Digits 1 and 2 are "CS".
- Digits 3 and 4 represent the cons chart of accounts to which the set is assigned.
- After a hyphen, there are 4 more digits that indicate the set contents. These digits contain an extract of the item numbers within the set.

Example: CS01-00 Receivables (from affiliates)

Activities

Maintain the methods for IU elimination. Proceed according to the hierarchy sequence:

- 1. Methods for IU elimination
- 2. FS item sets
- 3. Further control options (if needed) **Methods for IU elimination**

FS item sets

S

Further control options

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

 Document Type Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals
 - Enter the number range for allocation of document numbers.
 If you have not yet created the number range you require, choose the function *Define number range*.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

- Indicate whether the document should be automatically reversed in the following

period.

3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

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You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks for Interunit Elimination

You use tasks in order to run interunit (IU) eliminations.

For these tasks, you define task versions.

The purpose of these settings is to assign task versions to the consolidation version for IU eliminations tasks.

You assign a document type and a method to a task version, effective as of a certain year and period.

Example

You could require one task each for the elimination of IU payables and receivables, revenue and expense, and investment income.

Standard settings

Tasks for every activity are preset in the standard system.

Activities

Check the preset tasks and modify them if necessary. Proceed in the order of the steps shown in the navigation group.

1. Task

Create a task for IU elimination.

- Maintain the task version
 Define the task versions you require for the task. You need several task versions if you want to
 execute a task using various methods and/or document types.
- Assign method and document type to the task version Assign a document type and a method to each combination of task version, effective year and effective period.
- Assign task version to consolidation version Assign the applicable task version to each consolidation version, as required. Further notes

You assign the task(s) to the task group for the consolidation monitor in the step Define task group.

Elimination of IU Profit/Loss in Transferred Inventory

The settings you make in this section enable you to run elimination of interunit (IU) profit/loss in transferred inventory. You execute the elimination from the consolidation monitor using tasks specifically for this purpose.

Global Settings

In this step you define the global settings for the elimination of interunit profit/loss in transferred inventory.

In particular, you determine the source of the inventory data that is needed for determining the interunit profit/loss as follows:

- Table of additional financial data: you either enter the additional financial data manually, or you load the data into the Consolidation system using the flexible upload Totals database: provides the following data:
- Gross book value or stock quantity
- Valuation allowance disallowing losses
- Valuation allowance allowing losses
- Incidental costs, absolute or percentage

Requirements

In order to transfer the inventory items from the totals database, the inventory items must be broken down by the custom characteristic product group, the partner unit, and another characteristic for differentiating the data that is read from the totals database.

Activities

Decide which source is to be read for the inventory data: the totals database or the additional financial data. In order to read the data from the totals database, you must use a **custom characteristic** as the subassignment, to which the data element "product group" with the technical name *FC_PRGRP* is assigned.

Furthermore, decide whether to account for valuation allowances by selecting the corresponding indicator. If this is done, the net book value is used for calculating the group cost of goods manufactured. If valuation allowances are not account for, the gross book value is used as the bases for calculating the group cost of goods manufactured.

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The global settings are dependent on effective year/period, which permits easy change of the data source for the inventory data at any time. This is accomplished by making the setting that in the current period the inventory data is accessed from the totals database, and in the prior period the data is accessed from the additional financial data.

Define Product Groups

In this step you define product groups that are transferred within your corporate group. You assign these product groups to the inventory items or item sets. You enter additional financial data for the elimination of IU profit/loss in transferred inventory on the basis of these product groups. There are two ways of doing this:

- You can enter the additional financial data in the Consolidation application menu.
- You can access the reported inventory data from the totals database if the totals database contains a unique characteristic for the product group. In this case it is important that all inventory items share the same breakdown category. Then the subassignments can be maintained globally.

The system calculates the interunit profit/loss for each product group and each pair of consolidation units.

In the global system settings for Consolidation, you can choose define the use of product groups with respect to the elimination of IU profit/loss in inventory. The product group can be either a unique characteristic or a custom characteristic subassignment. If you access the reported inventory data from the database, there is no need to maintain the inventory data during the entry of the additional financial data for the elimination of IU profit/loss in inventory.

It is important that all inventory items share the same breakdown category if the inventory data is read from the totals database. Then the subassignments are maintained globally.

The system eliminates the IU profit/loss either at the inventory item level or at the product group level. This is why you must assign the product groups to the inventory items. In general terms, the inventory items build an aggregation for the product groups.

Example

You could define the product groups motors, transmissions, and so on, and assign them to inventory items.

Activities

- 1. Define the appropriate product groups for the goods transferred within your group.
- 2. Assign the product groups to the inventory items or to the FS item sets you have defined beforehand. In a single step you can select multiple product groups and assign them to the inventory items or the item sets. The view for assigning inventory items to product groups automatically shows the names of the product groups that you selected. Insert either the individual inventory items or the set name.

Further notes

You can display the master data of the defined product groups, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Copy Product Groups from File using Flexible Upload

In this step you use the flexible upload to copy product groups from a file into the SAP system. You specify the data format of the upload file by defining an upload method in the SAP system. Then you can transfer the product groups.

Standard settings

The standard SAP system includes a predefined upload method.

Activities

Do the following activities:

- Define the format of the file in an Upload Method and decide whether you can use the predefined upload method.
- Transfer the data from the file into the SAP system.

Subassignments for Inventory Items

In this step you define the subassignments for the inventory items.

The subassignments are subordinate to the inventory items. Ordinarily, all inventory items share the same breakdown category, in which case you do not need to enter the inventory item. The selected subassignments are automatically valid for all inventory items unless you define different subassignments for individual inventory items.

Note that it is *not mandatory* that all inventory items share the same breakdown category.

Standard settings

Following subassignments are available:

- Gross book value These values build the basis for inventory adjustments.
- Valuation allowance disallowing losses
- Valuation allowance allowing losses
- Incidental costs

Activities

Define the breakdowns for the inventory items. There is no need to define breakdowns for the product group and the partner unit; these are derived directly from the context.

If you read data from the totals database for the elimination of IU profit/loss in inventory, you must maintain the valuation allowance data and the incidental costs, in addition to the gross book value.

There must be different subassignments to differentiate between the gross book value, the different valuation allowances and the incidental costs.

Posting Items

Posting items are required for the configuration of the elimination of IU profit/loss in transferred inventory.

You define posting items either dependent on inventory items or dependent on product groups. Note that both of these procedures can be mixed (or used simultaneously) within one consolidation activity.

As with inventory items, you can define subassignments for posting items, too.

Since you can eliminate IU profits at both the product group and the inventory item level, you can also define posting items at both of these levels as well. Allocations to product groups are finer than allocations to inventory items. Therefore, if overlapping occurs, the allocation to the product group has a higher priority.

Value ' ' means for all inventory items/product groups.

If you use a custom characteristic as the product group, you can split the posting document into separate documents by product group. To do this, the corresponding subassignment must be permanently fixed in Document Type Maintenance.

Posting Items: Inventory Item-dependent

You use the inventory-related posting items to define the posting logic of the selected inventory items that is required to eliminate the interunit profit or loss incurred by inventory transactions that take place between different subsidiaries.

Recommendation

If you want to use the same posting items for multiple inventory items, you can copy all inventory-related posting items from one inventory item to another inventory item by choosing *Edit -> Copy as*.

Activities

Determine the posting logic for the offsetting entries as well as the entries for translation differences and the entries for transferring distribution costs.

Further notes

If you leave the *inventory item* blank, then the settings for all inventory items apply.

Posting Items: Product Group-dependent

You use the product group-related posting items to define the posting logic of the selected product groups that is required to eliminate the interunit profit or loss incurred by inventory transactions that take place between different subsidiaries.

Activities

As with the inventory item-related posting items, you can determine the product group posting logic for the offsetting entries as well as the entries for translation differences and the entries for transferring distribution costs.

Further notes

If you leave the *product group* field blank, the settings for all product groups apply.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

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Activities

Decide which document types you require and define them.

Do this in the following sequence:

 Document Type Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals
 - Enter the number range for allocation of document numbers.
 - If you have not yet created the number range you require, choose the function *Define number range*.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

- Indicate whether the document should be automatically reversed in the following period.
- 3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

- a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.
- Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Task

You use a task to run the elimination of IU profit/loss in inventory.

Standard settings

All required tasks are preset in the standard system.

Activities

- 1. Check the predefined tasks and edit them if necessary.
- 2. Make settings for the tasks:
- Define the effective year and period.

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- Define a document type with the posting level 20.
- Specify the document type for the prior period if this is the first time you are eliminating IU profit/loss in inventory.
- Choose a comparison exchange rate indicator if you want to compare the historical IU profit/loss with that using the current exchange rate.
- Decide whether to post the offsetting entry to the inventory managing consolidation unit.
- Decide whether to permit the posting of interunit losses.

Consolidation of Investments

This chapter instructs you how to make the settings for the consolidation of investments.

Determine System Utilization for C/I

How you customize consolidation of investments depends on which functions of the sub-component **Consolidation of Investments** (C/I) you want to use.

In this step you specify which functions are used in the consolidation of investments. After this step, you will be prompted with the steps and configuration options that are useful for the settings you make here.

Standard settings

C/I utilization is already predefined in the standard R/3 system and can be modified if necessary. The accounting techniques Purchase Method, Equity Method, Proportional Consolidation and Mutual Stock Method are selected.

Activities

Determine which functions you want to use within the consolidation of investments. Proceed as follows:

- 1. Choose the accounting technique to be used for including one or more consolidation units in the consolidation of investments.
- 2. Determine whether you need to generate equity aging reports or post appropriation of retained earnings during consolidation of investments.
- 3. In 'Further settings' choose whether and how to treat hidden reserves/contingencies (fair value adjustments), goodwill, negative goodwill and negative stockholders' equity. The treatment of goodwill and negative goodwill offers several fields. When defining the methods for the consolidation of investments, specify which treatment of goodwill or negative goodwill is to apply to each method.

- 4. For each of the functions chosen above, determine how Customizing is to treat the hidden reserves or contingencies, goodwill, negative goodwill and negative stockholders' equity. The following options are available:
 - Global

Choose this option if the same settings apply to all consolidation units. If so, make the settings in step Make global settings.

- With exceptions

Choose this option if the same settings basically apply to all consolidation units with only very few exceptions for individual consolidation units.

In this case, first make the global settings (see above). Then you can make any additional settings for the methods in step Define methods. Use the assignment of the methods to the consolidation units to determine which consolidation units these exceptions apply to. The global settings always apply unless an exception at the method level exists.

- By method

Choose this option if the settings are always made at the method level. Use the assignment of the methods to the consolidation units to determine which settings apply to the various units.

Further notes

In this step, you can also check the consistency of the Customizing settings for consolidation of investments. To do this, choose the function *Customizing Check* after you have made your settings. The system displays a list of inconsistencies and/or missing settings.

Make Global Settings

In this step, you make the settings for the consolidation of investments which are applicable to all methods.

Which settings are available depends on which functions you have chosen for the consolidation of investments.

The settings encompass the following:

- The collection of reported financial data to be processed by the consolidation of investments;
- The treatment of goodwill and/or negative goodwill;
- The FS items for the treatment of goodwill and/or negative goodwill;
- The treatment of hidden reserves/contingencies (fair value adjustments);
- The equity aging report;
- Negative stockholders' equity **Standard settings**

The standard R/3 system includes global settings.

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Activities

Make the global settings for the functions you have chosen.

If applicable, specify the FS items needed for posting goodwill.

Further notes

Also note the step Check global system settings, in which you can determine whether to show the statistical items in the C/I audit trails.

Define Tasks

In this step you define the tasks for the consolidation of investments (C/I).

As a rule, you only need to define one task. However, it might be useful to define several tasks in cases where the C/I activities or individual accounting techniques are performed at different times or by different staff members.

For each task you define a sub-set of all available C/I activities and accounting techniques.

Example

Example 1

Assume that your consolidation of investments consolidates one set of consolidation units using the accounting technique 'purchase method,' and the other set using the 'equity method.' The following activities are used: first consolidation, subsequent consolidation, amortization of goodwill, step acquisition, and the distribution of dividends.

In this case you would create a task and assign to it all combinations of the accounting techniques and activities listed.

Example 2

Assume that a particular staff member runs all of the equity method consolidations. In this case you would want to define a separate task for the staff member. To the task you would assign a combination of the accounting technique 'equity method' and the activities to be processed.

You would also define another task for any other accounting techniques.

Standard settings

One C/I task is predefined in the standard SAP system. It includes all activities and all accounting techniques.

Activities

1. Check the predefined tasks and, if needed, define any additional ones.

2. To each task assign the combinations of the activities and accounting techniques you want to perform during the consolidation of investments.

Further notes

In the step Define task group, assign the task (or tasks) to the task group for the consolidation monitor.

Methods

In this section you define the methods for the consolidation of investments.

The difference between the methods for the consolidation of investments and the methods for other consolidation tasks lies in the fact that the methods for the consolidation of investments are assigned directly to the consolidation units.

Define Methods

In this step you define the consolidation of investment (C/I) methods.

A C/I method is only valid for one accounting technique. If you want to include consolidation units based on different accounting techniques, you will require at least one C/I method per accounting technique.

Example

If the consolidation of investments is to include consolidation units based on the accounting techniques 'purchase method,' 'equity method' and 'proportional consolidation,' you need at least one C/I method for each accounting technique.

Standard settings

The standard SAP system includes methods for the following accounting techniques:

- Purchase method
- Proportional consolidation
- Equity method
- one-line consolidation, in which goodwill is part of the investment book value
- two-line consolidation, in which goodwill is NOT part of the investment book value, but instead is disclosed at a separate FS item
- Mutual stock method as many features as the purchase method

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The methods refer to FS items, which are dependent on the consolidation chart of accounts. Whenever you view a method definition, you always see the FS items that belong to the cons chart of accounts currently set in the global parameters.

If desired, make the following modifications:

- All methods are defined so that they use direct shares when computing acquisitions. If needed, change this setting so that acquisitions are computed with group shares.
- Goodwill is defined with an amortizable life of four years. Modify this if necessary.
- If you intend to use the equity method with a C/I method that uses one-line consolidation, you may be required to disclose the goodwill contained in the investment book value as part of the notes to consolidated statements. In order for you to be able to determine the goodwill in a report, SAP recommends that you insert an additional subitem of the subitem category 1 (transaction type) for "Transfers of Goodwill Equity Method". You specify this subitem in the method definition for the acquisition item for goodwill (instead of subitem 120).

Activities

Check the predefined methods and define new ones if necessary:

- 1. For each C/I method, determine which accounting technique is to apply.
- 2. For each C/I method, determine which accounting rules US GAAP or HGB (German Commercial Code) are to apply.
- 3. Make additional settings see below on the detail screen. These are dependent on the definitions previously made in step Determine system utilization for C/I.
 - If multiple fields for the treatment of goodwill or negative goodwill are activated, for each method determine whether to perform amortization, direct elimination or periodic reduction.
 - If the treatment of hidden reserves/contingencies, goodwill, negative goodwill and negative stockholders' equity is defined at the method level, maintain the applicable settings.

Assign Methods to the Consolidation Units

In this step you assign the consolidation of investment methods defined in a previous step to the consolidation units (CUs).

Various options are available for viewing the assignments and the methods:

- Dimension view

This option displays the method assignments of all CUs of the entire dimension. The display is hierarchical, as derived from the hierarchy of consolidation groups. In general, you use this view for making your method assignments.

- Consolidation group view

This option displays the method assignments of all CUs in a single consolidation group. It shows you, in particular, which methods of the CUs are inherited from the lower-level consolidation groups by the group currently being displayed.

This view is designed for assigning a different method (one other than that which is normally inherited from a lower-level consolidation group) to a CU in the current hierarchy level.

- Consolidation unit view

This view displays which methods are assigned to a given consolidation unit at the various hierarchy levels.

This view is designed for assigning to a CU a method that is valid at all hierarchy levels. By default, the system assigns methods to CUs wherever none has been made.

- A method assignment must be made to each consolidation unit in every consolidation group to which the CU belongs.
- A method must also be assigned to CUs in hierarchy levels, in which CUs inherit their methods from multiple lower-level consolidation groups.

The reason for this is that in each lower level a different method can be assigned to a given CU. Thus, an unambiguous inheritance is not possible.

As a rule, one method "dominates" a given consolidation group; that is, a majority of the CUs use the same method. In this case, you would assign the "majority" method to the consolidation group and pass it on to the CUs. The following options are available:

- Downward Inheritance The lower-level CUs inherit the method assigned to the consolidation group - that is, the method is passed on downwards.
- Upward Inheritance

The higher-level CUs inherit the method assigned to the consolidation group - that is, the method is passed on upwards.

However, CUs do not inherit such a "majority" method if another method is already directly assigned to the CU.

The system uses symbols and colors to denote method inheritance and any missing assignments. See the color and symbol legend to display the meanings.

Example

Consolidation unit 'CU A' belongs to the consolidation groups 'CG 2' as well as 'CG 3'.

- CG 2 has an ownership of 60% and therefore uses the purchase method for CU A.
- CG 3 has an ownership of 30% and therefore uses the equity method for CU A.

At the next higher hierarchy level (of the dimension) both CG 2 and CG 3 belong to CG 1. At this level, a method must be assigned to CU A as well, because the consolidation unit inherits methods from two separate lower-level consolidation groups, in which the assigned methods are ambiguous. **Activities**

Assign a method to all consolidation units to be included in the consolidation of investments.

Use the following basic procedure:

- 1. Check which methods are already assigned to the consolidation units (CUs).
- 2. Choose the 'dimension view'.
- 3. If possible, use the inheritance feature for making your method assignments: Position the cursor on the consolidation group and choose **Edit -> Choose** or double-click the mouse button. In the dialog box, enter the method, the effective year and the effective period, and select the type of inheritance.
- 4. For those consolidation units that should not inherit this "majority" method, assign the deviating method directly:

Position the cursor on the consolidation unit and perform the remaining actions, as described in step 3.

5. If you want to change a CU's method, then replace the method assignment for the prior period with the new method.

In a dialog box, determine the date from which the method is to take effect. In the hierarchical view of the method assignments, besides the current method you can also look at the method assigned to the prior period.

You can use the 'consolidation group' and 'consolidation unit' views to correct your method assignments, when needed.

Maintain Subitems for Equity Aging Report

If you made a setting in Determine System Utilization of C/I to have the system generate equity aging reports, you use the present step to define the subitems for such reports.

Activities

- If you chose Net Display in step Make Global Settings, define the following subitems for the activities:
- subitems for the equity
- subitems for minority interest in investments if you use one or more methods that calculate acquisitions (first consolidation, step acquisition, increase in indirect investment) using group shares.
- If you chose Gross Display, define the subitems per activity for the group and the subitems for minority interest.

Specify Scope of Reported Data for Equity Method

During subsequent consolidation of consolidation units that are included using the equity method, an update of the **equity in earnings of affiliates** item can be triggered by any of the following events: recording of annual net income, distribution of dividends, payment of bonuses, occurrence of currency translation differences, and so forth.

In this step, you specify the various "triggering events" as part of the scope of reported financial data for the equity method.

Then you can enter the reported data concerning equity holdings adjustments for exactly the same scope of reported data.

Standard settings

The standard SAP system includes various predefined scopes of reported data.

Activities

Check the existing predefined scope of reported data, and modify the settings if necessary.

Settings for Fair Value Adjustments

If you want to perform fair value adjustments when consolidating investee units, use these steps to maintain the financial statement items and further settings.

You can define fair value adjustments either manually or copy them via a flexible upload from a data file.

Define Fair Value Adjustments

In this step you can manually define fair value adjustments.

The settings for the fair value adjustments are made for each investee unit. First, specify what type of fair value adjustments is involved. For each type, you can define a list of subnumbers.

Activities

- 1. Make a list of the investee units for which fair value adjustments are accounted for. Define the fair value adjustments for each unit.
- If desired, subclassify the adjustments using subnumbers. If do not want to do this, you can overwrite the default subnumber with spaces.
 For each subnumber, enter a description and, if desired, the beginning date of the amortization.
- For each subnumber, enter the time-dependent properties: For the effective year and period, specify how the fair value adjustments are to be eliminated.
 If the upper-level entry contains the beginning date of amortization, that year and period is used as the default for the effective year and period. If desired, you can overwrite the defaults.
- 4. For each subnumber, enter the FS items to be used to eliminate the fair value adjustments.

Further notes

For easier maintenance, you can select several or all entries and enter the values at one time. For example, you can select the fair value adjustments for all consolidation units, and then go and maintain the subnumbers.

Copy Settings by means of Flexible Upload Alternatively to defining manually, in this step you can transfer the settings for the fair value adjustments with means of a flexible upload from a file.

Selected Items

Automatic posting needs to know which FS items certain activities are to be posted to. For instance, for the transfer of minority interest, the system must know which FS items you have reserved in the consolidation chart of accounts for the minority interest.

In this section, you define these FS items as socalled **selected FS items** for the consolidation of investments.

Specify Equity Items and Items for Statistical Equity Postings

In this step you specify the equity items that are included in the consolidation of investments.

You also assign a statistical item to each equity item. The system uses these statistical items to record the group share in the equity values. The system requires these statistical entries in order to process the activities that follow.

Example

The first consolidation process completely clears the equity included in the consolidation. The minority interest is transferred to equity, the group share is eliminated against the equity in earnings of affiliates (investment book value), and any goodwill is disclosed.

In addition to this entry, the system posts the group share in the cleared equity to one or more statistical items.

Requirements

The statistical items must be defined in the consolidation chart of accounts. If needed, go to step Maintain Hierarchies of Cons Chart of Accounts.

Standard settings

In the standard SAP system, a statistical item is assigned to each stockholders equity item and each item for currency translation differences. This item requires a breakdown by transaction types as subitems and a breakdown by partners.

Activities

Assign the statistical items to the equity items.

Further notes

Maintain the overall offsetting item for statistical entries in step Specify miscellaneous selected items.

Specify Minority Interest Items

If the group share in consolidation units is less than 100%, the consolidation of investments takes minority interest into account. Minority interest in investments and equity capital is transferred to the corresponding minority interest items.

In this step, you specify which financial statement items are to be posted with the minority interest for the relevant investment and equity items. These assignments are cons chart- and version-dependent.

Example

You might assign the item "Minority Interest in Capital Stock" to the item "Capital Stock".

Requirements

Before assigning the minority items to the investment and equity items, you must define the minority interest items in the consolidation chart of accounts. If needed, choose the step Maintain item hierarchies for cons chart of accounts.

Standard settings

The standard SAP system contains predefined minority interest items for all stockholder equity items and all translation difference items for the cons charts 01, 11 and 12.

In addition, cons charts 11 and 12 have minority interest items assigned to the investment items. This isn't necessary for cons chart 01.

Activities

Assign the corresponding minority interest items to the investment and equity capital items.

Note that you do not have to assign one minority item for each investment and equity item. Instead you can specify one minority item as the default item by leaving the investment and equity items blank and only entering the minority interest item.

If this is done, only the default item is used for the minority interest postings if no separate entry is found for an investment or equity item.

Define Items for Other Comprehensive Income

Use

If the *Other Comprehensive Income in Total Divestiture* function is active in the system utilization for consolidation of investments, the system makes a posting with effect on net income of the group values of other comprehensive income in the *Total Divestiture* activity.

In this step, you define the items for other comprehensive income, and assign income statement items for posting the other comprehensive income in total divestiture to the items.

Requirements

The items for other comprehensive income must form a subset of the equity items. This means that every item that you define in Customizing for other comprehensive income must also be entered in the step *Determine Equity Items and Items for Statistical Equity Postings* as an equity item and a statistical equity item assigned to this item.

The posting items for other comprehensive income in total divestiture must be located in the income statement. They must not necessarily assign various income statement posting items to the different items for other retained earnings components. You can also choose the same income statement posting item for debit and credit posting.

Activities

Define particular equity items (for example, currency translation difference) as other comprehensive income, and assign posting items in the income statement to these items.

Define Offsetting Items for Other Comprehensive Income

Use

If the *Other Comprehensive Income in Total Divestiture* function is active in the system utilization for consolidation of investments, the Total Divestiture activity posts the group values of Other Comprehensive Income in the income statement.

In this step, you define the items for Other Comprehensive Income and assign to these items other items for the offsetting entries for posting the Other Comprehensive Income in total divestitures with an effect on net income.

Requirements

The items for Other Comprehensive Income must form a subset of the equity items. This means that every item that you define in Customizing for Other Comprehensive Income must also be entered in the

step *Determine Equity Items and Items for Statistical Equity Postings* as an equity item and a statistical equity item assigned to this item.

The exact same equity items that are defined as Other Comprehensive Income must be specified in the following two steps:

- Define Items for Other Comprehensive Income
- Define Offsetting Items for Other Comprehensive Income

The offsetting items for posting Other Comprehensive Income with an effect on income in total divestitures can be located either in the balance sheet or the income statement. The offsetting items assigned to the various Other Comprehensive Income items do not need to be different. You can also use the same offsetting item for debit and credit postings.

Activities

Define particular equity items (for example, currency translation difference) as Other Comprehensive Income, and assign to these items other items for offsetting entries for Other Comprehensive Income in total divestitures with an effect on net income.

Customize Appropriations for Cons of Investments Postings

The items for the appropriation of retained earnings reflect the changes to the stockholders' equity items in the balance sheet. When the consolidation of investments process posts elimination entries to the equity items, the corresponding appropriation items must also be adjusted in order to ensure that the appropriations are accurately disclosed in accordance with standard accounting practices.

To enable the automatic adjustments, you need to allocate the equity items to their corresponding appropriation items.

Example

If a first consolidation transfers the value of the appropriation items to minority interest items and eliminates the value against the investments, then the value of the appropriation transfers should be treated in the same manner.

Requirements

The settings in this step are only required if the system is to make the adjustments in the retained earnings appropriations mentioned above as part of the consolidation of investments.

Activities

In the steps that follow, specify the appropriations items for the relevant equity capital items as well as the minority interest items for the appropriation of retained earnings.

Further notes

In addition to these settings, ensure that the treatment of appropriations is selected in the step Determine system utilization for C/I.

Specify Items for Adjusting Group Appropriations

In this step you link the equity items relevant to the consolidation of investments to their corresponding appropriation of retained earnings items.

Requirements

The appropriations items must be defined in the consolidation chart of accounts before they can be assigned. If needed, go to the step Maintain item hierarchies for cons chart of accounts.

Standard settings

The standard SAP system features appropriation items assigned to the equity items.

Activities

Allocate the appropration items to their corresponding equity items.

You can distinguish between debit and credit entries. If you always want to assign the same item - regardless of the net balance, simply specify that item under "GARE */Dr".

Specify Items for Adjusting Minority Appropriations

In this step, you link the equity items relevant for the consolidation of investments to their corresponding minority interest items in the appropriation of retained earnings. **Requirements**

The minority interest items must already be defined in the consolidation chart of accounts before they can be assigned. If needed, go to the step Maintain item hierarchies for the cons chart of accounts.

Standard settings

The standard SAP system features minority interest items assigned to the equity items.

Activities

S

Assign the minority interest items for appropriations to the corresponding equity items.

You can distinguish between debit and credit entries. If you always want to use the same item - regardless of the net balance, merely specify the item under "MARE */Dr".

Specify Items for Equity Method Postings

In order to update the equity in earnings of affiliates (investment book value) when using the equity method of consolidation, the system requires the investment item and its offsetting item, as well as the divestiture items.

In case the updates cause the investment book value to become negative, the system also requires settings for the posting entry and offsetting entry for the negative value.

You specify these items for each scope of data for the equity method. This allows you to differentiate the updates of the investment book value depending on what causes it.

Requirements

The items must already be defined in the consolidation chart of accounts. If needed, go to the step Maintain item hierarchies for cons chart of accounts.

Standard settings

The standard SAP system contains posting items for each predefined scope of reported data. The definitions of the various scopes differ in their offsetting items, the items for negative investment book values, and the item for statistical equity.

Activities

Specify the items to be posted for the equity method. Specify Items for Distribution of Dividends

In order to process certain activities in the consolidation of investments, the system needs to know which items are used for recording distributions of dividends. For instance, this information is required for the accurate calculation of minority interest in annual net income.

Keep in mind that these items may only be recorded with values that stem from the distribution of dividends.

Requirements

The items must already be defined in the consolidation chart of accounts. If needed, go to the step Maintain item hierarchies for cons chart of accounts.

Standard settings

In the standard SAP system, the cons charts 01, 11 and 12 each have a predefined FS item for distribution of dividends.

Activities

Specify which items are to be recorded with distributions of dividends.

Specify Items for Bonus Payments

Certain organizations make sizeable bonus payments. If this applies to your organization, these payments need to be taken into account when processing certain activities in the consolidation of investments:

The system needs to know which items are used for recording such bonus payments.

Keep in mind that these items may only be recorded with values that stem from bonus payments and the like.

Requirements

The items must already be defined in the consolidation chart of accounts. If needed, go to the step Maintain item hierarchies for cons chart of accounts.

Standard settings

In the standard SAP system, the cons charts 01, 11 and 12 each have a predefined item for bonus payments.

Activities

Specify which items are to be recorded with bonus payments. **Specify Miscellaneous Selected Items**

Besides the selected FS items specified in the previous steps, the consolidation of investments requires additional selected items for the automatic postings.

Requirements

The items must already be defined in the consolidation chart of accounts. If needed, go to the step Maintain item hierarchies for cons chart of accounts.

Standard settings

The standard SAP system has predefined selected items for the cons charts 01, 11 and 12.

Activities

Specify the selected items.

Document Types

The postings for the consolidation of investments (C/I) require document types. You can manipulate the postings using document types in one of two ways:

- You can assign one document type to each C/I task.
- You can assign one document type to each combination of C/I activity and accounting technique.
 The second option allows a greater differentiation of document types, thus enabling you to "classify" the postings using the document type.

Note that you cannot combine both alternatives.

Therefore, in this section you should first define the document types, and then perform only one of the two steps for assigning the document types.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

 Document Type Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals
 - Enter the number range for allocation of document numbers.
 - If you have not yet created the number range you require, choose the function *Define number* range.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

- Indicate whether the document should be automatically reversed in the following period.
- 3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no

default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Assign Document Types to Tasks

In this step you assign one document type to each task for the consolidation of investments (C/I).

Requirements

A document type for use with the consolidation of investments must already exist.

Standard settings

The standard SAP system features predefined document types.

Activities

To each task assign the document type to be used for posting consolidation entries. The assignments are made for each version, effective year and period.

This allows you to assign different document types to a task for your various versions. Likewise, you can assign different document types for different time periods.

Further notes

Note that the step Assign document types to activities and accounting techniques is an alternative to this step.

Assign Document Types to Activities & Accounting Techniques

In this step you assign document types to combinations of activities and accounting techniques for the consolidation of investments (C/I).

Requirements

Document types for use with the consolidation of investments must already exist.

Standard settings

The standard SAP system features predefined document types.

Activities

To each combination of activity and accounting technique assign the document types to be used for posting consolidation entries. The assignments are made for each version, effective year and period.

This allows you to assign different document types to the combinations for your various versions. Likewise, you can assign different document types for different time periods. **Further notes**

Note that the step Assign document types to tasks is an alternative to this step.

Activities

The activities processed in the consolidation of investments require additional financial data. Auxiliary functions are available for collecting the additional financial data. In this section you can make the necessary settings:

- You can define default values to be used during the entry of the additional financial data.
- You can define reported items to enable the system to read the additional financial data from the totals database.

Furthermore, you can define the sequence of the activities in this section.

Specify Integrated Entry

In this step you determine whether you want to enter integrated values for those activities that require additional financial data for investments and equity. "Integrated" means that both the investment and the equity values are input during a session of activity entry.

If you do not want to use integrated data entry, then after the separate entry of investment and equity values you must run Activity Number Matching.

Activities

Determine whether you want to enter investment and equity data in an integrated fashion or separately.

Further notes

Integrated entry remains active as long as no entry is made in this step.

Specify Defaults for Entering Activities

In this step you can define default values to make the entry of activities easier.

The defaults involve the values for investments and equity that are entered during the activities. They are defined for each dimension and consolidation chart of accounts.

These default values will automatically appear when you run the entry of additional financial data in the application menu. There, you can overwrite the default values at will. **Standard settings**

Default values for certain activities (first consolidation, subsequent consolidation, and others) are predefined in the standard SAP system.

Example

You might specify the following default values for the activity "first consolidation":

- investment item
- subitem (if applicable)
- debit/credit sign "+" for changes in investments
- debit/credit sign "+" for book value changes to the investment item
- equity item
- subitem (if applicable)
- debit/credit sign "+" for book value changes

Activities

- 1. Check which activities of the consolidation of investments (C/I) are to be entered in the application menu.
- Enter the default values for each C/I activity.
 Keep in mind that you need to enter the default values for each activity. The definitions are activity-specific -- for instance, investment and equity values are entered during first consolidations, whereas, only the equity values are entered during subsequent consolidations.

Define Number Range for Automatic Number Assignments

To enable the system to assign activity numbers during activity entry, you need to define a number range.

Standard settings

In the standard SAP system, number range 01 is predefined for the object FIMC_COINR.

Activities

Check and see if number range 01 already exists for object FIMC_COINR. If not, define it.

Remarks Concerning Transports

To transport the number range, in the maintenance of number ranges select "Range -> Transport". **Reported Items for Automatic Activity Recognition**

An alternative to entering changes in equity and equity holdings adjustments data as additional financial data in separate financial data tables, you can access this data in the totals database.

The reported items must be specified to enable the system to recognize the data in the totals database that is relevant to consolidation of investments (C/I) activities.

In this section, you can specify which reported items are relevant to the changes in equity and equity holdings adjustments.

Specify Reported Items for Changes in Equity

In this step you specify the financial statement items and subitems (if applicable) to be used for reported financial data showing changes in equity.

For each activity related to changes in equity, you specify which FS items and subitems are to be recorded in the totals database.

Standard settings

The standard SAP system has predefined FS item sets and subitem sets for the consolidation charts of accounts 01, 11 and 12 for use with the C/I activities first consolidation, subsequent consolidation, increase in capitalization, and reduction in capitalization.

In general, you can use IDs of your own choice for FS item sets. The standard system uses the following structure for the item set IDs: 'COI-abb-ccdd'

Code	Represents
a	Category:
	"E" for Equity items
	"I" for Investment items
bb	Cons chart of accounts
сс	Activity
dd	Sequence number
Example:	

Item set 'COI-E01-0100' contains Equity items for first consolidation, cons chart 01.

The subitem sets in the standard system use the following structure for the IDs: 'COI-a-bb-cc'

Code **Represents** a

Subitem category bb Activity cc Sequence number

Example:

Subitem set 'COI-6-0100' contains transaction types for equity, first consolidation. Activities

For each activity specify the FS item set that contains the reported items. You can assign sequence numbers to specify multiple item sets.

If the item set does not yet exist, enter the name of the set and go to Set Maintenance. There you can define the set.

Further notes

To ensure that the financial data is read from the totals database, go to step Global Settings and select the appropriate option for activity entry.

There you can also choose the calculation base for the values.

Specify Reported Items for Equity Holdings Adjustments

In this step you specify the financial statement items and subitems (if applicable) to be used for the reported financial data concerning the equity holdings adjustments to the consolidation units. Equity holdings adjustments are needed for processing activities of consolidation units that are consolidated with the equity method.

You can have different scopes of reported data for the equity method. If you require a new scope of data in addition to those already defined, you can define it in the step Specify scope of reported data for equity method.

Standard settings

In the standard SAP system, certain scopes of reported data have predefined FS items and subitems in conjunction with cons charts 01, 11 and 12.

Activities

For each scope of reported data specify the FS item and the subitem (if applicable).

Further notes

To ensure that the financial data is read from the totals database, go to step Global Settings and select the appropriate option for activity entry.

There you can also choose the calculation base for the values.

Define Default Sequence of Activities

The postings in the consolidation of investments (C/I) to a great degree depend on the sequence that the system uses to process the entered C/I activities. The sequence is determined by:

- the sequence of the activities among themselves
- the sequence in which the consolidation units within the hierarchy are processed

In this step you can define the default sequence of the activities, and select one activity for the "up to here" threshold.

The overall sequence of activities is achieved as follows:

- 1. The system determines the ownership (or investment) hierarchy of consolidation units from the additional financial data concerning the changes in investments.
- 2. For each consolidation unit the system sorts the activities by the default activity sequence.
- 3. The system then merges the investment hierarchy of consolidation units with the default sequence of activities, thus creating the overall sequence as follows:
 - a) First, each hierarchy level is processed, one by one, from the top level to the lowest level.
 - b) Within each hierarchy level, the consolidation units are processed in alphanumeric order.
 - c) For each consolidation unit, the system processes the first portion of activities up to the "up to here" threshold.

- S
- d) Afterwards, the system processes the remaining activities, processing the consolidation units in reverse order.

Example

A consolidation group contains the consolidation units CUTOP, CUMID, CUSUB1 and CUSUB2 with the following investment hierarchy:

- CUTOP has an investment in CUMID.
- CUMID has investments in both CUSUB1 and CUSUB2.

You entered the activities:

- First consolidation
- Subsequent consolidation
- Step acquisition
- Partial divestiture
- Distribution of dividends

This also represents the default sequence. You chose the activity Step Acquisition as the "Up To Here" threshold.

The system processes these activities as follows:

- 1. The activities First consolidation, Subsequent consolidation and Step acquisition are processed for each of the units in the following order:
 - a) CUMID
 - b) CUSUB1
 - c) CUSUB2
- 2. Then, the activities Partial divestiture and Distribution of dividends are processed for the same units in reversed order:
 - a) CUSUB2
 - b) CUSUB1
 - c) CUMID

Standard settings

The standard SAP system has a predefined default activity sequence.

Activities

Specify the default sequence of the activities. Choose one activity for the "Up to here" threshold.

Further notes

S

To refine these sequence settings, you can modify the default sequence by individual consolidation units. Thus, when processing such a unit, instead of using the default activity sequence, the system will process the activities according to the sequence specifically modified for the unit.

Define Goodwill Treatment for Acquisitions

Use

In this step, you can determine which goodwill treatment (that is, the valuation allowance procedure) is to be used to post goodwill or negative goodwill incurred in an acquisition (except first consolidation):

- Direct acquisition (entry "Step Acquisition"): step acquisition, increase in capitalization, reduction in capitalization
- Increase in indirect investment

When you specify a goodwill treatment in this step, this setting overrides the goodwill treatment set in the consolidation of investments method; this means that the goodwill incurred in the acquisition is posted using the goodwill treatment defined in this step, regardless of the setting in the consolidation of investments method.

If you specify a goodwill treatment for all entries in this step, the goodwill treatment in the consolidation of investments method is only relevant to the first consolidation activity.

Requirements

For the treatment of goodwill or negative goodwill, you can specify only those values that are activated in system utilization for consolidation of investments.

Activities

You can use this optional setting to determine the goodwill treatment for acquisitions (except first consolidation).

Check Consistency of Customizing for Consolidation of Investments

Use

In this activity, you can check if the Customizing settings are consistent.

We urgently recommend that you completely resolve any errors to prevent serious errors later on in consolidation of investments.

Reclassification

The process of consolidation may need to include reclassifications in order to make transfers, to net balances, and so on. These are postings that use posting levels greater or equal to 20. You define a task for this purpose, which is then shown in the Consolidation Monitor.

The section Data features the same steps for defining reclassifications within data collections.

Define Methods

The method for reclassifications specifies which FS item values are to be reclassified.

Additional control options for laying out the reclassification entries are also available. The main options are:

- To reclassify using percentage rates
- To reclassify periodically
- To reclassify based on debit/credit signs
- To post reclassifications at the partner unit

Example

See the examples in the Process of Reclassifications in the documentation (SAP Library).

Activities

- 1. Create the reclassification methods.
- 2. For each reclassification method, define the reclassification rules as follows:
 - Make the settings as to how reclassification is to take place.
 - Specify the Triggering item, the Source item and the Destination item. Keep in mind the available options for inheriting the assignments.
 - If needed, define additional control options.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

1. Document Type

Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals
 - Enter the number range for allocation of document numbers.
 - If you have not yet created the number range you require, choose the function *Define number* range.
 - For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.
 - Indicate whether the document should be automatically reversed in the following period.
- 3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks

Reclassifications require a task. To this task you assign a document type and a reclassification method.

Requirements

The document type(s) and method(s) must already be defined.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

- 1. Check the predefined tasks and modify as needed.
- To each task assign its document type and reclassification method for one or more time periods (using the effective year and period).
 Further notes

You assign the task(s) to the task group for the Data Monitor in step Define task group, or to the task group for the Consolidation Monitor in step Define task group.

Consistency Check of Customizing for Reclassification

Use

In this activity, you can check if the Customizing settings for reclassifications are consistent.

We urgently recommend that you completely resolve any reported problems to prevent serious errors later on when posting reclassifications.

Preparations for Changes in the Consolidation Group

Changes to consolidation groups result when consolidation units are acquired or divested.

To prepare for such consolidation group changes, you can post entries that adjust the consolidation unit's existing reported financial data, standardized financial data, and consolidated financial data as follows:

- If an acquired or divested consolidation unit has balance sheet items that are broken down by subitems, you might want to transfer its values to the subitem 'Acquisitions by Consolidation Group' or 'Divestitures from Consolidation Group'.
- If the change is an acquisition, you may want to transfer the portion of the value of certain income statement items that belongs to the periods preceding the acquisition to the item 'Retained Earnings Prior to First Consolidation'. The postings are always based on the consolidation group.

In this section you make settings to enable preparatory postings for adjusting consolidated financial data.

You define document types with posting levels

- 22 (two-sided elimination for cons group changes)
- 24 (two-sided elimination for cons group changes with special logic) and one or more tasks.

Define Document Types

The posting of journal entries requires document types. In this step, you check the preset document types and define any new ones you need.

Recommendation

You should use a single document type for every consolidation task which requires a document type. Therefore you should not use the same document type for several tasks. The reason for this recommendation is that the douments which are generated by a task, should be identifiable by the document type. This is important, for example when repeating the task. The system then selects, with the help of global parameters as well as with the help of the document type (and possibly further criteria), which old documents are to be cancelled or deleted.

Standard settings

The standard SAP system includes document types for the various posting levels and business applications. Several number ranges are also predefined.

Activities

Decide which document types you require and define them.

Do this in the following sequence:

1. Document Type

Create the document type and make the following specifications in the detail screen:

- Specify the document type properties and the currency to be posted, and determine whether deferred taxes will be posted.
- Select the FS item category that can be posted to with the given document type. When you create (and save) a new document type, all FS item categories are automatically marked as being postable. If you remove the indicator for individual items, the document type cannot be used for posting to any of the FS items that belong to that item category.
- 2. Number Ranges, Automatic Reversals

- Enter the number range for allocation of document numbers.
 - If you have not yet created the number range you require, choose the function *Define number* range.

For manual posting, you can choose between internal number allocation (by the system) and external allocation (by the user). We recommend internal number allocation. For automatic posting, you must choose internal number allocation.

- Indicate whether the document should be automatically reversed in the following period.
- 3. Selected FS Items

When applicable, the system creates automatic line items during the posting process. To do this, the system needs to know which FS items are to be posted. You defined such items for financial statement imbalances and deferred taxes in the customizing step Specify Selected Items for Posting.

This step lets you "fine tune" the selected items for deferred taxes with respect to each document type. Furthermore, for document types with posting levels 20 or greater you can specify a clearing item for interunit entries. (Only these posting levels can be used for postings across different consolidation units.)

When defining selected items for a document type, you specify one item for debit entries and one item for credit entries.

If the item's breakdown category supports subassignments, the respective subassignments appear after pressing Enter. The following options are available for determining which subassignment value is used in the automatic line items:

a) If you do NOT activate the *Default* indicator for the given subassignment of the selected item, you must enter a value for the subassignment. In this case, the system assigns this subassignment value to the automatic line items.

Exceptions: If it concerns an optional breakdown, then you do not have to enter the characteristic value. The system then does not post the subassignment, but debits the value initially.

- b) If you activate the *Default* indicator, while generating the automatic line item the system checks whether the value of the subassignment can be clearly derived from the document. If so, the system assigns that value to the automatic line item.
- c) If you activate the *Default* indicator and the value of the subassignment is not clear, the system then proceeds as follows:

If you specified a value for the given subassignment, in addition to activating the *Default* indicator, the system inserts this value into the automatic line item. If you did not specify a value for the given subassignment, the system first looks at the subassignments you may have defined in the Customizing step Specify Selected Items for Posting. If there is no default value, but the breakdown category dictates a required breakdown, an error message is displayed.

4. Control of Subassignments

This only concerns manual entries. The detail screen *Control of Subassignments* lists all standard and custom subassignments. You can fix and/or hide each subassignment as follows:

- Fixing subassignments

Subassignments are fixed to improve clarity and ensure consistency. You can fix a subassignment temporarily or permanently. When this is done, the Posting transaction displays the subassignment on the *Unique Subassignments* tab. Unfixed characteristics are shown for each line item. We recommend that you at least temporarily fix as many subassignments as possible to make the entry of line items as clear as possible.

- Hiding subassignments

You can hide subassignments that are used by only a few FS items. These subassignments are then shown when you enter an FS item that has a breakdown category with a "hidden" subassignment.

Remarks Regarding Transports

To transport number ranges (see step 2), in the maintenance of number ranges select "Range -> Transport". Number range objects are transported automatically.

Define Tasks

You require tasks in order to post entries to prepare for the adjustments of reported, standardized and consolidated financial data:

- Adjustments to reported and standardized data

The tasks for these adjustments are executed in the Data Monitor. You can define separate tasks for adjusting reported data and standardized data, respectively. However, you can also define just one task by assigning document types with posting levels 02 (Reported data for cons group changes) and 12 (Standardizing entry for cons group changes). You assign the task(s) to the task group for the Data Monitor in step Define task group.

- Adjustments to consolidated data

The tasks for these adjustments are executed in the Consolidation Monitor. You assign the document types with posting levels 22 (Two-sided elimination for cons group changes) and 24 (Two-sided elimination for cons group changes with special logic).

You assign the task(s) to the task group for the Consolidation Monitor in step Define task group.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

- 1. Check the predefined tasks and modify them if necessary.
- 2. Assign one or more document types to each task.
Validation of Consolidated Data

After you post the consolidation entries, you can check that the consolidated financial data is still consistent.

In this section you define validations for the consistency checks. It is feasible to define the same checks you use for the reported and standardized financial data. You assign the validations to the consolidation groups.

Define Validations

In this step you define validations for reported, standardized and consolidated financial data. Each validation consists of one or more validation steps. Each validation step is made up of the following components:

- Prerequisite

When defining a validation step, you can define a prerequisite that must be met before a validation check is done. However, it does not make sense to define prerequisites for validations of reported, standardized and consolidated financial data, because in these particular validations the prerequisites are NOT taken into consideration. You should therefore define the validations without any prerequisites in this step.

By contrast, however, you can define prerequisites for validations of postings. For more information on this, see the step Define validations in the section Manual Postings.

- Check

In this portion of a validation step, you specify the data which is to be validated, and the operations to be performed with the data.

You enter a mathematical equation (also called formula), which consists of rules for selecting the data, and an operator.

- Message

In this portion of a validation step, you specify which message is to be displayed if the validation finds discrepancies.

You use the following data structures to define a validation step (see below for further details):

- ECCSDAT Structure of data requiring validation
- ECCSPAR Structure for prior year/period comparison
- ECCSEQV Structre for equivalency checks

The step Assign validations distinguishes between validations that are assigned to consolidation units for checking reported and standardized data, and validations that are assigned to consolidation groups for checking consolidated data.

Example

You might define a validation that contains a validation step (among others) to ensure that the total value of assets matches the total value of liabilities and equity.

You would define the validation step as follows:

- Check SUM (Cumul. local currency) WHERE ASSETS = SUM (Cumul. local. currency) WHERE LIABILITIES
- Rule ASSETS FS item = '0001000000'
- Rule LIABILITIES FS item = '0002000000'
- Message: Total assets are not equal to total liabilities and equity

Standard settings

A validation is predefined in the standard system for each of the charts of accounts 01, 11, and 12.

These validations only contain a check for totals records in local currency. It is not necessary to define a validation for checks in both local and group currency for each chart of accounts. If you start validation from the data monitor or consolidation monitor, the system automatically runs checks in the correct currency. If you start validation from the application menu, you can specify the currency that you want checked on the initial screen.

Activities

Establish which validation steps you need for the reported, standardized and consolidated data.

Establish how many separate validations you need for the consolidation units and consolidation groups.

Define any new validations that you require as follows:

- 1. Create a validation with a name and description.
- 2. The first time a validation is defined, the system configures the message class. You must specify a message class in the range reserved for R/3 customers (Z*). If a message class dedicated to validations does not yet exist, choose the 'Create' function. If you want to change the message class later on, on the initial screen for defining validations choose "Environment -> Change message class". Enter "043" for the Boolean Class. Then you can replace old message classes with new ones.
- 3. Create the first validation step by choosing "Edit -> Insert entry".
- 4. Leave the prerequisite blank.
- 5. Define the validation check by using the Formula Builder to enter a formula with the following syntax:

SUM (*table field*) WHERE *RULE* *operator* SUM (*table field*) WHERE *rule* Here the variables (or placeholders) are denoted with asterisks (*). Substitute the variables as follows:

a) *table field*

You can substitute this variable with local currency, transaction currency and group currency fields as well as quantity fields. You can insert any of the following fields: Local currency (cumulative value) Local currency (periodic value)

Group currency (cumulative value) Group currency (periodic value) Transaction currency (cumulative value) Transaction currency (periodic value) Quantity (cumulative value) Quantity (periodic value)

b) *rule*

Substitute this variable with the name of the validation rule. To define new rules, see activity 6.

c) *operator*

Substitute this variable with any of the following comparison operators:

< > >= <= =

In addition to using the formula as listed above, you can also define formulas without the second portion **SUM** (*table field*) WHERE *rule*. For instance, you could define the following short formula:

SUM (*table field*) WHERE *rule* ≥ 0

Note

The system uses the Formula Builder to convert the formula that you created into the following formula syntax:

SUM (ECCSDAT-*value/quantity field*) WHERE *rule* * operator* SUM (ECCSDAT-*value/quantity field*) WHERE *rule*

- 6. Define new validation rules if needed.
 - a) Specify a name for the rule and a description, then choose the Formula Builder.
 - b) Specify the fields that are to be selected during the check (Structure ECCSDAT). Keep in mind that you must always specify the field "FS item".
 The characteristics dimension, version, year, period, consolidation chart of accounts, consolidation unit and consolidation group should only then be used in the validation rule, if the rule should only be valid for a certain characteristic value of this characteristic. As a rule you do not normally specify this characteristic, so that you can execute the validation step for any dimensions, versions, consolidation charts of accounts. The system determines these characteristics at the start of validation via the global parameters and the organizational units selected by the monitor (if they are specified).

Custom characteristics can be used exactly like the characteristics which are delivered by SAP

c) For each field, use the operator '=' (equals sign) to specify the value of the field to be selected.
 Example: FS item = '0007100000'

Further notes for the definiton of rules

FS item values to be checked

- To cumulate all FS items data, you can enter the FS item = ' ' that is space. The system then selects all value items, that means balance sheet items, income statement items and statistical items.

- You can use FS item sets. In these FS item sets you can enter value items, totals items and other sets. Keep in mind that the system interprets the totals items and selects each cumulated value.

Each FS item can only be contained once in the set, otherwise the system selects the item value repeatedly. For example a multiple selection occurs when you include a value item and a totals item in the set and the totals item contains this value item. Sets with item ranges are problematic when the ranges include totals items as well as the value items which belong to it. Then the system interprets and selects the values of the totals items and additionally the values of the value item.

To get round the problem of multiple selection, you can use totals items directly in the validation rule, therefore without set.

- You can limit the item values to subassignments, for example with the following rule: FS item = ' ' AND Subassignment = '120'

Consolidation units to be checked

- You can limit the check to certain consolidation units, for example with the following rule: Consolidation unit = 'CUXXX'
 - As well as that you can limit the check to consolidation units with a certain attribute, for example the country: Country/Cons unit = 'USA'
 - Then exactly those consolidation units are included in the check, to which the 'USA' is assigned.
 - The advantage is that you can define individual validation steps for certain consolidation units, but can simultaneously assign the validation of a comprehensive number of consolidation units.

Comparisons and Equivalent units

- To compare periods or fiscal years, you can specify comparison fields (data structure ECCSPAR) for the fields "Period" and "Fiscal year" for the (data structure ECCSDAT). Example: Year = Prior year

For equivalent units, you can specify equivalent fields (data structure ECCSEQV) for those in (data structure ECCSDAT). Example: Cons unit = Equivalent cons unit See also the step Specify equivalencies.

For other comparisons you have to specify fixed characteristic values in the validation rule. Example: Version = '900' for Version comparison

Specify the message to be displayed if the check finds errors. To create a new message, choose "Environment -> Maintain messages". The maintenance of new messages is also possible from the maintenance of validation steps.

8. Define the other validation steps.

9. Define any additional validations you require.

Hierarchical log

The validation log lets you examine the results of the validation step by step through its hierarchical layout.

Note on transport

To transport your settings, choose "Validation -> Transport". **Assign Validations to Consolidation Groups**

In this step, you assign validations for checking consolidated financial data to your consolidation groups.

Activities

Assign a validation to each consolidation group.

Further notes

You make your assignments for a period category. Period categories can be maintained in the step Define period categories.

Specify Equivalencies between Cons Units/Groups

You can define validation steps for checking the data of equivalent consolidation units or groups.

Organizational units are **equivalent** if they are contained in different dimensions as different consolidation units or consolidation groups, but are actually one and the same organizational unit.

In this step, you specify equivalencies between consolidation units and groups.

Example

In a business area dimension, a given company might be a consolidation group. However, in a parallel statutory dimension, the same company could be a consolidation unit. Using a validation step, you could check if the annual net income of the company is the same in both dimensions.

In addition to defining the validation step, you would have to declare equivalencies between units/groups in this step.

Activities

For each dimension, specify the consolidation unit or group together with the equivalent unit or group.

Validations that check equivalencies need to check both organizational units/groups involved. Therefore, the equivalencies must be defined for both units/groups in a pair

Define Task

A task is required for validating consolidated data in the Consolidation Monitor.

S

Standard settings

Tasks for every activity are preset in the standard system.

Activities

Look at the preset tasks and modify them if necessary.

Further notes

Assign the task for the validation of consolidated data to the task group for the Consolidation Monitor in step Define task group.

Rollup to Consolidation Groups: Define Task

Performance benefits from compressing the data of consolidation units via rollups to consolidation groups or consolidation group hierarchies. This allows report programs created by the Report Writer to access the data more quickly. The rollup also increases the performance of interunit elimination functions.

If you want to the rollup to substitute the partner units onto higher hierarchy levels, select the corresponding indicator in the step Define dimensions.

Note that this has *nothing* to do with the data transfer method 'rollup'. You will find information on the transfer method in the section on 'Integration'.

You will require a task to execute a rollup onto consolidation groups.

Standard settings

All of the executable tasks are predefined in the standard SAP system.

Activities

Check the predefined tasks and modify as needed.

Further notes

Assign the task for the rollup to the task group using the step Define task group for the data monitor and the step Define task group for the consolidation monitor.

Add Tasks

SAP has prepared an assortment of tasks for the consolidation process. When customizing the task group for the data monitor and the consolidation monitor, you can choose the desired tasks for your consolidated statements.

Moreover, you may want to extend the consolidation process with additional tasks. The component features the option to define your own tasks, socalled custom tasks, which you can use with programs that

do not belong to the Consolidation component. (The standard tasks cover all of the programs included in the Consolidation component.)

Example

You might want to extend the consolidation monitor with a task that runs a program which transfers the consolidated financial data to the SAP component Executive Information System/EC-EIS (program FICEIS00).

Activities

If desired, define a new task as follows:

- 1. Enter a name for the task.
- 2. Choose the task category Custom Task for Consolidation Monitor.
- 3. Enter a short text and a medium text.
- Assign a program to the task in conjunction with the effective year and period. The program may not belong to the Consolidation component.
 The program must use the following function modules, which are delivered by SAP and enable the interface to status management:
 - FC_USER_AUTHORITY_CHECK
 - FC_USER_STATUS_CHECK
 - FC_USER_STATUS_UPDATE
 - FC_USER_GET_CACTI
 - FC_USER_CHECK_FOR_OUTPUT

Further notes

For the consolidation monitor you assign the new task(s) to the task group in Customizing step Define Task Group. There you also determine the execution sequence of the tasks.

Log Archiving

In the following section you make the settings for archiving the logs, which are created for the tasks exectued in the SAP component Consolidation.

Define Number Range for Archiving

In this step you specify the number ranges for archiving logs.

Recommendation

S

Create a number range 01, maintain the number range.

Maintain Log Archiving Settings for Tasks

In this step you maintain the settings for the archiving log for tasks, which you exectue during data entry and consolidation.

Set the indicator, that ,while executing the task in the update run, you want to store a log for a later display.

Delete Archived Logs

In this section you delete every combination of dimension, version and fiscal year in all logs, which are available for the executed tasks.

Information System

You can evaluate the financial data after data collection and consolidation take place.

Predefined standard reports are available for this purpose. In this section, you can define your own additional reports using the tools drilldown reporting and the Report Writer. You can also define journal entry reports for evaluating the journal entries.

Reporting Using the Report Painter and Report Writer

In this component you can use the Report Painter as well as the Report Writer to define your reports. At the same time, you can also define drilldown reports.

In this section, you set up your reports using the Report Painter or the Report Writer.

Please adhere to the following notes when working with Report Painter and Report Writer reports:

- The data selection in SAP Consolidation only permits periods as the basis for breaking down consolidation groups into consolidation units which are valid according to the consolidation frequency.
- You can use sets for the characteristic Consolidation Group. However, if the consolidation groups of the set overlap, you should not use that set in the general selections of a report. This is especially true for automatically generated sets. Instead, you can, for example, use the top consolidation group as a single value.

Copy Reports from Other Clients

In this step you can copy reports from a source client to your test client or production (live) client.

Note that this function lets you copy only Report Writer objects stored on the same system.

You can copy Report Writer objects stored on other systems by exporting them there and importing the objects into your system. In step Define reports choose "Utilities -> Transport -> Import or export".

In your client you can modify the reports to meet your specific requirements.

Activities

Import the desired library along with all related objects into your client. You can delimit the choice of reports to certain report groups.

Further notes

For detailed information, go to "Help -> SAP library -> Financial Accounting -> Special Purpose Ledger -> Report Writer".

Define Reports

In this step you can define reports to meet your specific requirements using the Report Painter or the Report Writer. During the activity you can go and maintain libraries, report groups, standard layouts, etc. by choosing

During the activity you can go and maintain libraries, report groups, standard layouts, etc. by choosing "Report Writer" on the menu bar.

Activities

- 1. Examine the predefined reports.
- Decide which additional reports are still needed, and define them using the Report Painter or the Report Writer.
 When creating a report, you are prompted whether you want to use the Report Painter or the Report

When creating a report, you are prompted whether you want to use the Report Painter or the Report Writer.

The reports for SAP Consolidation must be stored in a library that uses table **FIMC** as its reporting database.

Remarks Concerning Transports

You can manually insert Report Writer objects (and any related objects) into a transport request in the menu under "Utilities -> Transport".

Furthermore, under the same menu item Report Writer objects can be

- exported to external files,
- imported from external files, and copied from other clients.

Further notes

For detailed information, go to "Help -> SAP library -> Financial Accounting -> Special Purpose Ledger -> Report Writer".

Drilldown Reports

Besides being able to define reports with the Report Painter or the Report Writer, this component lets you define drilldown reports.

In this section you customize your drilldown reporting.

Specify Global Variables

In this step you define global variables for drilldown reports.

You use variables for flexibility during the creation of forms.

Variables are parameters that are either already provided by the system or are defined after a report is defined and run. The latter occurs when you fill the fields in a dialog screen.

Variables with an SAP exit or customer exit must not be entered. **Standard settings**

The following global variables feature an SAP exit:

- Value variable for global parameters
- Value variable for ledgers with special logic
- Hierarchy variables for organizational units Hierarchy variables for FS items

The following generally applies to all variables:

- Variable names start with an *ampersand* character ("&").
- You can use the variable types *characteristic value* or *hierarchy*.
- You choose the characteristic via the field name.

Value variable for global parameters

Variable type Value

Variable name &0GP

Characteristic dimension, cons chart, ledger, version,

fiscal year, period, reference version, reference fiscal year, reference period

Type of substitution SAP exit

Value variable for ledgers with special logic

Variable type	value
Variable name	&0FROMTCG
Characteristic	ledger (RLDNR)
Type of substitution	SAP exit

The ledger can be derived from a unique combination of the characteristics dimension, cons group, version and fiscal year. This is acheived by defining the characteristics in the report using the characteristic selection, or in forms by creating exactly one variable for the characteristics (as the variable for the From Value).

Hierarchy variable for organizational units

Variable type	hierarchy
Variable name	&0FROMTCG
Characteristic	consolidation group,
	consolidation unit, partner unit
Type of substitution	SAP exit

If a report was defined with a hierarchy display for one of the specified characteristics, and the variable **&OFROMTCG** was chosen as the hierarchy, the name of the hierarchy is derived from the unique values for the dimension, totals cons gorup, version, fiscal year and period.

The dimension is unique when you determine the dimension in the report using the characteristic selection, or you define in the form exactly one variable for the From Value of the dimension. The same applies to the totals consolidation group. The version is derived from a unique value for the reference version; if that is not given, the version is taken from the characteristic "consolidation version". The fiscal year is derived from a unique value for the characteristic "reference fiscal year"; if that does not exist, from the characteristic "fiscal year".

The period is taken from the value for the "reference period"; if that does not exist, then the highest of the variables residing in the form is used for the characteristic "period". If no value is found, then 16 is used.

Hierarchy variable for FS items

Variable type	Hierarchy
Variable name	&0FROMTITM
Characteristic	FS item (RITEM
)
Type of substitution	SAP exit

If a report was defined with a hierarchy display for characteristic *FS item* (RITEM) and the variable *&OFROMTITM* was chosen as the hierarchy, then the hierarchy name is derived from the unique data of the consolidation chart of accounts. The cons chart data is unique if you choose the cons chart of accounts in the report using the characteristic selection, or you define in the form exactly **one** variable for the From Value of the cons chart. Then all item hierarchies for this cons chart are displayed. If unique data also exists for the totals item, the sub-hierarchy of that totals item of the cons chart is displayed.

Activities

Define your globale variables.

Further notes

For more detailed information, see Help -> SAP Library -> Cross-application components -> CA-General Drilldown Report.

Define Characteristic Groups

In this step you define characteristic groups, to which you assign characteristics. These characteristic groups form the basis of your drilldown reports.

Example

<u>Characteristic group</u>	<u>Characteristic</u>
FS Item	cons chart, FS item,
	totals item
Organizational unit	dimension, consolidation unit,
	consolidation group
Subassignment	Partner Unit, Subitem,

Activities

Define the characteristic groups to meet your business requirements, and assign characteristics to each of these groups.

S

Hierarchy Names

In the following two steps you define the names of the consolidation group hierarchies and the FS item hierarchies you want to use as the basis for drilldown reports.

Activities

Specify the parameters needed for each hierarchy.

In the adjacent block *Properties* you can select the following:

- *Hierarchy Display (Presentation Type)* Here you choose one of the following: a hierarchy without definition of display variants, a

hierarchy with asterisks (*) or levels, lines, or lines and blank lines.

- Top-Down Indicator

Select this indicator for a top-down display in the hierarchy. If the flag is not selected, a bottom-up hierarchy is displayed.

- Starting Level for Hierarchy Display Determines how many levels are opened when the report is run for the first time.
- Total

You can choose whether to display a line of results.

Furthermore, you enter the name of the hierarchy. You can also specify a medium and long name.

If no hierarchy name is entered, drilldown reporting automatically proposes a generic entry in the hierarchy selection: an entry screen is shown in which you can specify the hierarchy name.

If you explicitly define a hierarchy name and simultaneously want to use the generic name, you must create the latter of the two names using the function *Create Generic Entry*.

Define Hierarchy Names for Consolidation Groups

In this step you define the hierarchy names for the consolidation groups. **Example**

You create a hierarchy with a name that is comprised of the following parameters: group G1, dimension 01, version 100, the period of December, 1998.

Activities

Specify the following characteristics that identify the hierarchy:

- dimension
- consolidation group
- version

- fiscal year

- period

Select the properties of the hierarchy using the information shown in section Hierarchy Names.

Further notes

The hierarchy class for consolidation group hierarchies is CSCG.

Define Hierarchy Names for FS Items

In this step you create the hierarchy names for FS item hierarchies.

Example

You create a hierarchy with a name 01, which stands for cons chart of accounts 01.

You create a hierarchy with a name 0147, which stands for cons chart of accounts 01 with hierarchy 47 or FS item 47.

Activities

Specify the first of the following characteristics to identify the hierarchy. As an option you can also specify one of the remaining characteristics:

- cons chart of accounts
- FS item hierarchy
- FS item

Select the properties of the hierarchy using the information shown in section Hierarchy Names. **Further notes**

The hierarchy class for FS item hierarchies is CSIT.

Define Forms

In this step you define forms to used for defining drilldown reports.

Forms are row or column structures which you can use in any report definition. Forms describe the report's layout in terms of content (attributes, key figures) and formal structure (rows, columns).

S

When creating a report, you decide whether or not to use a form. Simple reports do not require a form. However, you need a form when defining a more complex or formatted report.

Requirements

If the form is to contain variables, these must be defined beforehand.

Standard settings

The standard SAP system has predefined reports. Each report has a form with the same ID.

The IDs can be freely chosen. SAP uses the following naming convention:

Digits	Content	Value	Meanin	g	
1 + 2	Cons chart represents cons	00 chart 01	represen	ts all cons charts etc.	s 01
3	Hyphen	-			
4	Grouping	1	represen	ts financial state	ements
2		represents	s hierarch	y nodes	
3		compariso	on of orga	nizational units	
5	Period	1	years		
2		quarters			
3		months			
6	Version	0	current v	version	
	1	compar	ed versior	1	
7	*(see belo	ow)	0	current period	
1		compared period			
2		period changes			
3		changes in subitems			
4		changes in	n posting	levels	
			5		cons units in columns
			0		consumits and groups
8	SI categor	·v	, 1		subitem category 1 (if 7th digit = 3)
-		2	2		subitem category 2 (if 7th digit = 3)
			etc.		

9 + 10 sequence no.

*) comparison/changes in columns Examples:

- 00-1100000 Current year with structure percentage rate

- 00-2100000 Payables/receivables aging report

- 00-3105000 Comparison of consolidation units

Activities

Define one or more forms, or copy a standard form and modify it as needed.

Remarks Concerning Transports

To transport the settings, go to step Import or transport forms.

Further notes

For detailed information go to "Help -> SAP library -> Cross application -> Drilldown reporting".

Define Reports

In this step you define drilldown reports. You can create either an ad-hoc report or a report that uses a form.

Standard settings

The standard SAP system has predefined reports. Each report has a form with the same ID.

The IDs can be freely chosen. SAP uses the following naming convention:

Digits	Content		Value	•	Meaning	
1 + 2			00		represents cons chart 01	
3	Hyphen		-			
4	Grouping		1		represents financial statements	
			2		represents hierarchy nodes	
			3		comparison of organizational units	
5	Period	1	years			
2		quarters				
3		months				
6	Version	0	current	version		
1		compared	version			
7	*(see belo	ow)	0	current period		
1		compared	period			
2		period changes				
3		changes in subitems				
4		changes in posting levels				
5		cons units in columns				
6		cons groups in columns				
7		cons units	and grou	ups		

8 SI category 1 subitem category 1 (if 7th digit = 3) subitem category 2 (if 7th digit = 3) etc.

9 +10 Sequence no.

*) comparison/changes in columns Examples:

- 00-1100000 Current year with structure percentage rate
- 00-2100000 Payables/receivables aging report
- 00-3105000 Comparison of consolidation units

Activities

Define drilldown reports, or copy a standard report and modify it as needed.

Remarks Concerning Transports

To transport the settings, go to step Import or Transport Reports.

Further notes

For more information on drilldown reports, see the SAP Library, section *Cross-Application Components* -> *CA Drilldown Reporting*.

Report Data

In this section you define the settings for running reports in background sessions by means of variants. **Maintain Variants**

You execute reports in the background using selection variants.

For a report, the variable entries and the settings for rebuilding summarization data, creating frozen report data and printing can be saved in ABAP variants.

The option to rebuild summarization data is only displayed if summarization data has been activated in the definition of the report.

For printing, the setting in the "Read mode" field determines how current the printed data is.

If you choose "Reselect", data is printed according to the settings made in the "Performance" dialog box in the report definition. If you did not activate the option "Current data" in the report definition, the system prints the most recently summarized data.

If you select "Frozen data", the system prints the frozen report data, if any exists. Otherwise, a message is issued.

Example

2

Requirements

Standard settings

Recommendation

Activities

Define the variants you would like to use in your reports.

Once you have made your entries, choose "Goto -> Variants -> Save as variant..." (see also the online documentation "BC Computing Center Management System"). You can then schedule this variant in the background. If you need to schedule more than one report for background processing using variants, you can group these variants together in a so-called "variant group" (see the following Customizing activities).

Define Variant Groups

In the background, reports are processed using selection variants. Several variants can be grouped together in a variant group.

Using variant groups, you can

- schedule several variants for one report (different combinations of characteristic values for one report)
- schedule variants for several reports in one step.

Recommendation

Activities

Define the variant group that you want to use.

Further notes

Maintain Variant Groups

Different variants of several reports can be grouped together in one variant group.

Example

Requirements

Standard settings

Recommendation

Activities

Enter the reports and variant which are to be scheduled for this variant group. **Further notes**

Schedule Variant Groups

The entire variant group can now be scheduled for background processing.

Example

Requirements

Standard settings

Recommendation

Activities

Enter the variant group you want to schedule in the background. You can limit the reports for which the variant group should be executed by specifying report names.

The job is scheduled in the background for the variant group and the specified reports. You can execute this job in regular intervals at specific times. For more information about this, see the online documentation "BC Computing Center Management System".

Reorganize Variant Groups

If a given report variant is assigned to a variant group, and this variant is deleted, the assignment to the variant group must be deleted as well.

In this step, you can have the program delete all assignments of variants that no longer exist.

Activities

Enter the variant group, for which the assignments of no longer existing variants should be deleted. **Transport**

In this section you can import forms and reports from a source client to another client; or you can transport these from one SAP system to another.

Import or Transport Reports

This step features the following activities:

- You can import reports from a source client into another client.
 This is particularly needed to copy the reports supplied by SAP from client 000 to your working client.
- You can transport reports from system to system.
 This is needed, for instance, when transporting reports from a test system to a production (live) system.

Activities

Import or transport reports as needed.

S

Import or Transport Forms

This step features the following activities:

- You can import forms from a source client into another client.
 This is particularly needed to copy the forms supplied by SAP from client 000 to your working client.
- You can transport forms from system to system.
 This is needed, for instance, when transporting from a test system to a production (live) system.

Activities

Import or transport the forms as needed.

Reorganization

To keep the volume of data to a minimum, this section lets you delete report data, reports and forms. **Reorganize Report Data**

This step enables you to specify (on a selection screen) a set of stored report data which you can then delete from an overview list.

Example

- You may want to delete the test data for a report prior to going live.
- You may want to delete report data that was created by a specific user on a specific date.

Activities

Reorganize your report data as needed.

Reorganize Reports

This step enables you to specify (on a selection screen) a set of report definitions which you can then delete from an overview list.

Example

You may want to delete all of the test reports created by a specific user prior to going live.

Activities

S

Reorganize your report definitions as needed.

Reorganize Forms

This step enables you to specify (on a selection screen) a set of forms which you can then delete from an overview list.

Example

You may want to delete all one-dimensional forms that were created on a specific date.

Note

Only those forms are delete, which are no longer used in any reports. This is automatically checked during the deletion process.

Activities

Reorganize your forms as needed. **Convert Reports**

Functional enhancements for a new release can make it necessary to convert the internal structure of reports. Release information makes you aware of this. Furthermore, after a release change which makes a conversion necessary, a corresponding message is displayed when such a report is started.

Requirements

The conversion at first does not delete the old definitions. After checking that the converted reports run without errors, delete the old definitions using the function Delete Report.

Activities

Run the function after a release change when you are prompted to do so by a release information or by an error message.

Define Currency Translation Keys

When a drilldown report is executed, you can translate the currency columns into other currencies by selecting "Settings -> Change currencies". When this is done, you must specify a currency translation key. In this step you can define currency translation keys.

Activities

Define currency translation keys for drilldown reports, if needed.

Define Journal Entry Layouts

Journal entry reports let you analyze your posted documents (also called journal entries) according to various selection criteria.

The basis for such a report is a journal entry layout. The layout determines the structure of the report using the following definitions:

- Characteristics (such as the document type, document number, financial statement item, subitem) according to which the journal entries are to be reported and sorted; - Currencies or quantities to be listed in the value columns of the report.

In this step you can define journal entry layouts.

Example

You might define a layout to report the journal entries by document type, document number, FS item and subitem, and to display a hierarchy of those characteristics in the same order to be used for drilldowns.

The value section of the report might list the values in local currency and group currency.

Standard settings

SAP supplies several predefined journal entry layouts.

Activities

Examine the journal entry layouts already supplied and, if needed, define new ones.

1. Create a layout with a name.

- 2. Define the structure of the layout:
 - a) Choose the field names of the characteristics to be listed on the report. Use the list of possible entries.
 - b) Flag the characteristics (field names), whose values are to be presented hierarchically on the report to enable drilldowns into the underlying characteristics (totaling).
 - c) Determine the order of the characteristics.

Keep in mind that the characteristics which are to be totaled need to be listed first. List those characteristics next, which are to be listed on the bottom line of the characteristic block, and not in the hierarchy.

- d) Enter the field names for the currencies (or the quantity) to be listed in the value section of the report.
- e) Determine the order of the currencies or quantities. Assign new sequential numbers to these fields, continuing the consecutive numbering already assigned to the characteristics.

Further notes

You can display the master data of the defined journal entry layouts, for example, in order to make a printout. To print the master data, choose the *Print* function and enter selection criteria for the list. The system generates the list using the ABAP List Viewer. You can use the functions available in this tool to filter data or customize the display of the data columns (for more information, see the documentation on the ABAP List Viewer in the SAP Library).

Preparing for Production

At this point you have specified all of your functional requirements for Consolidation. Before going live with your SAP System, you need to perform the more technical tasks in the following section. **Authorization Management**

This section provides information regarding the authorization objects, authorizations and profiles supplied by SAP.

You can define additional authorizations and profiles depending on your requirements.

Define Authorizations

Consolidation features the following authorization objects:

	Journal entry layout	E_CS_JEFRM
	Data entry layout	E_CS_DEFRM
	Consolidation unit	E_CS_BUNIT
	Consolidation group	E_CS_CONGR
	Consolidation tasks	E_CS_CACTT
	Monitor, opening/closing of	E_CS_PERMO
	periods	
	Cons chart of accounts	E_CS_ITCLG
	Reporting with Report Writer, Report	E_CS_RPTNG
	Painter and Drilldowns	
	Dimension	E_CS_DIMEN
	Version	E_CS_RVERS
Γh	e standard SAP Consolidation system contains t	he profiles E_CS_ALL (full authorization) and

E_CS_Display (display authorization).

S

Description of Authorization Objects

Object: E_CS_JEFRM Journal entry layout

Definition

Determines which journal entry layout you are authorized to work with within the Consolidation system.

- journal entry layout
- activity

Object: E_CS_DEFRM Data entry layout

Definition

Determines which data entry layout you are authorized to work with within the Consolidation system.

- data entry layout
- activity

E_CS_BUNIT Consolidation unit

Definition

Determines which consolidation unit you are authorized to work with within the Consolidation system.

- Activity
- Addition/Creation
- Change Display
- Deletion
- Dimension
- Consolidation unit

E_CS_CONGR Consolidation group

Definition

Determines which consolidation group you are authorized to work with within the Consolidation system.

- Activity
- Addition or creation
- Change Display
- Deletion
- Dimension
- Consolidation group

E_CS_CACTT Consolidation tasks

Definition

Determines which consolidation tasks you are authorized to carry out in the Consolidation system. This is the central authorization object for controlling the consolidation steps.

- Activity
- Change : Customizing of tasks: changing, creating, deleting
- Display : Display and run tasks in test mode
- Blocking: Blocking of tasks in the monitor
- Execution: Execution of tasks in update mode
- Dimension
- Consolidation group
- Consolidation unit
- Consolidation version
- Task category
- Carrying forward balances
- Data collection
- Validation of reported data
- Manual posting
- Currency translation
- Validation of standardized data
- Item substitution/retained earnings
- Preparation for cons group change
- Rollup of standardizied data

- Interunit elimination
- Elimination of IU profit/loss in inventory
- Elimination of IU profit/loss in transferred assets
- Consolidation of investments
- Reclassification
- Rollup of consolidated values
- Validation of consolidated values
- Task

E_CS_PERMO Monitor, Opening/Closing of Periods

Definition

Determines whether a user is permitted to open and close periods for posting documents.

Defined fields

Dimension

Version

Consolidation unit

Consolidation group

Monitor activity

Object: E_CS_ITCLG Consolidation chart of accounts

Definition

Determines which FS chart of accounts you are authorized to work with within the Consolidation system.

- FS chart of accounts
- activity

E_CS_RPTNG Reporting with Report Writer/Painter and Drilldowns

Definition

Determines the consolidation units and groups which a user can process in Reporting (Report Writer, Report Painter, drilldown reporting).

This authorization object is also checked in these areas. **Defined**

fields

- Dimension
- Consolidation group
- Consolidation unit
- Consolidation version

Specific authorizations are also required for the Report Writer, the Report Painter, and Drilldown Reporting.

E_CS_DIMEN Dimension

Definition

You use this authorization object to specify which dimension the user can work with within the Consolidation system.

Defined fields

- Activity
- Add or Create
- Change Display
- Delete
- Execute
- Dimension

A user of an application requires at least display authorization for the dimension the user is assigned to.

A user who wants to change consolidation group hierarchies requires the activity Change, and also requires change authorization for consolidation groups and units. This allows the authorization to be limited to groups and units.

E_CS_RVERS Version

Definition

Determines which version the user is authorized to work with in the Consolidation system. **Defined fields**

- Activity
- Change Display
- Execute
- Consolidation version

A user of an application requires at least display authorization for the consolidation version the user is assigned to.

A Customizing user, who is allowed to change versions, requires change authorization, including the characteristic value of '*' in the version field.
SAP System Object:

Generate Authorizations for a Consolidation Group

The task of defining authorizations for units within a consolidation group can sometimes be very timeconsuming. This step is designed to aid you in this task. You can define authorizations for a given consolidation group for the following authorization objects:

- E_CS_BUNIT Consolidation unit
- E_CS_CONGR Consolidation group
- E_CS_CACTT Consolidation tasks
- E_CS_RPTNG Reporting with Report Writer, Report Painter and Drilldowns

The consolidation group and its units are automatically inserted into an authorization. You can manually maintain the other attributes of an authorization (such as activities, task category, and so on).

Activities

- 1. Determine which organizational units, version and time period shall apply for the authorization.
- 2. Create a name for the authorization.
- 3. Choose the authorization objects that apply to the consolidation units.
- 4. Maintain the authorizations in step Define authorizations.

Maintain Global Parameters Centrally

In this section you maintain the global parameters centrally for one or more users of the SAP component consolidation.

Activities

Select the role, to which you want to assign the global parameters, by means of the F4 possible entries from a large number of predefined roles. Assign the global parameters to the assigned users of a role.

Translation

The preceding sections had texts in various master records, reported data and control parameters, that were maintained in the login language.

This section enables you to translate these texts into further languages required in your

S

corporate group.

Translate Data Entry Layout Texts

In this step you can translate texts concerning data entry layouts.

Activities

Translate the translation-relevant objects in the data entry layouts into the additional languages you require.

Translate Report Writer Report Texts

In this step you can translate the texts from Report-Painter- Reports

Activities

Translate the translation-relevant objects into the necessary languages.

Translate Report Writer Report Texts

In this step you can translate texts concerning reports creating with the Report Writer.

Requirements

The maintenance language must be created as a language in the transaction *GCRS* (Report Writer: Supported languages).

Activities

Translate the translation-relevant objects into the additional languages you require.

Use the transaction GR 32 *Report Writer: Change report* to translate the Report Writer reports. Choose *Extras -> Maintenance language*, to select the desired language.

The texts are saved in succession in the maintenance language.

When you display the report texts (title page, headers, footers, last page, text for export) in a different language to the template, you can overwrite the translation directly. To do this use *Text* -> *Template*. **Translate Drilldown Report Texts**

In this step you can translate texts concerning drilldown reports.

Activities

Translate the translation-relevant objects into the additional languages you require.

Translate Texts used Centrally and Decentrally

In this step you can translate texts belonging to objects that are used in the central consolidation system as well as in the decentralized data entry program based on MS ACCESS.

The objects to be translated are listed in a structure similar to that of this implementation guide.

Activities

- 1. Choose one of the objects listed in the structure the versions, for instance.
- 2. Select one of the entries and choose "Edit -> Translation".
- Choose the target language and translate the text.
 When maintaining items and subitems, you can translate the long texts by choosing the *Multiple* selection (arrow) function.

Further notes

Data entry layouts need to be translated for the decentralized entry based on MS ACCESS. You can do this in step Translate data entry layout texts.

Translate Miscellaneous Texts Used Centrally

In this step you can translate texts belonging to objects that are used in the central consolidation system in addition to those objects that are translated in step Translate texts used centrally and decentrally.

The objects to be translated are listed in a structure similar to that of this implementation guide.

Activities

- 1. Choose one of the objects listed in the structure the versions, for instance.
- 2. Select one of the entries and choose "Edit -> Translation".
- 3. Choose the target language and translate the text. When maintaining Reasons for Inclusion, you can translate the long text by selecting the *Multiple selection* (arrow) function.

Transport Customizing Settings

In this step you can transport the Customizing settings to another system. As opposed to the automatic transport, which is usually triggered in the maintenance of the Customizing settings, you are able to transport the settings at any time without having to make any changes.

You can specify which objects are to be transported according to your specific requirements. Various object groups are available for this. In each object group you can choose each individual transport object within the group's screen frame. Note the following when doing this:

- You can transport objects (e.g., consolidation units, frequencies, exchange rate indicators, etc.) as well as object assignments (e.g., the assignments of frequencies to the consolidation groups).
- When transporting object assignments, you need to make sure that the objects themselves are transported as well. Otherwise, the destination system will contain erroneous data.

Example

Example 1:

Say, you want to transport consolidation units along with the translation methods assigned to these units.

- In screen frame *Consolidation Units* you choose the units to be transported and activate the *Translation Methods* indicator. This indicator causes the translation method assignments of the selected units to be transported.
- To ensure that the translation methods (objects) themselves are transported, you activate the *Translation* indicator in the screen frame *Consolidation Methods*.

Example 2:

Say, you want to transport consolidation units along with the contact person assignments.

- In screen frame *Consolidation Units* you choose the units to be transported and activate the *Contact Persons* indicator. This indicator causes the contact person assignments of the selected units to be transported.

To ensure that the contact person objects themselves are transported, you activate the *Transport* assigned objects also indicator.

- As an alternative, you can also activate the *Contact Persons* flag in screen frame *Consolidation Functions*. This causes all of the contact person objects to be transported.

Note that the Transport assigned objects also flag is not available for all objects.

Activities

Transport the Customizing settings in accordance with your specific requirements. **Copy Dimensions**

In this step, you can copy a dimension and its dependent data to another dimension in the same system and client.

You can specify the data that you want to copy by selecting individual objects from various object groups.

Example

You want to create a dimension for test purposes. The settings for this dimension (organizational units, document types, tasks, methods, and so on) are almost identical to those in an existing dimension.

You therefore copy the existing dimension into the new dimension. The system creates the new dimension when you copy the settings, you do not need to create it when beforehand.

Activities

Copy a source dimension to a target dimension if required.

- 1. Specify the source dimension and target dimension.
- 2. Specify how you want the system to handle any dimension-dependent settings that already exist in the target dimension.
- 3. Select the object groups and objects that you want to copy.
- 4. Run the copy program in test mode. A log with warning messages is generated if the objects that you want to copy are inconsistent in the target dimension. A list of objects that were deleted, overwritten or created in the target dimension is also generated.
- 5. Run the copy program in update mode.

Further notes

If you copy consolidation group hierarchies, you need to regenerate sets of consolidation groups and units. To do this, choose "Edit -> Generate" in hierarchy maintenance for consolidation groups.

Copy Document Number Ranges

In this step you copy the document number ranges for the work into the SAP component consolidation.

Further notes

In order to transport document number ranges, select within the document number range maintenance "Interval -> Transport". Number range objects are transported automatically.

Delete Transaction Data

In this step you can delete the transaction data in the totals table of Consolidation as well as the transaction data of individual ledgers. The deletion of transaction data becomes necessary when you want to convert a test system into a production (live) system.

You are only able to delete transaction data in ledgers that are not yet flagged as being productive (live).

When deleting the totals table, the transaction data of the journal entry table is also deleted. Note that the number ranges are not reset.

Activities

- Delete the transaction data of totals table ECMCT, if needed.
- If needed, delete the transaction data of a ledger for consolidation:
- Specify the ledger.
- Specify record type 0 for the actual values.
- If applicable, delimit the deletion to a version and fiscal year. Keep in mind that you cannot delimit deletions to organizational units of consolidation.
- For the data specification choose the totals table and the actual journal entries.

Transport Transaction Data

In this step you can transport transaction data of the Consolidation component from one system to another system or client. This may be useful, for example, if you created data in a test system and want to use it on a productive system. You can transport totals records as well as journal entry records.

The following steps are necessary:

- Export the transaction data from the totals database (ECMCT) and/or journal entry database (ECMCA).
- Import the transaction data into the totals database (ECMCT) and/or journal entry database (ECMCA).

You can select the data according to the following criteria:

- Organizational units
- Version und time period
- Ledger
- Posting levels

You also have the option of choosing whether to transport the totals records and the journal entry records.

Requirements

Make sure you do not transport transaction data to a given system or client more than once. Before repeating a transport, delete the data in the target system first. To do this, go to step Delete transaction data.

Activities

- 1. Choose *Export transaction data*.
 - a) Select the transaction data to be exported.
 - b) The selection screen shows default names and paths for the totals record file and the journal entry file to be written. Modify these defaults as necessary.
 - c) Export the transaction data. If desired, you can first try test mode and examine the audit trail before running the export in update mode.
- 2. Choose Import transaction data.
 - a) Choose the data to be imported. If you only select a portion of the exported data, the import function deletes the unnecessary data.
 - b) The selection screen shows default names and paths for the files to be imported. Modify these defaults as necessary.
 - c) Import the transaction data.

Integration: Preparation for Consolidation

If the Consolidation application is to be integrated with transactional SAP applications, such as General Ledger, Asset Accounting, Profit Center Accounting, and so on, you need to make settings in these applications to ensure that the data is prepared before being transferred to Consolidation in the best possible fashion.

This section provides the steps to accomplish this. There are two sets of steps: The one set of steps is performed in the transaction (sending) system, and the other set of steps is performed in the Consolidation (receiving) system. Both systems can be identical, depending on your consolidation scenario. If that is the case, you still need to handle both sections.

Preparation in the Sender System

This section concerns the activities that need to be performed in the transaction (sending) system.

Enterprise Structure

In order to transfer data from a transaction (sending) system to Consolidation, the system must know which enterprise structure is relevant to consolidations. This involves the organizational units of the transaction (sending) system and the organizational units of Consolidation.

At this point, you have already defined the settings for the organizational units in the **Enterprise Structure** Implementation Guide. You can check these settings in the steps that follow.

Integrated consolidations with the SAP component also require that the Consolidation system's units and groups be created from the organizational units of the transaction systems. See section Copy organizational units. Business area and profit center consolidations require that the combinations of company codes and business areas/profit centers be defined. These combinations are used for creating the consolidation units and groups. See the steps that follow.

Check Companies

For integrated Company consolidation it is necessary to do the following:

- Create all companies of the group
- Assign the company code of the transaction system to the companies of the corporate group.

Activities

In the **Enterprise Structure** Implementation, check the step Maintain company as well as Assign company code to company.

Further notes

You should only assign company codes to a company whose data you want to transfer in consolidation.

Checking the Structure for Business Area Consolidation

To carry out an integrated business area consolidation, the system needs to know about the consolidation business areas that are allocated to the business areas, as well as the combinations of companies and consolidation business areas. Examine the steps that follow.

Business area consolidations also require the allocation of company codes to the companies. See the step check structure for company consolidations.

Business Area Assignments: Check Consolidation Business Area

For integrated business area consolidations you need to:

- create the consolidation business areas

- assign a consolidation business area to each business area of the transaction applications.

Group headquarters should announce the consolidation business areas and - if applicable transport them to the sender systems.

Activities

In the **Enterprise Structure** Implementation Guide, check the step Assign Business Area Consolidation Business Area.

Define Combinations of Company Codes/Business Areas

The Consolidation system takes the combinations of companies and consolidation business areas and builds the consolidation units and consolidation groups, which you then use as the basis for business area consolidation.

In this step, you specify the combinations of company codes and business areas that can occur in the postings in transaction applications. The system then uses these to form the combinations of companies and consolidation business areas.

Activities

Specify the valid combinations of company codes and business areas.

Further notes

When defining the data transfers for business area consolidation in step Activate data transfer, you can determine that the system checks postings as to whether a business area assigned to a document is valid for the given company code. This check accesses the combinations of company codes and business areas you specify in this step.

Export Combinations of Companies/Consolidation Business Areas to File

If the Consolidation application runs on a different system or a different client as the transactional applications, in order to construct the consolidation units and consolidation groups for business area consolidation, you will need to download the relevant companies and consolidation business areas. In the transactional applications, the system reads the applicable combinations of company codes and business areas, uses these to determine the companies and consolidation business areas, and downloads this information to the Consolidation application. Once in the Consolidation system, the consolidation units and groups needed for a business area consolidation can be constructed automatically.

Requirements

This step is thus necessary if the transaction applications run on seperate SAP systems or clients, other than that of the Consolidation system.

Activities

Download the organizational units.

Checking the Structure for Profit Center Consolidation

In order to perform integrated profit center consolidations, the system must know the combinations of companies and profit centers.

See the steps that follow.

Furthermore for profit center consolidations the assignment of company codes to companies is necessary. See the step Check Companies.

Check Combinations of Company Codes/Profit Centers

The Consolidation system takes the combinations of companies and profit centers and builds the consolidation units and consolidation groups, which you then use as the basis for profit center consolidation.

In Profit Center Maintenance of Profit Center Accounting, you can define which company codes are valid for each profit center. The system then uses these definitions to form the combinations of companies and profit centers. Profit centers can be provided with a Lock indicator. These cannot be posted, but assigned as partners. This requirement can exist for a cross controlling area management consolidation. For locked profit centers, the assignment of company codes is ignored and no consolidation units or groups are created from them either

Activities

Check the valid combinations of company codes and profit centers stored in Profit Center Accounting, as well as the lock indicators of profit centers.

If the combinations are incomplete, go to step Maintain Profit Center in the Implementation Guide for Profit Center Accounting, and specify the valid company codes for the incomplete profit centers and/or correct the lock indicators.

Export Combinations of Companies/Profit Center to File

If the Consolidation application runs on a different system or a different client as the transactional applications, in order to construct the consolidation units and consolidation groups for profit center consolidation, you will need to download the relevant profit center master data and hierarchies.

In the transactional applications, the system reads the valid combinations of companies and profit centers, and downloads this information to Consolidation. Once in the Consolidation system, the consolidation units and groups needed for a profit center consolidation can be constructed automatically.

Requirements

This step is thus necessary if the transaction applications run on seperate SAP systems or clients, other than that of the Consolidation system.

Activities

Download the organizational units.

Define Aggregation of Profit Centers to Profit Center Groups

Use

When you use integration between Profit Center Accounting (EC-PCA) and Consolidation, the system automatically defines consolidation units as combinations of profit centers and companies.

However, customers often want to define integrated consolidation units at a higher level to be able to record this data using rollups. At this kind of aggregated level, each integrated consolidation unit then reflects one of the following:

- a profit center group
- the combination of a profit center group and a company
- a profit center

Activities

Tell the system which rules to use for aggregating profit centers when running a rollup. For each profit center you enter the profit center group, in which it is aggregated. Select the indicator if you wish to retain the detail information of the company.

If a profit center is mapped to itself, enter it as the target profit center. In this case, you normally do not need to retain the details per company and, therefore, you do not select the indicator.

To ensure that the rollup correctly converts the assigned organizational units (company code/company and profit center) to the aggregated consolidation and partner units, you need to store and equip the appropriate client-dependent (user) exits in the field groupings. For derivation, Exit CC6 is used for consolidation units and Exit CC8 is used for partner units. You insert the logic for determining the aggregated consolidation units in these exits.

Program RGLVU000, as delivered, already contains implementation templates for both exits, which you can simply adapt for your individual requirements if necessary. The actual determination of the aggregated consolidation is performed in routine AGGREGATE_CU_GET, which is already implemented in program RGLVU000. Among other things, this routine evaluates the aggregation rules stored in this implementation step. If no aggregation is defined for a given profit center, the consolidation unit and partner unit are derived in the corresponding standard exits.

Note the following: If you need a naming convention that deviates from the rules for ID combination, you must define this in Exit 100 in SAP Enhancement FMC10010. For more detail, see the documentation for the enhancement and/or exit.

Example

The following example should explain the individual steps.

Assume that the standard hierarchy of profit centers PC10000 is assigned to controlling area CA01. It has the following structure:

PC10000 __10100 __101101 ___101101 ___101102 ___101201 ___101202 ___101203 ___100 ___1001

The units 10100, 10110, 10120 and 100 reflect profit center groups, and 101101, 101102, 101201, 101202, 101203 and 1001 reflect profit centers. Further, controlling area CA01 contains the two company codes CC01 and CC02, to which the companies C01 and C02 have been assigned. Assume that both company codes are assigned to each profit center.

An aggregation needs to be made for management consolidation. You would define these aggregation rules as follows:

- Profit centers 101101 and 101102 do not require the company details; that is, they are used to create the consolidation units.

You enter the profit centers 101101 and 101102 as the target profit centers. You do not select the indicator for company details.

- Profit centers 101201, 101202 and 101203 are to aggregated at profit center group 10120, which hence reflects a consolidation unit.

You specify 10120 as the target profit center group for the profit centers 101201, 101202 and 101203; and you do not select the indicator.

- Profit center 1001 is to be aggregated at profit center group 100, and in this case the company details are to be retained.

You define the profit center group 100 as the aggregation target for profit center 1001, and you select the indicator.

Further notes

See also the corresponding step for the receiver system: Define Aggregation to Profit Center/ Profit Center Group.

Preparations Related to All Consolidation Types

The steps described in this section are equally relevant to the integrated consolidation types company consolidation, business area consolidation and profit center consolidation. Always carry out these steps before the steps described in the sections "Company Consolidation", "Business Area Consolidation" and "Profit Center Consolidation" which follow.

Copy Group C/A, Cons BS/IS Structure, Cons Transaction Type

Dependent on the data transfer method which you use for the transfer of operative data, a group financial statement version must exist in the sending system of the group chart of accounts. As a rule these are predetermined centrally. Tools are available in the section Preparation in the SAP Consolidation System, with which you can build and transport a group chart of accounts and a financial statement version.

The transaction types for consolidation must be created in the sender system.

Activities

When the consolidation system provides a transport of the group chart of accounts, the group financial statement version and the transaction data for consolidation then you transfer these objects into the transaction system. However this is only necessary when it concerns different systems and clients.

Transaction Accounts: Assignment of Group Accounts

A link must be created between the transactional chart of accounts and the consolidation chart of accounts in order to update the financial statement (FS) items of Consolidation with the data posted with transactional accounts using the realtime update or rollup transfer methods.

You allocate the transactional charts of accounts to one or more consolidation charts of accounts in section *Preparation in the SAP Consolidation System*, step Assign transaction charts of accts to cons charts of accts.

If you want to use the accounts in the group chart of accounts to establish a link between the transactional accounts and the FS items in Consolidation, you must allocate the transactional chart of accounts to the group chart of accounts in the sending application. You can do this in this section.

Assign Group Chart of Accts to (Transaction) Chart of Accts

The group chart of accounts must be assigned to the (operational) chart of accounts.

Activities

Make the assignments in the chart of accounts list.

Automatically Assign Group Accounts to (Transaction) Accts

In some circumstances it is possible to automatically assign group account numbers to operational accounts.

Preconditions

A group chart of accounts as well as a financial statement version must exist to which the operational accounts are assigned.

Activities

Automatically assign the group accounts to the operational accounts.

Further notes

If no group financial statement version exists, decide whether it is less time-consuming to set up the FS version or to manually assign the group accounts to the operational accounts.

Manually Assign Group Accounts to (Transaction) Accounts

If you cannot automatically assign the group accounts to the operational accounts, you can manually assign the relevant group account to each operational account in this step.

Activities

Enter the relevant group account into the master records of all (operational) accounts.

S

Check Group Account Assignments for Completion

In order to ensure proper reassignment of data during update, the assignment of group accounts to the operational accounts must be complete. This can be checked automatically.

Activities

Execute the automatic check. Specify the operational chart of accounts in the selection screen.

Print Group Account Assignment

In this step you can display and print a list of group account assignments to operational accounts. The list can be sorted in two ways:

- By group account For every group account, the operational accounts are displayed to which an assignment is made.
- By G/L account The operational accounts are displayed with the group account assigned to them.

Activities

Print the account assignment, sorted as desired. You need to specify the operational chart of accounts.

Transaction Type Account Assignment

For the integrated data collection, there is a requirement to copy the transaction type assignments from the transactional components into the Consolidation system.

In the EC-CS/SEM-BCS Consolidation component, you can use subitems to assign transaction types. A subitem category must first be defined specifically for transaction types. Note that Asset Accounting and General Ledger do not use subitem assignments, but instead use asset transaction types and the transaction types of the FI-LC Consolidation component, respectively. The following logic is applied for transferring data assigned with transaction types into EC-CS/SEM-BCS Consolidation:

- Asset Accounting uses very detailed asset transaction types. For consolidation purposes, you need to aggregate the asset transaction types and assign them to the transaction types in FI-LC Consolidation.
- General Ledger is able to use the transaction types of FI-LC Consolidation for its internal document posting. For example, General Ledger assigns transaction types for portraying Provision transactions. These postings do not involve Asset Accounting.
- You use master data maintenance of Subitem Categories to link the FI-LC transaction types with the EC-CS/SEM-BCS subitems. In the Sender Field for the subitem you enter the FI-LC transaction type.

S

In this section, you make the allocations between the transaction types of Asset Accounting and the transaction types of FI-LC Consolidation. To maintain the subitem categories for transaction types in EC-CS/SEM-BCS Consolidation, see the step Define subitem categories.

Maintain Transaction Types for Consolidation

In this step you can maintain the transaction types of FI-LC Consolidation. The central group should set these transaction types.

Standard settings

A range of transaction types are preset in the standard SAP system. They are used in particular for showing the horizontal development of balance sheet items.

Activities

1. Check whether the transaction types supplied meet your requirements.

Assign Asset Transaction Types

In this step you assign FI-LC Consolidation transaction types to Asset Accounting transaction types.

Standard settings

In the standard SAP R/3 System, Consolidation transaction types are already assigned to asset transaction types. The assignments have been made in such a way as to allow you to create a group asset history sheet.

Activities

- If you have defined your own asset transaction types or made changes to the standard asset transaction types supplied, then you should assign the relevant Consolidation transaction types to these.
- If you have defined your own Consolidation transaction types or made changes to the standard Consolidation transaction types supplied then you should correct the assignment accordingly.

Set Transaction Types as Required Entry

For individual accounts, you can control whether Consolidation transaction types should be an optional or required entry for posting. You do this using the field status group in the account master record. In this step you maintain the field status groups.

Activities

1. Select the relevant field status variant for your company code. Assign company codes to field status variants in the Financial Accounting Implementation Guide, section "Financial Accounting Global Settings", activity Allocate company code to field status variant.

Maintain the field status groups which are assigned to your relevant accounts. Select the field group "Consolidation" and specify entry of transaction types.

Define Validation for Account/Transaction Type

In this step you can define validations which ensure that only the transaction types of a specific group can be assigned to individual accounts.

Activities

- Define the appropriate validation rules at the document line item level.
 A validation rule consists of a prerequisite for performing the check, and the actual check that is to be carried out.
- As the prerequisite, you should specify the G/L accounts to be broken down by transaction type (such as equity). As the check, define the permitted transaction types.

Further notes

For further information on defining validations, see the FI-SL Special Purpose Ledger documentation. Assignment of Business Area: Check Assignment of Cons Business Area

With the integrated data collection you may want to supplement the business area (at least when posting to certain FS items, for example FS items of the income statement).

In consolidation you can use Subitem for this account assignment. Prerequisite is that you define a Subitem category for the consolidation business area and assign the relevant FS items.

So that the system can transfer the business area of operative postings into the subitem of consolidation, you have to carry out an assignment between Business area and Consolidation business area

Activities

Check the assignment in the implementation guide enterprise structure in the step Assign business area to consolidation business area.

Trading Partner Account Assignments

One of the main tasks of preparation for consolidation is to prepare data for Consolidation in such a way as to allow interunit eliminations to take place. For this, trading partners must be simultaneously assigned to group-internal transactions.

In this chapter you carry out the master data assignments which enable trading partners to be automatically assigned in group-internal transactions. You can make the following assignments:

- The company ID to the customer/vendor master record.

Consolidated companies which are group-internal business partners are represented by customer/vendor master records. In the master record you enter the company ID by which the company will be identified within the group. When you post group-internal transactions, for example group-internal payables/receivables, the system finds the company ID in the customer/vendor master record and assigns that company as a trading partner.

- The company ID to the G/L account master record.

If business relations with other consolidated companies are not shown in customer/vendor master records but instead in G/L accounts specifically set up for this purpose, the company ID is directly entered into the G/L account master record. The company is assigned as a trading partner on posting.

During posting, the trading partner is duplicated in all document lines. The offsetting entry is therefore also given the ID of the trading partner. This is particularly important for entries which affect sales, because a trading partner assignment must exist for the consolidation of intercompany revenue and expense.

Since the internal trading partner is duplicated in all document lines, the trading partner must be uniform for the whole document. See the step Maintain document types for transaction processing. **Further notes**

For posting across company codes, the trading partner is derived from the company assigned to the partner company code. Thus, no company ID needs to be entered for the trading partner assignment in the master records of company code clearing accounts.

Insert Company into Customer Master Record

In this step you can assign company IDs in the customer master records of your affiliated companies. You maintain your customer master records in the Accounts Receivable main menu.

Activities

In the SAP menu, select Accounting -> Financial accounting -> Accounts receivable -> Master records - > Change. Proceed as follows to maintain customer master records:

- 1. In the initial screen, flag the indicator "Control data" in the general data area.
- 2. In the detail screen for control data, enter the company ID in the field "Trading partner".

Further notes

You control the entry characteristics of the field "Trading partner" in the relevant field status group. If necessary, maintain the field status "General data" for each account group in the FI Implementation Guide "Accounts Receivable and Accounts Payable" in the step Define account groups for customers. Choose the field group "Control data" and determine the characteristics of the field "Trading partner".

Insert Company into Vendor Master Record

In this step you can assign company IDs in the vendor master records. You maintain the vendor master records in the Accounts Receivable application menu.

Activities

In the SAP menu, select Accounting -> Financial accounting -> Accounts receivable -> Master records - > Change. Proceed as follows to maintain vendor master records:

- 1. In the initial screen, select the indicator "Control data" in the general data area.
- 2. In the detail screen for control data, enter the company ID in the field "Trading partner".

Further notes

You control the entry characteristics of the field "Trading partner" in the relevant field status group. If necessary, maintain the field status "General data" for each account group in the FI Implementation Guide "Accounts Receivable and Accounts Payable" in the step Define account groups for vendors. Choose the field group "Control data" and determine the characteristics of the field "Trading partner".

Insert Company into G/L Account Master Record

In this step you can assign company IDs to the general ledger (G/L) account master records. You maintain G/L master records in the General Ledger Accounting application menu.

NOTE: You can only assign a company ID to a G/L account if the account is set up for this company. For example, you might have created separate accounts for investments in different group companies. In this case, assign each G/L account the company ID of the group company in question. If you have set up a single account for investments in different companies, however, do not assign a company ID to the G/L account master record.

Activities

In the SAP menu, select Accounting -> Financial accounting -> General ledger -> Master records -> Change.

In the detail screen, enter the company ID in the "Trading partner" field.

Maintain Document Types for Transaction Processing

In this step, you can adjust document types in Financial Accounting to meet the requirements of the Consolidation application.

- "Multiple companies" indicator

In order that the trading partner account assignment can be duplicated in a document when you post business transactions within the group, you can only have one trading partner per document. You should therefore set up the document type to not allow posting to multiple companies. For some business transactions, more than one trading partner needs to be assigned when posting and so you specify more than one trading partner in the document. As a result, the system cannot duplicate the trading partner in the offsetting entries. This is the case, in particular, for entries which are not sales-relevant, for example automatic payments. Entries to cash accounts are usually irrelevant to consolidation and therefore do not require a trading partner assignment. For these transactions, you can set up the document type so that posting to multiple companies is allowed.

- "Enter trading partner" indicator

For posting to G/L accounts only (without direct reference to customer/vendor accounts), you may need document types which allow manual assignment of trading partners. This is the case, for example, with group-internal transfers within the income statement.

Activities

- 1. Check which document types you require for your work flow management.
- 2. For each document type, specify whether posting to multiple companies will be allowed. You usually *do not* allow posting to multiple companies, in order that the system can automatically duplicate the trading partner account assignment in the document.
- 3. For each document type, specify whether the manual assignment of trading partner will be allowed.

Multiple Currencies

For consolidation activities to take place, data for foreign companies must be kept in group currency. Various translation procedures are available for translating data from local currency to group currency.

Data can also be locally translated into group currency on a company code level. As a result, data can be portrayed on a transaction basis in group currency.

If certain data is translated locally in the company code then you must set group currency there. This chapter deals with the setting of parallel currencies in Financial Accounting, Asset Accounting and Materials Management.

Further notes

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For background information, please refer to the section "Consolidation of Subsidiaries", chapter "Currency Translation" in the FI manual "Preparation for Consolidation".

Set Parallel Currencies in FI Financial Accounting

In General Ledger Accounting you have the option of managing all company code values in parallel in the same accounts in up to three currencies. You define a currency by means of the following:

- A currency type corresponding with the function of the currency (for example group currency)
- An exchange rate type for translation
- A base currency for translation
- A date (for example document date) for translation

If group currency is used in parallel with the company code currency, the values in local currency and the values already translated are transferred to the Consolidation processing ledger. In Consolidation you can use the currency translation method to determine the financial statement items whose previously calculated group values should be kept for consolidation, and the FS items for which another translation should take place.

Activities

- 1. Specify whether the group currency will be used as the parallel currency on a company code level.
- 2. If you choose this, determine the currency type (group currency), exchange rate type, base currency and the type of date for translation.

Parallel Currencies in FI-AA Asset Accounting

Parallel currencies in Financial Accounting can be supplemented by the use of parallel currencies in Asset Accounting. Parallel currencies are posted in the same FI document as the local currency value.

A depreciation area must exist in group currency, if the group currency is to be the parallel currency in Asset Accounting.

This Implementation Guide assumes that depreciation areas in group currency have already been defined in Asset Accounting Customizing.

Set Chart of Depreciation

The Asset Accounting depreciation areas are assigned to a country-dependent chart of depreciation.

In this step you select the chart of depreciation which will form the basis for the following steps relating to Asset Accounting.

Activities

Select the chart of depreciation for which you want to maintain depreciation areas.

Check use of "parallel currencies"

In this step you can check whether group currency has been set as the currency type for the depreciation areas.

NOTE: The currency type and the currency key of the depreciation area must be identical with the settings for the parallel currency used in General Ledger Accounting for the company code concerned.

Standard settings

Depreciation areas are preset in the standard SAP system. **Activities**

Check whether the appropriate settings have been made in the relevant depreciation areas and make any necessary corrections.

Further notes

- The depreciation area's currency key is set on the company code level. You can check this setting in the next step.
- For further information on maintaining depreciation areas, see the FI-AA Asset Accounting component documentation.

Check the Currency for Depreciation Area

The currency key of the depreciation area is assigned at the company code level.

Activities

For the relevant company codes, check whether the correct currency key is assigned for the depreciation areas in group currency.

Further notes

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The currency field is only ready for input if certain settings are made in the definition of the depreciation area. You have to define the area so that the acquisition and production cost values and depreciation rules are transferred without changes from the local currency depreciation area for the same type of valuation.

Set up Parallel Currencies in MM Materials Management

In the material ledger you can manage valuation data for material stock in up to three currencies. For material ledger closing, the values are totalled in each currency and a periodic unit price is calculated separately for each currency.

Activities

For more information, see the CO Controlling documentation, section "Accounting for Actual Costs / Material Ledger".

Parallel Valuations

SAP's transaction applications support parallel valuations according to local commercial codes (local valuation) and according to corporate policy (group valuation). This section describes the parallel valuations in the sub-sections of Asset Accounting, Investment Management and Controlling.

Financial Accounting posts parallel valuations to special accounts. Using various financial statement versions, you can generate closing statements with local valuation as well as closing statements with group valuation. In order to transmit the values to Consolidation, the accounts are allocated and transferred to the consolidation FS items with group valuations instead of local valuations.

Asset Accounting: Depreciation Areas

In Asset Accounting, parallel valuations according to local and group law are represented by various depreciation areas.

For valuation according to group law, depreciation areas for both group valuation in local currency and group valuation in group currency are required.

This Implementation Guide assumes that depreciation areas for group valuation have already been defined in Asset Accounting Customizing.

Set Chart of Depreciation

Asset Accounting depreciation areas are assigned to a country-specific chart of depreciation.

In this step you set up the chart of depreciation which will form the basis of the following steps relating to Asset Accounting.

Activities

Select the chart of depreciation for which you want to maintain depreciation areas.

Maintain Depreciation Area

During preparations for consolidation, you should do the following:

- Check that the depreciation area is defined in such a way that its values are posted to the relevant accounts in the general ledger.
- In the definition of the depreciation area in group currency, ensure that acquisition and production cost values and depreciation parameters from the depreciation area with an identical valuation are transferred in local currency without changes.

This is a prerequisite for assigning the group currency on a company code level (see also the step Check the currency for depreciation area).

Standard settings

Depreciation areas are preset the standard SAP system.

Activities

Maintain the settings of the depreciation areas for group valuation.

Further notes

For further information on maintaining depreciation areas, see the FI-AA Asset Accounting component documentation.

Check Account Assignments

In this step you check the assignments of the general ledger accounts to be posted for the corporate valuation depreciation areas. A consistency program is available for this purpose, which displays the G/L accounts for each account assignment and depreciation area in a selected company code.

Activities

- 1. Check the general ledger accounts for the group valuation depreciation areas.
- 2. In order modify an account assignment, see the chapter Business Transactions -> Integration -> Asset Management in the General Ledger Accounting Implementation Guide, and select the appropriate step.

Investment Management: Capitalization

In Investment Management, costs of capital investment measures which require capitalization are periodically settled. You can use different capitalization versions to achieve different settlements depending on the depreciation area.

For this, you need to perform the following:

- Assign one capitalization version to a depreciation area.
- Enter capitalization keys in the master data for investment measures.
- Assign version-dependent capitalization percentages rates to your capitalization keys. With various capitalization versions you can now perform different capitalizations, depending on the depreciation area.

Example Cost

element 410000: -Cost accounting depreciation 100 %

- Group depreciation 90 %
- Tax depreciation 80 %
- Book depreciation 80 %

Further notes

See the IM Investment Management component documentation.

Maintain Capitalization Key

In this step you maintain the capitalization key to which you will then assign various capitalization percentage rates in the next step.

Activities

Maintain the capitalization keys which you require.

Assign Capitalization Percentage Rates

In this step you assign the capitalization percentage rates required by group law to the capitalization keys, in accordance with the capitalization version.

Activities

S

Make the necessary assignments.

Controlling: Check Account Assignments

In Cost Object Controlling, the results analysis version can be used for periodically valuating long-term orders and projects and for determining work in process according to the group's valuation requirements.

If, due to group requirements, you want a valuation other then local closing, you must set the appropriate parameters for results analysis in Customizing for Cost Object Controlling. Make the settings

- for the results analysis version of long-term orders and projects, in the steps contained in the chapter Results Analysis
- for determining the work in process, in the steps contained in the chapter Work in Process

In this step you can check the assignment of FI General Ledger accounts to which the results analysis data is posted.

Activities

If necessary, check the applicable account determination for group valuation.

Further notes

See the CO Controlling component documentaiton, section "Cost Object Controlling".

Further Settings for Business Area Consolidations

In this section, you define the settings in the sending application that are needed for supplying the data for business area consolidations.

Business area consolidation, like company consolidation, is integrated with the applications Financial Accounting, Asset Accounting, Controlling, Materials Management and Sales and Distribution. For business area consolidation to take place, the data supplied by the operational systems must contain information about business areas and trading partner business areas for the transactions relevant to consolidation.

Financial Accounting

Financial Accounting is of vital importance in the preparation of data for business area consolidation, whereas the use of other applications is optional.

In the following steps you make settings for the manual entry and subsequent adjustment of business areas.

Check Activation of Business Area Balance Sheets

In order to perform Business area consolidation, the business area totals should be activated on a company code level. This has the effect that the field business area, independent of the field control of posting keys and accounts, is always ready for input when you post.

If you only want to perform business area consolidation for subareas, for example for the income statement, then you should make the field business area and trading partner business area ready for input via the field control of accounts.

Activities

Activate the business area balance sheets for all company codes which you want to include in a business area consolidation.

Maintain Field Status Groups for G/L Accounts

For the manual assignment of business areas or partner business areas you can use the field status group to control whether the assignment is to be mandatory or optional (required or optional entry). If no assignment is made in accounts where entry is optional, the transaction is assigned to the business area "space". On the closing key date the business areas must then be subsequently allocated.

In this step you determine whether field entry will be required or optional for G/L accounts.

Depending on the objective of the business area consolidation, you will want the assignments of business areas and trading partner business areas to be as complete as possible when entering business transactions.

Activities

- 1. Select the relevant field status variant for your company code. Assign company codes to field status variants in the Financial Accounting Implementation Guide, section "Financial Accounting Global Settings", activity Allocate company code to field status variant.
- 2. Specify for which business transactions/general ledger accounts the entry of business area and trading partner business area should be required and for which it should be optional.
- 3. Set the entry of business area and trading partner business area to 'Required' or 'Optional' in the field status groups of the G/L accounts.

S

Specify Accounts for Subsequent Adjustment

In subsequent debiting, document line items are subsequently assigned to certain profitability segments (business area, cost center, profit center and so on). Clearing and adjusting entries are automatically generated in the process.

Subsequent debiting allows a breakdown of certain document lines which have not yet been supplied with business area/trading partner business area. The (trading partner) business areas are derived from offsetting entries for which an account assignment was made.

In this step you specify the following accounts for adjusting and clearing entries respectively:

- Adjustment accounts

These are required for reconciliation accounts (for example payables and receivables), tax accounts and all accounts which cannot be posted to directly. These adjustment accounts cannot must not be marked as tax-relevant; in the accounts master record no entries may be made in the field "Tax category", and the field "Posting without tax allowed" must be selected.

- Clearing accounts

The subsequent debiting program also finds any business area balances which have arisen and posts them per business area to a clearing account. A zero balance is thereby produced for each business area.

Activities

Check the accounts in the standard system and specify your own accounts for clearing and adjustment entries if necessary.

Maintain Document Types for Subsequent Debiting of BAs

For periodic subsequent debiting you must use a document type for which:

- posting is cross-company
- trading partners can be manually entered

Standard settings

The document type 'SU' is preset in the standard SAP system for periodic subsequent debiting.

Activities

If necessary, create your own document type with the characteristics mentioned above.

Asset Accounting: Assign Business Areas

You can make assignments to each business area in the Asset Accounting asset master records. Asset postings thereby 'inherit' the business area and trading partner business area assigned.

If business area balance sheets have been activated for a company code, business area assignments automatically become a required entry in the asset master records. The required entry is independent of how the field entry for the asset master record is defined in the screen layout rules. This ensures that every asset master record is assigned to a business area.

During assignment, the system also checks whether the business area agrees with the business area in the master record of any cost accounting object selected as an additional account assignment.

Activities

If business area balance sheets have been activated, you do not need to make any settings in Customizing for business area account assignments when posting assets.

You assign assets to business areas in the Asset Accounting application menu.

Controlling

You should only perform the activities described below if you use the CO System and consolidate business areas.

You make assignments to a business area in the master records of CO posting objects such as cost center, order or project.

If the business area balance sheet is activated for the relevant company code, the assignment of business areas in the master records of the CO posting object automatically becomes a required entry. The system checks this during master data maintenance.

In primary posting in Financial Accounting to accounts with auxiliary account assignments relevant to CO (cost and revenue), business areas assigned to each assigned CO posting object are transferred to the entries.

If allocations are made between company codes/business areas in CO, these allocations must be followed by entries in FI. If the reconciliation ledger is activated, it can be used to make reconciliations between FI and CO. It can also be used to create the corresponding reconciliation entries for Financial Accounting.

Since all CO activities basically contain sender and receiver specifications, both respective business areas and trading partner business areas can be derived for the entries.

In the following steps you make settings for reconciliation entries.

S

Define Account Determination for Reconciliation Entries

For FI reconciliation entries with CO allocations between company codes/business areas, you need to define clearing accounts and assign them to business transactions (repostings, allocations, assessments and so on) or to object classes.

If clearing accounts have not yet been assigned in CO Customizing, you can assign them in this step.

Activities

- 1. Create the clearing accounts in the General Ledger Accounting application menu.
- 2. Assign the clearing accounts to the CO transactions and/or object classes.

Further notes

You can find further information in the CO Controlling documentation, section Overhead Cost Controlling, Cost and Revenue Element Accounting.

Maintain Document Types

In this step you can create your own document type for entries originating in the reconciliation ledger. The document type does not need to have any special characteristics.

Standard settings

Document types are preset in the standard SAP system.

Activities

If necessary, create your own document type for entries originating in the reconciliation ledger.

Materials Management

You should only perform the actions described below if you use Materials Management and consolidate business areas.

The business area is derived from the following master data assignments for entries in Materials Management:

- The combinations of division and valuation area which are relevant to business area consolidation are assigned to a business area.
- The appropriate division is entered in the material master records for articles, products and services.

All material master records are thereby assigned to a business area via the appropriate division.

The trading partner business area can be derived from material transfer postings or from the reference between purchase order and order. The latter is possible if the companies involved are members of the consolidation group and managed in the same client. The purchase order number entered in the order is used to derive the trading partner business area.

In the following steps you can make the appropriate settings for deriving business areas and partner business areas.

Identify Companies Within the Same Client

In this step you can identify those companies which are managed in the same client in your system and use the MM (Materials Management) and SD (Sales and Distribution) modules. For these companies you select the indicator "Read purchase/sales order". This indicator is used to determine trading partner business areas and trading partner profit centers within Logistics applications.

If a company for which this indicator is set appears as a partner, the system recognizes by the indicator that the trading partner business area and the partner profit center can be derived from the purchase order or sales order.

If the indicator is not set for the company, the system recognizes that this is not possible.

Activities

Set the indicator for those companies which are managed in the system in the same client as the company code and use the MM and SD modules.

Assign Division/Valuation Area to Business Area

When using business area consolidation, the combinations of division and valuation area are assigned to a business area. This business area is then adopted for all material stock postings in this division.

Activities

Assign all relevant combinations of division and valuation area to the appropriate business area.

Maintain Field Selection Group for Division

In order to ensure that all articles, products and services are assigned to a business area, set the Division field as a required entry in material master maintenance.

Activities

Maintain the field selection group of your material master records. Set the division as a required entry.

S

In the standard SAP system, the division field is preset in field selection group 090. Many other fields are already assigned to this group, however. You should define a separate field selection group for the division field, in order that not all the fields in the group require entry.

Activities

- 1. Define a new field selection group for the division field (field name "MARA-SPART").
- 2. Maintain the entry option for the field selection group. Set the division field as a required entry. You can select the key KB as a field selection reference. This key is intended for use in general customer settings.

Further notes

You can also find the activities available in this step in the "Logistics - General" Implementation Guide in the following steps: Assign fields to field selection groups and Maintain data screen field selection. You can find detailed information on how to perform these activities in the accompanying documentation.

Specify FI Account for Price Differences

Price differences can arise during material movement. In this step you specify the FI accounts which should be posted to in case of a price difference.

The accounts are set up in Financial Accounting. They can be created as a cost element or as non-CO-relevant. If they are defined as a cost element then you can assign a CO posting object in the following step, in accordance with the business area.

Activities

Enter the price difference accounts for price difference transactions (transactions PRD and PRY).

Further notes

You can also find the activities available in this step in the Materials Management Implementation Guide in step Create automatic postings.

You can find detailed information on how to perform these activities in the accompanying documentation.

Maintain CO Assignments for Price Differences

In this step you assign a CO posting object (for each business area) for the price difference accounts which were defined as cost elements. These CO posting objects must be posted to the same business area.

Activities

Assign one CO posting object per business area to the price difference account.

Further notes

You can also find the activity available in this step in the CO Controlling Implementation Guide in the step Maintain automatic account assignment. You can find detailed information on how to perform these activities in the accompanying documentation.

Sales and Distribution

Perform the actions described below only if you use the Sales and Distribution system SD and consolidate business areas.

The business area is automatically derived in the Sales and Distribution system.

The following options are supplied in the standard SAP system for deriving business areas:

- Rule 1: Business areas assigned per plant and division
- Rule 2: Business areas assigned per sales area

The trading partner business area can also be derived from the reference between purchase order and order, provided that the companies involved are members of the consolidation group and managed in the same client in the SAP system. The purchase order number entered in the order is used to derive the trading partner business area.

In the following steps you can make the appropriate settings for deriving business areas and partner business areas.

Identify Companies Within the Same Client

In this step you can identify those companies which are managed in the same client in your system and use the MM (Materials Management) and SD (Sales and Distribution) modules. For these companies, set the indicator "Read purchase/sales order". The indicator is used to determine trading partner business areas and trading partner profit centers within Logistics applications.

If a company with this indicator set appears as a partner, the system recognizes by the indicator that the trading partner business area and the partner profit center can be derived from the purchase order or sales order.

If the indicator is not set for a company, the system recognizes that this is not possible.

Activities

Set the indicator for those companies which are managed in the same system client as the company code and use the MM and SD modules.

S

Assign Rules per Sales Area

For business area assignment you must set the rule to be used by the system for determining a business area for each sales area.

Note

- If you do not specify a rule for the sales area, the business area cannot be assigned.
- Currently you cannot change the rules for determining business areas in Customizing.

Standard settings

Two rules for the automatic assignment of business areas during revenue account determination are included in the standard SAP system:

- Business areas assigned per plant and division
- Business areas assigned per sales area **Activities**
- 1. For each sales area, check which rule will be used for business area assignment.
- Specify one rule per sales area for determining the business area.
 The system automatically lists the existing sales areas for you to choose from.

Assign Business Area per Plant and Division

In this step you assign combinations of plant and division per business area for automatic assignment.

The system then determines the appropriate business area using the plant and division.

Activities

Assign plants and divisions to business areas.

Assign Business Area per Sales Area

In this step you can assign sales areas to business areas in order to enable the automatic posting of business areas.

The system then determines the appropriate business area using the sales area.

Activities

S

Assign the sales areas to business areas.

Further Settings for Profit Center Consolidations

This section provides information and tools on how to prepare operational data for Profit Center Consolidation.

The main prerequisite for profit center consolidations is the Profit Center Accounting is implemented and that it is set up to allocate costs and revenue, and possibly balance sheet items to the profit centers. This section assumes that you have made the Customizing settings in the Implementation Guide for Profit Center Accounting. This section only refers to the settings for assigning partner profit centers, and contains tools for analyzing the operational data.

Also look at the settings in section Enterprise Structure -> Check Structure for Profit Center Consolidations.

Derive Partner Profit Center

For Profit Center Consolidation it is necessary to assign the costs and revenue, and any balance sheet changes from group-internal trading, to the partner profit center.

The derivation of the partner profit center depends on the kind of system environment your group has:

- All company codes use the same SAP System or client: In this case, for business transactions in Materials Management and Sales the system can automatically derive the partner profit center from the order or delivery data. You only need to identify the trading partners in your group.
- The company codes use different systems or clients:
 In this case, you need to define rules to derive the partner profit center in Purchasing or Sales.

Activities

Make the Customizing settings for deriving the partner profit center in the Implementation Guide for Profit Center Accounting, in section Preparation for Consolidation.

Tools: Analysis of Partner Assignments

In this section help functions are at your disposal, with which you can

analyze the transaction data of profit center accounting according to certain criteria. The aim of such analyses is to guarantee correct account assignment of data for consolidation.
S

Analyze the Accounts by Partner Breakdown

Elimination entries in Consolidation require that the transaction data includes the assignment of partner units to the relevant accounts. To enable the system to convert the partner assignments to the partner units during data transfers, the original transaction data of Profit Center Accounting must reflect the partner company as well as the partner profit center.

This step gives you the opportunity to generate a list of the partner assignments for ranges of account numbers. The system examines all transaction data of the accounts selected, and states each account's assignments of partner companies and partner profit centers.

You can use this list to identify the accounts with missing or erroneous partner assignments.

Activities

If desired, create a list of partner assignments or a selection of accounts. Analyze the Accounts by Activities and Origin Objects

When you identify accounts that were posted incorrectly, it is helpful to examine the accounts according to the criteria listed below before proceeding with the next steps:

- the business process represented by the posting entry
- the type of origin object

In this step, you can generate a list according to these criteria.

Activities

If needed, create a list for you to analyze.

Preparation and Activation of Data Transfer

In this section you prepare the data transfer method, which you want to use for the integrated data transfer.

You will find detailed information on how to implement the methods in the SAP-Library, component Consolidation, section Integrated Data Collection.

Realtime Update into Consolidation

If you want to transfer data to Consolidation with the data transfer method realtime update and if you use custom subassignments in Consolidation, please follow the next step.

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Make Settings for Custom Subassignments

If you use custom subassignments in Consolidation, you define field movement 0C03 in this step.

If the following applies, you must also use the SAP enhancement **FMC10011** in conjunction with function exit 250, in order to be able to update the custom subassignments:

- the custom subassignments belong to a compound of characteristics and - the independent characteristic is fixed in the breakdown category.

For more detail, see the documentation for the SAP enhancement. Note that enhancement projects require knowledge of ABAP programming.

Activities

If applicable, define field movement 0C03 and execute the enhancement. **Periodic Extract from the Consolidation Staging Ledger**

If you want to transfer data to Consolidation with the data transfer method periodic extract, please follow the next steps.

Maintain the Currency of the Consolidation Staging Ledger

A periodic extract also transfers group values from the consolidation staging ledger to the consolidation processing ledger. If you do not want the Consolidation system to re-translate these group values and, instead, have the system use the group values as received from the staging ledger, you must make sure that the ledger currency of the staging ledger coincides with the ledger currency of the processing ledger.

This step lets you maintain the ledger currency of the consolidation staging ledger.

Standard settings

In the standard SAP system, ledger 09 is predefined as the consolidation staging ledger. Its ledger currency is USD.

Activities

If needed, adjust the ledger currency of ledger 09 to match the ledger currency of your consolidation processing ledger.

Also make sure that the currency of the consolidation staging ledger in the consolidation system is identical to the currency that you define in this step for the consolidation staging ledger of the operational system.

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Define a Logical File Name

In order to transfer the periodic extract by file to the consolidation system, you have to define a logical file name.

The logical file name is used to determine the physical path in which the system should store the Extractfile.

Activities

- 1. Define logical file names and logical file paths cross-client
 - a) You define the logical file path.
 - b) You assign the physical file path to the logical file path. You carry out this assignment via syntax groups, to which the operating systems are assigned.
 - c) You define the logical file names.
 In the definition you specify the physical file names amongst other things. You can insert variables in the names which the system replaces with the current values on generation of the extract file, for example the date.

You will find detailed information in the basic implementation guide in the step Cross-Client Maintenance of File Names and Paths.

2. Define logical file names cross-client

In addition you can define the file names cross-client. You will find detailed information in the basic implementation guide in the step Additional Client-Dependent File Name Maintenance.

Execute Enhancement for Custom Subassignments

If you use custom subassignments in Consolidation, you must use the SAP enhancement FMC10011 along with function exit 250 in order to populate these subassignments with periodic extracts.

For detailed information see the documentation on the SAP enhancement. Note that ABAP knowledge is needed for enhancement projects.

Activities

Check if you use custom subassignments. If so, carry out an enhancement.

Rollups

Perform the following steps if you want use data transfer method rollup to transfer transactional data for an integrated consolidation type.

Upload Customizing Settings from File

In order to transfer the transaction data to SAP Consolidation Component using the rollup method, certain Customizing settings for Consolidation must be disclosed to the transactional applications, so that the data can be converted to the necessary account assignments. If Consolidation and the transactional applications do not share the same system and client, it is necessary to upload or download the Customizing settings of Consolidation to the distributed transactional systems. This involves the Customizing settings for financial statement items, subitems, breakdown categories, rules for ID combination, and so on.

When creating the rollup file of transaction data in the transaction application, the system uses the Customizing settings to convert the account assignments. After the rollup file is generated, the Consolidation system performs checks on the file and updates the database.

To download the settings of the Consolidation system, see step Download the Customizing settings. In this step you upload the settings into the transaction system.

Requirements

Thus, the upload is necessary:

- if your integration scenario involves distributed systems or clients
- if you use the rollup method of data transfer
 - Activities

Upload the settings, if applicable.

Define Rollup for Data Exports

In this step you find out how to define rollups for transferring data into the Consolidation application.

If sending and receiving applications reside in the same system, then you only need a rollup selecting and converting the operational (transaction) data. If the applications reside in different systems, you also need an additional rollup for importing the data into the Consolidation system. You define the additional rollup in the IMG step Define Rollup for Data Imports.

Note on the SAP Enhancement

The SAP enhancement **FMC10011** features the function exits described later. If applicable, choose the activity *Execute the Enhancement* in this step. Note that ABAP knowledge is needed for carrying out enhancement projects.

- Function Exit 200: Determine the Data Stream The system determines the data stream as follows:
- from the global parameters when you start the rollup within the monitor

- from the global parameters when you start the rollup directly and status management is activated
- from the reset set of the rollup when you start the rollup directly and status management is deactivated

If several data streams are active and the system cannot determine the relevant data stream from the parameters, you then need function exit 200 to determine the relevant data stream.

Function Exit 210: Output Fields for Erroneous Data Records

Rollup execution produces an error list. This list contains messages for any errors that are encountered, along with the relevant data records to each message.

For easier identification of the data records, the system displays for each record the values of certain key fields. In the standard SAP system, these output fields are defined for the following sender tables: ECMCT, GLPCT, GLT3, GLT0, GLFUNCT, and GLFLEXT. For example, a rollup from the sender table GLPCT shows the following key fields: RBUKRS,

RYEAR, KOKRS, RPRCTR, RACCT, RTCUR, RASSC, and SPRCTR.

You need function exit 210 if:

- You want to define other output fields for the sender tables listed above, or
- You want to execute rollups from other sender tables

- Function Exit 220: Sender Fields for Organizational Units

During a rollup, the system tries to find the sender fields within the sender tables using data elements. Following is a list of the data elements the system uses to access the characteristics:

 CharacteristicData Element company code BUKRS company
 RCOMP_D

 business area
 GSBER controlling

 area
 KOKRS profit center

 PRCTR partner company
 RASSC partner

 business area
 PARGB partner profit center

 PPRCTR G/L account or cost element
 RACCT ledger

 RLDNR
 RLDNR

This can be false for certain characteristics with some sender tables. For example, in the sender table FILCT the G/L account coincides with the characteristic *consolidation item*. Therefore, the system should not access the data element RACCT, but instead must access the data element RITEM. You must use function exit 220 to determine these discrepancies.

- Function Exit 230: Sender Fields for Subitems

In IMG step Define subitem categories for the integrated data transfer you determine which account assignments are transferred to the subitem. You can choose the transaction type, functional area, business area, country of customer, cost center, G/L account, and profit center.

Function Exit 240: Processing Value Fields Prior to the Update

This function exit lets you manipulate the value fields of the rolled data records before these are written to the consolidation database. Here a few sample cases where this might be applicable:

- If the consolidation frequency of the consolidation group shows quarterly consolidations, it is then necessary to accumulate the period values to produce quarterly values. The standard

rollup does not support an accumulation of values that are being transferred. This is where the function exit comes in handy.

- Conversion of values using special logic

Function exit 240 is called up from the standard exit, which SAP uses for rollups into the SAP component consolidation. This occurs at the time of the update. Thus, the customer exit influences the values directly prior to when the values are written.

- **Function Exit 250: Providing Values for Custom Subassignments** If you use custom subassignments in Consolidation and you want to fill them using the rollup, you need function exit 250 if:

- subassignments are part of a characteristic compound, and
- the independent characteristic is fixed in the breakdown category.

For more detail, see the documentation in the enhancement transaction.

Standard settings

In the standard SAP system, the rollup 0C_PC2CS (sender table GLPCT; receiver table ECMCT) is predefined for the selection of data in the sender structure and for the conversion of the data.

If you want to rollup a different sender table, e.g., for GLT3, define the rollup analogous to rollup OC_PC2CS with the respective sender table and field movements.

As the sender table, you can select a local table (containing company codes) and a global table (containing companies). For global tables there is an additional standard exit SC1 for receiver field RCOMP (see below for more information on standard exits).

Activities

Check the predefined rollups and define additional ones, if needed, for selecting and converting the operational data. Each rollup requires a header and a sequence.

Rollup Header

- 1. Enter the totals table from the transaction application as the sender table (for example the totals table GLPCT for Profit Center Accounting) and the Consolidation totals table (ECMCT) as the receiver table.
- 2. Enter the reset set.

When a rollup is started, the reset set resets to zero those value fields in the receiver table that will be filled by the rollup. This is essential, for example, if a rollup is repeated. By double-clicking on the reset set field, you can access the set maintenance function. You specify value fields for the set. For performance reasons, the set must contain entries for the following characteristics as a minimum:

- Ledger
- Record type

Version

The reset set can sometimes be used to determine the relevant data stream for the rollup. For example, you might have multiple data streams activated in Customizing; however, the rollup can only populate one data stream. Therefore, in the reset set, besides the characteristics ledger, record type, and version, you also need to determine the characteristics dimension and consolidation chart of accounts. Note that these characteristics may only have one value in each set, so that the data stream can be uniquely identified. The reset set must also contain the characteristic posting level. Specify the posting level that was used to write the data to the totals database of Consolidation (the default is " ").

Note: See also the documentation on function exit 200 for SAP enhancement FMC10011.

- To roll the data, also specify both the Exit and the rollup set: 3.
 - During processing, the exit specified in the rollup header reads the relevant internal table to determine data streams, ID combination rules, financial statement (FS) items and so on. Insert standard exit SC1.
 - The rollup set determines the data to be selected from the sender structure. By double-clicking on the rollup set field, you access set maintenance. Note that for reasons of performance you need to specify at least one of the characteristics Ledger, Record Type, Version and Company Code.
 - Note: If you use a rollup to collect operational data from Profit Center Accounting, keep this limitation in mind: In the rollup set for selecting the data, you may only specify company codes from controlling areas that carry the profit center ledger (ledger 8A) with the same valuation.
 - Background: The valuation of a profit center ledger is valid for a single controlling area. If you select data from company codes that are assigned to different controlling areas, these data records can be valuated differently. However, the rollup assumes that all data records share the same valuation. Rollups cannot process different valuations.

Rollup Sequence

Define the rollup sequence. For each sequence, define the field movement and specify the receiver ledger. By double-clicking on the "Field movement" field, can access a maintenance function:

- 1. Specify the receiver fields. Typically these will be the fields for the consolidation unit, partner unit, dimension, consolidation chart of accounts, FS item, record type, version, subitem category and subitem.
- 2. Specify a sender field and/or an exit for every receiver field:
- Standard SAP exits for converting the sender data exist for some receiver fields. For example, general ledger accounts must be converted to the financial statement items of Consoldation. Generally speaking, you should keep these standard exits (listed below). However, for one or more receiver fields you can map a special logic using a user exit. If you do this, you replace the standard exit with a user exit that contains the following:
- customer-defined special logic
- a call to the standard exit at the end of the special logic
 - In user exits you must ensure the correct sequence of the rollup exits. You will find comprehensive information on this subject in SAP Note no. 111140.
- For receiver fields without a standard SAP exit, you specify either the sender field, a substitution process, or a user exit.

For receiver fields with standard SAP exits, you cannot specify a substitution process. Although you can specify a sender field, this only serves informational purposes, except when the following applies: For custom subassignments that don't belong to a compound or whose independent characteristic is not fixed in the breakdown category, you must specify the sender field for each receiver field and also specify SC8 as the standard exit. When dealing with compound custom characteristics whose independent characteristic is fixed in the breakdown category, you do *not* specify a sender field: instead you specify standard exit SC8. (see also remarks to function exit 250 in SAP enhancement FMC10011).

The following exits are predefined in the standard system:

- SC1

for treating the company from the global sender tables, except ECMCT

- SC2

for determining the record type

The exit always has record type 0. When collecting plan data, the record type must be changed to a version for plan data.

- SC3

for determining the dimension The exit accesses the definition for data streams.

- SC4

for determining the consolidation chart of acocunts The exit accesses the definition for data streams zu.

- SC5

for determining the version The exit accesses the definition for data streams.

- SC6

for determining the consolidation unit The exit accesses the Copy Organizational Units and the rules for ID combination.

- SC7

for converting accounts to FS items

For conversions, the exit accesses Assign transaction charts of accts to cons chart of accounts as well as Allocate cost element ranges to FS items .

- SC8

for treating all subassignments that were not filled

Note: You insert standard exit SC8 in each receiver field that represents a subassignment. However, the sytem only calls this exit only once for each data record and treats all subassignments during one step. Keep the following in mind if you want to implement your own logic using a custom er exit: You cannot call the exit more than once for a given data record.

Insert standard exit SC1 as the exit prior to the update.

The exits are executed in ascending order.

Further notes

- Currencies are transferred as follows:
- In the step Activate data transfer the system checks whether the local currency of the company codes match the local currency of the respective companies. The system always transfers the local currency (or a parallel local currency) of the company code, that is the company in consolidation. It does not execute a currency translation in another group currency.
- Group currency values are transferred if the third currency in the sender system matches the currency of the receiver ledger.
- Values in transaction currency are then transferred, when the breakdown category of the respective consolidation item plans the values in transaction currency.

Set Lock Mode for Rollups

Use

When you execute a rollup to the consolidation system, the system locks the rollup itself and the consolidation processing ledger being updated. This is why it is initially not possible to simultaneously execute multiple rollups to the same ledger.

However, during the data collection phase of consolidation it may be absolutely necessary to record data for different consolidation units in the same consolidation processing ledger using rollups because of organizational reasons.

You can use different lock modes to accomplish this. You can adjust the level of detail used for locking a rollup to meet your organizational requirements. You can set lock modes for each integrated consolidation type and dimension. And you can change, delete or display the lock mode entries that already exist in this customizing step.

The different lock modes only apply to consolidation systems - that is, systems that contain the master data of the integrated consolidation units (except for lock mode 3 - see below).

The level of detail and, thus, the number of lock entries to be managed increases with each lock mode:

- Lock mode 0: Locks at the level of integrated consolidation type / dimension / consolidation processing ledger
- Lock mode 1: Locks at the level of integrated consolidation type / dimension / consolidation processing ledger / company of the consolidation unit
- Lock mode 2: Locks at the level of integrated consolidation type / dimension / consolidation processing ledger / consolidation unit
- Lock mode 3 (expert mode): The system does not set any locks. Instead, the user is responsible for avoiding conflicts if rollups are executed simultaneously. This lock mode applies to pure sender systems that do not contain any master data for integrated consolidation units and, therefore, cannot be used for lock modes 1 and 2.

The following alternatives are available for systems from which only data of a transactional application is exported to the consolidation system (rollup file):

- You set lock mode 0 (global lock) or lock mode 3 (no lock).
- In all other cases, the system automatically sets a global lock (lock mode 0). The same is true if the system does not find a lock mode entry when executing a rollup for the integrated consolidation type and dimension of the updated data stream.

Which lock mode you choose depends on your organizational requirements:

- You do not need to make any settings in this step if any of the following applies: (a) You transfer and write to the consolidation system data for all consolidation units in a single file; (b) You read data from a sender table in a single process step; (c) You can do without the simultaneous execution of rollups. In this case, the system uses lock mode 0.
- Choose lock mode 1 for this integrated consolidation type and dimension if you want to simultaneously record data for the consolidation units of one or more companies, for example, in a hierarchy of consolidation groups which is broken down by companies (of the consolidation units).
- You will require lock mode 2 for this integrated consolidation type and dimension if you want to simultaneously roll up data for a single consolidation unit or a group of consolidation units for different companies.

Recommendation

Try to use the smallest lock mode number possible and, thus, the number locks to be set. Increase the locking capacity if you encounter locking management problems when executing a rollup.

Activities

- 1. Specify the integrated consolidation type, the dimension, and the lock mode for the rollup.
- 2. Choose one of the following options:
 - Set lock mode
 - Display all entries
 - Reconcile entries
 - Delete all entries

Activate Data Transfer

In this step you determine the type of data transfer that is to take place between the transaction applications and the Consolidation application. The following types of consolidation are supported for integration with SAP transaction applications, depending on which SAP Consolidation component you implement at your group's headquarters:

- The SAP FI-LC component supports:
- Company consolidation

- Business area consolidation
- The R/2 RFKONS component supports:
- Company consolidation
- The SAP component supports:
- Company consolidation
- Business area consolidation
- Profit center consolidation

This Implementation Guide describes the configuration for consolidation using the SAP component.

Requirements

All other settings in the section Integration: Preparation for Consolidation should be defined prior to making the settings described in this step.

Activities

- 1. Specify which corporate group the companies in this SAP system report to.
- 2. Specify which fiscal year variant is used for the consolidation financial statements.
- 3. Specify for which consolidation types the data is transferred.
- 4. Choose one of the following data transfer methods for each consolidation type. If you choose realtime update or periodic extract as a consolidation type, keep in mind that realtime updating is activated as soon as you save your settings.

Further notes

When you save your settings, the system checks the following:

- Have all the necessary assignments been made between the transaction accounts and the group accounts?
- The system checks this for all relevant transaction charts of accounts that are assigned to a group chart of accounts.
- Are the sender field and the default subitem maintained for all subitem categories?
- Do the company codes and the companies assigned to them use the same local currency?

The following customizing settings are automatically made when you save:

- If the sender and receiver of consolidation data reside in a central system, the data transfer method is entered in the master data of the relevant consolidation units. The method is saved for a particular special version for data entry.
 - You can choose in a dialog box as well, that the system enters the consolidation fiscal year variant for all ledgers assigned to the integrated consolidation units used by integrated consolidation types.

- If you have selected periodic extract, the consolidation staging ledger is assigned to all company codes that have a company assigned to them.

Note on transports

These settings cannot be transported. You must define the settings for each client in each system.

Tools for Creating the Initial Data Set

In this section, you can create the initial data set in the consolidation staging ledger or the consolidation processing ledger. This is done only once. The initial balances must be posted with the necessary subassignments.

If you have updated the ledger with FI data for the current fiscal year, you must post-edit the data before creating the initial balances. You must also post-edit the data if the FI data was posted to Consolidation without the necessary subassignments.

Post FI Documents

In this step you can subsequently post FI documents in the consolidation ledger or in the consolidation staging ledger. This can only be done if the documents are still in the system and have not been archived.

The following documents can be subsequently posted:

- General Ledger documents
- Documents that originated from Asset Accounting
- Documents that originated from Materials Management or Sales & Distribution.

Requirements

You have performed Activate data transfer.

Recommendation

SAP recommends that you subsequently post all transactions in a single step as follows:

- Leave the "Transaction" and "Document origin" fields blank.
- Activate the "Transfer MM and SD documents too" indicator.

Warning

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Do not subsequently post documents that have already been posted to the ledger. You can check this if needed (see below).

Activities

- 1. Execute the step and choose the activity post to consolidation ledger or post to the consolidation staging ledger.
- 2. For the subsequent posting, specify the company code, fiscal year and period.
- 3. Leave the transaction and document type fields blank. This allows you to handle all possible combinations in subsequent posting.

However, if you want to restrict subsequent posting to documents that belong to General Ledger, Asset Accounting, Materials Management or Sales & Distribution, specify the transaction and the document origin as follows:

- To subsequently post documents of General Ledger, specify transaction "RFBU" and the document origin "BKPF".
- To subsequently post documents of Asset Accounting, specify transaction "RFBU" and the document origin "AMBU".
- To subsequently post documents of Materials Management, leave the transaction blank and consecutively specify the document origins "MKPF" and "RMRP" in two separate passes.
- To subsequently post documents of Sales & Distribution, leave the transaction blank and specify the document origin "VBRK".
- 4. If desired, you can restrict the subsequent posting to specific ranges of document numbers or specific document data, posting data or data entry data.
- 5. Choose between test mode and update mode.
- 6. Decide whether to check if the data records to be posted already exist. A prerequisite for this check is that the ledger being subsequently posted also carries line items (journal entries). Note however, that periodic extracts do not allow the carrying of line items. If you do not use this checking function when performing multiple subsequent postings to a ledger, you must ensure that the same data is not posted more than once.
- 7. Decide whether to also subsequently post FI documents that originated from Materials Management (MM) or Sales & Distribution (SD).

However, note the following: To be able to subsequently post documents originating from MM or SD, you cannot restrict the postings to transactions or documents that originate from General Ledger or Asset Accounting. You can only restrict the postings to documents that originate from MM or SD. The latter might become necessary if - in a first pass you subsequently posted G/L or AA documents and did not activate the indicator, and then - in a second pass - you want to subsequently post the documents from MM and SD.

8. Decide whether the subsequent posting is to apply the partner assignment and the group account defined in the master data. This is necessary if the data is missing from the FI documents that are being subsequently posted. The FI documents will not include the partner or group account if the master data was incomplete at the time of the first posting. You must always activate the indicator if you use realtime updates and you want to transfer the additional account assignment "Country of customer" into the Consolidation system. This is because FI documents do not include this

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subassignment. Activating the indicator ensures that the (subsequent) posting gets the assignment from the customer's master data at the time of the posting.

9. Determine whether to apply the document types of Consolidation. This becomes necessary if the document types of Asset Accounting were not mapped to the document types of Consolidation at the time of the (first) posting.

Make Manual Entries in Consolidation Staging Ledger

In this step you can manually build or post-edit the consolidation staging ledger. This is necessary whenever the general ledger documents do not contain all of the subassignments or when the documents cannot be subsequently posted (for example, because the documents have already been archived).

Requirements

Simultaneous posting is not permitted during the manual entry of opening balances. This would cause problems with the update task. Therefore, take organizational measures to prevent posting.

Activities

You can enter the balances and add any missing breakdowns (such as trading partners or transaction types) for each G/L account.

Note that manual entries must always be posted in the last period of the fiscal year.

Further notes

See also the explanations in the FI documentation on Preparations for Consolidation (SAP Library), section "General Aspects of Consolidation", subject "Building the initial data sets in the consolidation staging ledger or the consolidation processing ledger".

Database Reconciliation

In this section, you can reconcile the databases General Ledger and consolidation staging ledger.

You should run a reconciliation after having constructed and/or post-edited the data set to make sure that the data is complete.

If differences are found between the general ledger and the consolidation staging ledger, then depending on your situation - you may need to delete and either re-post or manually enter the data.

See also the explanations in the FI documentation on Preparations for Consolidation (SAP Library), section "General Aspects of Consolidation", subject "Creating Initial Data Sets in the Consolidation Staging Ledger and Consolidation Processing Ledger".

Reconcile General Ledger with Consolidation Staging Ledger

This step lets you reconcile the totals records in the GLT0 database (general ledger) with the totals records in the GLT3 database (consolidation staging ledger). Activities

- 1. Enter the company code and the fiscal year.
- 2. If desired, specify a range of periods or account numbers.

Transaction Data

In this chapter, you can delete existing transaction data. This can become necessary, for example, in the following situations:

- Test data must be deleted before going live.
- Transferred data is still incomplete, for example, because opening balances or the subassignments are missing.

Delete Transaction Data from Realtime Updates

This step lets you delete the documents and totals records that were written via realtime update to the consolidation processing ledger. This is necessary, if the documents and totals records are incorrect, for example, if the necessary subassignments are missing.

Activities

In the selection screen, choose the organizational units, versions and time period in which the data is to be deleted.

Delete Documents from Realtime Update

Use

This step lets you delete documents created in realtime updates, and thereby having the system adjust the totals records accordingly.

The step Delete Transaction Data from Realtime Updates lets you:

- Delete documents updated in realtime with automatic adjustment of totals records, if the corresponding ledger contains journal entries.

- Delete totals records updated in realtime, if the corresponding ledger does NOT contain journal entries.

By contrast, this step always deletes realtime-update data from ledgers that carry journal entries. You can select which journal entries are deleted as follows:

- You can select individual consolidation documents.

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You can select individual consolidation units.

- You can make restrictions to activity-related characteristics (for example, the accounting transaction the document is based upon), or you can make restrictions to characteristics that refer to Financial Accounting (for example, the FI document number, the FI document type, the posting period in financial accounting, or the posting date). This is important if you first delete documents with errors, and then repost these documents (refer to the follow-up posting transaction for documents in Financial Accounting).

Activities

- 1. Specify which documents are to be deleted.
- 2. If applicable, deselect *Test Run*.
- 3. To delete the documents, choose *Execute*.

Delete Transaction Data from Periodic Extracts

This step lets you delete transaction data in the consolidation staging ledger.

Activities

Specify the staging ledger from which you want to delete the transaction data.

Select a specific fiscal year, if desired.

Preparation in the Consolidation System

This section involves the settings necessary for using the Consolidation System as the recipient of data transfers.

Check Ledgers, Versions, Dimensions and Cons Charts of Accts

The steps that follow prescribe that you make the settings for versions, ledgers, dimensions and consolidation charts of accounts in the Consolidation system. You can check your settings in this step.

Activities

Check the settings in the following steps and adjust the settings if necessary:

- Define versions
- Define ledgers
- Define dimensions
- Define consolidation chart of accounts Maintain the settings if necessary.

Tools: Cons Chart, Group Chart, Financial Statement Version

In the consolidation system you define the consolidation chart of accounts for consolidation. Dependent on the data transfer method which you use, you require a group chart of accounts and/or a financial statement version as well.

In this section you have tools at your disposal, with which you can build these plans and structures. Subsequently you can transport the group chart of accounts and the financial statement version into the transaction system.

Manually Creating a Group Chart of Accounts

In this section, you can create a group chart of accounts manually.

Enter Group Chart of Accounts in the Chart of Accounts List

In this step you enter the group chart of accounts which you want to create into the chart of accounts list.

Activities

Enter your group chart of accounts in the chart of accounts list.

Further notes

The following options are available for manually creating the G/L accounts in the group chart of accounts:

 You can create the G/L accounts in the Implementation Guide of General Ledger Accounting under section G/L Account Creation.
 You can create the G/L accounts in the main menu of General Ledger Accounting under "Master records".

S

See the FI General Ledger documentation for instructions on how to define a chart of accounts.

Assign Account Groups to Group Chart of Accounts

In this step you assign one or more account groups to the group chart of accounts. This assignment is required from the accounting point of view; but it is of no importance to consolidation. Therefore you should assign one single account group to the group chart of accounts, which includes all relevant account numbers for the group chart of accounts.

Activities

Assign an account group to the existing group chart of accounts. Specify a range of all account numbers that are relevant to the group chart of accounts.

Create Group Chart of Accounts from Cons Chart of Accounts

This step lets you create a group chart of accounts from a consolidation chart of accounts.

Activities

Create the group chart of accounts from a consolidation chart of accounts.

You do not need to create the chart of accounts or the account group yourself. The system automatically creates them if they do not yet exist.

Transport Group Chart of Accounts

You can transport a chart of accounts with this function. You can use the function with preparations for consolidation in order to transport the group chart of accounts into one or more transaction systems.

Activities

If necessary you can transport the group chart of accounts. Build and Transport Financial Statement Version for the Group

In this step you can build the financial statement version for the group and subsequently transport it into one or more transaction systems (see menu).

Standard settings

The standard SAP system includes a predefined financial statement version for the group.

Activities

- 1. Check if you can use the financial statement version in the standard system.
- 2. If not, define your own financial statement version or customize the standard financial statement version to meet your requirements. Note the following when doing this:
 - The FS item keys in the lowest structure level are used to generate the FS items for Consolidation.
 - SAP recommends that you create the FS item keys without leading zeroes. You should only define the keys with leading zeroes if the leading zeroes are part of the ID and you always want to enter these zeroes.
 - The financial statement version provides two separate item keys for retained earnings and retained losses. The consolidation charts of accounts only provide one FS item for retained earnings or losses. This is a selected item. The system automatically forwards the retained earning or loss to this selected consolidation item. Hence, you can freely assign the item keys in the financial statement version for retained earnings or retained losses.

Transfer of FS Items

In this section you can transfer FS items from a chart of accounts or a balance sheet/income statement structure.

Copy FS Items from Accounts/Cost Elements

In this step, you can copy an transaction (operational) chart of accounts as a consolidation chart of accounts. The accounts in the source chart of accounts are then created in Consolidation as financial statement items with the same numbers. Afterwards, you need to manually edit the FS items as needed.

You do any of the following:

- Copy Financial Accounting accounts only from the chart of accounts.

Copy Financial Accounting accounts and also secondary cost elements from Cost Accounting. In order to copy secondary cost elements from a chart of accounts, you need to specify the controlling area and key date for which the secondary elements are valid.

This means that you reserve a FS item for each secondary cost element. If you do not want such a one-toone relationship, you can instead allocate a range of cost elements to a given FS item. See the step Allocate cost element ranges to FS items.

S

If the consolidation chart of accounts you are copying to already exists, you can choose whether you want to insert new items only into the consolidation chart of accounts or overwrite existing items.

Requirements

Beforehand, you must create the consolidation chart of accounts that is to accommodate the FS items. See the step Define consolidation chart of accounts.

Activities

- 1. Copy accounts and cost elements to a consolidation chart of accounts.
- 2. Edit the hierarchies of the consolidation chart of accounts and the FS item master records. See the section User-defined Consolidation Chart of Accounts.

Compare FS Items with Accounts/Cost Elements

In this step, you can check that the FS items in a consolidation chart of accounts match the accounts and any cost elements from the transaction chart of accounts.

You need to do this if you have copied a transaction chart of accounts to a consolidation chart of accounts, and there is a possibility that changes have been made to any of the charts of accounts.

The system compares the accounts and items, and classifies mismatches by:

Accounts - FS items

-

- Group accounts

Activities

Specify the charts of accounts that you want to compare.

When choosing the transaction chart of accounts, specify whether you also want to check secondary cost elements.

Copy Item Hierarchies from Financial Statement Version

If you use periodic extract as a data transfer method, a financial statement version whose FS items match those in consolidation must exist in the sending system. In this step, you can create item hierarchies for a chart of accounts from an existing financial statement version.

Requirements

You need to define the consolidation chart of accounts for which you want to create item hierarchies.

Activities

Proceed as follows:

- 1. Set the relevant cons chart of accounts in the global parameters.
- 2. Choose Cons chart hierarchy-> Copy autom. -> Financial statement
- 3. version.
 - a) Enter the name and description of the item hierarchy that you want to create.
 - b) Enter the financial statement version and set the languages in which you require item texts.
 - c) Copy the items.

The system generates an item hierarchy that is identical to the financial statement version. You can subdivide this hierarchy by reassigning items, for example to the hierarchies "Balance Sheet", "Income Statement", or "Statistical".

The system copies the following master data for items:

- Text
- Type
- Debit/credit sign
- Where-applied indicator

Maintain any other master data that you require manually using the step Make mass changes.

Assign Integrated Consolidation Types to the Dimensions

In this step, you specify which integrated consolidation types you want to perform in each dimension.

Example

You might define two dimensions: The first dimension performs company consolidation and the second dimension performs profit center consolidation.

Activities

Specify the integrated consolidation types for your dimensions.

Copy Organizational Units

When using integration, you derive consolidation units and consolidation groups from the organizational units in the transaction applications. To do this, you let the system create the consolidation units and groups instead of manually defining them yourself.

To determine which identifiers and descriptions the units and groups receive, you define rules for ID combination.

Define ID Combination Rules

In this step, you define the rules the system uses for extracting the IDs and descriptions from the IDs of the organizational units in General Ledger Accounting and Profit Center Accounting when constructing the consolidation units and groups.

Furthermore, the SAP enhancement "FMC10010" is also available if you wish to modify the organizational unit IDs and descriptions constructed according to the ID combination rules. This enables you to further customize standard IDs and descriptions. Customization takes place prior to the checks and updates.

Activities

Define the ID combination rules. You can use the following prefixes:

- Letters (A through Z)
- Digits (0 through 9)
- Characters "+" (plus sign), "-" (minus sign), and "_" (underscore)

If desired, do a modification using the SAP enhancement. For more information, see the documentation provided with the enhancement transaction. Note that a working knowledge of the ABAP programming language is required for implementing enhancement projects.

Maintain Hierarchies

Automatic creation

In this step, the system creates consolidation units and groups from the organizational units in General Ledger Accounting and Profit Center Accounting. Afterwards, you must manually maintain the master data records of the units and groups.

The system makes a distinction between the following types of integrated consolidation:

- In company consolidations, the units are derived from companies. A group is created for the companies.
- In business area consolidations, the units are created from combinations of companies and consolidation business areas. Two hierarchies can be built with the units: one hierarchy with the companies as the consolidation groups, and another hierarchy with the business areas as the groups.
- In profit center consolidation, the units are created from combinations of companies and profit centers. Hierarchies can be created either with companies as groups or with profit centers as groups.

Subsequent integration

After organizational units have been automatically converted into consolidation units and groups, any units that are subsequently created in the transaction system must subsequently be maintained in the Consolidation application.

Activities

Automatic creation

- 1. In the hierarchy, mark the insertion point and choose Automatic Creation and depending on the consolidation type choose either Companies, Business areas or Profit centers.
- 2. Maintain the master data manually. For integration, especially make sure that you maintain the following data:
 - Any ledgers in which the organizational unit is to be kept
 - During the automatic creation, the system assigns each consolidation unit to the ledger that is set in the global parameters. If you want to use additional ledgers, you need to assign these manually.
 - The fiscal year variant

Note: If you are using a central system which contains both the sender and receiver for the consolidation data, when saving the data transfer (IMG step Activate Data Transfer) you can choose an option to make the system assign the fiscal year variant of consolidation to all ledgers that are assigned to integrated consolidation units of active consolidation types.

- The local currency
- The data transfer method

Note: If the sender and receiver of consolidation data reside in the same central system, the system automatically enters the data transfer method in the master data of the relevant consolidation units when you save your settings for data transfer (in the step Define data transfer). The method is saved for the relevant special version of data entry.

A mass changes function is also available for subsequent maintenance of master data. Maintain data in the sections Consolidation Groups and Consolidation Units.

Subsequent integration

1. Manually create the consolidation units and groups that represent organizational units in the transaction systems. Enter the IDs and names in accordance with the ID combination rules for automatically creating units and groups.

You can use enhancement FMC10010 to determine IDs and names, and then create the appropriate units and groups.

- 2. In the menu, choose Organizational unit -> Subsequent integration. Enter the dimension, and restrict integration to certain consolidation units and groups if necessary. Enter the type of consolidation for which you want to subsequently integrate organizational units. In the case of profit center consolidation, enter the controlling area.
- 3. The system generates a list of integrated and non-integrated consolidation units and groups, in which the IDs of organizational units in the transaction system are assigned to the consolidation units and groups requiring integration. The system determines these IDs from the ID combination rules and/or the customer enhancement. A status shows you whether each ID actually exists in the system. If IDs are assigned incorrectly, in other words if an ID does not exist in the system, you can change the ID within the list. Note that Consolidation application can only check whether profit centers which it recognizes exist. Therefore, if you specify a controlling area that the system does not recognize, no check will take place.
- 4. From the list of error-free and corrected ID assignments, select the consolidation units and groups that you want to integrate, and save them. When you save, the system checks once again whether the organizational units exist.

Subsequent Integration of Organizational Units

Use

Consolidation units and groups that are created manually in integrated dimensions are not automatically integrated -- that is, the system does not know which operational organizational units lie behind the consolidation units or groups.

Therefore, integrated data collection is only possible once you have subsequently integrated the manually created units and groups. For this, you need to specify and save the valid operational organizational units for each manually created unit or group.

Activities

- 1. In the selection screen, you specify the integrated dimension, to which you want to subsequently integrate consolidation units and groups. You can select certain consolidation units and groups, and you can choose whether to also select rollup consolidation units for processing.
- 2. Specify the integrated consolidation type for which you want to integrate the consolidation units and groups.

- 3. If the system in which the units and groups are assigned has a logical system ID, specify that as well.
- 4. If you are performing profit center consolidation, you also need to specify the controlling area.
- 5. In general, the system creates a list with four sections:
 - The first two sections (consolidation units and consolidation groups) contain organizational units that have yet to be integrated.
 - The last two sections show the consolidation units and groups that are already integrated. No more processing is necessary for these organizational units.
- 6. If an operational organizational unit exists in the local system, the system performs the following checks:
 - When creating the list, the system attempts to derive the names of the operational organizational units by using the the rules for ID combination with the IDs of the consolidation units and groups. The result is shown in the fields of the list next to the consolidation units and groups to be integrated, and in the status display. The latter shows whether all of the operational organizational units derived by the system already exist and whether they were uniquely identified.
 - When dealing with the integrated consolidation types "business area consolidation" and "profit center consolidation", the system can interpret the ID of each consolidation group twofold -- that is, according to the ID combination rules of each grouping category. Therefore, the system lists the results from the analysis of the consolidation group ID for both of these possibilities, even though only one of them can be applicable.
- 7. Using update mode, check the IDs of the operational organizational units in the list, and make any corrections if necessary.
- 8. Before saving, select the consolidation units and groups that are to be integrated. If one of the selected units shows an error, it cannot be saved and thus is also not integrated.
- 9. Before saving, you can run the check function. This checks all of the entreis in the leading sections of the list. Look out for any errors in the consolidation units and groups that are to be integrated.

10. Save the data.

Note

As an alternative, you can work step by step through all of the consolidation units and groups to be integrated, which means that you can save the data on a step by step basis. When a check is successful, the system transfers the integrated units and groups of the current session to the lower sections of the list. You can then continue processing the remaining entries without the need for rerunning the customizing step.

Define Aggregation to Profit Center/Profit Center Group

Use

The integration between Profit Center Accounting (EC-PCA) and Consolidation by default defines consolidation units as combinations of profit centers and companies.

However, customers often want to define integrated consolidation units at a higher level to be able to record this data using rollups. At this kind of aggregated level, each integrated consolidation unit then reflects one of the following:

- a profit center group
- the combination of a profit center group and a company
- a profit center

Requirements

You have already performed the following steps:

- 1. You designated a dimension for profit center consolidation and assigned to it the appropriate integrated consolidation type.
- 2. You have defined rules for ID combination for the IDs of integrated consolidation untis and groups for profit center consolidation.
- 3. In the profit center dimension, you either manually created the consolidation group hierarchy with the appropriate level of detail, or you accomplished this by uploading a file with the consolidation units, consolidation groups, and the hierarchy structure. It is a great advantage if the IDs of the consolidation units and groups adhere to the rules for ID combination, although the following general considerations should be taken into account:
 - Depending on the aggregation, the profit center is substituted with either the profit center or the profit center group.
 - The portion derived from the company ID can be removed if the aggregation requires this.

4. If applicable, you completed the maintenance of the master data for the consolidation units and groups, for example using mass change programs. The consolidation units require a valid local currency, the data transfer method "rollup", and a fiscal year variant for the rollup ledger.

Activities

Tell the system which operational organizational units are logically assigned to their respective integrated consolidation unit or group.

- Integrated Consolidation Units

Enter a company only if the integrated consolidation unit records this level of detail. Profit centers may not be stored if the consolidation unit is aggregated with profit center groups. In the reverse case, if the consolidation unit reflects a profit center, you do not maintain a profit center group. Hence, you either specify a profit center or a profit center group for each consolidation unit.

- Integrated Consolidation Groups

Profit centers may not be stored if the consolidation group is aggregated with profit center groups. In the reverse case, if the consolidation group reflects a profit center, you do not maintain a profit center group. Hence, you either specify a profit center or a profit center group for each consolidation group.

Example

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The following example explains the individual steps.

Assume that the standard hierarchy of profit centers PC10000 is assigned to controlling area CA01. It has the following structure:

PC10000
10100
10110
101101
101102
10120
101201
101202
101203
100

1001

The units 10100, 10110, 10120 and 100 reflect profit center groups, and 101101, 101102, 101201, 101202, 101203 and 1001 reflect profit centers. Further, controlling area CA01 contains the two company codes CC01 and CC02, to which the companies C01 and C02 have been assigned. Assume that both company codes are assigned to each profit center. The transfer of this hierarchy builds a consolidation unit for each combination of profit center and company. Therefore, the generated hierarchy of consolidation groups in this example contains 12 consolidation units.

To perform management consolidation, a partially simplified itemization should suffice.

- Company details are not needed for profit centers 101101 and 101102; that is, these profit centers should become consolidation units.
- The profit centers 101201, 101202 and 101203 should be aggregated to profit center group 10120, which also is recorded as a consolidation unit.
- Profit centers are to be aggregated to profit center groups, retaining the company details.

The following rules for ID combination are defined for the transfer of the profit center hierarchy to the consolidation group hierarchy:

- The IDs of the consolidation units are comprised of the prefix U, the ID of the profit center with 6 characters, a dash, and a 3-digit ID for the company.
- The IDs of the consolidation groups have the prefix G, followed by the ID of the profit center or profit center group.

This results in the following consolidation group hierarchy. Note that after performing the workaround for the contained consolidation units, it is possible to roll up data, for example, from Profit Center Accounting.

PC
TOP-PC
G10100
G10110
U101101
U101102
U10120
G100
U100-C01
U100-C02

Further notes

In general, since these aggregated and integrated consolidation units do not correspond to the combination of profit centers and companies, this step cannot be used by the program, as delivered, for subsequent integration (transaction CXNT).

See also the corresponding step in the sender system: Define Aggregation of Profit Centers to Profit Center Groups

Evaluate the Master Data of the Organizational Units

This step contains an utility for analyzing the transferred organizational units according to different points of view.

You can generate a list to show you:

- the consolidation units that have been copied
- the master data of the consolidation units that pertains to the integration
- the transaction system and the client, from which the unit was copied
- the organizational units of the transaction application that were used to create the consolidation unit

The analysis offers various selection options. You can select the organizational units of Consolidation as well as the (global) organizational units of the transaction applications.

Example

You might use this function to check if the data transfer method is defined in all consolidation units.

Activities

Generate a list as desired.

Collection of Data

Consolidated financial statements are created on the basis of financial data reported by consolidation units and any standardized financial data that is posted in the Consolidation application.

In this section, you make the necessary settings that enable you to:

- Collect data reported by consolidation units in Consolidation
- Post any necessary standardizing and correcting entries
- Translate currencies
- Check the consistency of data

In order to perform these activities, you define tasks, which can be executed in the Data Monitor. The Data Monitor can be accessed from the Consolidation application menu.

Assign Transaction Charts of Accts to Cons Charts of Accts

This step is necessary when you use the data transfer method Realtime update or Rollup.

You assign the Charts of accounts that are used in transaction applications to the respective Consolidation chart of accounts. The objective is to enable the collection of data for consolidations by linking each transaction account or cost element with its respective financial statement item.

Note when operational, data providing applications and consolidation work in different systems or clients:

Note that for this activity in the consolidation system, you have to have the information from which operative charts of accounts the data is transferred from. If necessary you must sort it out with the contact person for the operative sending systems. It is not necessary for the assignment that the operative chart of accounts is created in the consolidation system. You have the following possibilities for the assignment:

- You can assign a transaction chart of accounts which is **not** assigned to a group chart of accounts to one or more consolidation charts of accounts.
 For each account in the transaction chart of accounts, an item with an identical key must exist in the respective consolidation chart of accounts.
 Transaction charts of accounts may contain secondary cost elements in addition to FI accounts. You can either assign one item in the consolidation chart of accounts for each cost element, or you can assign one item to a range of cost elements. See the step Allocate cost element ranges to FS items.
- You can assign a transaction chart of accounts which is assigned to a group chart of accounts to one or more consolidation charts of accounts. For each account in the group chart of accounts, an item with an identical key must exist in the respective consolidation chart of accounts. Each account in the transaction chart of accounts must be assigned to a group account.
 Note: You cannot assign a group account to a secondary cost element since secondary cost elements are not accounts in Financial Accounting. If the transaction chart of accounts contains secondary cost elements, you need to allocate cost element ranges to individual items. See the step Allocate cost element ranges to FS items.

Activities

Assign the transaction charts of accounts to the respective consolidation charts of accounts, as required. Note: If you copy a transaction chart of accounts to a consolidation chart of accounts, this assignment is automatic.

Those transaction charts of accounts, in which ranges of cost elements are allocated to FS items of Consolidation, are regarded as 'only for informational purposes.'

For Profit Center Cons: Cost Elements Assignment

If you want to carry forward the values of secondary cost elements for profit center consolidations, then you have the following possibilities:

- You can carry forward the secondary cost elements 1:1 in FS items of consolidation.
- You can summarize intervals of secondary cost elements on FS items.

If you want the summarization, then you assign the intervals of secondary cost elements to the FS items in this section.

Allocate Cost Element Ranges to FS Items

In this step you can assign ranges of secondary cost elements to a given financial statement item. This is useful, if you do not want to allocate a FS item for each secondary cost element, but instead want to group cost elements together.

Note for different systems:

Note that for this activity in the consolidation system you must have the information which secondary cost elements per operative chart of accounts should be transferred. If applicable you must clear this with the contact person for the transaction systems. It is not necessary for this assignment that the operative charts of accounts and the secondary cost elements are created in the consolidation system.

Requirements

The FS items you assign ranges of cost elements to must be defined in the consolidation chart of accounts. See section User-defined Consolidation Chart of Accounts.

Activities

- 1. Choose the (transaction) chart of accounts the consolidation chart of accounts, to which you are assigning the ranges of cost elements.
- 2. Specify that data collection is to take ranges of cost elements into consideration.
- 3. Specify the ranges of cost elements and assign each range to a FS item.

Find Categories for Cost Elements

In order to decide which cost elements need to be allocated to which FS items, it is helpful to be aware of the cost element categories assigned to the cost elements. In this step, you can generate a list for this purpose.

Activities

Generate a list, if required.

Define Data Streams

In this section, you define a target chart of accounts and version for data collected in Consolidation. You make this setting for each combination of consolidation type and dimension.

Activities

Define data streams and activate those that you require.

Realtime Update: Ledger Selection

Use

In this step, you define the ledger selection to further restrict updates in individual ledgers.

Dependencies

The settings you make here are taken into consideration only if you have activated ledger selections in the step Activate Data Transfer.

Activities

Specify which ledgers are updated and for which versions they are updated.

Example

Assume you need different ledgers to generate parallel financial statements for:

- Different reporting currencies
- Different fiscal year variants

To meet these requirements, the ledgers L1 and L2 have either the same or different currencies, or they are assigned to the consolidation units either with the same or different fiscal year variants.

The assignments of ledgers to consolidation groups are dimension and version dependent. You need different consolidation versions to generate parallel statements for the same consolidation groups within a given dimension.

The assignments of ledgers to consolidation units are only dimension dependent. For realtime updates, the ledger selection is needed on the consolidation unit level to reflect the additional version-dependent ledger assignment on the consolidation group level.

Integrated Cons Type	Dimension	Desired Target Ledger
1	I1	L1, GJV1
1	I2	L2, GJV2

Since the creation of parallel statements in multiple ledgers is linked to the ledger assignment to consolidation groups, the data streams also need to have different versions:

Integ	<u>gr. Cons Type</u>	Dimension Version	<u>n</u> <u>Desired Target Ledger</u>
1	I1	100	L1, GJV1
i	I1	200	L2, GJV2
	1	1 11	

Ledger selection is necessary when modeling this case.

Realtime Update: Define Document Type

If, in the definition of the consolidation ledger (that is the ledger), you have specified that the system should create documents during realtime updates. Therefore, realtime updates require a document type for each dimension.

Note: If you define more than one document type for a dimension, the system only uses the first document type.

Standard settings

A document type for realtime update is predefined in the standard system.

Activities

Decide which document types you require for realtime updates and define them.

Proceed in the sequence of the structure levels:

1. Document type

Specify the document type. The currency to be posted has already been entered.

- 2. Number range
 - Enter the number range for the assignment of document numbers. If you have not yet created the number range you require, choose the function "Define number range".

Note on transport

In order to transport number ranges (see step 2), chooose Interval -> Transport in number range maintenance. The number range objects will be transported automatically.

Contra Item/Determination of Retained Earnings: Define Task

If you collect reported financial data using realtime update or rollups, you need to do the following after data is collected:

- If any item balances become reversed, that is debit balances become credit balances and vice versa, post these balances to the respective item's contra item.
- Calculate retained earnings (if you state the appropriations of retained earnings at the end of the income statement) and calculate the annual net income (if you state the appropriations of retained earnings in the balance sheet), and post these amounts to the designated selected items.

In this step, you define a task for these activities.

Standard settings

All possible tasks are predefined in standard SAP system. Activities

Check the predefined tasks and modify as necessary.

Further notes

Assign this task to the task group for the Data Monitor in the step Define a task group.

Define Rollup for Data Imports

This step is relevant if you use the data transfer method rollup to transfer data to the Consolidation system.

In step Define rollup for data exports you define a rollup in the operational sender system that selects and converts the operational data. If sender and receiver applications reside in different systems, you also need a rollup for importing the data into the consolidation database. This step is used to define this rollup.

Standard settings

The standard SAP system contains the rollup 0C_CS2CS (sender/receiver table ECMCT) for importing the data into the Consolidation system.

Activities

Define the rollup for the Import of Data into Consolidation.

Rollup Header

- 1. For the sender table and the receiver table, specify the totals database of Consolidation (ECMCT).
- 2. Specify the reset set.

The set must at least contain entries for the ledger, record type, and version. The reset set can also serve to determine the relevant data streams for the rollup. It could namely be that you have activated several data streams in Customizing; however the rollup can only fill one data stream. Therefore you have to determine the dimensions ledger, record type, version, dimension and consolidation chart of accounts additionally in the reset set. Please note that these dimensions must each have a value, so that the data stream is clearly identified. With the dimension ledger several values can be contained in the set. Then the data stream flows parallel to this ledger.

3. For rolling the data, define the exit in the roll header, and define the rollup set. The rollup set is identical to the reset set.

Rollup Sequence Define the rollup sequence.

- 1. Specify the receiver fields. Usually, these are the following fields: consolidation unit, partner unit, dimension, cons chart of accounts, FS item, record type, version, subitem category, and subitem.
- 2. Specify each receiver field as a sender field, too.
- 3. Specify user exits to check the data. The standard SAP system contains the exits SD1 and SD2 for the fields consolidation unit and partner unit. These exits check if the units assigned in the data records exist in the Consolidation system.

4. Enter the exit (for the time of the update) for the currency transport and the status update.

Set Lock Mode for Rollups

Use

When you execute a rollup to the consolidation system, the system locks the rollup itself and the consolidation processing ledger being updated. This is why it is initially not possible to simultaneously execute multiple rollups to the same ledger.

However, during the data collection phase of consolidation it may be absolutely necessary to record data for different consolidation units in the same consolidation processing ledger using rollups because of organizational reasons.

You can use different lock modes to accomplish this. You can adjust the level of detail used for locking a rollup to meet your organizational requirements. You can set lock modes for each integrated consolidation type and dimension. And you can change, delete or display the lock mode entries that already exist in this customizing step.

The different lock modes only apply to consolidation systems - that is, systems that contain the master data of the integrated consolidation units (except for lock mode 3 - see below).

The level of detail and, thus, the number of lock entries to be managed increases with each lock mode:

- Lock mode 0: Locks at the level of integrated consolidation type / dimension / consolidation processing ledger
- Lock mode 1: Locks at the level of integrated consolidation type / dimension / consolidation processing ledger / company of the consolidation unit
- Lock mode 2: Locks at the level of integrated consolidation type / dimension / consolidation processing ledger / consolidation unit
- Lock mode 3 (expert mode): The system does not set any locks. Instead, the user is responsible for avoiding conflicts if rollups are executed simultaneously. This lock mode applies to pure sender systems that do not contain any master data for integrated consolidation units and, therefore, cannot be used for lock modes 1 and 2.

The following alternatives are available for systems from which only data of a transactional application is exported to the consolidation system (rollup file):

- You set lock mode 0 (global lock) or lock mode 3 (no lock).
- In all other cases, the system automatically sets a global lock (lock mode 0). The same is true if the system does not find a lock mode entry when executing a rollup for the integrated consolidation type and dimension of the updated data stream.

Which lock mode you choose depends on your organizational requirements:

- You do not need to make any settings in this step if any of the following applies: (a) You transfer and write to the consolidation system data for all consolidation units in a single file; (b) You read data from a sender table in a single process step; (c) You can do without the simultaneous execution of rollups. In this case, the system uses lock mode 0.
- Choose lock mode 1 for this integrated consolidation type and dimension if you want to simultaneously record data for the consolidation units of one or more companies, for example, in a hierarchy of consolidation groups which is broken down by companies (of the consolidation units).
- You will require lock mode 2 for this integrated consolidation type and dimension if you want to simultaneously roll up data for a single consolidation unit or a group of consolidation units for different companies.

Recommendation

Try to use the smallest lock mode number possible and, thus, the number locks to be set. Increase the locking capacity if you encounter locking management problems when executing a rollup.

Activities

- 1. Specify the integrated consolidation type, the dimension, and the lock mode for the rollup.
- 2. Choose one of the following options:
 - Set lock mode
 - Display all entries

- Reconcile entries
- Delete all entries

Rollup: Export Customizing Settings to File

For the Rollup of transaction data from transaction applications into consolidation, certain Customizing settings in the source applications must be made available to the consolidation component to enable it to convert the account assignments of the data that is copied.

If Consolidation and transaction applications reside in different systems or clients, then it is necessary to export these settings to a file and pass them on to transaction systems.

The download involves the Customizing settings for FS items, subitems, breakdown categories, and ID combination rules, amongst others (master data of consolidation units are not transferred, but merely the rules for ID combination.)

Activities

If applicable, perform a download.

Reconciliation of Data

Reconcile Totals Records

Use

You use this step to reconcile the totals (summary) records of a transactional application with the totals records of SAP Consolidation.

The system compares the totals data of a sender ledger (which can be read using RFC) with the totals data of Consolidation in the local system. The function compares values in transaction currency, values in the second or third currency of the ledger (or also quantities), and -depending on whether the fiscal year variants differ -- either the periodic or cumulative figures for each range of periods. Each of these are optional.

The data comparison uses the following mappings of sender table characteristics with the characteristics of Consolidation:

- Operational Business Units

The operational organizational units (company code, company, business area, etc.) are converted according to their designated rules for ID combination to the IDs of the consolidation unit and/or partner unit (if this is defined in the breakdown category of the target item). The system determines the names of the sender fields for the operational organizational units in the sender system. The system also processes function exit 220 of enhancement FMC10011, provided the enhancement is activated and assigned to an active enhancement project (see section *Activities*).

When this is done, you can check the names of the operational organizational units in the local system, and modify them if necessary. Exit 220 of enhancement FMC10011 is also used for this, provided it is implemented in the local system and activated.

- Accounts and Cost Elements

The system converts accounts and/or cost elements over to the financial statement items of the consolidation chart of accounts according to the assignments made in the sender system (for example, from group account to G/L account, or ranges of secondary cost elements).

- Items Broken Down by Subitems

For target items that have subitem breakdowns, the system fills the subitem from the corresponding sender field for the subitem category. The names of these sender fields are determined in the same way as the field names for the operational organizational units are determined: First, in the sender system using function exit 230 (enhancement FMC10011), if possible. If that fails, then using exit 230 in the local system.

- Further Characteristics

For informational purposes, you can transfer up to three additional characteristics recorded in the sender table to the reconciliation list. For details, see the documentation for function exit 230 of enhancement FMC10011.

If you want to use your own logic to derive the consolidation unit, item, subitem, and/or partner unit from the sender table, you can do this with the help of function exit 270 (enhancement FMC10011). For more detail, see the documentation for this exit and/or enhancement.

The local (consolidation) system does not need to know the sender table, nor do the structures in the sender and local systems need to match.

Custom subassignments are not shown in the reconciliation list. Thus, the consolidation data gathered for the reconciliation is always aggregated according to these characteristics.

Activities

To activate an exit mentioned beforehand, do the following: 1. Create an enhancement project, or use an existing one.

- 2. Assign enhancement FMC10011 to the enhancement project.
- 3. Activate the exit.

To reconcile the totals data, do the following:

- 4. Specify the necessary data in the selection screen.
- 5. Choose *Execute*.

Profit Center Accounting

This implementation guide describes the installation tasks for the component accounting methods. **EC-PCA Profit Center Accounting** using the account-based period account and cost-of-sales

In order to understand the installation guidelines, you should know how to work with the SAP system. For information on this, see the manual Introduction to the SAP system.

Before you start setting up the system, you should familiarize yourself with the business functions and with the concept of account-based Profit Center Accounting. You can find further information in the online manual *EC-PCA - Profit Center Accounting*.

For information on the functionality of SAP Basis, see the online manual *BC* - *System administration*.

The corresponding SAP training courses will provide you with the knowledge necessary to configure your system.

Basic Settings

In the following activities, you make the basic settings necessary for working with account-based Profit Center Accounting (EC-PCA).

First you need to set the controlling area to the one in which you want to set up Profit Center Accounting.

Then you need to maintain the global settings for Profit Center Accounting in the controlling area.

If you wish to use the average balance ledger, you also need to activate the average balance ledger.

Set Controlling Area

The settings you maintain in the following section apply for a single controlling area. With this function you determine which controlling area this should be.

Controlling Area Settings

In the following steps, you make the basic settings required to run Profit Center Accounting according to your requirements.

Under Maintain Controlling Area Settings, you

- Assign certain master data to the controlling area
- Make the settings for the distribution scenario (ALE)
- Make the settings for elimination of internal business volume
- Determine which currencies and, where required, which valuation views you wish to use

You make settings which control postings of transaction data in the actual and plan systems under Activate Update.

All of the basic controlling area settings can be checked under Analyze Settings and be changed in certain cases using the function Update Basic Settings. **Maintain Controlling Area Settings**

In this IMG activity you define the general control parameters for the current controlling area.

Controlling area settings

- The first step you need to take is to enter the name of the standard hierarchy of profit center master data. The system creates the standard hierarchy automatically when you save. You can then maintain it under *Master data -> Standard hierarchy* in Customizing.
- The dummy profit center receives all the postings in your system to objects which are not assigned to a profit center. This ensures that your data will be complete in Profit Center Accounting. This field is displayed here for informational purposes only. You **create** the dummy profit center under *Master data -> Dummy center*.
- The checkbox Elim. of internal business lets you eliminate internal business volume in your controlling area. If you check off this field, the system will not update transaction data between objects which are assigned to the same profit center in account-based EC-PCA.
 Example: When you make a secondary allocation from one cost center to another, and both cost centers are assigned to the same profit center, this information will only be updated to Profit Center Accounting if elimination of internal business is not active.
- In the field **Currency type**, you enter the type of currency you want to use as the special profit center report currency. The system uses this currency in some standard reports, which display data in this currency.

The transaction data in Profit Center Accounting is updated in up to three currencies:

- transaction currency (optional): currency in which the transaction was carried out.
- company code currency (mandatory)
- the so-called *third currency* (mandatory): a special profit center local currency

In the **Profit center local currency type** field, you set the type of special profit center local currency you want to use. This is used, for example, for standard reports which display values in this currency. You can choose from between the

- group currency (30)
- controlling area currency (20) and the
- special profit center currency which you can define (90). If you choose the last option, you need to enter that currency in the next field.
- If you choose the group currency or controlling area currency as the profit center report currency, the field **profit center local currency** must remain blank. The system will determine the currency automatically as data is posted. If you choose the special profit center currency, enter that currency here.
- The field **Store transaction currency** lets you decide whether the system should also update the transaction data to Profit Center Accounting in the transaction currency. This is only possible, however, if you selected **legal valuation view**. Deactivating this flag reduces your data volume. However, it is then no longer possible to analyze your data in the transaction currency.
- The field "Valuation" determines whether the data in Profit Center Accounting is stored using the transfer price from the legal view, the group view, or the profit center view in this controlling area. For a detailed description of the different valuation methods and views in transfer pricing, see the online documentation for Profit Center Accounting. You can only set a different valuation than the legal one if you are using transfer prices.

To activate this function, you must carry out the steps described in Customizing for Controlling, under Multiple Valuation Methods/Transfer Prices). If you use a currency and valuation profile that calls for profit center valuation, you must use profit center valuation here.

If you store your data in Profit Center Accounting in the transaction currency, you can only use legal valuation here. (See also Transfer Prices.)

A distribution method determines whether and how data in Profit Center Accounting is distributed across systems using ALE (Application Link Enabling). For more information, see Set Up Distribution of Profit Center Data.

Note

In most cases, you can no longer change these settings once data has been posted to Profit Center Accounting in the controlling area.

An exception to this is changing the **currency type**: where the type of currency being used is the same, it is possible, even after postings have been made, to change the currency type from 90 to 20 or 30, from 20 to 30 and from 30 to 20.

You can also change the **ALE distribution method** after postings have already been made. However, you also need to perform a number of additional activities to do this. Note the long texts for the messages which appear when changing the distribution method, and see the information under Set distribution of profit center data.

Control indicator

This flag activates Profit Center Accounting in the controlling area beginning with the specified fiscal year.

This flag lets other components easily see whether they need to perform activities for Profit Center Accounting. If the indicator is not set, no data is posted to Profit Center Accounting.

Actions

Maintain the desired control indicators for the current controlling area.

Then enter the control parameters for transferring actual data.

If you want to transfer plan data, you also need to create the desired plan versions.

Select the checkbox in the line with the correct fiscal year to activate Profit Center Accounting. **Note**

In the view "Control Indicators for Profit Center Accounting", the system only displays those combinations of controlling area and fiscal year for which other control indicators in Controlling already exist. This means that other functions in CO must be active for the corresponding controlling area and fiscal year as well. These might include: Cost Center Accounting, Orders, Projects, Sales Orders, Profitability Analysis, etc. Since Profit Center Accounting takes its data primarily from these applications (the profit center is automatically posted in the background), it only makes sense to activate Profit Center Accounting if at least one of these other applications is also active.

To obtain additional entries in this view, proceed as follows:

- Choose the function *Environment -> Controlling area* in another application, such as Cost Center Accounting or Internal Orders.
- Position the cursor on the desired controlling area.
- Choose the function *Goto -> Control indicators*.
- Make a new entry with the appropriate indicators for the desired "From" fiscal year, and save your changes.
- For more information, see the Implementation Guide for Cost Center Accounting in the section Activate cost center accounting in controlling area

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Activate Direct Postings

In the following steps, you make the settings required for updating plan and actual data.
You maintain the control parameters for actual data once for the control area (see Set Control Parameters for Actual Data).

With plan data, it is possible to create various versions in one controlling area, which can have different control indicators (see Plan Versions).

Set Control Parameters for Actual Data

Here you set all the control parameters for actual postings in Profit Center Accounting.

Prerequisites

- The current controlling area must be set.
- The settings for Profit Center Accounting must be maintained in the controlling area. You can check this using the function Environment -> controlling area.

Activities

Enter the control parameters which should be valid **beginning with** the fiscal year entered:

- If the lock indicator is active, the controlling area is locked for actual postings in Profit Center Accounting. No changes can be made to the actual data.
- The *online indicator* controls whether or not data is posted to Profit Center Accounting simultaneously (by activity). If the indicator is not active, you need to post the data later by period or fiscal year using the available programs.
- The *line item indicator* determines whether actual line items are updated.

Further notes

Note that the control parameters are valid **beginning with** the fiscal year specified. If the settings do not change for several consecutive years, you only need to make an entry for the first year.

Furthermore, note that once you have posted data in a given time frame, it is no longer possible to change the control parameters. If you want to change the parameters after transaction data has been created, you must delete the transaction data beforehand.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Plan Versions

You can carry out your planning in various plan versions. For example, you can create a version with the original plan. If this plan changes in the course of the approval process, you can create a different, modified version. You must normally specify the plan version when working with plan data.

In the subsection Maintain Plan Versions (transaction Maintain Plan Versions), you can maintain plan versoins for Profit Center Accounting.

In the subsection Adjust Line Items and Summary Records (transaction Adjust Line Items and Totals Records), you can check the consistency between balances for line items and the corresponding summary records for each plan version.

You should do this, for example, if you have changed the **Line Item Indicator**. **Maintain Plan Versions**

In this activity, you maintain plan versions for Profit Center Accounting.

Plan versions let you create and save parallel sets of plan data for the same profit center, because you can use several plan versions in parallel.

In the first step, you create the versions for general use in the SAP system on the *General version definition* screen. On the basis of this general definition, you must then maintain control parameters for the individual applications.

For Profit Center Accounting, you have to maintain these control indicators for each controlling area and fiscal year. You do this on the Settings for Profit Center Accounting screen.

Requirements

Set the desired controlling area before maintaining your versions.

Activities

First the system displays the General version definition screen. Check whether the field *Plan* is selected for the desired version. If you want to create a new version, choose *Edit -> New entries*.

Next you need to make the **Profit Center Accounting settings** for the current controlling area. If necessary, choose *Extras -> Set controlling area* to make sure you are in the right controlling area. Then maintain the fiscal-year dependent parameters for the controlling area.

To do so, select the field next to the desired version. Then choose Settings for Profit Center Accounting in the Navigation box.

On the next screen, you can enter a special text for the version for Profit Center Accounting. Then maintain the control indicators for each fiscal year.

- If the *lock indicator* is selected, the plan version is locked. This means that the plan data for that year cannot be changed. This flag lets you protect plan data from being changed once it is in its final form. If the indicator is not selected, the plan version can be changed. If necessary, you can remove the "X" and then make your changes.
- The flag *Online data transfer* determines whether postings are transferred to Profit Center Accounting simultaneously with original activity. If the indicator is not selected, you need to transfer the postings manually by fiscal year using the plan data transfer function.
- The Line items flag controls whether plan line items are created when you change plan data. The line items document every change made to a plan.
- With the exchange rate type, you determine which rate such as the average rate or bank selling rate should be used to translate the plan data in that version. If you do not designate a value date, the values will be translated using the exchange rate valid on the first day of the month. With a value date, you can set a date to be used for the translation.
- You must determine the variants for transfer pricing if you want to valuate planned quantities of representative materials with transfer prices for the purposes of quantity-based goods movement planning, or if you want to derive material direct costs from costing.

To enter parameters for a new fiscal year, choose *Edit -> New entries*.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Adjust Line Items and Totals Records

In this activity, you check the consistency of plan line item table GLPCP with summary record table GLPCT.

It is recommended that you perform this activity if the indicator Write line items in planning has been changed for an EC-PCA plan version in transaction OKEQ (Maintain plan versions).

Activities

Start the transaction with the setting **Check line item table**. The system then displays information about the existing summary records and the balance of line items for the EC-PCA plan version in the specified controlling area and fiscal year.

Five different scenarios may apply at this point:

1. Line item updating is active and there are already summary records in the corresponding plan version. Not all plan line item balances agree with the summary records to which they belong. Tables GLPCT and GLPCP are therefore not consistent with one another for the plan version in question. In this case, it is recommended that you start the transaction with the setting **Adjust line item table**. If you do this, the system will create corresponding clearing/opening line items, which ensure that the line item balances agree with the corresponding summary records at closing.

- 2. Line item updating is active and there are already summary records in the corresponding plan version. All plan line item balances agree with the summary records to which they belong. Tables GLPCT and GLPCP are therefore consistent with one another for the plan version in question.
- 3. Line item updating is active and there are no summary records in the corresponding plan version. Tables GLPCT and GLPCP are therefore consistent with one another for the plan version in question.
- 4. Line item updating is not active. However, there are plan line items in the corresponding plan version. Tables GLPCT and GLPCP are therefore not consistent with one another for the plan version in question. It is recommended that you archive the plan line items in question, by choosing Environment -> Archiving in the application menu.

For archiving, you must specify the following parameters: the controlling area to which the line items belong, record types 1 and 3, the plan versions to which the line items belong, the fiscal year, the general processing options *Archive with database update* and the archiving type *Only line items to be archived*.

5. Line item updating is not active. There are no plan line items in the corresponding plan version. Tables GLPCT and GLPCP are therefore consistent with one another for the plan version in question.

Analyze Settings

This function lets you display and check the settings for Profit Center Accounting.

At this time the system checks the following settings. The analysis always applies for the current controlling area:

General control information which is maintained in Customizing:

- control indicators for each controlling area
- dummy profit center
- standard hierarchy
- profit center report currency and
- other indicators (elimination of internal business, storing of transaction currency)
- fiscal-year dependent control parameters for plan versions (lock indicator, line items, online indicator)
- fiscal-year dependent control parameters for actual postings (lock indicator, line items, online indicator)
- the business activities which are transferred to Profit Center Accounting
- additional technical control information for the General Ledger, which is used for updating data. These control entries are created automatically in the background. No manually entries are required.
- assignment of the company codes in the controlling area to the fixed ledger 8A (Table T882)
- additional control information for the plan versions (Table T894) and fiscal-year dependent version parameters (Table T895)
- General control information for the fixed profit center ledger 8A (Table T881), such as the storing of three different currencies or the debit/credit indicator

In addition to this information, a check is made for consistency between the profit center standard hierarchy and the master data of the profit centers contained there.

This test recognizes inconsistencies in the target system after transporting customizing settings.

First, the system checks whether or not master data exists for all the profit centers contained in the standard hierarchy. Then it checks whether all the existing profit centers are contained in the standard hierarchy.

Further notes

If inconsistencies occur in the technical control information of the General Ledger, you can create this information automatically using the function Update.

If inconsistencies occur in the master data, check whether the master data or the standard hierarchy has been transported. If either of these is incomplete, transport the missing information.

Update Basic Settings

Technically, transaction data is updated in Profit Center Accounting using the tools of the component *FI-SL Special Purpose Ledgers*. The ledger "8A" is a so-called fixed ledger, which is maintained entirely in Profit Center Accounting.

In addition to the application-specific control tables, other tables also must be maintained for the internal control of FI-SL. This usually takes place automatically in the background when you maintain higherlevel settings in Profit Center Accounting.

Under some circumstances, such as when you import customizing settings or change an assignment of company code to controlling area, you may need to generate these additional control entries manually.

The following control information is generated or checked:

- the installation entries in the summary record table GLPCT, the actual line item table GLPCA and the plan line item table GLPCP in FI-SL (Table T800A)
- the definition of the fixed ledger 8A (Table T881)
- the assignment of company codes to the fixed ledger "8A" (Table T882)
- the plan versions (Table T894)
- the fiscal year-dependent version parameters (Table T895)

If important entries (in Table T800A) are missing, you need to run a generation program in FI-SL to install Profit Center Accounting. No data may be posted in any productive client in your system while this program is running! This could cause postings to be lost without your becoming aware of it.

The program sends a confirmation prompt, so that you can inform your users accordingly. Once you have made sure that no more postings are being made, you can confirm. Then the system automatically generates the objects. This should only take a few minutes.

Requirements

Profit Center Accounting must be active in the affected controlling area. The Customizing settings for Profit Center Accounting must have been either maintained manually in or imported to the affected controlling areas.

In addition, the assignments of company codes to controlling areas must be up to date.

Further notes

If you are not sure that all the internal control tables are up to date, check this using the function Analyze settings(Transaction 1KE1).

Notes on Transport

The menu option *Update Basic Settings* has the sole function of removing non-permitted inconsistencies in Customizing for Profit Center Accounting. As transporting the database changes made here does not necessarily lead to removal of possible inconsistencies in the target system, this transaction is *not* connected to the Profit Center Accounting transport link.

Activate Average Balance Ledger

In this activity you can activate or deactivate an average balance ledger for Profit Center Accounting. The system automatically creates a fixed ledger "8Z" for the summary record table in Profit Center Accounting (table GLPCT).

All transactions carried out during a period are stored with a date weighting in the average balance ledger. This means that a transaction that takes place on the first day of the period is updated with a full weighting, whereas later transactions are weighted according to when in the period they occurred (days remaining in period, divided by days in period).

Activities

1. Choose "Activate" or "Deactivate" to activate or deactivate the average balance ledger.

2. In the second box, you can decide how the average balance should be calculated. You can have the system use either the posting date (SAP standard / exit G01) or a user exit. Standard exits/user exits Save your settings.

Further notes

The average balance ledger (8Z) only contains weighted transactions by period. To calculate the average balance for a period, the system needs to take the opening balance into account as well. This opening balance is taken from the profit center ledger "8A".

Example:

At the beginning of period 2, account balance = 10,000.00Number of days in period 2: 28 Inward movement on 2/15: 10,000.00=> weighted movement: 10,000.00 * 14 days / 28 days = 5,000.00Inward movement on 2/22: 10,000.00=> weighted movement: 10,000.00 * 7 days / 28 days = 2,500.00

This yields an average balance for period 2 of 17,500.00

Note that quantities are ignored when you updated the average balance ledger using the standard exit. In other words, they are not weighted.

Caution:

If you want to calculate the average balance using the value date, note that there are certain limitations. In particular, it is not possible to ensure that the ledger is updated consistently if the value date and posting date differ.

The average change in balance of a transaction is posted in the period of the posting date. In addition, the system adds the balances in ledger 8A from the previous period, which do not use the value date, to the average balance in ledger 8Z in order to calculate the average.

You can only update the average balance ledger if you update accounts in realtime. If you transfer these periodically, you can only see the balances as of the end of the period. It is no longer possible to determine when during the period the transactions were carried out.

For more information about the average balance ledger, see the SAP Library, under Profit Center Accounting.

Balance Carryforward

In this step you set up the function for carrying balances forward in Profit Center Accounting.

You need to do this if you want to transfer Additional Balance Sheet and Profit & Loss Accounts to Profit Center Accounting.

This function makes it possible to carry forward balance sheet and income statement accounts. The balance sheet accounts are carried forward to the same account, while those of income statement accounts are carried forward to retained earnings accounts.

Example

You transfer postings made to balance sheet accounts in Financial Accounting to Profit Center Accounting. You want to carry the balances of these accounts forward when you perform your year-end closing activities.

Further notes

You can also use the functionality for carrying balances forward in Planning.

For more information about carrying balances forward, see the R/3 Library for Profit Center Accounting under *Actual Data -> Carrying Balances Forward*. Allow Balances To Be Carried Forward

In this step you allow balances to be carried forward in Profit Center Accounting. This makes it possible to execute the program for carrying balances forward in the application menu, and automatically carries forward balances from the previous year for all postings which are

- Transferred from Financial Accounting or
- Created directly in Profit Center Accounting or

This action only applies for the client you are currently working in.

Activities

Select the "Bal. CF" field.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Maintain Retained Earnings Accounts

In this activity you define the retained earnings accounts you want to use for carrying forward income statement accounts.

Activities

Enter a retained earnings account for each income statement account type.

Further notes

Using income statement account types, you can assign more than one retained earnings account to each chart of accounts. You must assign a retained earnings account to each type used in a chart of accounts. The assigned retained earnings accounts can be identical or different.

The chart of accounts is stored in the master data for the company code.

Note that these accounts are also used for carrying forward balances in the component FI-SL Special Purpose Ledgers.

Maintain Transaction Types for Consolidation

In this step you can maintain Consolidation transaction types. **Standard settings**

A range of transaction types are preset in the standard SAP system. They are used in particular for showing the horizontal development of balance sheet items.

Activities

- 1. Check whether the transaction types supplied meet your requirements.
- 2. Maintain additional transaction types if required.

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

1. 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.

- 2. Enter the controlling area.
- 3. To activate the enterprise organization, select *Enterprise organization active* for the controlling area in question.
- 4. Enter the fiscal year interval for which the standard hierarchy is to be classed as complete.

Note on number of fiscal years

5. 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

- 1. 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.
- 2. In the detail area, overwrite the provisional entries.
- 3. Save your entries.

Creating Additional HR Organizational Units

- 1. 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
- 2. 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.
- 3. 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.

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

Creating Cost Centers/Profit Centers

- 1. 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
- 2. 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.

3. 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

- 1. 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.
- 2. 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.

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

- 2. 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.
- 3. 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

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

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

2. 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

- 3. 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.
- 4. Specify whether the hierarchy should be generated for **cost center** or **profit center**.
- 5. Specify whether groups that exist in the existing standard or alternative hierarchy should be overwritten when the new hiearchy is generated.

Note on hierarchies

- 6. Specify whether the hierarchy is to be generated for **controlling areas** or for **profit centers**.
- 7. 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:

- a) <Organizational unit> or <Organizational unit> interval
- b) <Organizational unit> group
- c) All <Organizational units> in a controlling area 2. Decide whether to activate *immediately* or in a *Test run* first.
- 3. Decide whether to activate in the *background* or *online*.
- 4. 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:

- a) <Organizational unit> or <Organizational unit> interval
- b) <Organizational unit> group
- c) All <organizational units> of a controlling area 2. Decide whether to delete *immediately* or in a *test run* first.
- 3. Decide whether to delete in the background, or online.
- 4. 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 following steps, you create the master data for Profit Center Accounting.

This comprises:

- Profit centers
- Standard hierarchy
- Statistical key figures
- Representative materials

Profit Center

In the following steps, you make the settings required to set up and structure profit centers.

You must define the following:

- the standard hierarchy (if you are **not** using the enterprise organization)
- the actual profit centers
- the dummy profit center

The following steps are optional:

- setting up additional profit center groups
- copying cost centers in order to align the profit center structure with the cost center structure
- copying cost center groups for the same purpose
- specifying time-based fields for profit centers maintaining matchcode IDs for profit centers

Define Standard Hierarchy

If you do not use the Enterprise Organization function, create the standard hierarchy for profit centers in this IMG activity and make any necessary changes.

The standard hierarchy is a tree structure for organizing all the profit centers belonging to a controlling area. In the standard hierarchy, there are two types of node as structure elements:

- Profit centers can be assigned directly to an end node.
- Summarization nodes do not themselves contain profit centers. Instead, they summarize other nodes (end nodes or summarization nodes).

The system divides the nodes into these types automatically. If you have already assigned profit centers to a node, you can no longer attach any subnodes to it. Similarly, profit centers **cannot** be assigned to a node that already contains subnodes.

Prerequisites

The following prerequisites apply for this function:

- In Profit Center Accounting: When defining the settings for the relevant controlling area, you need to have entered the name of the standard hierarchy.
- In new General Ledger Accounting (with the scenario *Profit Center Update*): You need to have performed the activity Define Profit Center Standard Hierarchy in Controlling Area. **Recommendation**

First create a special group for the dummy profit center of the controlling area. You create this special group directly under the hierarchy root node, which has generally already been created automatically. This makes it easier later in the information system to display the nonassigned costs and revenues for this controlling area.

Activities

Subsequently, in the definition of the master data, the actual profit centers are assigned to the hierarchy areas. With this function, only the hierarchical structure for the profit center groups of the standard hierarchy is defined.

Further notes

You have the option of copying the standard hierarchy of Cost Center Accounting so that you can use it as a template.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Copy Cost Center Groups

If your standard cost center hierarchy is similar to your standard profit center hierarchy, you can use this step to copy the cost center hierarchy to a profit center hierarchy. Once you have done this, you can then change the profit center groups as desired.

It is also possible to copy alternative cost center groups to alternative profit center groups. Note, however, that it is not possible to copy the standard cost center hierarchy to an alternative profit center group, or to copy an alternative cost center hierarchy to the standard profit center hierarchy.

You use the same number for corresponding cost centers and profit centers as well as for corresponding cost center groups and profit center groups.

You have set the desired controlling area.

If you want to copy the standard hierarchy, its name must already be entered in the controlling area settings, but the hierarchy structure itself cannot already exist. An existing profit center hierarchy cannot be overwritten, since this could lead to inconsistencies.

Activities

- If you want to copy the standard hierarchy, select the corresponding field and enter the name of the cost center standard hierarchy. All the nodes of the standard hierarchy will be copied. However, the profit centers will not be assigned to the end nodes of the hierarchy. You need to do this when you create the profit center master records.
- 2. If you want to copy an alternative cost center group, leave the field "Copy standard hierarchy" blank and choose the desired cost center hierarchy. In this case the system will copy the end nodes with the corresponding profit center numbers.
- 3. After copying, change the profit center hierarchy as desired.
- 4. Save your standard hierarchy or profit center group.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Specify Time-Dependent Fields for Profit Centers

If you wish to define master data fields as **time-based**, you should do this **before** creating profit center master data.

The settings delivered with the standard SAP system should be sufficient.

Note

The SAP system stores a separate master record for each period of validity if the time-based fields differ in the two periods.

If the master records differ only in fields which are not time-based, the system stores only one master record, valid for the entire period. When you create the master record, the system copies the contents of the non-time-based fields from the latter period of validity. If a field which is not time based changes, this affects existing data records only if the end of the validity period falls within the time period of the change.

Note that this method of storage can lead to very large data volumes. Consequently, you should only define the most important fields as time-based.

Actions

Select the fields you wish to define as time-based. If you check off the flag next to a field, that field will be defined as time-based in the master data table (the content can differ for different time periods).

Additional information

Note that a profit center with master data in more than one time frame will appear more than once in the matchcodes.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Create Dummy Profit Center

This function lets you create the dummy profit center for the current controlling area.

The dummy profit center is updated in data transfers whenever the object to which the data was originally posted (cost center, order, and so on) is not assigned to a profit center. This ensures that the data in Profit Center Accounting is complete. You can later send the data on the dummy profit center to the other profit centers using assessment or distribution.

You create the master record for the dummy profit center using this special transaction. To change or display it, use the normal profit center maintenance functions.

The name of the dummy profit center is displayed in the controlling area settings for Profit Center Accounting.

Prerequisites

The standard hierarchy must exist for the current controlling area.

Actions

Enter the name of the dummy profit center. The rest of the steps are the same as when you create a normal profit center.

Choose the function *Extras -> Set controlling area* first to make sure that the correct controlling area is set.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Define Profit Center

With this function you create profit center and change profit center master data.

Prerequisites

- Set the desired controlling area beforehand.
- The standard hierarchy for the controlling area must have been created either directly of via the enterprise organization.

Actions

See the SAP Library for Profit Center Accounting, under *Basic* Functions -> Master Data -> Profit Center for detailled instructions.

Further notes

You can copy cost centers to profit centers and then change these as desired.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Activate Inactive Profit 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

- 1. Choose the corresponding objects using one of the following criteria:
 - a) <Object> or <object> interval
 - b) <Object> group
 - c) All <objects> in a controlling area
- 2. Decide whether to activate *immediately*, or in a *test run* first.
- 3. Decide whether to activate in the *background*, or *online*.
- 4. 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 Profit 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

- 1. Choose the corresponding objects using one of the following criteria:
 - a) <Object> or <object> interval
 - b) <Object> group
 - c) All <objects> in a controlling area
 - d) Decide whether to delete *immediately*, or in a test run first.
- 2. 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.

Copy Cost Centers

In this section you can copy cost centers to profit centers, and then change these as you wish.

The program creates a batch-input session which is used to create the corresponding profit centers.

Requirements

You use identical numbers for cost centers and the corresponding profit centers.

You have set a controlling area. You have already created the nodes of the standard hierarchy to which the new profit centers will be assigned.

The profit centers you are copying do not exist yet. Existing profit centers are not overwritten, since this could lead to inconsistencies.

Activities

Choose a cost center group that contains all the cost centers you want to copy. In addition, enter a name for the batch-input session.

Then import the batch-input session.

Further notes

If you want to copy an interval of cost center numbers, you can create a cost center group which contains these, and then copy that group.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Define Profit Center Groups

In addition to the standard hierarchy of the controlling area, you can also create alternative hierarchies, which are called "profit center groups". These can be used in planning, in allocations or in the information system.

Unlike the standard hierarchy, the profit center groups do not have to contain all the profit centers in the controlling area. They let you select and regroup several profit centers in a meaningful way.

Actions

Enter the controlling area and the name of the profit center group. You can then enter or change the compressed nodes, end nodes and profit centers which you require.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

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.

After you have defined an inactive version, you can use the Web Dynpro frontend to copy your profit center group hierarchy into this inactive version.

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 profit 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:

- 1. You have defined a hierarchy version in the Customizing activity Define Hierarchy Versions.
- 2. You have copied your profit center group hierarchy into the inactive hierarchy version using the Web Dynpro frontend.

Activities

- 1. Within this inactive hierarchy you can create new profit center groups and assign profit centers as required.
- 2. 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.

3. If you schedule the 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. The messages are stored in the application log under object COOMMD and subobject COMDACTIVATE.

Define Matchcode IDs for Profit Centers

In this step, you define matchcodes for profit centers. If you want to change or display a profit center master record, but do not know the name of the profit center, you can search for the profit center using a matchcode. The system stores certain fields from a profit center master record in the matchcode. You can search for the profit center using these fields.

The structure of matchcodes is generated from the master data tables via database views and indices (= update type I). **Example**

You want to find a profit center, but only know the short text and the name of the person responsible. With a matchcode search, you can find the profit center via the short text or the name of the person responsible.

Standard settings

SAP provides three standard matchcodes IDs for profit centers:

- The matchcode with identification H allows you to search via the profit center standard hierarchy.
- The matchcode with identification *N* allows you to search via the profit center key.
- The matchcode with identification **S** allows you to search via the profit center short text.

The matchcode object for profit centers is called *PRCT*. The matchcode object determines which database tables and fields will normally be required for the matchcode IDs. For each matchcode object, you can then create one or more matchcode IDs. The matchcode ID determines which fields and field combinations will be used for searching.

Activities

- 1. Determine which matchcodes you require in your company.
- 2. Check the matchcode IDs provided. It is important, for example, that the desired fields are given in the correct order. Create your own matchcode IDs where appropriate.

Statistical Key Figures

In the following activities you make the settings necessary for using statistical key figures in Profit Center Accounting.

Under Choose Key Figures, you define which statistical key figures you want to transfer. After you have done this, statistical key figures are transferred to Profit Center Accounting if online transfer has been activated for actual/plan data (see Activate update).

From Profit Center Accounting, it is possible to create and change statistical key figures in Controlling. You can do this by choosing Maintain Statistical Key Figures and Maintain Statistical Key Figures Groups.

Further information

If statistical key figures have already been entered in Controlling, you must also generate an opening balance to serve as a basis for online entry. If you want to transfer statistical key figures periodically, rather than online, you must generate the opening balance periodically on the relevant key date. You can find the relevant customizing activity under *Planning -> R/3 Internal Plan Data Transfer* or under *Actual Postings -> R/3 Internal Data Transfer*.

Define Statistical Key Figures

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

Statistical key figures serve as the basis for internal allocations and are used for key figure analyses.

When maintaining the master data for a statistical key figure, you can link a key figure from the *Logistics Information System (LIS)* to a statistical key figure from Cost Center Accounting. By setting up this link, you meet the condition for a subsequent transfer of key figures from the LIS to Cost Center Accounting, from where the key figures can subsequently be transferred to Profit Center Accounting.

For more information on the interface to the LIS, see the SAP Library for Cost Center Accounting, under Master data in Cost Center Accounting -> Statistical key figure -> Edit statistical key figures -> Link to the LIS.

Notes on Transport

You transport statistical key figures in Customizing for Controlling.

Further Notes

For more information on statistical key figures, see the SAP Library:

- For General Ledger Accounting under Tools > Statistical Key Figures
- For Profit Center Accounting under Basic Functions -> Statistical Key Figures and Statistical Key Figure Groups.

Maintain Statistical Key Figure Groups

In this activity, you create new statistical key figure groups, or change existing ones.

You can combine statistical key figures of the same kind into statistical key figure groups. You can combine these groups into further groups and so create a hierarchy of statistical key figures and key figure groups.

Examples of how you can use statistical key figure groups are:

- to create reports about certain statistical key figures in the information system
- to edit a number of statistical key figures in one step in Profit Center Accounting, say in
- planning,
- distribution, or

- assessment

Statistical key figures which are used as reference values for assessment/distribution can be combined into a group.

Maintaining Groups

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.

Transport notes

You transport statistical key figure groups in Customizing for Controlling

Note on period of validity

Note that groups have no period of validity. By contrast, most master data is time-dependent.

Further notes

For further information on statistical key figures, see the SAP Library for Profit Center Accounting, under Basic functions -> Statistical key figures and Statistical key figure groups.

Choose Statistical Key Figures

Here you specify all the statistical key figures that you want to transfer from Controlling to Profit Center Accounting. **Example**

You want to transfer the statistical key figure "Employees" from Cost Center Accounting. This is only possible if you specify the key figure "Employees" here.

Activities

Enter all the statistical key figures you want to transfer, together with the controlling objects which you want to transfer them from.

Further notes

These entries are valid for both actual and plan data.

Representative Materials

In this section, you can define derivation rules for finding representative materials.

A representative material is a selected material number that represents a group of materials in Profit Center Accounting. This makes it possible to analyze exchanges between profit centers not only by account, but also by groups of materials.

Activate Representative Materials

You activate a representative material for specific material per controlling area, valuation grouping code, and valuation class. Essentially, this means you activate it per balance sheet account.

Example

Semifinished and finished products are generally grouped together under one representative material, whereas raw materials are not analyzed in further detail.

Requirements

Valuation is set up in Customizing for Materials Management under account determination using the functions Define Valuation Control and Group Together Valuation Areas.

The valuation classes are defined in the material master records. You do this in the activity Define Valuation Classes. **Recommendation**

Do not activate derivation of representative materials for raw materials. This can lead to long runtimes.

Activities

Activate derivation of representative materials in the desired valuation classes for the relevant valuation grouping constants.

Choose Representative Materials

In this activity you specify the material numbers you would like to use as representative materials in your controlling area.

Requirements

The materials must already exist in your system.

Further notes

Choose the materials you would like to use as representative materials in each controlling area.

Derive Representative Materials

In this activity, you maintain derivation rules which help to find representative materials for individual materials or for intervals of materials.

You can derive a representative material from one of the source fields below, or from a combination of these fields:

- Controlling area
- Company code
- Valuation area

Requirements

You have performed the two activities Activate Representative Materials and Choose Representative Materials.

Activities

By combining these source fields, you can determine a sequence of derivation steps. To do this, enter Edit -> Choose or Edit -> Create Step

Under Goto -> Maintain rule values you can maintain several derivation rules per derivation step, which the system will process in succession. As soon as a default profit center is found for a derivation rule, the system will add this profit center and will cease processing derivation rules.

It is possible that not all characteristics are set in all postings. If the system does not find a default for a posting in any of the rule values contained in the derivation step, it skips to the next derivation step.

Example

You assign materials 4711 to 4721 to the representative material 4711.

Recommendation

Remember that complex derivation strategies can lead to significantly longer program runtimes.

To ensure the consistency of the representative materials, you should make the assignments at the controlling area level.

Further notes

If you have activated the key figure *Display error message* for a derivation step under *Edit -> Choose* on the tab page *characteristics*, a warning will appear if no rule value is maintained for the current posting. The derivation step will then be ended, and other existing derivation steps will cease to process. To avoid this, enter a rule value for every combination of source values you use.

On the same tab page, you can make a setting so that rule values can be maintained with validity date. This allows you, for example, to deactivate values temporarily for testing purposes without having to delete them.

For more information about maintenance of derivation rules, see the section Profitability analysis (CO-PA) in the SAP Library, under Characteristic derivation.

Notes on Transport

You have to transport derivation rules manually. Choose *Extras -> Transport*. Assignments of Account Assignment Objects to Profit Centers

In this activity you assign all objects which store data which is relevant for profits to a profit center. This means that you do not need to post the data explicitly to a profit center, since the system posts it to the right profit center automatically according to this assignment.

Prerequisites

- The controlling area to which the assigned objects belong is identical to the controlling area of the profit center
- The profit centers to which you want to assign the objects must already exist. In addition, the period of validity of a profit center must contain the period of validity of the objects you assign to it.

Additional Information

For more information about dividing your company up into profit centers and reflecting business transactions in Profit Center Accounting, see the R/3 library.

Check Assignments

The assignment monitor lets you check all the assignments of objects to profit centers. If an object is not assigned to a profit center, its costs and revenues are posted to the dummy profit center.

Check these assignments carefully, since it is difficult to transfer the data to the "right" profit center later.

Actions

From the overview menu, choose the type of object (such as cost center, order, or project) you want to analyze. For this type of object, you can obtain a list of all objects without an assignment (cost centers not assigned to profit centers) or a list of all the objects and their assignments to profit centers or profit center groups.

On the next screen you can limit your selection further (for example, by specifying a cost center type).

When the list is displayed online, you can maintain the objects individually by double-clicking on the corresponding line. This allows you to make any missing assignments.

For selections which may be time-consuming (such as a list of material masters), you can create the list in the background.

Profit Center Where-Used List

Profit Center Where-Used List

You use the Profit Center Where-Used List to analyze the usage of profit centers in the master data of the SAP system. The program enables you to check which cost centers, orders, or materials are assigned to a given profit center.

Before you can use the Profit Center Where-Used List, you need to create a run to collect the data. After performing the data retrieval run (online or in the background), you can analyze how profit centers are used in the objects returned by the run.

When defining the data retrieval run, you specify the master data for which you would like an overview of the profit center assignments. You can create and execute as many data retrieval runs as you require. The time-dependent master data tables for cost centers, business processes, and profit centers are analyzed for the specified analysis date.

The data is analyzed separately for each data retrieval run. You can analyze which profit centers are used in the objects returned by the run. The program displays the profit centers stored in the master data of all objects analyzed in a data retrieval run. Objects that do not have a profit center assignment are displayed separately.

If the data retrieval run has not been restricted to specific profit centers, the results of the analysis can be displayed using a specified profit center hierarchy or a specified node of a profit center hierarchy, or using individual profit centers. If there is a restriction, the results of the analysis can only be displayed for the profit centers specified in the data retrieval run.

If you have activated Segment Reporting in General Ledger Accounting, you can also use segments to portray the results.

Material

The functions found in this section let you assign material masters to profit centers. This assignment is always valid for one plant.

The assignment of individual master records is described under Assign Material Masters. For assigning a large number of master records to a single profit center simultaneously, see Perform Fast Assignment.

For information about the further use of assignments by the system, see the section Assigning Materials in the SAP Library.

Perform Fast Assignment

The fast assignment function lets you quickly assign a large number of material master records to a profit center.

Prerequisites

You can only assign materials for which a plant segment already exists in the plant you are working in. The plant is assigned to a controlling area via its assignment to a company code, and the profit center must be in the same controlling area.

Activities

- 1. On the first screen, enter the profit center to which you want to assign the material masters. Also enter the plant for which you want to assign the materials.
- 2. Enter a material type, a material group, or a product hierarchy to select a list of the materials you want to process. If you select the "Also assigned materials" field, the system also selects those materials that have already been assigned to profit centers.
- 3. Now go to the Assignment screen.
- 4. On the next screen, assign the materials to the corresponding profit center by selecting them in the list. Save your assignments.

Further notes

It may happen that you want to assign material masters that are currently being processed by other users and therefore cannot be processed. You can assign these materials at a later point using a list that the system displays.

Assign Material Masters

This function lets you access the material master directly to assign your profit centers.

Actions

Assign the material in question to a profit center. You do this on one of the following tab pages or views:

- Calculation 1
- Sales and Distribution: General/Plant Data

Further Notes

You can make the Profit Center a mandatory field in the configuration menu of the Material Master, in the field selection. You do this by assigning it to its own field selection group and making this mandatory in the field selection.

Assign PP Production Orders

In this activity you can assign production orders to a profit center.

Note that when you create a production order, the default profit center is taken from the plant segment of the material master. It is therefore important, when you create new production orders, that all the materials you want to produce are assigned to a profit center.

You can find information about the further use of assignments by the system in the SAP Library under Profit Center Accounting, Assign production orders.

Actions

Assign the production order to a profit center. You can find the field "Profit center" under the menu option Goto -> Header on the tab page Assignments.

Assign Process Orders

In this activity you can assign process orders to a profit center.

When you create a process order, the system determines the profit center from the master record of the main product. You can change it manually if you like.

For information about how the system uses the assignments, see Assigning Manufacturing Orders in the application help for Profit Center Accounting.

Activities

You can find the field "Profit center" by choosing "Goto -> Header" on the Assignment tab page.

Assign CO Production Orders

In this activity, you assign CO manufacturing orders to a profit center.

Note that when you create a manufacturing order, a default profit center is proposed on the basis of the plant segment of the material master record. Therefore it is important that all the materials your organization manufactures are assigned to a profit center.

For more information about the use of assignments by the system, see the section Assigning Manufacturing Orders in the online documentation "EC Profit Center Accounting".

Activities

Assign the CO manufacturing orders on the Master Data screen to a profit center.

Assign Cost Objects

In this activity, you assign cost objects to a profit center. You can find further information on the use of assignments by the system in the SAP Library, under Profit Center Accounting, Assigning Cost Objects.

Actions

Assign profit centers to cost objects on the Basic Screen.

Assign Projects

In this activity you assign a profit center to your project structures. These are

- the project definition
- PSP elements
- the network header
- network processes

You can find information on the operational structures in the SAP Library, under Financials -> PS Project System.

For further information on how the system uses assignments, see the SAP Library for Profit Center Accounting, under Assigning Projects.

Activities

- Choose Change Work Breakdown Structure.
- Project Definition

Assign a profit center on the *Basic data* tab page, on the *Project definition* screen.

- PSP Elements

Assign a profit center on the Assignments tab page, on the PSP element overview screen.

- Choose Change Network
- Network Header

Assign a profit center on the Basic data tab page, on the Network header screen.

Network Processes
 On the *Process overview* screen, choose *Detail -> Process/Element -> General*. Now assign profit centers on the *Assignments* tab page.

Assign Cost Centers

This function lets you assign profit centers to cost centers. This makes it possible for you to reflect the costs settled between or posted to cost centers in Profit Center Accounting.

When assigning cost centers, please refer to the notes under Assign Fixed Assets. You can find information on the further use of assignments by the system in the SAP Library, under Profit Center Accounting, *Assigning Cost Centers*.

Acitivities

Assign the cost center to a profit center on the screen Master Data on the tab page Basic Data.

Assign Internal Orders

In this activity you assign your internal orders to profit centers.

When assigning internal orders, please refer to the notes under Assign Fixed Assets.

You can find information on the further use of assignemnts by the system in the SAP Library, under Profit Center Accounting, Assigning Internal Orders.

Actions

Enter the profit center on the master data screen on the Assignments tab page.

Further notes

If you wish to assign a large number of internal orders, you should use the list processing function, which is described in the Implementation Guide for Internal Orders. To do this, you need to create a list variant which contains the field "Profit center".

With the order type Internal Order, the field "Profit center" becomes mandatory, which means that a profit center must be entered for each internal order.

Assign Business Processes

In this activity you can assign business processes to a profit center.

For information about how the system uses these assignments, see Assigning Business Processes in the SAP Library for Profit Center Accounting.

Activities

Enter the profit center on the Master Data screen on the Basic Data tab page.

Assign Maintenance Orders

In this activity you can assign maintenance orders to a profit center. For information about how the system uses assignments, see *Assigning Maintenance Orders* in the SAP Library for Profit Center Accounting.

Requirements

You are using the Plant Maintenance (PM) application component.

Activities

Assign a profit center to the maintenance order on the Additional Data screen.

The system proposes the profit center in the cost center belonging to the responsible work center. You can overwrite this, however.

If you change the responsible work center in the order, the system does not automatically overwrite the profit center on the additional data header screen. If required, change this manually.

You can change the profit center in the order, provided that no actual data exists for the order yet.

Assign Fixed Assets

In this activity, you assign profit centers indirectly to fixed assets.

Assets are always implicitly assigned to a profit center via an assignment to an internal order to to a cost center.

Where an asset is assigned to both an internal order and a cost center, the profit center assigned to the internal order has priority. You can find information on the further use of assignments by the system in the SAP Library, under Profit Center Accounting, *Assigning Assets*.

Actions

Assign the fixed asset to an internal order or a cost center. You do this on the Master Data screen on the time-dependent tab page.

Assign Real Estate Objects from Area RE Classic

In this activity you can assign real estate objects to profit centers.

For information about the function and further use of assignments by the system, see the section *Assigning Real Estate Objects* in the online documentation "EC Profit Center Accounting". Activities

Enter the profit center on the General Data tab page on the

screens for maintaining buildings, properties, rental units, business entities, and management contracts.

In settlement unit maintenance, enter the profit center on the Participation IDs screen.

Assign the profit center for a rental agreement on the Master Data screen, on the Payment Data tab page.

Assign Real Estate Objects from Flexible Real Estate Management

In this step, you assign profit centers to real estate objects of Flexible Real Estate Management (RE-FX).

For information on the available functions and on other uses of these assignments, see the SAP Library for Profit Center Accounting. Choose Assigning Real Estate Objects.

Requirements

The transactions here are only valid if you activated Flexible Real Estate Management.

Activities

Assign the profit center in the application on the following screens:

- On the *Posting Parameters* tab page on the screens for processing master data of:
- Business entities
- Buildings
- Land
- Settlement units
- On the Posting Parameter tab page in the rental object on the Account Assignment detail screen
- On the Posting Parameters tab page in the real estate contract on the Organizational Assignment detail screen

Sales Orders

When you create a sales order item, the profit center is proposed from the material master or from a substitution rule. If you want to transfer the data to profit centers other than those proposed, you can do so by carrying out the following steps:

- Under Assign Sales Orders you can assign certain sales order items manually to profit centers.
- Under Sales Order Substitutions you can define substitution rules, according to which assignments are made automatically, according to selected characteristics.

Assign Sales Orders

In this activity, you assign sales order items to a profit center.

Note that when you create a sales order item, the default profit center is taken from the material master or from a substitution rule.

You can find information about the further use of assignments by the system in the SAP Library under Profit Center Accounting, Assign Sales Orders.

Actions

Assign a profit center to the sales order. You can do this from the Item Overview screen by selecting Goto -> Position -> assignment.

Sales Order Substitutions

Normally the profit center for a sales order item is proposed based on the combination of material and delivering plant. This lets you organize your profit centers according to products.

If you want a more sales-oriented organizational structure, you can define substitution rules here to determine how the system finds profit centers when you create a sales order.

You can then assign one substitution rule to each controlling area.

Define Substitution Rules

In this activity you define substitution rules for finding the default profit center for sales order items. It makes sense to use substitution rules if the profit center proposed from the material master does not meet your requirements.

Example

You want to use a sales office or a distribution channel as a profit center. **Standard settings**

No predefined substitution rules exist.

Activities

Proceed as described under Maintain Substitutions in Customizing for FI-SL Special Purpose Ledgers. The following are predefined in Customizing for Profit Center Accounting:

- The application area (Profit Center Accounting)
- The callup point (Create Sales Order)
- The field to be substituted (Profit Center)

You can substitute the profit center with a constant value or by assigning a table field. It is also possible to use a user exit.

Additional Information

For more information on substitution rules, see the documentation for Financial Accounting on the component "FI-SL Special Purpose Ledgers" (in the chapter "Basic Functions"). Also, read the notes in the SAP Library under *Financial Accounting -> Special Purpose Ledger -> Validation and Substitution -> Substitution*.

Further notes

Structure PCASUB is used as the transfer table for the fields from the sales order.

Assign Substitution Rules

In this section you can assign each controlling area a substitution rule for finding the default profit center when you create a sales order.

Example

You want to use a sales office or a distribution channel as a profit center.

Prerequisites

You have already defined a substitution rule.

Standard settings

The default profit center in sales orders is taken from the material master.

No substitution rules are defined. Activities

Assign the substitution rule to each controlling area and set the active indicator.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Transfer Prices

To use parallel valuation approaches/transfer prices, you must first make the necessary settings in Customizing for the component General Controlling (see Multiple Valuation Approaches/Transfer Prices.

You need to perform the activities listed below in order to use transfer prices specifically in Profit Center Accounting. These are:

- Basic Settings for Pricing

If you want to use transfer prices from the profit center valuation view, you must make the basic settings in this activity, so that the correct price can be valuated.

- Detailed Settings for Transfer Pricing

The system provides standard settings for all of the settings in this section. You are advised to use these for transfer pricing. However, should you have special requirements, which cannot be catered for using the standard settings, you can define the corresponding pricing components according to your requirements.

- Settings for Internal Goods Movements

In this section, you control account determination for postings of internal goods movements.

- Settings for Profit Planning

It is possible to carry out quantity-based planning where the quantities and accompanying costs are valuated by the system with transfer prices. If you want to carry out this type of planning, you must make the corresponding settings in this section.

For information on the concept of Multiple Valuation Approaches/ Transfer Prices, see the SAP Library for Profit Center Accounting.

Basic Settings for Pricing

In this activity, you make the settings required for transfer pricing in Profit Center Accounting. You maintain

- 1. Condition types
- 2. Pricing procedures
- 3. Transfer price variants

For information about these components and about the concept of transfer pricing, see the SAP Library for Profit Center Accounting, under Transfer pricing.

General Procedure

Preset standard deliveries are provided for all components of transfer pricing.

The standard deliveries are displayed in the left-hand screen area, together with condition types, pricing procedures and transfer price variants which you have defined yourself. By selecting the individual elements, you can see the corresponding settings in the right-hand screen area.

To define condition types, pricing procedures or transfer price variants yourself, click on create in the left-hand screen area.

Condition Types

Condition records are maintained using the condition type. From the condition records, a transfer price is derived for the exchange of goods and execution of measures between profit centers.

The text below will describe

4. how you can create a condition type

5. which condition types are delivered in the standard system

The condition records in which the concrete values for finding a transfer price are stored can be entered and displayed from condition type maintenance. You can also maintain condition records in the application menu, under *Master data -> Transfer prices*.

You can also enter and display the access sequences from condition type maintenance. However, you can also maintain them in Customizing for Profit Center Accounting, under *Maintain detail Advanced* settings for transfer pricing.

Creating your own condition records

- 1. Create a new condition type. To do so, choose *Create* in the upper left of the screen.
- 2. Then enter the following in the right-hand area of the screen:
 - a) a key consisting of up to four characters. The key should begin with the letter 'z', as these name spaces are kept free in the standard delivery. In addition to this, enter a text.
 - b) an access sequence, where required, which controls access to condition records. If you want to specify the access sequence here, it must already have been defined.
 - c) Select one of the options in the *Define costing type* group box.

3. Choose *Goto -> Detail view*.

There are logical preset control parameters for the condition types Base condition type from Material Ledger, Base condition type from Costing, Fixed price and Percentage surcharge. No rules exist for other condition types. However, make sure that the settings you make are logical and appropriate.

You can make the following entries:

a) Condition category

The condition category divides condition types into predefined groups. The following condition categories are supported in Profit Center Accounting:

' ' (Other condition categories):

This is used for condition types which do not need a particular condition category, for example surcharges/deductions or fixed transfer prices.

'**K'**:

Used for base condition types to read base values that can be used to calculate other values.

For technical reasons, these condition types must use the combination of condition category 'K', calculation type 'C' and condition class 'B'. You do not need to enter an access sequence for these condition types.

This condition type does not require an access sequence.

'b':

Used for base condition types to read base values that can be used to calculate other values. For technical reason, these condition types must use the combination of condition category 'b', calculation type 'C' and condition class 'B'. This condition type does not require an access sequence.

'h'

Used for base condition types to read base values that can be used to calculate other values. For technical reason, these condition types must use the combination of condition category 'h', calculation type 'C' and condition class 'B'. This condition type does not require an access sequence.

The following condition categories can only be used for base condition types using the legal valuation view.

'G':

For these condition types, the system reads either the standard price or the moving average price, depending on how the price control was defined for that material ('S' for the standard price, 'V' for the moving average price). The condition type does not require an access sequence.

'S':

For these condition types, the system reads the standard price from the material master, regardless of the price control setting. The condition type does not require an access sequence.

'T':

For these condition types, the system reads the moving average price from the material master, regardless of the price control setting. The condition type does not require an access sequence.

b) Calculation type

The calculation type determines how the system calculates discounts/surcharges and prices for a condition type. In Profit Center Accounting, the value can be calculated either as a percentage (calculation type 'A'), based on a quantity (calculation type 'C' or based on an absolute amount (calculation type 'B').

c) Condition class

The condition class provides a condition type structure. In Profit Center Accounting, the structure distinguishes between prices ('B') and surcharges/deductions ('A').

d) Scale basis

The scale basis determines how the system interprets the scale of a condition type. Profit Center Accounting contains value scales ('**B**') and quantity scales ('**C**') in addition to the basic setting (' ').

Under Additional settings, you can also make the following settings for each condition type:

- e) Specify a certain +/- sign
- f) Check the scale
- g) Rounding rules
- h) Currency translation

For details on these settings, see field help for the setting in question.

4. Save your condition type.

Standard System

Several condition types are delivered with the standard system. You can use these for defining pricing procedures. These normally cover the requirements of transfer pricing.

By double-clicking in the upper left of the screen, you can display the settings for each condition type in the right-hand area of the screen. By choosing *Goto -> Detail view* you can display the *control data* and *additional settings*.

The following condition types are delivered as standard:

- TP01 Transfer price (fixed)This is a condition type for a fixed price.(Condition category ' ', calculation type 'C', condition class 'B').
- **TPB1** Material price (material ledger) This is a base condition type, which uses the profit center price from the material ledger. Surcharges/deductions can then be calculated in the pricing procedure on the basis of this base condition type. (Condition category 'h', calculation type 'C', condition class 'B').
- **TPB2** Costing basis This is a base condition type, which uses the price from costing. Surcharges/deductions can then be calculated in the pricing procedure on the basis of this base condition type. (Condition category 'K', calculation type 'C', condition class 'B').
- TP02 Markup (percentage)
 This is a condition type for a percentage markup.
 (Condition category ' ', calculation type 'A', condition class 'A').

Pricing Procedures

A pricing procedure determines which condition types are to be calculated and in which order. The choice of which pricing procedure the system accesses for transfer pricing is determined by the transfer price variant.

Example

Step C.type Name From step

10 TP01 Transfer price (fixed)

- 20 TPBA Material price (Mat. ledger)
- 30 TP02 Markup (percentage) 20

In the above example, the system first finds a fixed price. If it cannot find one, it reads the profit center price from the material ledger. The markup is then calculated on the basis of this profit center price.

It is also possible to calculate another value on the basis of this markup by defining a subtotal line without a condition type. This line must contain the steps that are to be added together and can then be used for other calculations.

Recommendation

If you define a pricing procedure, this should only contain the condition types which you actually use. Otherwise, the system has to access the condition unnecessarily.

010

Creating Pricing Procedures

- 1. Choose *Create* in the left-hand screen area. In the right-hand screen area, enter a key of up to six characters and a description.
- Specify the condition types to be used. Set the order of your processing by choosing the fields *level* and *counter*. If you want a line in the pricing procedure to refer to several other steps, you can set this 2. by chooing the fields From stepand To step.
- 3. Save your pricing procedure

Standard Settings

Several pricing procedures are delivered with the standard system. You can assign any of these to transfer price variants. These standard pricing procedures normally meet the requirements of transfer pricing. The following pricing procedures are delivered with the standard system: TP0001 Fixed transfer price

Step	Condition type	Name	
010	TP01 Transfer price f	ixed	
TP0002	Transferprices - perce	entage	
A percent	age mark-up is made to th	e profit center price from the material l	ledger.
Step	Condition typeName	From To	
010	<i>TP01</i>	Material price	
020	<i>TP02</i>	Mark-up percentage010	01
- TP 0	003 Plan procedure cost	ing	
A pe	ercentage mark-up is made	e on the price from the material cost est	imate

Condition type Name From To Step

010	TPB2	Costing price	
020	<i>TP02</i>	Mark-up percentage010	010

Transfer Price Variants

A transfer price variant determines whether plan data or actual data is to be valuated.

For goods movements, only actual data is valuated. In this case you only need the fixed variant 000.

However, if you want to find plan prices based on costing data, you can define any number of variants for transfer prices.

Creating your own transfer price variant

- 1. Click on Create in the lower left-hand screen area.
- 2. Give your variant a three-digit number and a text description.

- 3. Specify the costing sheets which are to run in the transfer price variant. You can choose the sequence in which they are processed using the seq. field.
- 4. If the *condition analysis* indicator is activated, the system will call up condition analysis for each transaction which determines a transfer price.
- 5. This indicator should only be activated for testing purposes, in order to ensure that transfer prices are found correctly in accordance with the settings in Customizing for Profit Center Accounting.
- 6. Unless you specify otherwise, condition analysis is performed for each transfer price variant, and is not user-specific.
- 7. Condition analysis can also be made user-specific. To do so, set the set get parameter **DIA** to **X** in the user master record. The user in question can then activate condition analysis for all existing transfer price variants.
- 8. Save your variant.

Standard system

- 000 Actual variant

Number	Costing s	sheet	, <u>Desi</u>	gnation	, <u>Seq</u>	uence
10	TP	0001	Fixed	transfer g	price	01
20	TP0002	Perce	entage t	ransfer p	rice	02

To begin with, the system works through costing sheet TP0001. If it finds a transfer price here, it will use this transfer price. If it does not find a transfer price here, it will then work through costing sheet TP0002.

- 001 Planvariante 1

Number	Costin	g sheet	,Desig	gnation	<u>, Se</u>	quence
10		TP0001	Fixed	transfer	price	01
20	TP0003	Plan	calcula	ation pric	ce 02	

To begin with, the system works through costing sheet TP0001. If it finds a transfer price here, it will use this transfer price. If it does not find a transfer price here, it will then work through costing sheet TP0003.

If you want to set up highly complex pricing, and the information in this section is not enough, you can find the necessary information in the SAP Library, under *Logistics -> Sales and Distribution -> Conditions and Pricing*.

Notes on Transport

The system automatically records changes to the basic settings. When saving, you can specify whether you want these changes to be transported.

Advanced Settings for Pricing

In the following activities, you define certain components of transfer pricing:

- Condition tables
- Access sequences
- Condition exclusions
- Pricing reports

The standard settings for all of these components should be sufficient. If you have special requirements, however, you can define condition tables, exclusions, lists and access sequences yourself.

Further notes

It is possible to calculate transfer prices using your own programs and without relying on conditions. You do this using the customer enhancement PCATP001.

This user exit also lets you insert additional fields in the condition tables. These fields are not otherwise available in the standard transaction for condition table maintenance.
You can view the documentation on enhancements in SAP Enhancement Maintenance (transaction SMOD).

Further information about using enhancements can be found in Project Management of SAP Enhancements (transaction CMOD) under Utilities -> Online Handbook.

You can find further information on the concept of calculating transfer prices in the Profit Center Accounting section of the SAP Library.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Define Price Dependencies (Condition Tables)

In this activity you define the price dependencies for transfer prices. You can make any price, markup or deduction dependent on what values are contained in certain fields. You define these dependencies using so-called "condition tables". The condition table consists of combinations of fields, for which you can create condition records.

Example

In your costing sheet, you want to use a condition type KA01 that sets a transfer price depending on the combination of plant, material and profit center. To do this, you need to choose the fields *Plant*, *Material* and *Partner Profit Center* from the field catalog. If you only want to make the transfer price dependent on plant and material, you need to choose these fields only.

Activities

1. Before you create a new condition table, check whether the fields in the field catalog meet your requirements. If you want to use a field that is not contained in the standard field catalog, you can add this field.

Only fields contained in tables KOMG, KOMK or KOMP can be added. However, you can add tables you need to these tables. The procedure for doing this is described in the Implementation Guide (IMG) for Sales and Distribution, under New Fields for Pricing.

The fields contained in tables KOMG, KONK or KOMP are also transferred to user exit PCATP001 to allow changes to the arguments for transfer pricing. You can find further information about this topic under Develop Enhancements in Profit Center Accounting.

- 2. Create new condition tables. To do so, proceed as follows:
 - Enter the name of the table you want to create.

system automatically assigns a number. (Internally, the tables are named "Axxx", for example "A501".)

- Specify whether you want to limit the validity of the table.
- Enter a text for the condition table.
- Choose the desired fields from the field catalog.
- Generate the new condition table.
- 3. Enter the condition table in the relevant access sequences (see section Condition Types). This is where you link the condition type, access sequence and condition records.

Define Access Sequences

In this activity you define access sequences.

An access sequence is a strategy the system uses to search for valid condition records for a condition type.

For example, you can specify that the system should first look for a record for a specific material, plant and profit center, and then for a combination of plant and profit center.

Example

You can enter any number between 501 and 999. If you do not enter anything, the

Access sequence Z001 for condition type KA01:

No.	Table	Name	Condition	
Exclusi	ve			
-				
01	501	Plant/Material/Profit center		Х
02	502	Plant/Profit center		Х

Access sequence Z001 first looks for condition records stored with the key consisting of the combination "Plant/Material/Profit center". If no record is found for that combination, the system then searches for a record for the combination "Plant/Profit center".

If a record is found for a line where the field "Exclusive" is selected, the system stops reading data records.

Recommendation

If you define your own access sequences, you should give them a key that begins with the letter "Z". The standard R/3 system contains no access sequences in this name range.

To ensure that the first condition record found is used, set the "Exclusive" flag for each line. If you do not set this flag, the system adds the values for all the condition records found, which usually is not desirable for transfer pricing.

Activities

- 1. Create new access sequences. Enter a key of up to four characters and a description.
- 2. Enter the condition tables that you want to access using this access sequence in the order in which you want them to be accessed. Using the "Fields" function, you can display the field combinations for the individual condition tables.

If you want the system to stop searching as soon as the first valid condition record is found for a particular condition type, select the "Exclusive" indicator. If you want to specify other conditions, you can make an entry in the "Condition" field.

3. Save your access sequence.

Further notes

You must define and save your access sequence before you can assign it to a condition type and define condition records for it.

Define Condition Exclusion for Groups of Conditions

If more than one condition record is valid for a document item, you can define rules that determine which condition records are selected and which are ignored. These rules are called "condition exclusions".

To exclude conditions, you need to define so-called "exclusion groups". An exclusion group is a list of condition types that are compared with one another during pricing. Depending on the results of this comparison, individual condition types or an entire exclusion group can be excluded.

This lets you influence pricing to achieve the value that fits the desired criterion, such as the "best price", by taking into account certain condition types while ignoring others.

Example

You can define a condition exclusion that finds the best transfer price for the profit center and always ignores any less favorable ones. The best price then overrides the priority of condition types specified in the access sequence.

The costing sheet determines how the exclusion groups are selected and processed. The following options are available:

- Select the best condition type in an exclusion group
- Select the best condition record for a condition type if more than one valid condition record exists for that condition type
- Select the best of two exclusion groups (all the condition types in both groups are added together and the totals compared with one another)

- Exclusion method: If any one condition type in the first group exists in the document, all the condition types in the second group are removed from the document. No condition exclusions are delivered with the standard system. If you want to create condition exclusion, you therefore need to do the following: - Define exclusion groups

- Assign condition types to the exclusion groups
- Enter the exclusion groups in a costing sheet and specify how the condition types to be excluded are found

Activities

- 1. Create an exclusion group. Enter a four-character key and a name.
- 2. Assign condition types to the exclusion group. An exclusion group can contain any number of condition types.
- Enter the exclusion group in a costing sheet that you use for pricing. Pay special attention to the order in which the exclusion groups are to be processed.
 You can use two exclusion groups for condition exclusion. If you do, however, you use choose method "C", which finds the best price between two exclusion groups.

Define Pricing Reports

In this activity you can define the structure of your pricing reports. Pricing reports are ABAP report lists that let you display condition records according to various criteria.

Activities

- 1. Create new pricing reports. To do so, proceed as follows:
- 2. Enter the title of the pricing report you want to create.
- 3. On the next screen, the system displays all the key fields that are used for conditions in alphabetical order. Select all the key fields you want to see in your pricing report.
- 4. Choose *Edit -> Continue* if you want to select all tables which contain **at least one of** the selected key fields. Choose *Edit -> Continue with AND* if you want to select all tables which contain **all** selected key fields.
- 5. On the next screen, select all the condition tables that you want to analyze.
- Choose *Edit -> Continue to List Structure* to define the structure for the pricing report. The next data screen displays all key fields for the selected tables.
 To hide fields which you do not want to appear as selection criteria when displaying the pricing report, remove the "X" next to these fields in the "selection" column.

7. Save the pricing report

Settings for Internal Goods Movements

Internal goods movements in Logistics (stock transfers, goods usage for production orders etc.) can lead to a material flow between profit centers.

In the following activities, you make settings to ensure that these goods movements are represented correctly in Profit Center Accounting.

Under Define Account Determination for Internal Goods Movements you specify which material movements are to be posted to which accounts for Profit Center Accounting.

You must also define account determination for produktion variances during deliveries to other profit centers.

Under Define Special Handling for Internal Goods Movements, you determine which internal goods movements are not to be represented as material flows between profit centers.

Define Account Determination for Internal Goods Movements

Internal goods movements in Logistics (stock transfers, materials usage for production orders, and so on) can lead to an exchange of goods between profit centers.

To be able to show the material flow correctly in Profit Center Accounting, you need to look at the profit center as an independent company. This means that a sale is made by the sending profit center, while the receiving profit center posts a goods receipt.

This way of looking at postings in Profit Center Accounting cannot be achieved based solely on the original posting.

You therefore need to make an additional account assignment. A separate **account determination** generates additional posting lines on the basis of the original document, and then posts these in Profit Center Accounting.

The source document is not changed. Therefore this has **no** effect on Financial Accounting (FI). However, note that these lines are also updated in FI if your organization is using transfer prices and storing the profit center valuation method in FI (see the example below).

For some goods movements, it is not useful to make an additional posting. These goods movements are given a **special handling**. The table that contains these exceptions is fully maintained and delivered by SAP in the standard system. You only need to define **special handling** if you require this for movement types that you defined yourself.

In this step, you enter the accounts that you need in order to represent internal goods movements in Profit Center Accounting for each controlling area:

- Accounts for internal revenue
- Accounts for internal balance sheet changes
- Accounts for deliveries from profit centers

In addition, you can define an alternative account for posting internal balance sheet changes at the receiver profit center. Such a differentiation of the accounts is useful when, for example, you want to identify these balance sheet changes as cost of sales at the sending profit center.

Stock transfer of material M1 from plant 01 to plant 02 using the legal valuation method in Profit Center Accounting and in FI

FI posting:

Stock to stock 1,000

EC-PCA posting:

PrCtr material M1 plant 01 --> internal revenues (1,000) --> Internal B/S change 1,000 PrCtr material M1 plant 02 --> delivery from profit center 1,000 --> Internal B/S change (1,000)

In this case, no original postings are transferred. Instead, all the postings are represented in Profit Center Accounting by additional postings.

Material withdrawal of a semifinished product 1 from plant 1 and plant 2 using transfer prices

The stock value using legal valuation is 1,000 The stock value from the PrCtr view is 1,200 The transfer price is 1,500 **FI posting:**

In FI, only legal valuation is recorded. Change in stock (plant 2) to stock (plant 1) 1,000

EC-PCA posting:

EC-PCA posting: EC-PCA stores the profit center valuation. PrCtr material M1 plant 01 --> internal revenues (1,500) --> Internal B/S change 1,200 PrCtr material M1 plant 02 --> delivery from profit center 1,500 --> Internal B/S change (1,500)

Material withdrawal of semifinished product material 1 (profit center 1) for production order 2 (profit center 2) using legal valuation in Profit Center Accounting and FI

For material withdrawals, the costs on the receiver profit center are shown, plus an internal sale is assigned to the sender profit center. On the receiving side, it may be necessary (consumption of semifinished goods) to correct the posting under "Change in stock" with a posting "Delivery from profit center". **FI posting:**

Change in stock SF to stock 1,000

EC-PCA posting:

Profit center 1 --> Internal revenue(1,000)--> Internal B/S change1,000Profit center 2 --> B/S change SF1,000--> Internal B/S change(1,000)--> Delivery from profit center1,000

The two lines "Change in stock" on the receiver side cancel each other out. The transaction is an external delivery from the point of view of the receiver profit center, which is reflected in the line "Delivery from profit center".

Material withdrawal of a semifinished product 1 (profit center 1) for production order 2 (profit center 2) using transfer prices

The stock value using legal valuation is 1,000 The stock value from the PrCtr view is 1,200 The transfer price for the semifinished material is 1,500 **FI posting:**

```
In FI, only legal valuation is recorded.
Change in stock SF to stock 1,000 EC-PCA posting:
```

EC-PCA posting: EC-PCA stores the profit center valuation.

 Profit center 1 --> Internal revenue
 (1,500)

 --> Internal B/S change
 1,200

 Profit center 2 --> B/S change
 1,500

 --> Internal B/S change
 (1,500)

 --> Internal B/S change
 (1,500)

 --> Delivery from PrCtr
 1,500 EC-PCA postings when alternative account on receiver side EC-PCA posting: EC-PCA stores the profit center valuation.

- Profit center 1 \rightarrow Internal revenue (1,500)
 - --> Internal costs 100,-
- Profit center 2 --> B/S change 1,500

--> Internal B/S change (1,500)

--> Delivery from PrCtr 1,500

Requirements

You must already have created FI profit and loss accounts with the "Only Automatic Posting" indicator.

- Accounts for internal revenue
- Accounts for internal balance sheet changes
- Accounts for deliveries from profit centers Cost elements are *not* permitted.

Activities

Choose the **material types** for which you want to represent goods movements between profit centers.

Note that only the material types you choose here will be taken into account in the representation of material flows between profit centers.

You may want to leave out material types for raw materials or operating supplies which have little value. If you do not choose these material types, only the consumption postings will be debited to the profit center on the receiver side.

All in all, you can make account determination dependent on the following objects:

- Material type
- Valuation class
- Valuation grouping code

Blank entries (for example, without a valuation class) are interpreted as generic entries. However, the material type must have at least one entry.

In the field No receiver records you enter whether the system should ignore the data records on the receiver side.

This might make sense if you also want to represent goods movements of raw materials between profit centers. In this case, the system posts a "material usage" on the receiver side. It is not necessary to correct the "change in stock" as shown in the third and fourth examples.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Define Acct Determination for Production Variances in Delivs to other Pctrs

When you use transfer prices in cross-plant manufacturing, a price is negotiated for goods delivered from one profit center to another. However, if the actual cost of goods manufactured differs from the planned cost, you need an additional account in which to post production variances. This account is necessary so that you can settle the difference to the sender profit center instead of the receiver. In this step, you define the profit and loss account to which you want to post production variances. You can define this separately for each valuation class and valuation grouping code.

Requirements

The necessary profit/loss account must already exist, and the "Automatic posting only" indicator must be selected in Financial Accounting

Activities

Specify the account for production variances for each valuation class and valuation grouping code.

Further notes

For more information, see "Transfer Pricing" in the online Documentation for Profit Center Accounting.

Define Special Handling for Internal Goods Movements

All internal goods movements which are not represented as material flow between profit centers are contained here.

Example

Scrapping a material:

FI posting: Usage scrap to stock 1,000.00

This goods movement naturally does not need to be represented as a material flow between profit centers.

Standard settings

The table is maintained completely and delivered with the standard R/3 system.

Activities

If you have defined your own movement types in Materials Management, you need to check whether these lead to a material flow between profit centers.

If this movement type should not be taken into account, you need to make an entry in this table.

Profit Planning

If you use transfer prices in the profit center valuation view, you can plan quantities for goods movements and have the planned quantities valuated with transfer prices. You can also valuate your planned stock changes with the cost of goods manufactured. In addition, you can derive the corresponding cost of goods manufactured using transfer prices from material costing.

For more information, see the SAP Library, under Profit Center Accounting -> Enterprise Controlling -> Profit Center Accounting -> Profit Planning

The activities in this section let you set up how EC-PCA reads the data from material costing:

Define Access to Material Costing

Assign Costing Key

Define Allowed Accounts

Define Keys for Accessing Material Cost Estimates

With this function, you can specify which cost estimates in Product Cost Planning should be used to valuate plan data in Profit Center Accounting.

For profit planning, the planned output costs are required from product cost planning, from the profit center valuation view. For this purpose, you define a set of access parameters, known as costing keys.

These parameters include the following:

- Costing variant
- Costing version
- Costing date
- Period/Year
- Plan period indicator

Requirements

You are using transfer prices to represent the profit center viewpoint.

You are using material costing.

You have defined representative materials. **Activities**

Define all the necessary costing keys that you want to use to valuate plan data in Profit Center Accounting. You can find further information on this topic in the Implementation Guidelines (IMG) for Product Cost Controlling, under Cost Estimate with Quantity Structure.

Assign Costing Key

In this activity, you maintain derivation rules to specify which costing key should be used to access the relevant material cost estimate.

You can derive a costing key from the one of the following source fields, or a combination of them.

- Representative material
- Version
- Fiscal year
- Plant

Activities

By combining these source fields, you can determine a sequence of derivation steps. To do this, enter Edit -> Choose or Edit -> Create Step

Under Goto -> Maintain rule values you can maintain several derivation rules per derivation step, which the system will process in succession. As soon as a default profit center is found for a derivation rule, the system will add this profit center and will cease processing derivation rules.

It is possible that not all characteristics are set in all postings. If the system does not find a default for a posting in any of the rule values contained in the derivation step, it skips to the next derivation step.

Example

You assign the costing key I01 to the representative material ABC in plant 001.

Requirements

You have already defined the corresponding costing keys in Customizing, underDefine Keys for Accessing Material CostEstimates.

Further notes

If you have activated the key figure *Display error message* for a derivation step under *Edit -> Choose* on the tab page *characteristics*, a warning will appear if no rule value is maintained for the current posting. The derivation step will then be ended, and other existing derivation steps will cease to process. To avoid this, enter a rule value for every combination of source values you use.

On the same tab page, you can make a setting so that rule values can be maintained with validity date. This allows you, for example, to deactivate values temporarily for testing purposes without having to delete them.

For more information about maintenance of derivation rules, see the section Profitability analysis (CO-PA) in the SAP Library, under Characteristic derivation.

Notes on Transport

You have to transport derivation rules manually. Choose Extras -> Transport.

Define Permitted Accounts

In this activity, you define permissible revenue and stock change accounts for profit planning.

For the revenue accounts which you define as permissible here, the following are derived:

- Transfer prices for the planned sales quantities
- Material direct costs for the planned production quantities

For the stock change accounts which you define as permissible here, the following are derived:

- The cost of goods manufactured for planned stock changes

For further information, see the SAP Library, under *Profit Center Accounting -> Planning -> Planning Directly in Profit Center Accounting -> Profit Planning*.

Activities

Enter your required P&L accounts as revenue or stock change accounts.

Note that an account cannot be entered as a revenue account AND a stock change account simultaneously.

Actual Postings

In the following activities, you make settings which are necessary for creating and allocating actual data in Profit Center Accounting.

Basic Settings: Actual

You must carry out the following activities in order to be able to assess or distribute actual data in Profit Center Accounting or to enter data directly there: Maintain Document Types

Define Number Ranges for Local Documents

Maintain Document Types

This option lets you define which document types are valid for allocating actual data (assessment and distribution) and creating profit center documents.

Actions

- 1. Define a new document type or maintain an existing one.
- 2. The three columns for the transaction currency, local/company code currency and third currency determine which currencies are stored for this document type. The simplest is to select all three. The flag for checking balances determines whether documents with a balance not equal to zero should be posted.
- 3. The information on the number ranges used for local and global ledgers is only displayed here. It is defined here automatically for when you maintain number ranges for this document type later. The profit center ledger "8A" is a local ledger.
- 4. Enter a name for your document type.

Note

You can use the standard document type A0 "FI-SL Actual posting". However, you should use your own document types if possible.

Define Number Ranges for Local Documents

In this activity you assign concrete number intervals to the documents you created and to those delivered with the system. The number assignment is dependent on the company code and the fiscal year.

Technically, this function is the same as number interval maintenance for local G/L documents.

Actions

You can reach the screen for maintaining number interval groups using Group -> Maintain. There you can make all the necessary settings.

Document types which belong together logically should be put together into one group. For example, it is advisable to create all the document types in Profit Center Accounting as a single group.

- Function Group -> Insert

This function lets you add a new group. You need to enter fiscal-year specific number range intervals for each company code where the document types in that group are going to be used. When you insert the group, the system will ask you for the first combination of company code, fiscal year and number interval.

- Function Interval -> Maintain

This function lets you enter number range intervals for additional combinations of company codes and fiscal years for the selected group. You receive the screen for maintaining number range intervals. You can make the necessary entries by using Edit -> Insert year.

- Functions Edit -> Select element / Assign element group

Next, the document types must be assigned to the group which you have created. Select the desired document types, which are here referred to as **elements**, using the first function. Then assign the selected element to the group and the number interval using the second function. Save the settings.

You can view the current settings at any time from the screen for maintaining number range intervals for local G/L documents using Number range object -> Overview.

Notes on transporting

INCLUDE TRANS_NUM OBJECT DSYS ID CHAP

Manual Entry using a Layout

It is possible to enter actual postings and values for statistical key figures manually in Profit Center Accounting.

In the following activities, you define the layouts in which you can enter the required data.

Maintain Layout for Document Entry

Maintain Layout for Entry of Statistical Key Figures

Maintain Layout for Document Entry

In this actitvity, you define or change layouts for document entry of actual postings.

A document entry layout must contain the following characteristics:

- Profit center
- Account
- Company code

These characteristics must be specified with a characteristic value, a group, an interval or a variable. If you specify a variable, this must be a mandatory variable, so that the user has to assign it a when creating the document.

If you design a layout with lead columns, one of the lead columns must be assigned the characteristic posting line. You must then specify the maximum number of posting lines that a document may contain. It is recommended that the whole possible range is specified from 1 to 999.

Plan and actual data are distinguished using the *Plan/Actual flag*. If the layout contains no plan data, it is not necessary to select this characteristic. Otherwise, you must enter the Plan/Actual flag for each column or row. For plan data, the version must be entered in the columns/rows. No version can be entered for actual data.

The characteristics *Functional area, Partner profit center, Partner company, Representative material, Plant, Object class* and *Unit of measure* are optional in the layout and can be set as optional variables. In this case, they do not necessarily have to be specified during document entry.

Note that a partner profit center is entered for elimination of internal business volume for the purposes of Reporting/Consolidation. Actual values, which cannot be eliminated during elimination of internal business volume when analyzing a superior profit center group, should not be entered with a partner profit center, even if the partner is known. (Example: Entry of direct consumption in profit center P1 from the balance of profit center P2).

The characteristic origin object is optional, though it must be specified if used in the layout.

You must include at least one key figure with currency amounts in your document entry layout. If you choose the key figure *Transaction currency*, the transaction currency(ies) to be entered must be specified. Note that the transaction currency is only updated if you enter it explicitly.

In addition to currency amounts, you can also create quantities, which cannot, however, be planned without currency amounts. If you would like to create quantities, you should also include the characteristic *Unit of measure* in the layout. You need to enter the unit(s) of measure to be created. If you do not do this, the data will be updated without the unit of measure. Note that if you enter actual data without a unit of measure, you can change the planned quantities later, but cannot change the unit of measure.

Although plan values can be displayed in a layout for document entry and be used in formulas for calculating other amounts, they are not ready for input.

Activities

- Create layouts in accordance with your requirements for entering actual postings or change an existing layout.

Further notes

You can find further information about defining layouts under Procedure for Layout Definition.

In the R/3 standard system, layouts are only created in client 000. To use them as templates for your own layouts, you have to import them (see Import Document Entry Layout).

Notes on Transport

The Implementation Guide (IMG) for Profit Center Accounting contains a function for transporting layouts, under Tools -> Transport Customizing Settings.

Maintain Layout for Entry of Statistical Key Figures

In this activity, you define or change layouts for entering and displaying statistical key figures.

A layout for entering statistical key figures must contain the following characteristics:

- Profit center
- Statistical key figure
- Fiscal year
- Period
- Company code

These characteristics must be specified, that is, assigned a characteristic value, a group, an interval or a variable. If you specify a variable, this may only be a mandatory variable, so that the user must enter a value here when entering statistical key figures.

Plan and actual data are distinguished using the *plan/actual indicator*. If the layout contains no plan data, you do not need to select this characteristic. Otherwise, the plan/actual indicator must be set for each column or row. For plan data, the version must be specified in each column or row. No version can be specified for actual data.

The characteristics *functional area, representative material and plant* are all optional in the layout, and can be set as optional variables. In this case, it is not strictly necessary to specify them when entering statistical key figures.

The characteristic origin object is optional, though it must be specified if used in the layout. If you want to summarize over the origin object, it may not be used as a characteristic in the layout.

No currency amounts can be entered in layouts for statistical key figures. Only quantities can be entered. The units of measure are clearly determined by the statistical key figures. For this reason, the characteristic *unit of measure* must be contained in the layout.

Activities

In accordance with your requirements, create layouts for statistical key figures or change an existing layout. Further Notes

For further information on defining layouts, see Layout definition procedure.

In the standard R/3 system, layouts are only created in client 000. To use these as templates for your own layouts, you must import them (see Import layout).

Transport notes

For the transport of layouts, there is a function in the Implementation Guide (IMG) for Profit Center Accounting under Tools -> Transport Customizing settings.

Maintain Automatic Account Assignment of Revenue Elements

In this activity you can assign revenue elements and sales deductions to profit centers.

The system automatically enters the specified profit center in the primary line items of the revenue elements.

Prerequisites

- You have completely defined the controlling area.
- You have maintained the revenue element or sales deduction you want to assign.
- You have created a master record for the desired profit center.

Actions

Enter the profit center which you want the system to add to the line item of the particular revenue element.

Additional Information

See also Automatic assignment of cost elements in the Cost Center Accounting Implementation Guide.

You can find further information in Maintain Automatic Account Assignment in Cost Center Accounting Customizing.

Choose Additional Balance Sheet and P&L Accounts

In the standard system, all postings made to cost and revenue elements are transferred to Profit Center Accounting. Profit and loss accounts are also transferred if they affect operations in Logistics or where a profit center is entered for the underlying operation.

The functions Choose Accounts and Derivation Rules for Finding the ProfitCenter let you transfer additional accounts to Profit CenterAccounting. In this way, you can transfer certain balance sheet accounts (payables, receivables, assets, inventories, and WIP) periodically or (except for payables and receivables) in realtime to Profit Center Accounting. You can also update other accounts, such as down payments on a WBS element, in Profit Center Accounting in realtime.

If no profit center is set for a specific transaction in one of these additional accounts, the system posts to the default profit center for that account interval. If you require greater flexibility in finding the profit center, you can also define derivation rules for this purpose.

Example

Other items which can be treated as accounts in Profit Center Accounting include payment accounts, down payments or retained earnings accounts.

Further notes

For more information about transferring balance sheet items, see the section Balance Sheet Items in Profit Center Accounting in the online documentation "EC Profit Center Accounting".

Choose Accounts

In this activity, you define which accounts or account intervals you want to transfer to Profit Center Accounting.

If no profit center is specified in a posting, the system uses the default profit center for the account or account interval.

If determination of a profit center per controlling area and account interval is not precise enough for you, you can also define derivation rules for finding the default profit center.

Activities

Enter the desired accounts or account intervals.

Further notes

Be sure that the accounts you enter do not overlap with the accounts already transferred by default.

For more information, see the SAP Library for Profit Center Accounting, under Actual Postings -> Balance Sheet Items in Profit Center Accounting. Derivation Rules for Finding the Profit Center

Here you can define derivation rules that the system should use to find a default profit center for the additional balance sheet/profit and loss accounts.

If no profit center has been specified for an additional balance sheet or profit and loss account, the system finds a default profit center using the derivation rules. If this does not yield a profit center, it uses the default profit center maintained for that account or the corresponding account interval.

To distinguish profit centers according to derivation rule, you have the following source fields:

- Account number or account interval (mandatory)
- Company code
- Valuation area
- Business area

Activities

By combining these source fields, you can determine a sequence of derivation steps. To do this, enter Edit -> Choose or Edit -> Create Step

Under *Goto -> Maintain rule values* you can maintain several derivation rules per derivation step, which the system will process in succession. As soon as a default profit center is found for a derivation rule, the system will add this profit center and will cease processing derivation rules.

It is possible that not all characteristics are set in all postings. If the system does not find a default for a posting in any of the rule values contained in the derivation step, it skips to the next derivation step.

Example

With postings in the balance sheet account X to company codes 1 to n, the system finds profit center A.

Requirements

You can only define derivation rules and derivation steps for accounts or account intervals that you have already decided to transfer to Profit Center Accounting (see Choose Accounts).

Further notes

If you have activated the key figure *Display error message* for a derivation step under *Edit -> Choose* on the tab page *characteristics*, a warning will appear if no rule value is maintained for the current posting. The derivation step will then be ended, and other existing derivation steps will cease to process. To avoid this, enter a rule value for every combination of source values you use.

On the same tab page, you can make a setting so that rule values can be maintained with validity date. This allows you, for example, to deactivate values temporarily for testing purposes without having to delete them.

For more information about maintenance of derivation rules, see the section Profitability analysis (CO-PA) in the SAP Library, under Characteristic derivation.

Notes on Transport

You have to transport derivation rules manually. Choose Extras -> Transport.

Period-end closing

In this activity, you define period-related actual allocations with sender/receiver relationships in cycles.

Define Distribution

Create Assessment Cost Elements

Define Assessment

Maintain Field Usage

Define Distribution

In this step, you define cycles as rules for actual profit center settlement by account.

Standard settings

EC-PCA is delivered with application-specific settings for the distribution cycles. If necessary, you can change these settings under Maintain Field Usage.

Recommendation

You can improve system performance by carrying out assessment instead of distribution. This is possible provided that it is not necessary to state the cost elements originally posted.

For example, if allocations are carried out from a sender profit center with 100 cost elements to 500 receiver profit centers, this means that

- using assessment (with a single assessment cost element:
 500 sender summary records and 500 receiver summary records are updated. Partner profit centers are updated on both sides, though no differentiation is made according to the underlying cost elements.
- using distribution:
 100 x 500 sender summary records and 100 x 500 receiver summary records are updated. Summary records are differentiated both according to partner profit center and cost elements.

The greater the number of senders and receivers, the greater the benefit to be gained in terms of system performance by using assessment rather than distribution.

Activities

To create a cycle, proceed as follows:

- 1. Specify a name and a start date for the cycle.
- 2. Enter the header data for the cycle.
- 3. Create the individual segements using Attach Segment and make the required entries for distribution rules/assessment rules.
- 4. Save the cycle.

Further notes

You can transport these settings using the Profit Center Accounting transport connection.

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 Assessment

In this step, you define cycles as rules for actual profit center settlement.

In contrast to distribution, the original cost elements are updated neither at the sender nor at the recipient. Instead, assessment is carried out via one or more special assessment cost elements.

Requirements

You have already created assessment cost elements.

Standard settings

EC-PCA is delivered with application-specific settings for the assessment cycles. If necessary, you can change these settings under Maintain Field Usage.

Activities

To create a cycle, proceed as follows:

- 1. Specify a name and a start date for the cycle.
- 2. Enter the header data for the cycle.
- 3. Create the individual segements using *Attach Segment* and make the required entries for distribution rules/assessment rules.

4. Save the cycle.

Further notes

You can transport these settings using the Profit Center Accounting transport connection.

Maintain Field Usage

The settings required for allocations are already made in Profit Center Accounting. It is not normally necessary for you to make any changes to these settings.

If you do want to make changes, however, you can do this using the maintenance transaction in the component FI Special Ledger.

Recommendation

In Profit Center Accounting, the controlling area (KOKRS field) should be in the cycle level.

The company code cannot be maintained as a receiver criterion, as assessments and distributions can only take place within a company code.

Test every change made to field usage settings very carefully.

Example

You can, for example, specify

- which fields are to be used as sender fields and which as receiver fields
- that, when cycles are created, they can be restricted to certain company codes

Activities

You can find information about setting cycles in the Implementation Guide (IMG) for FI Special Ledger, under

Naintain Field Usage for Assessment

Maintain Field Usage for Distribution

You can make the necessary settings in the Implementation Guide (IMG) for FI-Special Ledger under Periodic Processing -> Allocation.

Further notes

Transferring Selected Balance Sheet Items

This section contains the following activities:

- You generate an opening balance for
- Asset Portfolios
- Material Stocks
- Work in Process

You must generate the opening balance to be able to transfer the corresponding balance sheet items online, as only transactions (changes in stock) are posted for these. Another condition for online transfer is that the appropriate balance sheet accounts are entered in Customizing for Profit Center Accounting, under Choose Additional Balance Sheet and P&L Accounts.

It is good practice to enter the affected balance sheet accounts as additional balance sheet and P&L accounts in good time before postings are made to a new period. This ensures that all postings to these accounts are transferred online to Profit Center Accounting. After period closing, you can generate the opening stock at period end in Profit Center Accounting. Online postings which were made in the previous period (transfer period) are then deleted.

- Payables and receivables cannot be transferred online to Profit Center Accounting. For this reason, you have to transfer them periodically, in the activity Generate Payables and Receivables. Under Perform Account Control for Valuation Differences, specify to which account corrections made to valuation differences are to be posted.

Generate Opening Balance for Material Stocks

In this activity, you set up the opening balance for materials.

The system determines the material stock balance from Materials Management and posts it to Profit Center Accounting.

After setting up the opening balance, it is advisable to post the changes in the material stock balance online to Profit Center Accounting, as this simplifies reconciliation with Financial Accounting.

However, you can also transfer the material stock balance to Profit Center Accounting periodically.

Further notes

You can only transfer the material stock balance for the current period or the previous period. It is not possible to transfer earlier periods.

When you transfer the material stock balance, only those company codes are offered which are maintained in Materials Management. You make the transfer under Maintain company codes for Materials Management

Transaction Change company codes from the Materials Management view

For more information on transferring balance sheet items, see the SAP Library for *Profit Center Accounting* under *Actual Postings -> Balance Sheet Items in Profit Center Accounting*.

Generate Opening Balance for Work in Process

In this activity, you create the opening balance for work in process (WIP).

WIP is determined in the results analysis and posted to Profit Center Accounting.

To create an opening balance, select *Create opening balance*. Only now cam the system select WIP for all previous periods and years. Otherwise, the system only the determines and transfers the delta WIP from the previous transfer period.

After creating the opening balance, it is recommended that you post the changes in the WIP balance to Profit Center Accounting online, as this simplifies reconciliation with Financial Accounting.

However, you can also transfer the WIP balance to Profit Center Accounting periodically. In this case, do not select Create opening balance, as this would have an adverse effect on performance.

Further notes

For more information on transferring balance sheet items, see the SAP Library for Profit Center

Generate Opening Balance for Assets

In this activity, you create the opening balance for assets.

The asset balance is determined from Assets Management and posted to Profit Center Accounting.

After creating the balance, it is recommended that you post the changes in the asset balance to Profit Center Accounting online, as this simplifies reconciliation with Financial Accounting.

However, you can also transfer the asset balance to Profit Center Accounting periodically.

Further notes

If you are transferring your Asset Accounting to the SAP system from a different system, read the following paragraphs.

After transferring from an old system, Asset Accounting will not contain the same information for depreciations as for a posting of depreciations in the SAP system.

For a month in which depreciations were still posted in the old system, it is therefore only possible for asset balances to be posted correctly to Profit Center Accounting provided that no more depreciation runs are executed (in either the old system or in the SAP system).

For a month in which depreciations were posted in the SAP system, it is not possible to transfer asset balances to Profit Center Accounting later. It is recommended that you transfer asset balances as early as possible, that is, before a depreciation run is started for a subsequent period. This is better for performance, as the system then reads the balances from the annual table, instead of from the period table.

When you are transferring asset balances, the system only proposes company codes which have a chart of depreciation assigned to them in Asset Accounting. For further information, see Assign Chart of Depreciation to Company Code, transaction OAOB..

For more information about transferring balance sheet items, see the SAP Library for Profit Center Accounting, under Actual postings -> Balance sheet items in Profit Center Accounting.

Generate Opening Balance for Payables and Receivables

The purpose of this activity is to:

- 1. create the opening balances for payables and receivables
- 2. transfer the balance changes for payables and receivables periodically

The system determines open items and posts them periodically to Profit Center Accounting.

In contrast to other balance sheet items, payables and receivables cannot be transferred to Profit Center Accounting online. You must always transfer them periodically.

Requirements

You have started distribution of open items according to profit centers or business areas by choosing *General ledger -> Periodic processing -> Closing -> Regroup -> Calculate B/S readjustment* in the application menu for *Financial Accounting*. (Transaction FD)

When the system transfers payables and receivables to Profit Center Accounting, it corrects any valuation variances arising from foreign currency revaluation. Under Perform Account Control for Valuation Differences Transaction 2KEM) determine which account these adjustments are to be posted to.

Activities

If you are transferring payables and receivables to Profit Center Accounting for the first time, read the following section.

When you post payables and receivables in Financial Accounting for the first time, the system creates a "noted item" for each open item, as the document is of relevance for subsequent distribution according to profit centers. This only happens, however, if Profit Center Accounting has already been activated or you are using business area balance sheets.

Missing open items

If you started Profit Center Accounting at a later point or are not using business area balance sheets, it is possible that there are still open items in Financial Accounting. No "noted item" is created for these when you post them. For this reason, the system does not select them during transfer to Profit Center Accounting. To transfer these open items to Profit Center Accounting anyway, proceed as follows:

- 1. Make sure that activity *B/S readjustment special functions* has not already been performed for business area balance sheets in the period in question. If this activity has been performed, do not under any circumstances perform it again for Profit Center Accounting. This would cause serious errors to occur.
- 2. Otherwise, choose General ledger -> Periodic processing -> closing -> Regroup -> B/S Readjustment -> Special functions (Transaction FG).
- 3. When the next popup appears, choose Set up readjustment.
- 4. Under Date of 3.0 Release upgrade, enter the date from which Profit Center Accounting is to be activated.
- 5. Unter Setup from (posting date) enter the date from which you want to see the open items in Profit Center Accounting.

The system selects all open items which were posted in the time period you entered.

Assignment to profit centers

The open items which were posted before activation of Profit Center Accounting are transferred to the dummy profit center. This also occurs if profit centers have been assigned to the participating materials and CO objects following activation of Profit Center Accounting.

Distribution to profit centers is based solely on document lines posted in Financial Accounting.

With customer enhancement F180A001, however, you can make assignments to profit centers. However, this is only possible for single-item invoices, that is, where the open item belongs to one profit center only and does not have to be distributed to more than one profit center.

If you wish to use this customer enhancement, you must set it up **before** you can perform the activities listed above.

The enhancement is called up in the activities Set up readjustment and . Subsequent Business Area/Profit Center Adjustment - Calculation.

This enhancement has no effect on documents which are already contained in the "note tables".

You can view the documentation on enhancements in SAP Enhancement Maintenance (transaction SMOD).

Further information about using enhancements can be found in Project Management of SAP Enhancements (transaction CMOD) under Utilities -> Online Handbook.

Perform Account Control for Valuation Differences

When you transfer payables and receivables into Profit Center Accounting, the system adjusts valuation differences arising from foreign currency revaluation. As a prerequisite for this, the foreign currency revaluation must have been carried out during balance sheet preparation and valuation differences therefore marked for the open items.

In this activity, you decide which account these adjustments through foreign currency revaluation are to be posted to.

There are two possibilities here:

Posting to the General Ledger account for payables/receivables

The payables and receivables are adjusted directly by the amount of the valuation differences.

The original amount of the payables and receivables can no longer be determined in Profit Center Accounting. The value at which payables and receivables are stored corresponds to the last foreign currency revaluation in Profit Center Accounting.

Posting to the balance sheet adjustment account of the general ledger account for payables/receivables

The payables and receivables are transferred at their original value to the general ledger account in Profit Center Accounting. The adjustments required for valuation differences are posted to the balance sheet adjustment account of the general ledger account. You can examine the exact settings for the accounts under Account determination. adjustment account. For more information on these settings, see Define accounts for exchange rate differences.

To show the actual value of open items, the values in the general ledger account and the accompanying adjustment account must be analyzed together.

This procedure is used in Financial Accounting.

Example

Posting a receivable in Financial Accounting with a current value of: 1000 DM.

Value of the receivable at period end: 950 DM Transfer to Profit Center Accounting:

By general ledger account

Account	Amount
140000	950 DM

By adjustment account

Account	<u>Amount</u>	
140000	1000	DM
140099	- 50	DM
Standard settings		

If you do not make any settings, the system will use the general ledger account.

Actual Data Transfer

Before you go productive with Profit Center Accounting, you may need to transfer historic data to Profit Center Accounting. The functions in this section let you transfer historic plan and actual data in separate steps.

Prerequisites

- The profit centers and the dummy profit center must already be defined in the relevant controlling area.
- The objects from which you want to transfer data must all be assigned to profit centers.
- The controlling area must be activated for Profit Center Accounting in the desired fiscal years. In addition, the controlling area settings (elimination of internal business volume, currency settings) must be maintained.
- For actual data, the control parameters must be maintained.

- For plan data, a plan version must be defined for Profit Center Accounting.

Transfer CO Actual Data Periodically

This function lets you manually post all the secondary costs from the following CO objects:

- cost centers
- internal orders
- investment orders
- sales orders (in make-to-order manufacturing)
- projects
- networks
- cost objects
- real estate
- profitability segments in account-based Profitability Analysis

Note that before the transfer, the system deletes all the existing secondary costs on the aforementioned objects.

If you are repeating the data transfer, note that only data transferred **in or after Release 3.0** can be deleted before the next transfer. This means that it is **not** possible to repeat a data transfer from before Release 3.0.

Prerequisites

The prerequisites for the actual data transfer are described in Data Transfer.

Actions

- 1. Choose the **controlling area**.
- 2. Choose whether you want to **post** the data or carry out a **test run**.
- 3. If errors occur when you transfer historic data, the system stores the incorrect records in a separate file. These records can then be posted to Profit Center Accounting separately after you have rectified the errors. To do this, choose the function *Post incorrect records*. Note that **only the incorrect records** from the last regular transfer are posted.
- 4. You have the option of transferring line items. However, this is not recommended due to the large data volume.

Note

For more information, see Customizing under Transfer FI actual data.

Select and Transfer CO Actual Data

With this function you can transfer selected actual data from all the CO objects to Profit Center Accounting. You can select the data by fiscal year, document number and activity.

When you run the transfer, note that the functions *Check for existing records* and *Cancel* only work if you are storing line items in Profit Center Accounting. Before each transfer, you can do a test run and then check the information contained in the log.

The log displays a total per cost element for each object selected. By double-clicking on these objects, you can display the individual document numbers. From there you can also access the CO document by double-clicking again.

Requirements

- The prerequisites for the actual data transfer are described in Data transfer. **Actions**
- 1. Choose the **controlling area**.
- 2. Choose the fiscal year, a document number interval and an activity from Controlling.

Select the relevant indicator for your transfer.

Transfer FI Actual Data

This function lets you post data from Financial Accounting to Profit Center Accounting.

All the documents found for the selection criteria are displayed in a list. By double-clicking you can look at the corresponding FI document to check whether the desired documents were selected.

Requirements

- 1. Profit Center Accounting must be active.
- 2. The control parameters for actual data must be maintained. In particular, the parameter "Line items" must already be set if desired.

Additional prerequisites for the data transfer are described in the section Data Transfer.

Transfer MM Actual Data

MM Actual Data

With this function you can post data from Materials Management to Profit Center Accounting.

In the log, the system displays all the documents found which met the selection criteria. You can access each MM document individually by double-clicking to make sure that the desired documents were selected.

Prerequisites

1. Profit Center Accounting must be active.

2. The actual control parameters must be maintained, particularly the parameter "Line items".

Additional prerequisites for the data transfer are described in the section Data Transfer.

Transfer SD Billing Documents

This function lets you transfer billing data from the SD Module to Profit Center Accounting.

Note that the system only selects **data for which an accounting document already exists**. Billing documents which have not yet been transferred to FI, cancelled documents, documents in the price determination, and so on are not transferred.

The log displays the number of billing documents chosen and then divides this into how many were transferred to Profit Center Accounting and how many either were not transferred or contain errors. The billing documents not transferred include those which do not contain a real error but also do not contain any data to be assigned to a profit center.

The system displays further information if you double click on a line.

Requirements

- 1. Profit Center Accounting must be active.
- 2. The control parameters for actual data must be maintained. In particular, the parameter "Line items" must already be set if desired.

Further requirements for the actual data transfer are described in chapter Data Transfer.

Statistical Key Figures: Transfer Actual Opening Balance

In this activity, you transfer the opening balances already created in Controlling for statistical key figures.

If the values are changed in Controlling following the transfer, and the online transfer is active for actual data (see Set Control Parameters for Actual Data), changes are updated automatically in Profit Center Accounting.

In a production run, the system deletes any existing figures when the opening balance is generated. The system only deletes key figures for the selected object type. Key figures that were entered directly in Profit Center Accounting are not deleted.

You can therefore repeat this transaction as often as you like, without the risk of multiple entries or loss of data. In addition to online transfer, it is therefore also useful when you wish to transfer statistical key figures periodically.

Further notes

If you carry out a test run, the system only creates a transfer log. **Preparation for Consolidation**

In this IMG activity, you make the necessary settings for consolidation in Profit Center Accounting. Consolidation refers to the elimination of internal revenues within a company. To make this possible, you must know both the profit center and a partner profit center for each posting.

Company codes in different SAP systems

If your organization has company codes in different systems, you need to define rules for the derivation of partner profit centers in purchasing and sales.

All company codes in one SAP system

If your company codes are all in the same SAP system, you must activate profit center consolidation for your organization and then choose the companies for which partner profit centers can be determined using a special program.

Derivation: Partner Profit Center in Purchasing and Sales

When goods are exchanged between profit centers in different company codes and different SAP systems, it is not automatically possible for the system to find the partner profit center for the posting. In such cases, you need to define rules for deriving the partner profit center in other systems.

Derive Partner Profit Center in Purchasing

In this IMG activity you maintain rules for deriving the partner profit centers in purchasing transactions.

You can derive the partner profit center from any one or more of the following source fields:

- Vendor number
- Material number
- Partner company
- Sender profit center

Activities

By combining these source fields, you can determine a sequence of derivation steps. To do this, enter Edit -> Choose or Edit -> Create Step

Under Goto -> Maintain rule values you can maintain several derivation rules per derivation step, which the system will process in succession. As soon as a default profit center is found for a derivation rule, the system will add this profit center and will cease processing derivation rules.

It is possible that not all characteristics are set in all postings. If the system does not find a default for a posting in any of the rule values contained in the derivation step, it skips to the next derivation step.

Example

When you buy material M1 from vendor 001 - 100, the system determines that the partner profit center is "PP1"

Requirements

Profit center involved in exchanges of goods or services between company codes must be defined in all systems. This also applies to profit centers in different controlling areas. Thus in the above example, partner profit center PP1 needs to be defined and must have the same meaning in all affected controlling areas and systems.

Further notes

If you have activated the key figure *Display error message* for a derivation step under *Edit -> Choose* on the tab page *characteristics*, a warning will appear if no rule value is maintained for the current posting. The derivation step will then be ended, and other existing derivation steps will cease to process. To avoid this, enter a rule value for every combination of source values you use.

On the same tab page, you can make a setting so that rule values can be maintained with validity date. This allows you, for example, to deactivate values temporarily for testing purposes without having to delete them.

For more information about maintenance of derivation rules, see the section Profitability analysis (CO-PA) in the SAP Library, under Characteristic derivation.

Notes on Transport

You have to transport derivation rules manually. Choose *Extras -> Transport*.

Derive Partner Profit Center in Sales

In this IMG activity you maintain rules for deriving the partner profit center in sales transactions.

You can derive the partner profit center from any one or more of the following source fields:

- Customer number
- Material number
- Partner company
- Sender profit center

Activities

By combining these source fields, you can determine a sequence of derivation steps. To do this, enter Edit -> Choose or Edit -> Create Step

Under Goto -> Maintain rule values you can maintain several derivation rules per derivation step, which the system will process in succession. As soon as a default profit center is found for a derivation rule, the system will add this profit center and will cease processing derivation rules.

It is possible that not all characteristics are set in all postings. If the system does not find a default for a posting in any of the rule values contained in the derivation step, it skips to the next derivation step.

Example

When you sell material M1 to customers 001 - 100, the system determines that the partner profit center is "PP1"

Requirements

Profit center involved in exchanges of goods or services between company codes must be defined in all systems. This also applies to profit centers in different controlling areas. Thus in the above example, partner profit center PP1 needs to be defined and must have the same meaning in all affected controlling areas and systems.

Further notes

If you have activated the key figure *Display error message* for a derivation step under *Edit -> Choose* on the tab page *characteristics*, a warning will appear if no rule value is maintained for the current posting. The derivation step will then be ended, and other existing derivation steps will cease to process. To avoid this, enter a rule value for every combination of source values you use.

On the same tab page, you can make a setting so that rule values can be maintained with validity date. This allows you, for example, to deactivate values temporarily for testing purposes without having to delete them.

For more information about maintenance of derivation rules, see the section Profitability analysis (CO-PA) in the SAP Library, under Characteristic derivation.

Notes on Transport

You have to transport derivation rules manually. Choose *Extras -> Transport*.

Read Purchase Orders/Sales Orders

If the company codes in your organization are stored in the same system, the system can determine the partner profit center using a special program as follows:

- With billing documents and goods deliveries to affiliated companies, the system determines the profit center from the partner company's purchase order and sets this as the partner profit center.
- With billing documents and goods deliveries from affiliated companies, the system determines the profit center from the partner company's sales order or delivery (with stock transport orders) and sets this as the partner profit center.

For more information on determining partner profit centers, see the SAP Library for Profit Center Accounting under Preparations for Consolidation.

Prerequisites

You have activated the program for the relevant companies (see Identify Companies in the Same Client.

Identify Affiliated Companies

In this activity, you name all the affiliated companies for which the system should find the partner profit center by reading the corresponding purchase order or sales order. The system does this by reading the corresponding purchase order or sales order.

This is possible when the company is in the same client of your system and is using the SAP modules MM or SD.

Activities

Select the field Read for the desired companies.

Note that reading logistical predecessor documents has an adverse effect on system performance. You should therefore only activate the field if it is also possible to find the partner profit centers.

Further notes

The field Read is also used for business area consolidation.

For more information, see the SAP Library, under Profit Center Accounting, Preparation for Consolidation.

Information System

In this section, you find the functions needed to:

- Install the information system for Profit Center Accounting in the current client
- Make the SAP standard reports available
- Create your own reports using *drilldown reporting* or the *Report Painter*

With the exception of the activity defining report groups and read programs for the archive, you can carry out all of these activities from the Profit Center Accounting application menu.

Drilldown Reporting

In the following steps, you make the settings which you need in order to call up and create drilldown reports in a client.

The following steps must be carried out in Customizing:

Import Reports

Import Forms

Transport Reports

Transport Forms

Maintain Key Figures

The following steps can be carried out either in Customizing or from the application:

Maintain Variables

Maintain Form

Maintain Report

Maintain Currency Translation Keys

Reorganization

For more information about using drilldown reporting, see the SAP Library, under CA-Cross-Application Components -> Drilldown Reporting.

Import from Client

In the following activities, you can import reports and forms from a source client to the client in which you are working.

Import Forms

Import Reports

Import Reports

In this activity, you can import the standard reports from a source client (client 000 for example) to the client in which you want to work.

You must do this if you want to use the standard reports in your client.

Activities

- 1. Enter the source client.
- 2. Select the desired reports.
- 3. Decide whether you want to import the reports online with the function "Execute" or in the background ("Execute in background").

Import Forms

In this activity, you import forms from a source client (from client 000 for example) to the client in which you want to work.

To use the standard forms delivered by SAP in the client in which you are working, you first have to import these forms from client 000.

Activities

- Enter the source client.
- Select the forms you require.
- Decide whether you want to import the forms online with *Execute* or in the background with *Exec. in Background*.

Maintain Key Figures

In this step, you maintain the key figures.

The basic key figures of an aspect are the value and quantity fields in the relevant data structure. In order to prevent redundant data being stored, you should only save values/quantities on the database which cannot be calculated from other values/quantities. Calculated key figures can be defined using the key figure transaction. You need to enter an arithmetic formula to form a calculated key figure. Valid components of the formula are the basic key figures of the aspect, constants and key figures already defined.

Note

Key figure formulas may be up to 4096 bytes long. Note that key figures in the info system are substituted internally.

Actions

- 1. Choose an aspect for which you wish to maintain key figures.
- 2. Enter a new key figure or edit an existing one.
 - Maintain the short text, the description and enter a formula.
 - You can assign the key figure to a key figure group which is used in reporting when defining reports. Each key figure is attached to a particular aspect, however, if all the basic key figures used in it are also available in a second aspect, the resulting key figure can also be used in the second aspect if you enter it in table TKCTA.

Further information

Using the function 'Display basic fields', you can display the possible components for the formula. Using the function 'Switch basic fields', you can switch between basic key figures, existing key figures and constants.

The following operators are supported in the formula:

<u>Operator</u>	Description
+, -, *, /	Basic arithmetic operations
%	Percentage variance
%A	Percentage
**	Raise to a power
=	Assignment
ABS	Absolute amount
COS	Cosine
DIV	Division (of integers)
EXP	Exponential function
LOG	Logarithm
MAX	Maximum
MIN	Minimum
MOD	Remainder (of division of integers)
SIN	Sine
SQT	Square root

Before saving, you should execute the 'Check formula' function. The formula is then checked for correct syntax, the formula stages are generated and the technical attributes are set to default values. The formula stages are the different steps which build up the complete formula.

To reset the formula to that saved in the database or the last saved version, you can use the function 'Reset formula'.

When you choose the function 'Substitute formula', the key figures are replaced by the formulas behind them until the formula contains only basic key figures and constants.

Using the function 'Get formula(s)', you can display or hide the formulas for the key figures in the lower section of the formula area. You can specify the key figures by entering the name or subgroup.

Using the function 'Switchover paging', you can switch between the upper and lower formula areas.

Using the function 'Evaluate formula(s)', you can enter values in the basic key fields and have the system evaluate the formula ('Calculate key fig.'). The system displays the calculated values on the formula stage screen (you may have to switch between the value and attribute display).

Using the function 'Check recursive act.', you check whether recursive relationships exist between key figures.

The function 'EIS stage forms' is for internal purposes only.

If you choose the function 'Formula stages', you branch to another screen. Here, the system displays in which stages the key figure is calculated. In addition, you can set the time-based and non-time-based aggregation rules, reference field, 'No aggregation' flag and the display (number format).

The 'No aggregation' flag specifies how the key figure is to be calculated in the results row. It is either aggregated or calculated according to the rules of the formula from the aggregated basic key figures. **Example**

 A
 B
 A/B

 1
 10
 0

 10
 1
 10

 11
 10 or 1?

The 'No aggregation' flag must be set if:

3. operators other than '=', '+' and '-' are used in the key figure,

4. a key figure used in the formula has the flag 'No aggregation' set,

5. a time-based or non-time-based aggregation rule other than 'SUM' is used in a key figure used in the formula.

The (non-time-based) aggregation rule determines how the data is to be summarized. The following functions are available:

Function	Description
MAX	Maximum
MIN	Minimum
NOP	No aggregation
SC+	Summation where > 0
SC-	Summation where < 0
SUM	Summation

The time-based aggregation rule determines how the key figures are summarized with respect to time. If you have chosen a rule other than 'SUM', you need to enter a reference field. You can enter '&PERI' if the time-based aggregation should be based on fiscal year and period. The following functions are available:

Function	Description
AVG	Average
CNT	Counter
FIR	First value
LAS	Last value
MAX	Maximum
MIN	Minimum
NOP	No aggregation
SC+	Summation where > 0
SC-	Summation where < 0
STD	Standard deviation
SUM	Summation
VAR	Variance

You can maintain time-based and non-time-based aggregation separately. For stock (e.g. average warehouse stock), you may wish to choose time-based aggregation 'AVG' and non-time-based aggregation 'SUM'.

For any time-based aggregation other than 'SUM', you must enter a reference field. This can either be '&PERI' (for fiscal year and period) or a valid characteristic of type 'D'.

Further notes Transport of settings

Maintain Variables

In this step you define global variables for drilldown reports.

You use variables for flexibility during the creation of forms.

Variables are parameters that are either already provided by the system or are defined after a report is defined and run. The latter occurs when you fill the fields in a dialog screen.

Variables with an SAP exit or customer exit must not be entered.

Standard settings

The following global variables feature an SAP exit:

- Value variable for global parameters
- Value variable for ledgers with special logic
- Hierarchy variables for organizational units Hierarchy variables for FS items

The following generally applies to all variables:

- Variable names start with an *ampersand* character ("&").
- You can use the variable types characteristic value or hierarchy.
- You choose the characteristic via the field name.

Value variable for global parameters

Variable type Value Variable name &0GP Characteristic dimension, cons chart, ledger, version,

fiscal year, period, reference version, reference fiscal year, reference period

Type of substitution SAP exit Value variable for ledgers with special logic Variable type value

Variable name	&0FROMTCG
Characteristic	ledger (RLDNR)
Type of substitution	SAP exit

The ledger can be derived from a unique combination of the characteristics dimension, cons group, version and fiscal year. This is acheived by defining the characteristics in the report using the characteristic selection, or in forms by creating exactly one variable for the characteristics (as the variable for the From Value).

Hierarchy variable for organizational units	
Variable type	hierarchy
Variable name	&0FROMTCG
Characteristic	consolidation group,
	consolidation unit, partner unit
Type of substitution	SAP exit

If a report was defined with a hierarchy display for one of the specified characteristics, and the variable &OFROMTCG was chosen as the hierarchy, the name of the hierarchy is derived from the unique values for the dimension, totals cons gorup, version, fiscal year and period.

The dimension is unique when you determine the dimension in the report using the characteristic selection, or you define in the form exactly one variable for the From Value of the dimension. The same applies to the totals consolidation group. The version is derived from a unique value for the reference version; if that is not given, the version is taken from the characteristic "consolidation version". The fiscal year is derived from a unique value for the characteristic from the characteristic "fiscal year".

The period is taken from the value for the "reference period"; if that does not exist, then the highest of the variables residing in the form is used for the characteristic "period". If no value is found, then 16 is used.

Hierarchy variable for FS items	
Variable type	Hierarchy
Variable name	&0FROMTITM
Characteristic	FS item (RITEM)
Type of substitution	SAP exit

If a report was defined with a hierarchy display for characteristic *FS item* (RITEM) and the variable *&0FROMTITM* was chosen as the hierarchy, then the hierarchy name is derived from the unique data of the consolidation chart of accounts. The cons chart data is unique if you choose the cons chart of accounts in the report using the characteristic selection, or you define in the form exactly **one** variable for the From Value of the cons chart. Then all item hierarchies for this cons chart are displayed. If unique data also exists for the totals item, the sub-hierarchy of that totals item of the cons chart is displayed. **Activities**

Define your globale variables.

Further notes

For more detailed information, see Help -> SAP Library -> Cross-application components -> CA-General Drilldown Report.

Maintain Form

In this step, you can

- Create your own forms
- Change forms that you have created yourself
- Adapt standard SAP forms to your requirements You can assign a single form to several reports.

Prerequisites

If you wish to include global variables in a form, you must first define them under Maintain Variables.

Standard settings

SAP delivers standard forms in client 000, which you can copy into the client in which you are working. You can then either use the standard forms as they stand, or copy them as templates for your own forms.

The name space provided by SAP for the technical specification of the forms includes all specifications beginning with the numbers (0XXXXXX,...,9XXXXXX). This cannot be used for user-defined forms.

Further notes

When changing a form, you must take into account that it may already have been used in a number of reports. The changes you make will also be made in all of these reports.

For more information about creating forms in Drilldown Reporting, see the SAP Library under CA General Drilldown Reporting Book.

Maintain Report

In this step, you can

- Create your own reports
- Change reports which you have created yourself
- Adapt standard SAP reports to your requirements

Standard settings

SAP delivers standard reports in client 000, which you can import into the client in which you are working. You can then either use the standard reports as they stand, or copy them as templates for your own reports.

The name space provided by SAP for the technical specification of the reports includes all specifications beginning with the numbers (0XXXXXX,...,9XXXXX). This cannot be used for user-defined reports.

To find out which reports are delivered as standard, consult the SAP Library for Profit Center Accounting, under Standard Reports.

Further notes

You can find detailed information about creating drilldown reports in the SAP Library, under CA General Drilldown Reporting Book.

Transport

In the following steps, you can transport reports and forms between two different systems.

For example, you can transport reports and forms between a test system and a productive system.

Transport reports

Transport forms
Transport Reports

In this activity, you transport reports from one system to another.

Example

You have defined reports in the test system and want to transport them to the production system.

Requirements

In the source system, create a transport request to the target system.

The same release must be installed for both systems.

Activities

Select all reports which you wish to transport. Now start the transport by choosing Execute or Exec. in Background.

Transport Forms

In this activity, you transport reports from one R/3 system to another.

Example

You have defined reports in the test system and want to transport them to the production system.

Requirements

In the source system, create a transport request to the target system.

The same release must be installed for both systems.

Activities

Select all reports which you wish to transport. Now start the transport by choosing *Execute* or *Exec. in Background*. **Reorganization**

- In the following steps, you can:
- Delete Report Data
- **Delete Reports**
- Delete Forms

Before making any deletions, make sure that you no longer need the data you wish to delete.

Delete Report Data

In this activity, you can select and delete sets of frozen report data.

Before deleting the selected data, the system displays a dialog box in which you must confirm your selection.

You can enter characteristic values for the fiscal year, period, and period/year as selection criteria. These options allow you to delete individual sets of frozen data for reports that are executed periodically. This helps you avoid an overflow of frozen report data.

Example

You can delete the data in your test reports before going live.

You can delete frozen report data by report, name, and date created.

Activities

Reorganize your report data.

Delete Reports

Here you can select a list of reports according to a number of parameters and then delete individual reports from this list.

Before actually deleting the reports, the system displays a dialog box in which you must confirm your selection. **Example**

You can delete all the test reports created by a certain user before you go productive with CO-PA.

Actions

Reorganize your reports.

Delete Forms

Here you can select a list of forms based on certain parameters and then delete individual forms from that list. Before actually deleting, the system displays a dialog box in which you must confirm your selection.

Example

You can delete all the forms with one axis and key figures which were created on a specific date.

Note

You can only reorganize those forms which are not being used in any report. The system automatically checks this before deleting any forms, and at the same time calls up and checks the individual reports.

Actions Reorganize your forms. Maintain Currency Translation Keys

When you execute a drilldown report online, you can translate individual currency columns to a different currency using the function **Settings -> Currency**. In this step, you can maintain currency translation keys to be used for this translation. You define these translation keys by controlling area.

Activities

1. Define your translation keys by specifying the following:

a) a text

b) the exchange rate type (such as "average rate")

- c) the currency you want to translate the values into
- Specify whether the rate is an inverse exchange rate.
 Inverse exchange rates are useful where the values have already been translated and you want to translate them back into the original currency with the original values.
- 3. Specify whether the translation key should use a fixed or variable translation date. A fixed translation date is either a specific date or the date on which the report is executed. This date, together with the exchange rate type, determines which exchange rate is used later for the translation.
 If the translation date is variable, the system determines the time reference in each data record and translates the values according to that information. Here you specify the point of time start of the period or year end that should be used. This allows you to translate each data record according to the exchange rate valid in the period in which it was posted.
 If you use a variable translation date, note that columns in the list that are calculated using the translated column are automatically translated as well.
- 4. Save your currency translation keys.

Example of a currency translation key with an inverse exchange rate

Assume the following exchange rates:

DEM USD 10 USD DEM 03 When translating from USD to DEM with an inverse rate, the system uses the exchange rate 1/10 = 025 and not 03.

Report Painter

In the following activities, you make the necessary settings to call up and create report painter reports in a client

With the exception of defining report groups and read program for the archive you can carry out all of these activities from the Profit Center Accounting application menu.

You can find further information on working with the report painter in the SAP Library, under FI Special Purpose Ledger -> Report Painter Reports.

Import Reports

This function is used to copy Report Writer reports between different clients of an SAP System. You call up the function in the client into which the reports are to be copied.

When you upgrade your system, the standard reports are only imported into client 000. Consequently, you need to copy them to your other clients.

You can also copy user-defined reports between clients.

Note

When copying the report groups, the system copies all dependent objects to the target client as well. These include the reports and the library as well as sets, set variables and value variables. Thus if a revenue/cost element group is prespecified in a report, it will be overwritten in the target system by the import. The profit center standard hierarchy is not overwritten, however.

Actions

First, select the processing mode:

- If you choose **Background processing**, only the standard report groups (prefixes 8A*) are copied to the current client. You can choose any client you wish as the source client, though in most cases this will be client 000.

This function lets you schedule, but not release your background job. To release it, use the function System -> Services -> Jobs -> Job overview. Select "Jobs without start date", and release the job.

- In **Online** processing, you can narrow your selection of report groups down more. The system sets client 000 as the default source client, and all the standard report groups as the default report groups. However, you can change these values. You should copy the report groups together with the dependent objects. From the selection screen, you jump to another selection list, where you can choose the groups you want to copy before executing the function.

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

- 1. Determine the languages you need for your reports.
- 2. Enter the required languages.
 - a) choose *New entries*
 - b) Enter a language key and the corresponding description.
- 3. Save your entries.

Maintain 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 3.0) 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:

- 1. Enter a name for the library and the name of the table to which the library is assigned.
- 2. To copy and change an existing library, enter the name of the reference library in the field of the same name.
- 3. Enter a description for your library.
- 4. Determine which key figures are to be used in the library.
- 5. Determine which characteristics are to be used in the library.
- 6. 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.

Create Reports

The menu option *Report Painter* in the application menu (Information System -> Tools -> Report Painter) takes you to the **Report Painter**, where you can create your own Report Painter reports for your company to supplement the standard reports.

The Report Painter makes it quick and easy to create a report. It provides you with most of the functionality of the Report Writer but is easier to use.

You can perform the following for reports:

- create
- change display
- delete
 Actions

To read about how to create a Report Painter report, see the chapter Information system in the online manual.

Generate Reports

This function generates programs from the report definitions of the imported Report Writer reports.

Actions

You have the following options for generating the reports:

- 1. If you want to generate them online, proceed as follows:
 - a) Select the reports which you want to generate.
 - b) Choose the function "Generate".
- 2. If you want to generate in the background, create a background job as follows:
 - a) Give the job a name.
 - b) Enter a start date for the job.
 - c) Enter a start time for the job.
 - d) Set the flag "Release immediately" if you want to execute the job immediately.
 - e) The system then generates the standard reports of the groups 8A1 and 8 A 2.

Note

If you want to generate all the reports, you should schedule the job for a time when the system workload is low.

Define Report Groups and Read Programs for Archive

In this activity, you specify which of your report groups and/or read programs can be used for analyzing archived data.

Activities

- 1. To enter a new report group or program, choose "New entries".
- 2. Enter "PCA_OBJECT" as the archiving object.
- 3. If you entered a report group, enter "RW" as the report type. If you entered an ABAP program, leave this field blank.
- 4. Enter the name of the report group or program.
- 5. If you want the "Archive selection" button to appear on the read program screen in archiving, enter "X" in the "Activate archive sel." field. For Report Writer and Report Painter reports as well as generated programs, this field must remain blank.
- 6. Choose "Table view -> Save" to save your entries.

Tools

The following steps contain activities which are generally performed by system administration. They are settings of a technical nature which you require in order for the *EC-PCA* application to be tailored to your company's structure.

These activities are:

- Assign authorizations
- Change message control
- Set up distribution of profit center data (ALE)
- Transport customizing settings
- Set up customer enhancements
- Maintain document summarization
- Prepare your system for going productive
- Define sets and variables
- Convert your system from release 2.x to 4
- Convert your system to release 4 allocation cycles

Authorizations

Systen administration is responsible for creating and assigning authorizations. For more information on this subject, see the Implementation Guide (IMG) for Basis, under Users and Authorizations.

This is where the standard authorization objects and authorization profiles for Profit Center Accounting are listed.

It is urgently recommended that you create authorization profiles using the profile generator, and not manually!!! See Create Role and Assign Users.

The information about **authorization objects** which follows is not required for these activities. It is merely intended to provide technical background information. The description of **authorization profiles** which follows is only relevant for you want to user a standard profile rather than generating you own profiles.

Authorization Objects

The individual functions of the authorization objects listed below are defined in the standard for the individual functions of Profit Center Accounting. When a function is called up, the associated authorization object is tested.

Functions for	authorization object
Responsibility area	K_PCA
Delete transaction data	K_PCAB_DEL
Transfer actual data	K_PCAI_UEB
Transfer FI data	K_PCAF_UEB
Transfer MM data	K_PCAM_UEB
Transfer SD data	K_PCAS_UEB
Generate ledger	K_PCAL_GEN
Maintain planning hierarchy	K_PCAP_SET
Transfer plan data	K_PCAP_UEB
Standard reports	K_PCAR_SRP
Profit center maintenance	K_PCAS_PRC
Assessment/distribution in actual/plan	K_PCAD_UM
Transfer prices	K_TP_VALU Transfer prices
Authorization profiles	

An authorization profile contains authorization objects for a restricted task area. A composite profile contains several profiles.

By using profiles and composite profiles, you can structure and manage authorizations simply.

By entering a profile or a composite profile in the user master data, a user receives all authorizations contained in them.

Two standard profiles have been created for Profit Center Accounting:

- Profile **K_PCA_ALL** (entered as a composite profile in SAP_ALL) contains the following profiles:
- G_BASE_ALL (all general ledger basic authorizations)
 Rollup and database transactions GB01, GB11, GD/23/33/43, GP12, GP22//23 and GL15
- **G_PLAN_ALL** GPxx - Transactions
- **G_RW_ALL** (all authorizations in the Report Writer) Report, parallel report, library, standard layout and report group
- G_SETS_ALL (all authorizations for sets) Set and Variable
- G_SUBST_ALL (Speciale ledgers - Substitution: All authorizations)
- **K_PCA_AL1** (see below)
- Profile K_PCA_AL1, the actual profit center profile for own profit center transactions. The profile contains the ALL authorizations for the following authorization objects:
- EC-PCA: Delete transaction data
- EC-PCA: Actual data transfer
- EC-PCA: FI data transfer

- EC-PCA: MM data transfer
- EC-PCA: Generate and activate ledger
- EC-PCA: Planning hierarchy
- EC-PCA: Plan data transfer
- EC-PCA: Standard reports and datasets
- EC-PCA: Profit center
- EC-PCA: Summary and line-item reports
- EC-PCA: Assessment/distribution
- Number range maintenance
- Table maintenance (for example, using transaction "SM31")
- Archiving

These objects contained in these profiles are used in the following transactions:

- EC-PCA: Profit Center

Fields: Controlling area, Activity

- Create/change profit center master data (KE51 54) Activity: 01, 02, 03, 04
- Copy cost centers (2 KEV) Activity: 01
- Create dummy profit center (1KE2 and KE59) Activity: 01
- PrCtr/Customizing delete master data Activity: 06
- Time-dependent fields (0 KE 7) Activity: 02
- Master data index (KE5X) Activity: 03
- Transport of customizing settings (0 KEP-0KEV) Activity: 21
- Conversion of reports, line item and summary record files 2.x -> 3.0 (OKEW, OKEX, OKEY, OKEZ)
 Activity: 42
- EC-PCA: Summary and line item reports

Fields: Company code, profit center, cost type, activity

- This object, in addition to the object "EC-PCA: Profit Center", is checked during master data maintenance. In this way, master data maintenance can be restricted to individual profit centers. Activity: 01, 02, 03, 06
- Protection of reporting: Report writer reports and the display of line items (KE5Y, KE5Z) and summary records (2KEE) can be restricted to individual profit centers and cost elements.
- Actual postings: The entry of profit center documents and statistical key figures can be restricted to individual profit centers and company codes. Activity: 76

- EC-PCA: Planning hierarchy

Fields: Controlling area, activity

- Maintain profit center hierarchies Activity: 02, 03
- Copy cost center groups Activity: 01
- Add, change, display and delete planning sets used via object G_800S_GSE Activity: 01, 02, 03, 34

- EC-PCA: Standard reports and datasets

Fields: Ledger (not currently taken account of in the authorization check), activity

- Multiple selection (02), generation (07), issuing and selection of standard reports (16), conversion (42), import (60) and export (61) of reports and datasets. Used with KE5A-KE5L, KE6A-KE6L, 0KEC-0KEF, OKEA, OKEB. Aktivity: 02, 07, 16, 42, 60, 61
- The customer can assign the sets 8A-ALL-PRCTR, 8A-SAP-GKR, 8A-KOKRS001 to an authorization group. In this way, only users who have entered an authorization for the object G_800S_GSE, activity 03 in their user master data can user the standard hierarchy.
- When actual and plan line item displays are called up, the system checks that authorization exists for the object G_GLIP with the fields ACTIVI 03, GLRLDNR (ledger), GLRRCTY (record type) and GLAVERS (version of line item).

EC-PCA: Actual data transfer

Field: Controlling area

- Data transfer program for PrCtr invoice actual data (1 KEA)
- Data transfer program for statistical key figures (1KED, 1 KEE)

- EC-PCA: FI data transfer

Field: Company code

- FI data transfer to Profit Center Accounting (1 KE 8)

- EC-PCA: MM data transfer

Field: Activity

- Data transfer from MM to Profit Center Accounting (1 KEC) Activity: 90

- EC-PCA: SD data transfer

Field: Activity

- Data transfer from SD to Profit Center Accounting (1 KE 9) Activity: 90

- EC-PCA: Plan data transfer

Fields: Controlling area, version and business year.

- Plan data transfer to Profit Center Accounting. During data transfer, data which has already been posted will be deleted, via the program RGUDEL00, object S_ADMI_FCD FIELD 'RSET', system administrator function.

- EC-PCA: Delete transaction data

Field: Ledger

- Customizing PrCtr delete transaction data (0 KE 1)

- EC-PCA: Generate and activate ledger

Fields: Controlling area, activity

- Analysis of settings (1 KE 1) Activity: 03
- Activate profit center ledger Activity: 63

- Regenerate ledger Activity: 64

- EC-PCA: Assessment/distribution

- Fields: Activity, record type
- Actual assessment/distribution (3KE1 6, 4KE1 6) Record type: 2 Activity: 01, 02, 03, 06, 16
- Plan assessment/disribution Record type: 3 Activity: 01, 02, 03, 06, 16
- Number range maintenance
- The profile K_PCA_AL1 contains the authorization COPCA_ALL. This authorization has been created for the number range objects NR_NKPRIN and COPCA_PHNR.
- Table maintenance (for example, using the transaction 'SM31')
- The profile K_PCA_AL1 contains the authorization K_PCA_ALL. This authorization has been created for the table authorization groups GC, KCS, KE1C and KKB1 (authorization to maintain all EC-PCA tables and views.
- Archiving

Fields: Application class, archiving object, activity

 Create, delete, restore and manage archive (KE71 - KE74) Archiving object: PCA_Object Activity: 01

Create Role, Generate Profile and Assign Users

In this step, you can create roles and use the profile generator to generate authorization profiles.

Activities

To assign an authorization profile to a user, do the following:

- 1. Create a role
- 2. Enter a description
- 3. Select transactions
- 4. Create and edit authorizations
- 5. Assigns users and compare the user master (in doing so, the profile is entered in the user's master record)
- 6. Transport roles, if desired

Detailed documentation

For more information about the procedures, see transaction documentation

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 Profile Generator.

Note

You can also use authorization profiles you created manually or were delivered by SAP, in roles. You can create a role without a menu and include the corresponding profile in the authorization data of the role.

In the fourth step, choose "Edit -> Add authorization -> From profile" to add the authorization profile data to the role.

Change Message Control

With this IMG activity, you can set the appearance of selected system messages in accordance with your own requirements.

You can

- Determine the message type (error, warning, note in the bar at the foot of the screen)
- Switch a message off completely

In the <LSialog column, you can set the message type for the following processing types:

- Dialog
- Background processing
- Batch input processed in the dialog (open)

You can determine the message type for batch inputs processed in the background in the BatchI column.

You can make the corresponding settings for all users or for individual users.

Recommendation

To begin with, use the standard system messages. If a changeable message appears, it is possible for you to go from the message long text to the change mode of message control.

Activities

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- 1. Specify the application area from which the message comes. Close the dialog box by choosing *Exit*.
- 2. Choose *Edit -> New entries*.
- 3. Now enter the following data:
 - Message number

User name

Note that only certain messages in an application area are changeable.

If you enter a name here, the settings apply only for this user. IF you make no entries here, the settings apply for all users in the client.

- Message type Enter the required message type.
- Save your entries. The corresponding message text is set automatically.

Notes on transporting

You can transport message control settings manually. To do so, choose Table view -> Transport.

Set Distribution of Profit Center Data (ALE)

This section describes the settings which are necessary for distribution in Profit Center Accounting.

A distinction is made here between settings for Central Profit Center Accounting and settings for Decentralized Profit Center Accounting.

A further distinction is made between the functional properties of the systems participating in the ALE scenarios. There is

- a central controlling system
- a central master data maintenance system

(These two systems can be identical.)

- one or more local systems

For more information about distribution methods, see the SAP Library, CA - ALE Business Process Library under ALE in Profit Center Accounting.

Requirements

1. In the Implementation Guide (IMG) for *Distribution (ALE)* you - make the basic settings and set up communication.

- enter the logical system name of the central systems (under Model and implement business processes -> Configure pre-defined ALE business processes -> Accounting -> AC <-> AC -> Cost Center Accounting scenario).
- define a distribution method for the profit center data (under Set distribution of profit center data (ALE)). The system also shows you which system is the central controlling system and which where a distinction occurs is the central master data maintenance system for the controlling area.
- 2. You make the settings for Profit Center Accounting in the Implementation Guide (IMG) for Profit Center Accounting.
- If you have not already done so in the Implementation Guide (IMG) for *Distribution (ALE)*, define the distribution method when maintaining the controlling area (under Maintain settings for the controlling area).
- If you are using the decentralized distribution method, you must also assign a master system the logical system of the profit center to each profit center. You do this during master data maintenance. For the controlling area, this is either done in a separate central master data maintenance system or in the central controlling system.
- If you are using decentralized distribution, activate updating of line items in the control parameters for actual postings starting from the current fiscal year (under Set Control Parameters for Actual Data).
- If you change from the central distribution method to the decentralized distribution method, the system will automatically set the central controlling system as the master system for all existing profit centers. You cannot change the assignment of a profit center to a logical system.
- If you want to send the summary records to the ALE-linked systems in a compressed form, to reduce the volume of data, you can set this in Customizing for Profit Center Accounting (under Maintain field movement, Maintain substitutions and Assign field movement to company code.

Synchronization of settings

All Profit Center Accounting settings must be valid and identical in all systems.

The best way to ensure this is to perform Customizing in a central system and then distribute the data to all participating systems. You normally feed Customizing data into decentralized Profit Center Accounting using the transport system.

If, instead of making the Profit Center Accounting settings in a central Customizing system, you make them in each of the participating systems, make sure that all settings are valid and identical in all systems.

Activities

Maintaining the distribution model

The distribution model determines which source system the data comes from. You define the distribution model centrally. For this purpose, you must maintain the following message types in the corresponding systems:

CENTRAL DISTRIBUTION METHOD

	Inbox	Outbox
Central	PRCMAS	(PRCFET)
Controlling	COGRP6	
System	COGRP9	
	PCROLL	
Central PRCFET		PRCMAS
Master Data		COGRP6
Maintenance		COGRP9
System		

Local	PRCMAS	PRCFET
Systems	COGRP6	PCROLL
	COGRP9	(COGRP 9)

DECENTRALIZED DISTRIBUTION METHOD

	Inbox	Outbox
Central	PRCMAS	PRCFET
Controlling	COGRP6	SaveReplica
System ata	COGRP9	SaveReplicaPlanD
	PCROLL	Reverse
	SaveReplica	Delete
	SaveReplicaPlanData	
	Reverse	
	Delete	
Central	PRCFET	PRCMAS
Master Data		COGRP6
Maintenance		COGRP9
System		
Local	PRCMAS	PRCFET
Systems	COGRP6	PCROLL
	COGRP9	SaveReplica
	SaveReplica	
SaveReplicaPlanData		
	SaveReplicaPlanData	Reverse
	Reverse	Delete
	Delete	
an types which a	re used for distribut	ed Profit Center A

Message types which are used for distributed Profit Center Accounting:

PRCMAS	Profit center
COGRP6	Profit center group
COGRP9	Account group
PCROLL	Rollup
PRCFET	Request profit centers
PRCDOC	Replication of actual line items
	Method: SaveReplica
PRCDOCP	Object: ProfitCenterDocument Replication of plan line items
	Method: SaveReplicaPlanData
	Object: ProfitCenterDocument

PRCDOCR Reversal of profit center documents

Method: Reverse

```
Object: ProfitCenterDocument

PRCDOCD Deletion of profit center documents

Method: Delete
```

Object: ProfitCenterDocument

Define filter object

If you have more than one central system for the profit center transaction data, it might be necessary to send the data separately for each company code. In the distribution model, you must specify the filter object 'company code' for the message type PCROLL. If you are using the central scenario, it is therefore possible to send the data separately for each company code . If you are using the decentralized scenario, you must ensure that all data for the company codes belonging to a controlling area is sent to the central controlling system .

Error processing

The standard task TS40007915 PCROLL must be assigned to a position or workflow organizational unit, so that work items will be created for error processing when errors occur.

For further information on this point, see Error Processing.

Periodic processing

If you have set up distribution for Profit Center Accounting, you can plan the export rollup to the central system in the local systems. If you are using decentralized Profit Center Accounting, you perform the rollup in the corresponding master systems. In this case, the system only sends the summary records for the profit center which has the current system as its master system.

With the general job definition, you can send the IDocs automatically at period end.

Master data

The master data which is required for using Profit Center Accounting in the local systems comprises the profit center master records and, where appropriate, the profit center groups and account groups. Responsibility for master data maintenance lies either with the central controlling system or with a separately created central master data maintenance system. For further information about the distribution of master data, see Master Data Maintenance.

Maintain Field Movement

In this step, you can specify from which or into which fields data is to be summarized. You can also assign a substitution activity to a field movement in order to substitute values using this substitution activity. You yourself can define the conditions under which a substitution is performed.

For complex substitutions or field modifications, you also have the possibility of entering a user exit. The user exit would then be executed when the respective field movement is executed.

When you execute a rollup, the data from the following dimensions is automatically transferred from the source ledger(s) to the rollup ledger:

- Ledger
- Record type
- Version
- Company code or global company (local or global)
- Transaction currency (according to ledger definition)
- Unit of measure (according to ledger defintion)
- Target/actual indicator (according to ledger definition)

Actions

- 1. Define or maintain a field movement.
- 2. Specify which fields of the sender table are to be transferred into which fields of the receiver table.

Data will be summarized for all fields not entered here.

- 3. Define a substitution activity if specific values are to be substituted.
- 4. Enter, if necessary, a user exit number for processing the field movement. This user exit is executed, when the data from the sender field is transferred to the receiver field during the rollup execution.

Maintain Substitution

In this step, you can create substitution activities or maintain existing substitution activities. Using a rule, you can enter the condition that must be met in order for a substitution to be carried out.

Note

If no condition is defined, the substitution is always carried out.

Actions

- 1. Define or maintain a substitution activity.
- 2. Specify the receiver table and the receiver field.
- 3. Enter the value that is to be transferred to the receiver field if the condition is met.
- 4. Enter, if necessary, a user exit. If your substitution condition is too complex to be defined here, you can define the substitution condition in a user exit.
- 5. If necessary, use a rule to define a condition that must be fulfilled in order for the required value to be substituted. Rules for rollups must always be created with table GLU1 (application area GU and callup point 0002).

Further notes

For more information on creating rules, see activity Maintaining logical rules.

Assign Field Movement to Company Code

In this activity, you assign field transfers to company codes.

During the Rollup, the summary records for the company codes specified here will be summarized in accordance with the field transfer the company codes are assigned to.

Requirements

You have defined the field transfers in Customizing, under Maintain field transfers.

Transport Customizing Settings

In this section, you can transport selected customizing settings from one client to another client or SAP system.

Note

Note that the system does not check the transported settings for consistency or completeness in the target client/system.

If necessary, check for yourself whether any inconsistencies arise due to the transport. In some cases it may be safer to check and adjust the customizing settings manually.

Recommendation

Do not carry out the transport until you have fully customized your system.

Further notes

For more information on setting up the productive system, see SAP Procedure Model.

Transport drilldown reports in Customizing for Profit Center Accounting, under Drilldown Reporting -> Transport

To transport report painter reports, proceed as follows:

- a) Choose the option *Tools -> Report Painter* from the Profit Center Accounting application menu.
- b) Transport the reports by choosing *Utilities -> Transport*.

Transport Environment

In this activity you can choose the customizing settings which you want to transport to the target system. The customizing settings include: - basic data and controlling area settings

- business activities in Profit Center Accounting
- statistical key figures transferred from Controlling

The system places the selected objects in a transport request. You can then transport them to the target system using the transport functions.

Recommendation

When you transport basic data and controlling area settings, you transport settings which are also maintained in other components (such as Cost Center Accounting). Since the controlling area settings already in the target system are overwritten by the transport, you should finish customizing the other components as well before you transport.

Activities

- 1. Decide which data you want to transport.
- 2. Select the data for your controlling area.
- 3. Place the data in a transport request using the function "Include in request", or remove it using "Remove from request". You can only remove the data from the transport request if the corresponding task was not yet released to the transport request.

Transport Master Data

In this IMG activity, you choose the master data that you want to transport to the target system. The master data objects are dependent on the controlling area.

The R/3 System places the selected objects in a transport request. You can then transport the data to the target system using the transport functions.

You can transport the following objects:

- Profit centers
- Standard hierarchy
- Time-based fields
- Profit center groups
- Substitutions for sales orders

Recommendation

- Always transport the following objects together to avoid inconsistencies in the target system: The standard hierarchy and the profit center groups represent logical sets of profit centers. Transporting these sets separately could lead to inconsistencies if the corresponding profit centers (master data) do not exist or are incorrect in the target system.
- 2. If you have transported profit centers, restart the matchcode data in the target system so that the transported master data can be displayed using the "Possible entries" function.

Activities

- 3. Decide which data you want to transport.
- 4. Select the controlling area.
- 5. Place the data in a transport request using the function *Include in request*, or remove it using *Remove from request*. You can only remove data from a transport request if the corresponding task has not yet been released to the transport request.
- 6. You can analyze the settings in Profit Center Accounting using the function "Analysis" in Customizing for EC-PCA. This makes it possible for you to check the master data for consistency.
- 7. Using the function *Sales order substitution*, you can transport the assignment of substitution rules to controlling area which applies for Profit Center Accounting.

You transport the substitution rule itself using Transport substitutions in the activity Transport tools.

To delete a profit center in the source and target systems, first create the corresponding transport request. Then delete the affected profit center in the source system. Only then should you release the transport request.

Transport Settings for Planning

In the following settings, you transport the customizing settings for Planning via the Profit Center Accounting transport link:

Transport Plan Versions

Transport Distribution Keys

Transport Planning Layouts

You import Planning layouts from a source client in the activity Import Planning Layouts.

Transport Plan Versions

In this activity you can transport settings for your plan versions.

These include:

- CO versions
- EC-PCA versions
- GL versions

Activities

- 1. Select a controlling area.
- 2. Check off the transport flag.
- 3. Place the data in a transport request using the function "Include in request", or remove it from the request using "Delete from request".
 - You can only delete data from the transport request if you have not yet released the relevant task to the transport request.

Transport Distribution Keys

In this activity you can specify which distribution keys you want to transport.

Activities

Enter the name of the distribution key which you want to transport.

Transport Planning Layouts

In this activity, you create a transport request for transporting your layouts to a target system.

Requirements

The source and target systems must be the same R/3 release (update level).

Activities

- 1. Specify a transport request.
- 2. Select the layouts you want to transport.
- 3. Transport the request.

Import Planning Layouts

In this activity, you can copy layouts from other clients to this client.

This function is especially useful for copying the standard layouts from client 000 to your client.

- 1. Enter the source client from which you want to import layouts to your current client, and choose *Execute*.
- 2. Select all the layouts you wish to import.
- 3. Carry out the import.

Transport Settings for Actual Postings

In the following settings, you transport the customizing settings for actual postings via the Profit Center Accounting transport link: Transport Settings for Actual Postings

Transport Document Entry Layouts

You import document entry layouts from a source client in the activity Import Document Entry Layout.

Transport Settings for Actual Postings

In this activity you can choose the customizing settings for actual postings in your controlling area which you want to transport to the target system.

Note that some settings are only indirectly dependent on the controlling area. For example, the automatic assignment is specified by company code. These records are also placed in the transport request.

You can transport the data to the target system using the transporting functions.

You can transport the following settings:

- Control parameters
- Automatic account assignment
- Internal goods movements: Account determination
- Internal goods movements: Special handling
- Additional balance sheet and profit and loss accounts

Recommendation

When you transport control indicators, these take effect immediately in the target system. Therefore you should check whether the parameters set are valid for the target system as well.

For the settings for automatic account assignment and account determination, only these assignments are transported. The corresponding master data (cost elements, cost centers, profit centers and so on) are not transported.

Be sure to transport the master data involved along with the assignments in order to avoid inconsistencies in the target system.

Activities

- 1. Decide which data you want to transport.
- 2. Select the controlling area.
- 3. Place the data in a transport request using the function "Include in request", or remove it using "Remove from request". You can only remove data from a transport request if you have not yet released the corresponding task to the transport request.

Transport Layout

In this activity, you create a transport request for transporting your layouts to a target system.

Requirements

The source and target systems must be the same R/3 release (update level).

- 1. Specify a transport request.
- 2. Select the layouts you want to transport.
- 3. Transport the request.

Import Layout

In this activity, you can copy layouts from other clients to this client.

This function is especially useful for copying the standard layouts from client 000 to your client.

Activities

- 1. Enter the source client from which you want to import layouts to your current client, and choose *Execute*.
- 2. Select all the layouts you wish to import.
- 3. Carry out the import.

Transport Assessment/Distribution Cycles

In this activity you can specify which assessment/distribution cycles should be transported. In addition, you can decide whether the sets contains in the selected cycle should be transported as well.

Activities

- 1. Enter the name of the assessment/distribution cycle you want to transport.
- 2. Enter the start data of the assessment/distribution cycle, and specify whether the sets used in the cycle should be transported as well.

Transport Information System

In this activity you choose the information system settings you want to transport to the target system.

These include:

- Report list
- Report tree

- Decide which data you want to transport.
 If you want to transport a report tree, enter the name of the tree. The system proposes the name of the tree you defined in Customizing as a default.
- 2. Place the data in a transport request using the function *Include in request*, or remove them from the request using *Delete from request*.

You can only remove objects from the transport request if you have not yet released the task to the transport request.

Further notes

The reports in the report list and report tree are not transported together with the report or tree. To transport these reports, use the functions of the Report Painter **Transport Tools**

In this section you will learn how to transport settings for the tools to your target system.

Transport Substitutions

In this activity you can specify which substitution rules you want to transport. You can also specify whether the logical rules, sets and Boolean classes used in the substitution should be transported as well.

Note

The Boolean class used in Profit Center Accounting is class 50. Only substitutions of this class are relevant and can be maintained in Customizing. One substitution rule can be active for each controlling area.

Activities

- 1. Enter the name of the substitution you want to transport. If you wish to display a list of possible substitutions, select the substitutions of the class 50.
- 2. Specify which relevant information should be transported along with the substitution.

Transport Sets

In this activity you can specify which sets you want to transport. You can also decide whether the related objects (sets or variables contained in the transported sets) should be transported as well.

Note

You only need to transport sets like this if you have created your own sets for reports using the Report Writer.

To transport the Profit Center Accounting standard hierarchy and the profit center groups, which are also represented by sets, use the function Transport master data.

If you have defined your own sets, these sets are probably based on the EC-PCA summary record table GLPCT, which you must specify together with the names of the sets.

Activities

- 1. Enter the names of the sets you want to transport. Also enter the table name for the sets.
- 2. Decide whether you want to transport the related objects as well.

Transport Variables

In this activity you can specify which variables you want to transport. You can also decide whether you want to transport the related objects (sets contained in the variable) as well.

Actions

1. Enter the name of the variable you want to transport. Specify whether the related objects should be transported as well.

Customer Enhancements

In some cases, it makes sense to adapt the standard functionalities to the customer's special requirements.

For this reason, a number of customer enhancements are delivered with EC-PCA, making it possible for you to take account of special requirements in Profit Center Accounting.

In comparison with modifications programmed by the customer, these enhancements have the advantage that they are taken over into successive releases and are not overwritten.

Develop Enhancements for Profit Center Accounting

Choose Activities for Exit PCASELEK

Choose Activities for Exit PCASELEK

In this step, you can activate the SAP enhancement **PCASELEK** for each individual business activity. This makes it possible for you to influence the selection criteria for the data transfer and therfore use a different logic than that provided as standard for data transfer.

For example, you can leave out records which are normally transferred to Profit Center Accounting.

Standard settings

The table is already maintained in the standard system.

Activities

Activate the indicator User Exit for the activities for which you with to use selection criteria different to the standard.

The enhancement **PCASELEK** contains a number of function modules. Depending on the type of data transferred with this activity, the system jumps to one of these function modules. **Further notes**

You can view the documentation on enhancements in SAP Enhancement Maintenance (transaction SMOD).

Further information about using enhancements can be found in Project Management of SAP Enhancements (transaction CMOD) under Utilities -> Online Handbook.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Develop Enhancements for Profit Center Accounting

In this activity, you can set up enhancements which are not provided in the standard SAP system.

In Profit Center Accounting, you can set up the following standard enhancements:

- Document changes for data transfer (PCA 00001)
- Assignment of a representative material (PCA 00002)
- Determination of transfer prices (PCATP 001)
- Enhancement in the authorization check (**PCAAUTHO**)
- Change to selection criteria for data transfer (PCASELEK)

For additional information about this enhancement, see Choose Activies for Exit

PCASELEK.

Further notes

In contrast to modifications, enhancements are not generally affected by new releases. This is because they are set up in a namespace reserved for the customer, rather than in the SAP original.

You can view the documentation on enhancements in SAP Enhancement Maintenance (transaction SMOD).

Further information about using enhancements can be found in Project Management of SAP Enhancements (transaction CMOD) under Utilities -> Online Handbook.

Maintain Document Summarization

In this activity you can define rules by which the system should summarize line items created in Profit Center Accounting. This enables you to reduce the data volume in Profit Center Accounting. You can enter certain fields of the line item table separately for each activity. If the line items of a document are summarized, the content of these fields is not updated.

Example

You post a billing document with a large number of items. All items contain the same profit center and differ only in a few fields (such as "Material", "Sales order item", and "Profitability segment number"). If these fields do not interest you when you analyze billing documents in Profit Center Accounting, enter these fields (MATNR and KDPOS) here for the activity SD00.

Activities

Specify the fields that you want to summarize for each business transaction.

Additional information

The key fields of the totals records cannot be summarized.

Only lines within the same document can be summarized.

The following fields are automatically summarized, since without them no summarization would be possible: GL_SIRID: Record number of the line item record DOCLN: Posting line REFDOCLN: Number of the posting line in the FI document

Prepare Production Startup

This section contains functions for preparing to go productive with your system.

Delete Test Data

This section contains the functions for deleting master data and transaction data. The primary purpose of these functions is to clear the system of test data before productive startup.

Actions

Make sure that no references exist before you delete the data. You can do this using the assignment monitor.

Delete Transaction Data

This function lets you delete transaction data in Profit Center Accounting. The original postings in the other components (such as Financial Accounting, Cost Center Accounting, and so on) are not affected by this.

Actions

Specify the controlling area in which you want to delete the data. If desired, you can also narrow down the data selection further.

You can also decide if you want to do a test run first, and whether the system should display statistics afterward.

Note

It is recommended that you use the test run and the statistics before you actually delete the data.

Delete Profit Centers

This function lets you delete the master data for profit centers by controlling area.

Actions

- 1. Enter the controlling area in which the profit centers are to be deleted.
- 2. If desired, enter the individual profit centers or profit center groups to specify which master data you want to delete.
- You can specify a time period in which the profit centers are to be deleted. Warning:
 If you carry out the deletion without checking (see below) the specified time period is not taken into account. The profit centers are then deleted for their entire period of validity.
- 4. To be safe, you can carry out the function in test mode initially, so that no data is actually deleted.
- 5. When you execute the delete program, it makes the following checks:
 - a) Are materials assigned to the profit center?

If materials are assigned to a profit center, you will be informed in a deletion log. The profit center in question will then not be deleted, even in the update run. Check the corresponding assignments in the assignment monitor.

If you want to delete profit centers despite them having materials assigned, select the Restricted Check field.

- b) Are cost centers assigned to the profit center?
- c) Has data already been posted to the profit center?

If cases b) and c) apply, the profit centers in question will not be deleted, even in the update run. You will receive an error message in the deletion log. However, it is possible to delete all profit centers, including those where cases b) or

c) apply, without carrying out this check. To do so, select the *No Check* field. Note, however, that deletion without checking means that **all profit centers are deleted for their entire period of validity**. The consistency of data can therefore no longer be guaranteed.

Delete Long Texts

Here you can delete the long texts for plan data in your system. You can select the long texts according to various criteria.

Example

You can delete all long texts that were created within a certain time frame.

Data Transfer

Before you go productive with Profit Center Accounting, you may need to transfer historic data to Profit Center Accounting. The functions in this section let you transfer historic plan and actual data in separate steps.

Prerequisites

- The profit centers and the dummy profit center must already be defined in the relevant controlling area.
- The objects from which you want to transfer data must all be assigned to profit centers.
- The controlling area must be activated for Profit Center Accounting in the desired fiscal years. In addition, the controlling area settings (elimination of internal business volume, currency settings) must be maintained.
- For actual data, the control parameters must be maintained.
- For plan data, a plan version must be defined for Profit Center Accounting.

Transfer CO Plan Data

With this function you can transfer **plan data** from the following CO objects:

- Cost centers
- Internal orders
- Projects
- Business processes
- Networks
- Profitability segments in account-based CO-PA
- SOP or MRP orders (activity input of cost centers)
- Real estate objects

You can transfer planned data either for all the objects of the selected type (for example, all cost centers) or for individual objects only.

Before the transfer, the system deletes all the planned data which already has been transferred from the CO objects listed above.

Please ensure that you do not transfer planned data for CO objects online while the program is posting planned data subsequently. This might cause the planned data to be posted twice. To correct this, you would then have to post the data subsequently again using the program.

If you repeat the data transfer, note that only data which was transferred in Release 3.0 or later releases can be deleted.

This means that it is **not** possible to repeat a data transfer from **before Release 3.0**.

If you repeat the transfer for individual objects, the system can only delete existing data if line items exist in Profit Center Accounting.

Requirements

The plan version must exist in Profit Center Accounting. The further prerequisites for the data transfer are described in Data Transfer.

Actions

- 1. Set the **controlling area**, and choose the **plan version** and **fiscal year** for which you want to transfer planned data.
- 2. Choose the objects you want to transfer.

3. Decide whether you want to **update** the planned data or carry out a **test run**.

Statistical Key Figures: Transfer Plan Opening Balance

In this activity, you transfer the opening balances already planned in Controlling for statistical key figures.

If the values are changed in Controlling following the transfer, and the online transfer is active for the corresponding plan version (see Maintain Plan Versions), changes areautomatically updated in Profit Center Accounting.

In a production run, the system deletes any existing figures when the opening balance is generated. The system only deletes key figures for the selected object type. Key figures that were planned directly in Profit Center Accounting are not deleted.

You can therefore repeat this transaction as often as you like, without the risk of multiple entries or loss of data. In addition to online transfer, it is therefore also useful when you wish to transfer statistical key figures periodically.

Further notes

You can also post plan statistical key figures from CO objects which are not integrated into planning to Profit Center Accounting with this program. (It may be that plan data for internal orders is not transferred online for all plan versions.)

If you carry out a test run, the system only creates a transfer log.

Transfer CO Actual Data Periodically

This function lets you manually post all the secondary costs from the following CO objects:

- cost centers
- internal orders
- investment orders
- sales orders (in make-to-order manufacturing)
- projects
- networks
- cost objects
- real estate
- profitability segments in account-based Profitability Analysis

Note that before the transfer, the system deletes all the existing secondary costs on the aforementioned objects.

If you are repeating the data transfer, note that only data transferred in or after Release 3.0 can be deleted before the next transfer.

This means that it is **not** possible to repeat a data transfer from before Release 3.0.

Prerequisites

The prerequisites for the actual data transfer are described in Data Transfer.

Actions

- 1. Choose the **controlling area**.
- 2. Choose whether you want to **post** the data or carry out a **test run**.
- 3. If errors occur when you transfer historic data, the system stores the incorrect records in a separate file. These records can then be posted to Profit Center Accounting separately after you have rectified the errors. To do this, choose the function *Post incorrect records*. Note that **only the incorrect records** from the last regular transfer are posted.
- 4. You have the option of transferring line items. However, this is not recommended due to the large data volume.

Note

For more information, see Customizing under Transfer FI actual data.

Select and Transfer CO Actual Data

With this function you can transfer selected actual data from all the CO objects to Profit Center Accounting. You can select the data by fiscal year, document number and activity.

When you run the transfer, note that the functions *Check for existing records* and *Cancel* only work if you are storing line items in Profit Center Accounting. Before each transfer, you can do a test run and then check the information contained in the log.

The log displays a total per cost element for each object selected. By double-clicking on these objects, you can display the individual document numbers. From there you can also access the CO document by double-clicking again.

Requirements

The prerequisites for the actual data transfer are described in Data transfer.

Actions

- 1. Choose the **controlling area**.
- 2. Choose the **fiscal year**, a **document number interval** and an **activity** from Controlling.

Select the relevant indicator for your transfer.

Transfer FI Actual Data

This function lets you post data from Financial Accounting to Profit Center Accounting.

All the documents found for the selection criteria are displayed in a list. By double-clicking you can look at the corresponding FI document to check whether the desired documents were selected.

Requirements

- 1. Profit Center Accounting must be active.
- 2. The control parameters for actual data must be maintained. In particular, the parameter "Line items" must already be set if desired.

Additional prerequisites for the data transfer are described in the section Data Transfer.

Transfer MM Actual Data

MM Actual Data

With this function you can post data from Materials Management to Profit Center Accounting.

In the log, the system displays all the documents found which met the selection criteria. You can access each MM document individually by double-clicking to make sure that the desired documents were selected.

Prerequisites

- 1. Profit Center Accounting must be active.
- 2. The actual control parameters must be maintained, particularly the parameter "Line items".

Additional prerequisites for the data transfer are described in the section Data Transfer.

Transfer SD Billing Documents

This function lets you transfer **billing data from the SD Module** to Profit Center Accounting.

Note that the system only selects **data for which an accounting document already exists**. Billing documents which have not yet been transferred to FI, cancelled documents, documents in the price determination, and so on are not transferred.

The log displays the number of billing documents chosen and then divides this into how many were transferred to Profit Center Accounting and how many either were not transferred or contain errors. The billing documents not transferred include those which do not contain a real error but also do not contain any data to be assigned to a profit center. The system displays further information if you double click on a line.

Requirements

- 1. Profit Center Accounting must be active.
- 2. The control parameters for actual data must be maintained. In particular, the parameter "Line items" must already be set if desired.

Further requirements for the actual data transfer are described in chapter Data Transfer.

Statistical Key Figures: Transfer Actual Opening Balance

In this activity, you transfer the opening balances already created in Controlling for statistical key figures.

If the values are changed in Controlling following the transfer, and the online transfer is active for actual data (see Set Control Parameters for Actual Data), changes are updated automatically in Profit Center Accounting.

In a production run, the system deletes any existing figures when the opening balance is generated. The system only deletes key figures for the selected object type. Key figures that were entered directly in Profit Center Accounting are not deleted.

You can therefore repeat this transaction as often as you like, without the risk of multiple entries or loss of data. In addition to online transfer, it is therefore also useful when you wish to transfer statistical key figures periodically.

If you carry out a test run, the system only creates a transfer log.

Generate Opening Balance for Material Stocks

In this activity, you set up the opening balance for materials.

The system determines the material stock balance from Materials Management and posts it to Profit Center Accounting. After setting up the opening balance, it is advisable to post the changes in the material stock balance online to Profit Center Accounting, as this simplifies reconciliation with Financial Accounting.

However, you can also transfer the material stock balance to Profit Center Accounting periodically.

Further notes

You can only transfer the material stock balance for the current period or the previous period. It is not possible to transfer earlier periods.

When you transfer the material stock balance, only those company codes are offered which are maintained in Materials Management. You make the transfer under Maintain company codes for Materials Management

Transaction Change company codes from the Materials Management view

For more information on transferring balance sheet items, see the SAP Library for Profit Center Accounting under Actual Postings -> Balance Sheet Items in Profit Center Accounting.

Generate Opening Balance for Work in Process

In this activity, you create the opening balance for work in process (WIP).

WIP is determined in the results analysis and posted to Profit Center Accounting.

To create an opening balance, select *Create opening balance*. Only now cam the system select WIP for all previous periods and years. Otherwise, the system only the determines and transfers the delta WIP from the previous transfer period.

After creating the opening balance, it is recommended that you post the changes in the WIP balance to Profit Center Accounting online, as this simplifies reconciliation with Financial Accounting.

However, you can also transfer the WIP balance to Profit Center Accounting periodically. In this case, do not select *Create opening balance*, as this would have an adverse effect on performance. **Further notes**

For more information on transferring balance sheet items, see the SAP Library for *Profit Center* Accounting, under Actual postings -> Balance sheet items in Profit Center Accounting

Generate Opening Balance for Assets

In this activity, you create the opening balance for assets.

The asset balance is determined from Assets Management and posted to Profit Center Accounting.

After creating the balance, it is recommended that you post the changes in the asset balance to Profit Center Accounting online, as this simplifies reconciliation with Financial Accounting.

However, you can also transfer the asset balance to Profit Center Accounting periodically.

Further notes

If you are transferring your Asset Accounting to the SAP system from a different system, read the following paragraphs.

After transferring from an old system, Asset Accounting will not contain the same information for depreciations as for a posting of depreciations in the SAP system.

For a month in which depreciations were still posted in the old system, it is therefore only possible for asset balances to be posted correctly to Profit Center Accounting provided that no more depreciation runs are executed (in either the old system or in the SAP system).

For a month in which depreciations were posted in the SAP system, it is not possible to transfer asset balances to Profit Center Accounting later. It is recommended that you transfer asset balances as early as possible, that is, before a depreciation run is started for a subsequent period. This is better for performance, as the system then reads the balances from the annual table, instead of from the period table.

When you are transferring asset balances, the system only proposes company codes which have a chart of depreciation assigned to them in Asset Accounting. For further information, see Assign Chart of Depreciation to Company Code, transaction OAOB..

For more information about transferring balance sheet items, see the SAP Library for *Profit Center Accounting*, under *Actual postings -> Balance sheet items in Profit Center Accounting*.

Generate Opening Balance for Payables and Receivables

The purpose of this activity is to:

- 1. create the opening balances for payables and receivables
- 2. transfer the balance changes for payables and receivables periodically

The system determines open items and posts them periodically to Profit Center Accounting.

In contrast to other balance sheet items, payables and receivables cannot be transferred to Profit Center Accounting online. You must always transfer them periodically.

Requirements

You have started distribution of open items according to profit centers or business areas by choosing *General ledger -> Periodic processing -> Closing -> Regroup -> Calculate B/S readjustment* in the application menu for *Financial Accounting*. (Transaction FD)

When the system transfers payables and receivables to Profit Center Accounting, it corrects any valuation variances arising from foreign currency revaluation. Under Perform Account Control for Valuation Differences Transaction 2KEM) determine which account these adjustments are to be posted to.

Activities

If you are transferring payables and receivables to Profit Center Accounting for the first time, read the following section.

When you post payables and receivables in Financial Accounting for the first time, the system creates a "noted item" for each open item, as the document is of relevance for subsequent distribution according to profit centers. This only happens, however, if Profit Center Accounting has already been activated or you are using business area balance sheets.

Missing open items

If you started Profit Center Accounting at a later point or are not using business area balance sheets, it is possible that there are still open items in Financial Accounting. No "noted item" is created for these when you post them. For this reason, the system does not select them during transfer to Profit Center Accounting.

To transfer these open items to Profit Center Accounting anyway, proceed as follows:

- 1. Make sure that activity *B/S readjustment special functions* has not already been performed for business area balance sheets in the period in question. If this activity has been performed, do not under any circumstances perform it again for Profit Center Accounting. This would cause serious errors to occur.
- 2. Otherwise, choose General ledger -> Periodic processing -> closing -> Regroup -> B/S Readjustment -> Special functions (Transaction FG).
- 3. When the next popup appears, choose Set up readjustment.
- 4. Under Date of 3.0 Release upgrade, enter the date from which Profit Center Accounting is to be activated.
- 5. Unter Setup from (posting date) enter the date from which you want to see the open items in Profit Center Accounting.

The system selects all open items which were posted in the time period you entered.

Assignment to profit centers

The open items which were posted before activation of Profit Center Accounting are transferred to the dummy profit center. This also occurs if profit centers have been assigned to the participating materials and CO objects following activation of Profit Center Accounting.

Distribution to profit centers is based solely on document lines posted in Financial Accounting.

With customer enhancement F180A001, however, you can make assignments to profit centers. However, this is only possible for single-item invoices, that is, where the open item belongs to one profit center only and does not have to be distributed to more than one profit center.

If you wish to use this customer enhancement, you must set it up before you can perform the activities listed above.

The enhancement is called up in the activities Set up readjustment and . Subsequent Business Area/Profit Center Adjustment - Calculation.

This enhancement has no effect on documents which are already contained in the "note tables".

You can view the documentation on enhancements in SAP Enhancement Maintenance (transaction SMOD).

Further information about using enhancements can be found in Project Management of SAP Enhancements (transaction CMOD) under *Utilities -> Online Handbook*.

Sets and Variables

In most cases the G/L sets usually required in Profit Center Accounting for profit center hierarchies, revenue and cost element groups and planning sets are processed using special maintenance transactions. However, in some cases, such as allocation or in the information system, you may need to create additional special sets and G/L variables. The two functions in this section let you do this.

Refer to the documentation *FI-SL Sets* for more information on working with sets and G/L variables. **Maintain Sets**

This function lets you create G/L sets.

Note that sets for Profit Center Accounting must be created for Table GLPCT.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Maintain Variables

This function lets you create G/L variables.

Variables for Profit Center Accounting must be created for table GLPCT.

Notes on transporting

You can transport the Customizing settings for Profit Center Accounting under Transport Connection.

Conversion from Release 2.x to 4

Due to technical changes in Profit Center Accounting in Release 3.0, you need to convert a number of objects after upgrading your system. These technical changes include the fact that Profit Center Accounting now only uses one ledger: ledger 8A. In addition, the tables for transaction data had to be changed to the type "Transparent", and at the same time, new distingishing key fields were added to allow additional functions and analyses.

The **control information** for actual and plan postings is converted **automatically** during the system upgrade, so that you can begin posting data again immediately after the upgrade. You do not need to make any more manual changes for this.

Because of the new summary record table GLPCT, however, you need to convert all the sets and their uses in Profit Center Accounting manually. These sets include the **standard hierarchy**; other **groups** of profit centers, revenue and cost elements, and so on; the **Report Writer reports** you defined; and the definitions for **assessment and distribution cycles**. You need to carry out these conversions **manually**.

At first the data you posted before the upgrade remains in the old transaction data tables and ledgers. You need to **convert the transaction data** manually before you can use this data in reports or for allocations. The R/3 System provides you with special functions which let you transfer the summary records, actual line items and plan line items separately. The transaction data is converted at a later point in time in order to minimize the system time lost due to the upgrade.

Recommendation

You should convert the standard hierarchies and other groups first (see Convert User-Defined

Reports, Groups and Allocations. This is necessary before you can maintain master data for Profit Center Accounting or create new master data for assigned objects (cost centers and so on). (Transaction 0KEW)

You can convert the transaction data later when the system workload is low. The most important data is the summary records, since these are needed for the information system and for allocations (assessment and distribution) in Profit Center Accounting. Whether or not to convert the line items is optional.

Further notes

See also the following release notes:

- Changes in Customizing
- Changes in the tables

There you will also find information on what to do if you have modified the tables.

Convert user-defined reports, groups, and allocations

Standard hierarchies, other groups (for revenue/cost elements, profit centers, etc.), Report Writer reports and various control information for allocations are all table-dependent. The corresponding table for Profit Center Accounting is the summary record table. Before Release 3.0 this was Table GLPCT. For this reason you need to convert the control information.

In addition, the actual version was changed from 1 to 0 in order to make it uniform with the actual version in Controlling.

Recommendation

You should perform this conversion as quickly as possible after upgrading, since the standard hierarchies are required for master data maintenance.

Activities

You can execute this function online or in the background.

Once you have done this, change the actual version from 1 to 0 in your user-defined reports. If you do not do this, the system cannot select any actual data. If necessary, you should also change the profit center ledger to the fixed profit center ledger 8 A.

For more information, see the corresponding Release note.

Convert Totals Records

The data posted before you upgraded your system to Release 3.0 initially remains in the old ledger (i.e., the old summary record table GLTPC). Convert this data at a time when the system workload is low.

You must convert this data before you can use it in the information system or for allocations.

Activities

You convert the summary records for one fiscal year in one controlling area at a time. Enter the desired year and controlling area. In addition, you must enter the name of an export file (operating system file) which you want to use when converting the data.

If possible, convert the summary records in the background. To do this, execute the function Program -> Execute in background.

Further notes

You can only convert the data once for each combination of fiscal year and controlling area.

Convert Actual Line Items

The data posted before you upgraded your system to the new release initially remains in the old ledger (i.e., the old actual line item table GLSPC). Convert this data at a time when the system workload is low.

You must convert this data before you can use it for line item reports or any other purpose.

If you no longer need the historic data, it is not necessary to convert these actual line items.

Activities

You convert the line items for one fiscal year in one controlling area at a time. Enter the desired year and controlling area. If possible you should convert the line items in the background. To do this, execute the function *Program -> Execute in background*.

Further notes

The old line items from Release 2 in table GLSPC are not deleted automatically after the conversion (in Release 3.0F and higher).

If you need additional **memory space**, you can delete all the historic data from 2 in table

GLSPC following the conversion of the desired controlling areas and fiscal years using the ABAP/4 Database Utilities. After that, you should reorganize the tables to make the space freed up available again. If the program **terminates abnormally**, you first need to delete the data that was converted successfully for the affected controlling area and fiscal year from table GLPCA. Otherwise you will receive error messages when the system tries to insert the data that has already been converted. This would not be detrimental to the conversion itself, but the large number of error messages would make analysis of the log difficult. To delete this data, use program **RPCADEL2**. You can select the data by controlling area and fiscal year. Next, find the cause of the abend and fix it, and then restart the conversion with the same parameters.

Convert Plan Line Items

The data you posted before the new Release initially remains in the old ledger (the old plan line item table GLPPC). Convert this historic data at a time when the system workload is low.

You must convert this data before you can use it for line item reports or any other purposes.

However, it is not strictly necessary to convert plan line items.

You convert the line items for one fiscal year and one version in one controlling area at a time. Enter the desired values.

If possible convert the line items in the background. To do this, execute the function Program -> Execute in background.

Further notes

The old line items from Release 2 in table GLPPC are not deleted after the conversion (in Release 3.0F and higher).

If you need additional **memory space**, you can delete all the historic data from 2 in table GLPPC after completing the conversion for all the desired controlling areas, versions and fiscal years using the ABAP/4 Database Utilities. After that, you should reorganize the tables to make the space freed up available again.

If the program **terminates abnormally**, you first need to delete the data that was converted successfully for the affected controlling area, plan version and fiscal year from table GLPCP. Otherwise you will receive error messages when the system tries to insert the data that has already been converted. This would not be detrimental to the conversion itself, but the large number of error messages would make analysis of the log difficult. To delete this data, use program **RPCADEL3**. You can select the data by controlling area, plan version and fiscal year. Next, find the cause of the abend and then restart the conversion with the same parameters.

Convert Allocation Cycles to Release 4

In this activity, you assign existing allocation cycles to controlling areas appropriate to the company code, where these cycles do not yet have a controlling area in their header data. From Release 4A, allocations in Profit Center Accounting (distribution and assessment) are carried out at the controlling area level. When maintaining allocation cycles for Profit Center Accounting, you must enter a controlling area. This assignment must therefore also be made for existing cycles.

Recommendation

Note that it makes sense to carry out conversion for several/all controlling areas, as selection is always made for all cycles.

You can start this transaction initially in test mode, and check which cycles now contain the corresponding controlling areas.

Further notes

During conversion, it is not possible to create or change cycles in Profit Center Accounting.

Convert Profit Center Master Data to Release 4 C

In this activity, you convert profit center master data that was created before Release 4C to the current Release.

This conversion is necessary due to changes in profit center master data maintenance. For further information, see Release information for Release 4C inChanges when Creating and Changing Profit Centers.

From Release 4C, a profit center no longer has to be created several times for various periods of validity. This means, however, that gaps can no longer exist between the various periods of validity of a profit center. The periods must always be joined - without gaps. If a specified period of validity contains one or more analysis periods, in which it should not be possible for the profit center to be posted to, these can be locked in master data maintenance using the lock indicator.

Profit centers which were created using the old master data maintenance, and whose periods of validity contain gaps, must be adapted to the new method here using the conversion program. **Activities**

The conversion program is carried out at controlling area level. It changes all profit centers, so that they a seamless period of validity.

- If you choose *with lock indicator*, the gaps in the period of validity will be replaced with analysis periods, with the lock indicator set.

- If you choose *without lock indicator*, gaps between analysis periods will always be integrated into the later analysis period. This then merges with the preceding analysis period. This procedure makes sense if you have not defined the lock indicator as a time-dependent field (see Define Time-Dependent Fields for Profit Centers).

Further notes

For further information on master data maintenance of profit centers, see the SAP Library for *Profit Center Accounting*, under *Basic Settings -> Master Data -> Profit Center* and

Basic Settings -> Master Data -> Profit Center -> Creating, Changing and Displaying Profit Centers (Individual Processing).