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INTRODUCTION

This book provides system architects, technical consultants, and IT management the tools to design system architectures to deploy SAP applications on SAP HANA. Explore production and non-production systems, deployment options, backup and recovery, data replication, high-availability, and virtualization in detail. Dive into on-premise deployment options and data provisioning scenarios. Walk through scale-up and scale-out options and data partitioning considerations. Review the advantages and disadvantages of storage and system replication options and when to use each. Clarify how to leverage HANA for single node and distributed systems. Dive into a discussion on software and hardware virtualization.

36 Public Sector Management

36.1 General Settings for Public Sector Management

36.1.1 Basic Settings: Account Assignment Elements

36.1.1.1 Activate Account Assignment Elements

In this Customizing (IMG) activity, you activate the Grant, the Fund, the Functional Area and the Funded Program for your client.

Note

If you would like to use the grant, funds, the functional area or the funded program within the budgeting (Budget Control System BCS), you have to activate these account assignment elements both in this IMG activity and in IMG activity Activate Account Assignment Elements in Budgeting.

If you only want to use the grant, the fund or the functional area in Funds Management (PSM-FM), but not in CO and Asset Accounting, you can deactivate these account assignment objects in the activity Deactivate Account Assignment Elements in Controlling.

The activation of the account assignment elements after the live date has a number of effects in the whole system. Therefore, SAP recommends integrating a migration project.

Activating the grant, fund, functional area, and funded program has the following effects:

- In *Controlling* (CO), the respective account assignment element must also be assigned to the CO objects and cost element.
- In *Asset Accounting* (AA), the account assignment elements are available and can be defined in the asset master record and assigned with postings in order to manage the balances for each account assignment element.
- In *Payroll* (HR), the account assignment element must also be assigned. Please note that you must enter a date with the activation for when the account assignment element should be assigned to an account in HR.

As soon as the date is set, you *must* define the account assignment element when creating new or changing HR master records for all infotypes used (0001, 0027, 1018 (organizational management) 0014, 0015, 2001, 2002, 2003, 2005, 2010).

Caution

If you have been using HR for a while, the infotypes of the HR master records are not automatically supplied with an FM account assignment. You cannot carryout payroll therefore because the account assignment element cannot be found when payroll is running. Therefore you must create in the HR master records from the date entered a new info record and delimit the old record.

- In *Funds Managemen* (PSM-FM), in addition to the account assignment elements, commitment item and funds center, the respective account assignment element

Note the following:

- The grant, the funds, the funded program and the functional area can only be budgeted if you have activated these account assignment elements for the Budget Control System in the IMG activity Activate Account Assignment Elements in Budgeting. The funded program cannot be entered with postings, it must be derived from the account assignment elements of other components, for example, CO objects (project and order) instead.

- After the activation of functional area, grant, and funded program, you cannot restrict the selection to individual values in all programs. The corresponding program is then executed for all values of the respective account assignment element.
- *Grants Management* (PSM-GM) is activated by activating the account assignment element, grant. You can define more settings for Grants Management in the IMG of *Grants Management*. You should note that the use of Grants Management also requires you to activate the funds account assignment element.

Note

- The activation of grant, functional area and funded program has not been released for European Commission customers.

Requirements

Please note that you should only activate account assignment elements once certain prerequisites have been fulfilled.

For more information, see SAP Note 518610.

If you want to enter grant, fund and functional area when you are entering business transactions in other components, you must ensure that the *Grant, Fund* and *Functional Area* fields are ready for input.

The following prerequisites apply to Asset Accounting:

- To manage the balances for each account assignment element, you must activate grant, fund, and functional area in the Customizing of Asset Accounting. You must also activate the account assignment elements to be posted with each transaction and account assignment type (posting of APC values and depreciation posting).

You define these settings in the Customizing of Asset Accounting, under Integration with General Ledger -> Account Assignment Elements to be Posted -> Activate Account Assignment Objects and Define Account Assignment Types for Account Assignment Objects. You can find more information on the IMG activities in the following sections:

- Activate Account Assignment Objects
 - In this IMG activity, you should set the *ldent* indicator for grant, fund and functional area. This ensures that grant, fund and functional area are transferred from the asset master record with postings and cannot be changed thereafter.
- Define account assignment types for account assignment objects You must define grant, fund and functional area in the Asset master record if you want to manage per account assignment element.

Fund

Please note that an integration of the indirect activity allocation (activity RKIL) is not possible.

Functional Area

You should also be aware that the following restrictions apply in the system, when you are

working with the functional area:

Restrictions for the integration of other components:

- **Integration of Financial Accounting** You cannot use the functional area when you are using cost of sales accounting.
- **Integration Controlling** An integration of indirect activity allocation (activity RKIL) is not possible.
- Integration of HR Funds and Position Management The functional area cannot be used with the *HR Funds and Position Management* (PA-PF-FP-FM) component.

Restrictions in the Component Funds Management

- Status Management

If you are using status management, you cannot allocate a status for the commitment item/funds center/fund/functional area combination, you can only do this for the commitment item/funds center/fund combination. If status management is active, the settings apply for all functional areas.

- Workflow

Role definition can only be performed according to the FM account assignment without the functional area (fund, funds center, commitment item).

Grant

Please note the following restrictions when working with grants:

Restrictions when integrating other components:

- Integration of HR Funds and Position Management Grant cannot be used with the component *HR Funds and Position Management* (PA-PF-FP-FM).
- **Integration Controlling** An integration of indirect activity allocation (transaction RKIL) is not possible.

Restrictions in the Component Funds Management

- Status Management

If you are using status management, you cannot assign a status for the combination of commitment item/funds center/fund/grant- you can only specify one for the combination of commitment item/funds center/fund. If status management is active, the settings apply for all grants.

- Workflow

Role definition can only be performed according to the FM account assignment without the grant (fund, funds center, commitment item).

Funded program

Note that the following restrictions apply if you are working with the funded program:

Restrictions in the Component Funds Management

- Status Management

If you are using status management, you cannot assign a status for the combination of commitment item/funds center/fund/funded program - you can only assign one for the combination of commitment item/funds center/fund. If status management is active, the settings apply for all funded programs.

- Workflow

Role definition can only be performed according to the FM account assignment without the funded program (fund, funds center, commitment item).

Activities

Activate the account assignment elements you require for your clients.

Caution

Please note that you cannot deactivate the account assignment elements again if the commitment data and the actual data or budget has been posted with the account assignment elements.

36.1.1.2 Allow BLANK as Value for Account Assignment Elements

Use

In this step, you can specify that the initial value entry is allowed for account assignment elements grant, fund, functional area and funded program.

In the standard system, these account assignment elements must always have a fixed value as soon as they are activated in the step Activate Account Assignment Elements. SPACE/BLANK is then no longer accepted as a value by the system.

Note that this restriction is necessary because the following functions in the system do not accept BLANK/SPACE or entering BLANK/SPACE can lead to undesirable consequences:

- In Controlling you cannot define an assessment or allocation for the BLANK/SPACE value separately. This means that an allocation of fund BLANK (for example) to a different fund is not possible. The fund BLANK is only bequeathed from sender to receiver.
- One of the values proposed from the account assignment derivation can no longer be deleted through a manual entry (BLANK) when posting.
- When selecting values, as a rule, the entry BLANK/SPACE means that all values for an account assignment element are selected.

If after live date of the account assignment elements grant, fund, functional area or funded program for the first time with this release, you can allow the initial value (BLANK/SPACE) as value for these account assignment elements for your FM area in the transition period. This means that you will not have to make supplement account assignments for documents posted that are in old fiscal years.

36.1.1.3 Deactivate Account Assignment Elements in Controlling

Use

In this IMG activity, you can deactivate the account assignment elements fund, functional area and grant in Controlling and Asset Accounting.

If you want to use the fund, functional area or grant as the account assignment elements in Funds Management (FM), you must first activate these account assignment elements in IMG activity Activate Account Assignment Elements. If you want to use these account assignment elements in budgeting (BCS), then you have to activate them in IMG activity Activate Account Assignment Elements in Budgeting.

If you want to use *Grants Management*, you must activate the fund and the grant.

When you activate an account assignment element, you must then assign it to an account in Controlling and in Asset Accounting.

Deactivating an activated account assignment element for Controlling and Asset Accounting allows you to use this account assignment element within Funds Management or *Grants Management* without affecting business processes in Controlling or Asset Accounting.

Requirements

After activating the account assignment element, no postings were made on this account assignment element and no planning either.

Activities

Deactivate the account assignment elements that you have activated in order to use Funds Management or Grants Management in IMG activity Activate Account Assignment Elements.

36.1.2 Integration

36.1.2.1 Rule-Based Account Assignment Distribution

36.1.2.1.1 Maintain Field Profiles

Use

Use this step to identify which account assignment fields can be modified during the distribution process.

Activities

- 1. In the Field Profile overview, choose *New Entries* and enter an ID and a name for the field profile you want to use.
- 2. Having saved the profile, select it and choose *List of fields* in the dialog structure.
- 3. Choose *New Entries* and specify the fields you want to included in the field profile.
- 4. Save your entries.

36.1.2.1.2 Maintain Action Profile

Use

Use this step to control actions such as messages or displaying the results of splitting in a popup window. The message class FMSPLIT_ACTION contains some standard messages designed for use in the action profiles.

Activities

- 1. In the Action Profile overview, choose *New Entries* and enter an ID and a name for the action profile you want to use.
- 2. Having saved the profile, select it and choose *Actions in profile* in the dialog structure.
- 3. Choose *New Entries* and enter the following for the events you require:
 - Event
 - Under Actions in profile:
 - Action, selected from the input help
 - Message class
 - Message number Up to four variables
- 4. Save your entries.

36.1.2.1.3 Maintain Authorization Groups

Use

Use this step to maintain a list of authorization groups to which distribution rules and rule groups may be assigned.

Standard settings

If the rule binding type "Changes require override authorization" is to be used, the authorization group "OVER" must be created in order to support authorization profile maintenance.

Activities

In the maintenance view, choose **New Entries** and enter a four-character ID and a descriptive text for each authorization group required.

36.1.2.1.4 Maintain Rule Groups

Use

Distribution rules are organized in groups for management and authorization purposes. Use this step to make the necessary settings.

Activities

- 1. In the overview, choose *New Entries* and enter the following for each group you want to use:
 - ID and name
 - Authorization group
 - Field profile Action profile
- 2. Save your entries.

36.1.2.1.5 Maintain Derivation Strategy for Rule-Based Acct Assgnmt Distribution

Use

Use this step to determine which splitting rules to apply based on the account assignments input by the user.

36.1.2.1.6 Business Add-Ins (BAdIs) 36.1.2.1.6.1 BAdI: Enhancements for Maintenance of Account Assignment

Distribution Rules

Use

This BAdI supports the ability to add fields to the account assignment splitting Rule and Split tables, as well as to create custom tables related to splitting rules or splits.

Using the methods of the BAdI, a custom application can:

- Maintain custom fields added to the FMSPLIT_RULE database table via subscreen areas on the rule maintenance screen

- Suppress maintenance of split data in cases where a custom rule type does not require splits to be maintained
- Rreplace the screen normally used for rule and split data maintenance with a customer screen
- Include customer fields added to the FMSPLIT_SPLIT table in the ALV grid used for standard split maintenance
- Change the field catalogs used to control the ALV grids used to maintain Split and Value data

The BAdI has the following methods:

- DELETE_RULE
- MOVE_DATA
- SPLIT_ALV_DATA_CHANGED
- SPLIT_FIELDCAT
- SPLIT_MAINT_INITIALIZE
- SPLIT_MAINT_PBO
- TRANSPORT_REQUEST
- VALUES_FIELDCAT

Requirements

This BAdI must normally be used in conjunction with the BAdI FMSPLIT_RULE_DB, which provides methods to support moving custom data fields between the database tables and the editing structure used in rule maintenance.

36.1.2.1.6.2 BAdI: Account Assignment Distribution Rule - User-Defined Fields

Use

This BAdI supports creation of user defined fields in the FMSPLIT_RULE and FMSPLIT_SPLIT database tables

- LOAD_RULE_FROM_DB
- MOVE_RULE_TO_DB
- RENUMBER_SPLIT_ID

- MOVE_SPLIT_TO_DB
- CHECK_CUSTOM_DATA_CHANGED
- SAVE_RULE

Requirements

User-defined fields have been added to the appropriate database tables

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- Save the entries on the *Edit Implementation* screen.
 Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.1.2.1.6.3 BAdI: Enhancement for Derivation of Account Assignment Distribution Rules

Use

SAP provides methods that enable you to further customize the behavior of the rule-based distribution to multiple account assignments derivation tool. You must create an implementation using the following predefined methods:

- CHECK_DRULE_BEFORE_SAVE
- CHECK_DRULE_ENTRY
- GET_STRATEGY
- STEP_ACTIVITY_CHECK
- STEP_CHECK_ON_ENTER
- STEP_CHECK_ON_EXIT
- SET_DISPLAY_MODE
- STEP_DRULE_ACTIVITY_CHECK
- SET_STRATEGY_BUTTONS
- DERIVE
- FILL_CUSTOMER_FIELDS

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen.

Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.

9. Choose Activate

The code you stored in the method will be run when the application program is executed.

36.1.2.1.6.4 BAdI: Configure Control of Account Assignment Distribution

Use

Allows custom applications to:

- Move user-defined field contents from COBL into the structure FM_SPLIT_DERIVE at the start of the distribution process. These fields are then available to influence the distribution process.
- Move user-defined field contents from the FMSPLIT_DERIVE (structure that is used within the account assignment split processor) to COBL or COBL_AD at the end of the splitting process

These functions are implemented in the following methods:

- FILL_CUSTOM_DERIVE_FIELDS
- FILL_CUSTOM_COBL_FIELDS

Requirements

Custom fields are added to structure FMSPLIT_DERIVE and/or COBL

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.

The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.1.2.1.6.5 BAdI: Define Account Assignment Distribution Method

Use

This BAdI supports the implementation of a custom distribution method within account assignment splitting. The purpose of the distribution method is to determine which portion of an amount is to be allocated to a given split.

- INITIALIZE
- DISTRIBUTE

Requirements

A custom distribution method must be defined using maintenance view V_FMSPLIT_DIST_METHOD. Then account assignment distribution rules can be defined which reference this custom distribution method. When a distribution rule is processed, this BAdI is invoked to perform the calculation of the amount to allocate to a split.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate

The code you stored in the method will be run when the application program is executed.

36.1.2.1.6.6 BAdI: Configure Processing of Account Assignment Distribution Rules

Use

This BAdI allows custom processing of the filling of account assignment field values during the account assignment splitting process. The BAdI methods allow the takeover of the complete set of assignment fields population, or of individual fields.

The following methods are available for implementation of this functionality:

- INITIALIZE
- ONE_FIELD_VALUE_ASSIGNMENT
- ALL_FIELD_VALUE_ASSIGNMENT

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.1.2.2 Principle of Prudence

36.1.2.2.1 Define Derivation Strategy for Principle of Prudence

Use

Use this step to define the derivation strategy you need to apply the principle of prudence in your installation.

If you set the flag for postponing a funds return to "P", document processing can be customized so that parked documents, such as credit memos, do not impact the budget. Only posted documents impact the budget.

Standard settings

As a minimum, the following fields are available for use in determining whether the credit memo update to FM is delayed:

- Fund
- Fund Type
- Trading Partner

- Document Type

Activities

You can create, change and delete steps and also change their order.

Create Step

- Choose Create Step.
 If you want to add a new step to the derivation strategy, select the step before which you want to insert the new step and choose Create Step.
- 2. Choose the derivation step type that you want from those offered to you.
- 3. Enter a text and source and target field for the derivation step. For the source and target fields, you can determine Field characteristics.
 - Source Field

You can determine that initial values are permitted. This means that a derivation is carried out if the source field is not filled.

- Target Field
 - For the target field you can determine that:

The new value is not copied if a value from a previous derivation step already exists. The new value is copied even if the new value is blank (space) The new value is copied when the new value is filled.

Note: If you use this setting you can determine, for example, that the derived value cannot be overwritten manually.

- Source Fields and Target Fields

In addition to the derivation step type "Derivation Rule", you can determine that either the entire field contents, or only a part of the field contents is included.

- 4. If the derivation step should only be performed according to specific conditions, for example, only for specific account assignment values, enter this on the Condition tabpage. The derivation step is only executed when all conditions for the fields are fulfilled.
- 5. Define Step Characteristics on the Characteristics tabpage, for example, if an error message should be issued, if no target value can be determined.
 - An error message should be issued if the derivation step is not successfully derived. Otherwise the strategy will not be continued.
 - The execution of the strategy should be terminated if a suitable value is found in the derivation step. Otherwise the strategy is completed.

Note: If you are using derivation step type "Derivation Rule", you can make the following additional entries: Assignment Derivation.

You can make additional specifications on the Characteristics tab; for example, you can allow the entry of a validity date for a step and therefore make it time-dependent.

6. When you have saved the new entry, go back to the complete list.

- 7. To assign a company code to a strategy, select the strategy and choose company code assignment in the dialog window.
- 8. Choose new entries in the overview that follows and enter the company code you want to assign to the strategy.

Change/Delete Step

- When making a change, you have all the options described under "Create Step".
- To delete an entry, select the relevant step and choose Delete.

Change Step Sequence

- 1. Select the step you want to move.
- 2. Position the cursor below the target position.
- 3. Choose Move.

36.1.3 Information System: Reconciliation

36.1.3.1 Define Field Transactions for FI

Use

In this step, you define the field movements from a new general ledger (G/L) totals table to the internal structure of the reconciliation tool and assign them to a totals table. The field names of the internal structure are given in the default field movement SAPDEFAULT. Fields that do not exist in this field movement are added to the internal structures dynamically with the same name as in the totals table and do not need a field movement.

If no field movement is assigned, the default movement SAPDEFAULT is used.

Activities

Assign the field movement(s) you require.

36.1.3.2 Define Reconciliation Data Slice

Use

Use this step to create the data slice(s) you need to work with the reconciliation feature.

Standard settings

We deliver five data providers for use in reconciliation data slices.

Use

Stipulate the following for each new data slice you create:

- Slice ID
- Which of the data providers you want to use for this rule
- How the resulting default fields are to be processed. You can also add fields to the selection offered.

In addition, make the following entries on the tabs in the top half of the screen:

- Name and short name for the slice
- Calculation settings
- Derivation settings See the derivation tool documentation for details of how to do this.
- If desired, a text with any additional information relevant to the slice or its usage.
- Details of which rules use the data slice.

36.1.3.3 Define Reconciliation Rule

Use

Use this step to create and configure the reconciliation rule(s) you need to use the reconciliation feature.

Standard settings

We do not deliver any standard settings.

Activities

In the screen for creating reconciliation rules, you enter:

- Basic data, consisting of a name for the new rule and the system ID of the person to be notified if the reconciliation finds items that do not match.
- An equation for the reconciliation
- Field usage details
 - Here, you stipulate which fields are to appear in the selection screen for the reconciliation analysis report, along with the level of breakdown in each case.

36.1.3.4 Define Subtotal Groups

Use

Use this step to maintain lists of subtotal texts to be used when deriving additional breakdowns in reconciliation data slices.

Standard settings

We do not deliver any standard settings.

Activities

Subtotal texts are managed within subtotal groups. In the screen for maintaining subtotal texts, you must first create one or more groups forthe texts. Then select a group and maintain the texts in that group. In these screens you enter the following:

- For groups: Subtotal Group ID code and name -

For texts: Subtotal ID and Subtotal Text

36.2 Funds Management Government

The Implementation Guide (IMG) for "Funds Management Government" contains all information necessary for configuring the *"Funds Management Government"* component.

The IMG

- lists all the activities for implementing Funds Management
- refers to the Customizing settings in other components which are necessary for integrated use with Funds Management.

36.2.1 Prepare Funds Management Installation

When implementing the *Funds Management Government* component, you should take care to carry out the individual steps in a particular order. You enter the required preconfigurations and functions at different points in the SAP System.

Proceed as follows when implementing Funds Management:

1. You create company codes, FM areas, and controlling areas in the Customizing of the *Enterprise Structure*. For more information, see the implementation guide (IMG)

Enterprise Structure, sections:

- a) Edit, Copy, Delete, Check Company Code
- b) Maintain FM Area
- c) Maintain Controlling Area
- 2. You then assign an FM area to each company code and controlling area relevant to Funds Management.

For more information, see sections:

- a) Assign Company Code to FM Area
- b) Assign Controlling Area to FM Area
- 3. You create your G/L accounts in the General Ledger Accounting menu. For more information, read the chapter: Create G/L accounts in the *G/L accounting* IMG (FI-GL) under *G/L account master records*.
- 4. Use Financial Accounting customizing to maintain the field status definition groups. These determine which fields in the account are ready for input, must be maintained, or are hidden, when you are entering business transactions. For more information, read: Define Field Status Variants in the *Financial Accounting Basic Settings*.

Note that the additional account assignments commitment item, funds center and fund will only accept input if you mark the relevant fields as required or optional entries. This applies, however, only to G/L accounts whose commitment items are assigned with the 30 such as a revenue account. G/L accounts whose commitment items are assigned with a transaction other than 30 should have the error hidden.

If you want to reference earmarked funds when posting a payment, you must define the additional account assignment Earmarked funds as a required or optional entry.

- 5. Likewise for Materials Management, the additional account assignments, commitment item, funds center, and fund are only ready for input if they are flagged as required or optional entries when posting the purchase requisition and purchase order. You can find more information in the *Purchasing* IMG in section Maintain Account Assignment Categories.
- 6. If you want to integrate inventory management with Funds Management, there are different ways of controlling this, depending on the warehouse concept you chose. For more information, see the SAP Library under Funds Management -> Actuals and Commitments Update -> Integration
- 7. If you want to integrate Assets Accounting, you must go to the *Funds Management* implementation guide and flag as budget relevant the transaction types for the individual transactions (acquisitions and retirements). For more information, see the SAP Library under *Funds Management* Actuals and Commitments Update -> Integration Asset Accounting

- 8. If you want to integrate Payroll Accounting with Funds Management, you must define a funds center and fund for individual Infotypes. For more information, see the IMG of *Funds Management Government*, section Define Start Date for HR Integration (Scenario 2).
- 9. If you want to integrate Travel Management with Funds Management, the funds center, commitment item, and fund fields must be ready for input when you post in Travel Expense Accounting. You enter these settings in the *Travel Management* IMG *Dialogue*

and settlement control -> Screen layout for trip data input -> Set up variable construction for account assignment objects.

You switch to the Funds Management application menu, create your master data (commitment items, funds centers and funds) and then define your account assignment derivation.
 For more information on account assignment derivation in Funds Management, see component *Funds Management* (PSM-FM) under *Account Assignment Derivation* as well as section Define Account Assignment Derivation.

For more information on creating master data, see the component *Master data* in the component *Funds Management* (PSM-FM).

11. You can then define the remaining settings in the IMG of Funds Management. For more information, read the following chapters.

Further notes

The *Funds Management* application component can not be used simultaneously with the components *Cash Budget Management* and/or *Project Cash Management* if you use year-dependent master data in Funds Management.

If you want to use *Funds Management* with Cash Budget Management and/or Project Cash Management you must note that Cash Budget Management and Project Cash Management only process 10 character commitment items.

36.2.2 Basic Settings

In the following steps, you make the general basic settings for Funds Management.

36.2.2.1 Activate Global Funds Management Functions (PSM-FM)

In this step you can activate/deactivate specific functions in the system for the component *Funds Management (PSM-FM)*.

Activities

Set the indicator to use the functions in this system.

36.2.2.2 Activate Multi-Year Budget Execution

Use

In this Customizing activity you activate multi-year budget execution.

Activating multi-year budget execution means that business processes such as entering documents

and payment/clearing transactions can be executed regardless of the fiscal year with reference to a Budget ID. A fiscal year change is no longer necessary.

The system response changes as follows once this function has been activated:

- In the master data maintenance, you must work with year-independent funds centers and commitment items. You use the budget ID to define the validity of the budget in the fund master record independently of the respective fiscal year. A general total budget is usually defined in the fund types you are using if multi-year budget execution has been activated. You can also define other master data for a budget as well as the identification of the respective budget in the fund key.
- You use the Budget Control System (BCS) for budgeting in Funds Management . You enter the budget in the respective fiscal year and for the respective budget using the fund master data object. You can use BCS status management to regulate the budgeting process in the budget, which you have previously defined in the Customizing activity Edit Status. The availability control (AVC) takes place on the basis of the available overall budget for the respective budget. Accordingly, a checking horizon set for an annual period is no longer allowed.
- During document entry, you can reference commitment documents (earmarked funds, purchase requisitions, purchase orders). Estimated revenues can be referenced when entering commitment documents. A commitment carryforward is then no longer necessary. You can control the permitted/non-permitted actual/commitment postings for the respective periods for each fiscal year by opening/closing the posting periods.
- With the payment selection program RFFMS200, payments that refer to invoices from the previous year are converted to the current year. A fiscal year change for invoices is no longer necessary with the commitment carryforward and is therefore no longer supported.
- In the information system, with an active multi-year budget you can report on the yearly totals for commitment/actual of *Funds Management*, by executing program Fund Balance Carryforward. This program carries forward the open balance for each value type to the new fiscal year without changing the FM account assignment (and without summarizing using the commitment item). You can branch to the respective item from the previous year with totals reporting for Funds Management.

Comment

Note that the FM information system also supports multi-year reporting. If you do not need any year-based reporting through your budget (for example in an individual fund), you do not need to execute the fund balance carryforward. Note that you must hide the data records with the amount type *Carryover from Previous Years* (actual balance) (0360) in reporting using commitment/actual data, otherwise the fund balance carryforward causes incorrect valuation in multi-year reporting.

- You can perform yearly reporting on the residual budget by executing program Carry Over Residual Budget using one of the budget types intended for valuation purposes.

- If you want to transfer open commitments to the new budget with your closing operations, you can use program RFFMCCOVR. You execute the program in the menu of Funds management, under Additional Functions -> Closing Operations -> Commitments/Actuals -> Reassign Open Commitment.
- If you want to transfer the residual budget from the old to the new budget, you can use program Transfer Budget Data.

Requirements

You have set up Period-Based Encumbrance Tracking for updating in Funds Management.

You use an Update Profile that is based on profile 000101 and therefore supports a posting data-based update (such as the 000600 profile of the Federal Government). The multi-year budget is not supported for update profile 000500 ("availability control payment program, for example, for Canadian Government").

If you are working with year-dependent master data in your production system, note the migration steps to be executed for multi-year budget execution. For information about this, see Note **640452**.

Reassignment programs (programs RFFMCHA*...., especially RFFMCHAT) are not supported with this setting. You can use program RFFMCCOVR for this.

Standard settings

Multi-year budgeting is not active in the standard system.

Activities

If you activate this function, you must ensure the following:

Master Data

- The account assignment element "fund" is activated. You do this in the Customizing activity Activate Account Assignment Elements.
 A budget ID is coded into the name of the fund for each new budget entered. It is advisable to use the Create and Define Subdivision ID in Funds Management for this. If you have to define other FM account assignment elements as being year-dependent, you can do this by coding the budget
- ID into the name of the account assignment elements also.
- 2. Implement the Business Add-In (BAdI) Define Grouping Key (FMKU_GROUPING_KEY) so that the corresponding budget ID is returned for each possible FM account assignment, to activate the following consistency checks:
 - If you activate posting and/or budget objects and define a corresponding account assignment derivation for budget addresses, the system ensures that the budget address assigned to a posting address has the same grouping key (the same budget ID).
 - If you define an account assignment derivation for availability control objects, the system ensures that an availability control object assigned to a budget address has the same grouping key (the same budget ID).

For more information about this, see the documentation for this BAdI.

3. Specify that you want a multi-year checking horizon for availability control (AVC). To do so choose the Customizing activity Select Checking Horizon for Availability Control and select a ledger for which you define that the *checking horizon is entirely defined through the fund master record*. You can also set the checking horizon to be used for *overall checks*.

Examples

You have activated this function.

The name of your sponsors is coded into the first five digits, the budget ID into the last four digits of the fund name. The budget ID is assigned in accordance with the year the budget is entered: The budget adopted in fiscal year 2002 is managed under budget ID 2002 and so on. Funds 04711-2002, 04712-2002 and so on for the budget 2002 are assigned the keys 04711-2002, 04712-2002 and so on. In the budget with ID 2003 the same funds have the names 04711-2003, 04712-2003, and so on.

Notes

For more information about this, see the SAP Library under Multi-Year Budget.

36.2.2.3 Define Global Parameters

In this step, you can check whether you have maintained the required parameters and assignments for each of your FM areas .

For each of your FM areas, you must have maintained the following parameters at different points in the Implementation Guide:

- Fiscal year variant
- Status profile
- Number ranges for actual transactions

You also make the assignments at different points in the Implementation Guide. You can make any assignments which are still missing here.

Authorization for Fund SPACE or BLANK

In addition, you can use this step to define an authorization group for the **Fund BLANK** in each FM area, thereby making an authorization check possible. You define an authorization for this group and assign it to an authorization profile.

Standard setup

In the standard system, the following parameters are already maintained and assigned for FM area 0001:

- Fiscal year variant K4

Requirements

1. You must have created at least one FM area.

For more information, read the chapter "Maintain financial management area" in the "Enterprise Structure" Implementation Guide.

2. You must have assigned each company code which is relevant for Funds Management to an FM area. For cross-company code funds management, you can combine several company codes in one FM area. To do this, simply assign the company codes in question to the same FM area. For more information, read "Assign company code to FM area" in the "Enterprise Structure" Implementation Guide.

Activities

Check whether the necessary parameters have been maintained for each FM area.

If any are missing, maintain them at the appropriate points in the Implementation Guide.

Creating an authorization group for the fund BLANK

If you want to enter an authorization check for the fund BLANK, do the following:

- 1. If you are in display mode, then switch to change mode via Table View -> Display -> Change.
- 2. Use the cursor to select an FM area to which you want to assign an authorization group and choose View -> Detail.
- 3. Enter the name of the authorization group in the **Authoriz. Group** field, and choose Table View -> Save.

36.2.2.4 Fiscal Year Variant

A fiscal year consists of several posting periods and, if required, special periods to which you can post after a provisional year-end closing.

You define how your fiscal year is to be made up in the R/3 System. You assign this definition to the FM areas. The definition of a fiscal year is known as the fiscal year variant and is made at client level. More than one FM area can use the same fiscal year variant.

36.2.2.4.1 Define Fiscal Year Variants

In this step, you define fiscal year variants for your FM area.

You use a fiscal year variant to specify:

- The number of posting periods in a fiscal year
- The number of special periods you need
- How the system is to determine the posting periods when making postings When making your definitions, you allocate your posting periods to the calendar year.

Note

You can define fiscal year variants for Funds Management that differ from Cash Budget Management and/or Financial Accounting.

Note the following:

If you use fiscal year variants with special periods, the variants in Funds Management and Financial Accounting must match. Otherwise, the FI postings are transferred to the period of the posting date instead of the special period of Funds Management.

Standard settings

The following fiscal year variants are created in the standard system:

- Variants for which the fiscal year corresponds to the calendar year with an additional one, two, three, or four special periods
- Variants for shortened fiscal years For more information, read the section on special features for the shortened fiscal year in the Implementation Guide for "Financial Accounting".
- Variants for non-calendar fiscal years:
- April through March with four special periods
- June through July with four special periods October through September with four special periods
- Variant on a weekly basis.
 This variant can only be used in the "Special Purpose Ledger FI-SL" application.

Activities

- 1. Check the standard fiscal year variants.
- 2. Create your own variants.

Additional information

Assign the appropriate fiscal year variant to your FM areas in the next step.

36.2.2.4.2 Assign Fiscal Year Variant to FM Area

In this step, you assign fiscal year variants to your FM areas.

Requirements

You must first have defined fiscal year variants in the previous step. For more information, read "Define Fiscal Year Variants".

Standard settings

The standard system includes FM area 0001, with fiscal year variant K4 (12 posting periods plus four special periods) already assigned to it.

Activities

Make your assignments, as necessary.

You can assign different fiscal year variants for Funds Management than for Cash Budget Management and/or Financial Accounting

If you use fiscal year variants with special periods, the variants in Funds Management and Financial Accounting must match. Otherwise the FI postings in a special period are transferred to the period of the posting date and not to the special period in Funds Management.

36.2.2.5 Change Message Control

In this activity you can set system messages to appear as you require them. You can

- determine whether a message is issued as a note in the dialog box or in the footer
- change warnings into error messages
- switch off warnings and error messages

Different specifications are possible for the online mode and for the batch input sessions processed in the background.

You can make the corresponding specifications for a client or, if required, also for the individual user.

Activities

- 1. Enter the following data:
 - Message number
 By selecting the F4 key on the *MsgNo* field you can find out which messages are available.
 - User name

If you enter a name here then the specifications only apply to this particular user. If you enter "blank", then the settings apply to all users within the client.

- Message type You can find out the permitted message type by selecting F4 on the *Online* or *Batchl* fields.
- 2. Save your entries.

The accompanying message text is inserted automatically.

Further notes

Integrating Human Resources

If you have integrated Funds Management with HR (Human Resources) and specified that account assignments for Funds Management are to be derived from the CO -> FM account assignment, you should switch off message 012 "Item &: Funds Center & copied from default value". Otherwise, this message will appear when you are maintaining Infotypes (defining costs centers).

36.2.2.6 Develop Enhancements for Funds Management

You can use Customer exits to add you own functions to SAP standard applications without having to modify the SAP original.

SAP organizes available exits in groups - known as SAP enhancements. Every SAP enhancement can contain several exits.

You can only take advantage of customer exits if you have added these to the SAP standard application. The following enhancements in the *Funds Management* component are made available by SAP. You can find more information in the documentation of the enhancement and exits.

Master Data

- FMMD0007 Creating/changing funds center in FM area
- FMMD0008 Checking values in funds center (screen 400)
- FMMD0009 Customer-specific screen fields for funds centers
- FMMD0012 Customer-specific screen fields for fund master record
- FMMD0013 Creating/changing fund
- FMMD0014 Checking fund
- FMMD0015 Creating/changing commitment item (new)
- FMMD0016 Checking commitment item (new)
- FMMD0017 Customer-specific screen fields for commitment items (new)
- FMMD0018 Copying of commitment items (new)
- SAPLFMDT
 - Enhancement for the FM derivation tool

Actual and Commitment Update

- SAPLFMOI Update commitment
- SAPLFMPY Active budget control Funds Management in payment program
- SAPLFMCU CO update in Funds Management
- SAPLFMCH Reassignment Funds Management
- SAPLFMFA General module for update Funds Management
- SAPLFMKN Assignment of Funds Management control number
- SAPFMPM Online account assignment Funds Management plant maintenance
- SAPFMSD Online account assignment Funds Management sales and distribution
- SAPFMNV Online account assignment Funds Management network activity
- SAPFMNP Online account assignment Funds Management network header
- SAPLFMWR Exits for coding block
- SAPLFMPA Exits for payment conversion

Funds Management-specific postings

- FMRESERV
 Management of earmarked funds
- RFFMBW00 Transfer of external document number table
- FMITPOSM Transfer posting with FMITPO: validate document and bank data
- SAPLF0KA User exits request determinant

- SAPLF0KE

Request determinant help functions

Closing Operation

- SAPFMVTR Special update control setting balance carryforward in Funds Management

Activities

- 1. Create a project or use an existing project and then enter the enhancement. You can manage the enhancement and the customer exits contained in them using this program
- 2. Activate the project after you have assigned the functions you require to the exits in your project.

Your enhancement only has an effect after the activation.

Further notes

You can find the general procedure for the creation of enhancements in the enhancement transaction CMOD under Help -> Application Help or in the SAP Library under SAP Netweaver Components -> SAP Web Application Server -> ABAP Workbench (BC-DWB) -> Changes to SAP Standards -> Customer Exits.

36.2.2.7 Define Central System in ALE Environment

Use

In this IMG activity you define the central system in the ALE environment.

For more information on ALE distribution in Funds Management, see the documentation of IMG activity Create Standard ALE Customizing Settings in the IMG of the Budget Control System (BCS).

Requirements

You use Funds Management in a distributed environment. FM documents are posted locally and transferred to a central system.

Standard settings

Enter the central system.

36.2.3 Master Data

In the following sections you will be carrying out important settings which are necessary for the maintenance of master data.

36.2.3.1 Account Assignment Elements

36.2.3.1.1 Year-Dependent Master Data

In the follwing sections, you execute the activation of your master data maintenance for year-dependency.

36.2.3.1.1.1 Activate Year-Dependent Master Data

Using program **RFFMMDACT** you can activate the master data maintenance of an FM area to be yeardependent, that is, valid for a single year only.

Special feature during initial installation

If you are using the SAP system for the first time, you should execute this program before creating master data.

Special feature during changeover to year-dependency

If you previously maintained your master data separately for each year, master data changes will be necessary before the activation of year-dependency is allowed in the system.

During execution of the program, an FM area check is performed as to whether the current master data maintenance fulfills the prerequistes for changeover to year-dependency. In addition, the program will guide you as to which changes you must make in order to activate year-dependency.

Recommendation

In section Display activation status of year-dependent master data you can check the current

master data maintenance for commitment items and funds centers of an FM area.

Activities

You can find a detailed description of the procedure in the corresponding program documentation RFFMMDAC.

36.2.3.1.1.2 Display Activation Status of Year-Dependent Master Data

In this step you can check the current maintenance status of the master data for an FM area.

Whether a year-independent or year-dependent maintenance exists for the funds center and commitment items is displayed.

36.2.3.1.2 Commitment Item

In the following sections, you have the following functions available for the maintenance of commitment items:

- Creating/Changing of a chart of commitment items for the defining of commitment item hierarchies
- Assignment of a chart of commitment items valid for FM area/ fiscal year
- Definition of the committeent item input template
- Copy tool for the simple maintenance of commitment item master records
- Maintenance of criteria
- Extension of the long text function with additional text types

36.2.3.1.2.1 Create Variant in FM Area/Fiscal Year

In this step, you create variants for maintaining commitment item hierarchies.

In addition to the standard variant "000", you can create additional variants to use alternative commitment item hierarchies.

Standard settings

You do not have to create the standard variant "000". It is generated automatically as soon as you create or import new commitment items in an FM area/fiscal year.

If you want to import an alternative commitment item hierarchy into the new fiscal year, then you have to first create the variant in the new fiscal year. Unlike the standard variant, the variants of alternative commitment items are not automatically transferred on export/import.

Activities

- 1. Create the alphanumeric code and the name of the variant for an FM area/fiscal year.
- 2. Save your entry.

36.2.3.1.2.2 Copy Commitment Items

In these sections, you execute an export or import of commitment items of an FM area/fiscal year.

In doing so, the commitment item data records are exported from the SAP system to a Unix or PC data file, or imported from this data file to the SAP system.

36.2.3.1.2.2.1 Export Commitment Items to External File

In this step, you export the commitment items of an FM area/fiscal year into an external file (Unix File or PC File), using program **RFFMBI81**.

In a extra step (importing the external file), you import the stored data into the SAP System so you can transfer the commitment items of an FM area/fiscal year to the following fiscal year or to another FM area.

Activities

- 1. Start the program.
- 2. Enter the source FM area/fiscal year, from which you want to export commitment items.
- 3. Select the text type and language for the export of the long text. The standard text type is text type 01. If you do not make an entry, all long texts in all languages are transferred.
- 4. Choose the data type (Unix or PC) and enter the path.
- 5. Execute the program.

Further notes

For more information, see program documentation.

There is an enhancement FMMD0018 that you can use to change data records to be exported or to add new data records for the program.

36.2.3.1.2.2.2 Import Commitment Items from External File

In this step, you can use program **RFFMBI85** to import the commitment items stored in an external file (UNIX File or PC File) into the SAP system.

You can import the master data of the commitment items into the same FM area or into a new FM area.

Requirements

You have performed the "Export Commitment Items to External File".

Activities

- 1. Start the Report.
- 2. Enter the target FM area as well as the fiscal year.
- 3. Enter the target variant. If more than one variant is to be created, the standard variant must first be imported.
- 4. Enter the source directory as well as the file name of the data file to be imported.
- Set the *Test run* and *Detail list* indicators and execute the program.
 If error messages are displayed in the test run, remove the errors. Repeat the test run until no error messages appear.

6. Remove the *Test run* indicator and execute the program in an update run.

Further notes

For further information, see the Program documentation.

36.2.3.1.2.2.3 Copy Standard Hierarchy of Commitment Items into Following Year

Use

In this step, you can copy the commitment item standard hierarchy (variant 000) of a FM area from the fiscal year entered to the following fiscal year.

If you are working with year-dependent commitment items, use this program to construct the standard hierarchy of the old year in the new fiscal year. If there have been changes to the functional company structure, you can use the enhancement User Exit for Copying Commitment Items (FMMD0018) to change the data records to be copied during the copy process and add new data records.

If you want to use enhancement FMMD0018, you have to set the indicator *Enhancement: Copying Commitment Items*.

36.2.3.1.2.3 Create Additional Text Types for Commitment Items

In this step, you can extend the *long text* function in the commitment item master record with additional text types. The additional text types allow you to maintain more long text information independent of each other within a commitment item. The extended long text function is valid across FM areas or clients.

You define the additional text type with a numerical value and the corresponding meaning as a short text.

If you are in the master data maintenance of a commitment item and select the *long text* function, you will get the intial screen for long text maintenance *Maintain commitment item long text* and the defined text types available and for maintenance are displayed. You can also maintain an individual long text for each language version in a text type.

Standard settings

The text type 01 standard text: Commitment item is delivered in the standard.

Activities

- 1. Choose New entries.
- 2. Define a two digit numerical value and the meaning of the text type.
- 3. Save your entries.

Further notes

See the **Maintain Additional Master Data Long Texts** documentation for more information about this function.

36.2.3.1.2.4 Mask for Commitment Item Keys

In the following steps you can define a mask for the commitment item key. In the mask, you can specify which special signs should subdivide the commitment item key in the on-screen output.

36.2.3.1.2.4.1 Define Special Character for Mask

In this work step you specify which special character should be used for the mask of the commitment item key.

In a further IMG activity you specify the mask for the commitment item.

Activities

Specify the special character.

36.2.3.1.2.4.2 Define Mask for Commitment Items

In this step you define the mask for the commitment item key. When outputting the commitment items on the screen, the special characters, which must previously have been defined, according to the mask, are inserted into the commitment item key and displayed.

The mask defined is only valid for one client.

Exceptions:

The mask coding defined here is overriden, as soon as you create a commitment item that has more characters than the mask definition. In this case the commitment item key is displayed without special characters.

Example

You define the following mask for the key: XXX:XXX.XXX

The commitment item key 444555666 is displayed as 444:555.666.

Requirements

The special characters that are to be used in the mask must be defined in step "Define special characters for mask".

Note: Before you define a mask for the commitment item, you must ensure that no commitment items were previously created, whose keys contain the selected special characters. To do this, generate an alphabetical master data directory for the commitment items, in the *Funds Management* information system, for example.

Activities

Define the mask.

36.2.3.1.2.5 Reproduce Budget Structure

This hypertext is only relevant for German local authorities.

36.2.3.1.2.5.1 Define Structure of Commitment Item

This hypertext is only relevant for German local authorities.

36.2.3.1.2.5.2 Copy Commitment Item Structure from Source Client

In this step you copy the commitment item structure you have maintained in step "Specify structure of the commitment item" for more than one FM area.

Activities

After you have maintained the commitment item structure, go into the client in which you would like to copy this structure and copy the structure from the source client.

36.2.3.1.2.5.3 Maintain Structure Texts

In this step, for each financial year and FM area, you can:

- Create new single plans, sections and subsections and maintain the corresponding texts
- Make changes to existing single plans, sections and subsections Note:

This setting must be maintained for every financial year.

Activities

Enter the data you require for each FM area used.

36.2.3.1.2.5.4 Maintain Grouping Texts

In this step, for each financial year and FM area, you can:

- Create new main groups, groups and subgroups and maintain the corresponding texts
- Make changes to existing main groups, groups and subgroups Note:

This setting must be maintained for every financial year.

Activities

Enter the data required for each FM area used.

36.2.3.1.2.5.5 Copy Structural and Grouping Texts

This hypertext is only relevant for German local authorities.

36.2.3.1.2.6 Maintain Commitment Item

In this IMG activity, you can define additional types for master data maintenance of commitment items, as well as the commitment item types delivered by SAP.

Note:

The programs delivered by SAP refer to the preset commitment item types in the standard delivery. Only make changes if you want to apply your own programs exclusively in this context. SAP advises you not to change the commitment types of the standard delivery.

You can also define for each commitment item type, if a plausibility check for postings is to be carried out.

Standard settings

The standard delivery comprises the following commitment item types, numerical assignments, and checks:

Type of commit. itemType of cmmt item Verification 1 Management commitment item X

| 1 | Widnagement commitment item | 11 |
|---|-----------------------------|----|
| 2 | Net assets commitment item | Х |

3 Deposit
4 Advance (cash desk)

Activities

- 1. Choose the change mode, if you are in the display mode, via Table view -> Display -> Change.
- 2. To create new commitment item types, make the changes in existing data or select **Edit -> New** entries,
- 3. Save your entry.

36.2.3.1.3 Funds Center

In the following sections, you have the following functions available for the maintenance of funds centers:

- Creating of hierarchy variants for the definition of funds center hierarchies
- Assignment of a hierarchy variant valid for a FM area/fiscal year
- Copy tool for the simple maintenance of funds center master records and hierarchy variants -

Extension of the long text function with further text types

36.2.3.1.3.1 Hierarchy Variant

In these sections you will be carrying out the necessary settings in order to be able to create a hierarchical relationship between funds centers.

A funds center hierarchy is displayed in a hierarchy variant in the system.

There are 2 steps required to do this:

- 1. Create a hierarchy variant in IMG.
- 2. In master data maintenance, maintain the hierarchical relationship between funds centers of an FM area in the hierarchy variant.

Hierarchy variants are year-independent. In assigning a hierarchy variant to an FM area/fiscal year, you determine the current valid funds center hierarchy of an FM area.

36.2.3.1.3.1.1 Create/Change Hierarchy Variant

You create new hierarchy variants in this section. These are then used to define a funds center hierarchy in master data maintenance.

Beyond that, you can also delete hierarchy variants in this section and in existing hierarchy variants carry out changes in the textual name. Changing an alphanumeric key is not possible in an existing hierarchy variant.

Standard settings

No hierarchy variants are available in new installations of the delivery system.

If you are already working with a SAP System and funds centers exist in a hierarchical context, the funds center hierarchy has as a default in the standard a hierarchy variant preset with key 0000.

Activities

Create a 4 digit alphanumeric key and name for the hierarchy variant.

36.2.3.1.3.1.2 Assign Hierarchy Variant to FM Area

In this section, you determine which hierarchy variants are to be assigned to the FM area and fiscal year as the current valid funds center hierarchy.

If you are working in your FM area year-dependently, you must enter the respective fiscal year. If you would like to work year-independently, you must make "0000" as the entry for the fiscal year.

Requirements

You have created a hierarchy variant and defined the funds center hierarchy in master data maintenance.

36.2.3.1.3.1.3 Change Assignment of Hierarchy Variant

Use

In this IMG activity, you can remove (delete) the hierarchy variant assigned to an FM area/fiscal year and if necessary, replace it with an assignment to a new hierarchy.

You can find more information in the program documentation.

36.2.3.1.3.2 Copy Funds Centers

In these sections, you execute an export or import program in order to copy funds centers with/without a hierarchy structure of an FM area.

In doing so, the funds center data records are exported from the SAP system to a Unix or PC data file, or imported from this data file to the SAP system.

36.2.3.1.3.2.1 Export Funds Centers to an External File

In this step, using program **RFFMBI91** you export funds centers as well as the hierarchy variants of an FM area in an external file (Unix file or PC file).

All funds centers of an FM area are stored. In addition, you can also export the hierarchy structure of the hierarchy variants into an external file.

In another step (importing of an external file) you import a data file into the SAP system. You can transfer the funds centers or the hierarchy variants to another FM area, or create an identical copy of the existing hierarchy variants as a new hierarchy variant.

Activities

- 1. Start the program.
- 2. Specify the FM area and hierarchy variant key.
- 3. If you also want to export the hierarchy structure along with the funds center, then set the *Save funds centers from hierarchy variant* indicator.
- 4. Choose the text types and languages for the export of the long texts. The standard text is the text type 01. If no entry was made, all long texts are transferred in all languages.
- 5. Choose the file type (Unix or PC), the path as well as the file name.
- 6. Execute the program.

Further notes

The enhancement FMMD0011 is available for the program for changing or adding new data records to be exported.

See Program documentation for more information.

36.2.3.1.3.2.2 Import Funds Centers from External File

In this step, you import funds centers of an FM area or the hierarchy variants of an external file (UNIX file or PC file) to a new FM area or as a new hierarchy variant to the same FM area using program **RFFMBI95**.

Requirements

When importing funds center master data, the following prerequisites should be fulfilled in the target FM area:

- a hierarchy variant key has been created for the new hierarchy variant.
- the new hierarchy variant is not assigned to any FM area / fiscal year.
- no funds centers exist for the target hierarchy variant.

- the funds are created for the target FM area that are specified in the funds centers to be imported.
- the fiscal year variant data (first and last day) must be adapted to the validity dates (existence interval) of the funds centers to be imported.

Activities

- 1. Start the program.
- 2. Enter the target parameters FM area as well as the hierarchy variant in which you want to save the data record.
- 3. Enter the source directory as well as the file name of the data file to be imported.
- 4. Set the **test run** indicator and execute the program.
- 5. If error messages should be displayed during the test, correct the errors. Repeat the test run until there are no error messages displayed.
- 6. Remove the test run indicator and execute the import. Should error messages occur during the "real" import you should not only correct the error but delete the data already imported. To do this start the Delete funds centers in FM area program in section Delete master data.
- 7. Save your entries.

Further notes

Save funds centers in external file Delete funds centers in FM area

36.2.3.1.3.3 Create Additional Text Types for Funds Centers

In this step, you can extend the *long text* in the funds center master record with additional text types. The additional text types allow you to maintain more long text information items independently of each other within a funds center. The extended long text function is valid across FM areas or clients.

You define the additional text type with a numerical value and the corresponding meaning as a short text.

If you are in the master data maintenance of a funds center and select the *long text* function, you will get the initial screen for long text maintenance *Maintain funds center long text* and the defined text types available and for maintenance are displayed. On the other hand, you can maintain an individual long text for each language version in a text type.

Standard settings

The text type 01 Standard text: Commitment item is delivered in the standard.

Activities

- 1. Choose New entries.
- 2. Define a 2 digit numerical value and the meaning of the text type.
- 3. Save your entry.

Further notes

See the **Maintain several master data long texts** documentation for more information about this function.

36.2.3.1.4 Fund

36.2.3.1.4.1 Create FM Fund Types

You create fund types in this step.

You can classify and group a fund by defining fund types in the funds master records.

Activities

- 1. Create a six-digit alphanumeric key for the FM area and enter a name for the fund type.
- 2. Save your entry.

Further notes

The assignment of the corresponding fund type is entered in the master data maintenance for each fund.

36.2.3.1.4.2 Create Additional Text Types for Fund

In this step, you can extend the *long text* in the fund master record with additional text types. The additional text types allow you to maintain further long text information independently for one fund. The extended long text function is valid across FM areas or clients.

You define the additional text type with a numerical value and the corresponding meaning as a short text.

If you are in the master data maintenance of a fund and select the *long text* function, you will get the initial screen for long text maintenance *Maintain Fund Long Text* and the defined text types available for maintenance are displayed. On the other hand, you can maintain an individual long text for each language version in a text type.

Standard settings

The text type 01 Standard text: Fund is delivered in the standard.

Activities

- 1. Choose New Entries.
- 2. Define a two-digit numerical value and the meaning of the text type.
- 3. Save your entry.

Further notes

See the **Maintain Several Master Data Long Texts** documentation for more information about this function.

36.2.3.1.5 Funded Program

36.2.3.1.5.1 Create and Maintain Funded Program Type

Use

In this IMG activity, you create the funded program types you require and maintain them.

Activities

- 1. Choose *New Entries*.
- 2. Enter a funded program type and a descriptive text for the funded program type. Save your entries.

36.2.3.1.6 Subdivision of Master Data

36.2.3.1.6.1 Create and Define Subdivision ID

Create and Define Subdivision ID

Use

The subdivision ID is used to subdivide master data into sections, so that user-defined information can be included in the account assignment data. Below this subdivision ID, you have to define the corresponding subdivision structure, which is made up of the individual substrings of an account assignment element for each subdivision ID.

Activities

1. Create a subdivision ID for each account assignment element you want to subdivide. The name of the subdivision ID is user-defined, and a check is performed by the Business Add-In Check

Subdivision ID if implemented. You can use the same subdivision ID name for different account assignment elements.

2. Define a substring for each FM account assignment element, including the number, length and position of the individual substrings of an account assignment element for each subdivision ID.

When you define the subdivision structure for each account assignment element and subdivision ID, you can divide the fields - according to your master record data - into the following maximum number of substrings:

| Account assignment element | Number of substrings | |
|----------------------------|----------------------|---|
| Commitment item | 5 | |
| Funds center | 3 | |
| Fund | | 2 |
| Functional area | | 3 |

For each substring, you must define the length and position within the account assignment element.

Note that a substring can have a maximum of 10 characters. In addition, the total length of the resulting account assignment, including the separator (which you define in the activity Activate Subdivision) must not exceed the maximum length of the account assignment element.

36.2.3.1.6.2 Activate Subdivision

Use

In this step, you activate the subdivision of master data and define the separator so that the individual substrings are separated from each other when they are displayed on the screen. The separator is saved in the database.

This activation ensures that you can create the individual substrings of the account assignment elements in master data maintenance according to the subdivision-ID defined.

To create the substrings, in the SAP menu, choose *Public Sector Management -> Funds Management -> Master Data -> Tools -> Subdivision* and then the account assignment element that you want to create the substrings for.

To create master data, use the transactions to create the respective master record in which you can fit together the substrings you have created.

The subdivided master data is then processed in the system in the same way as the master data that was not subdivided.

Requirements

If you use components other than *Funds Management*, you must note the following when subdividing fund centers and commitment items:

The account assignment elements funds center and commitment item cannot be assigned to an account manually in some components; this applies to the following components:

- Human Resources (HR)
- Travel Management (FI-TV)
- Controlling (CO)
- Treasury (CFM und CML) Real Estate Industry (RE)

This means that the funds center and commitment item and, if necessary, the substrings of these account assignment elements must be derived from other account assignment elements, such as the cost element or cost center. This is done using the account assignment derivation of Funds Management.

In order to ensure that the derivation takes place, it is sometimes necessary to create the account assignment elements in different components so that they reflect the function of the respective substring.

For example, if the substring of a funds center represents the region and the derivation of this substring should occur from the cost center, you must construct your cost center structure in such a way that a cost center corresponds to a region.

SAP recommends defining these substrings as user-defined fields in the master data for the account assignment elements used (for example, cost element or cost center) in the derivation.

For an example of an account assignment derivation that includes the derivation from master data of other account assignment elements, see the SAP library in the documentation on *Funds Management* under *Actual-Commitment Update -> Account Assignment Derivation -> Example: Derivation Strategy for German Countries and Local Authorities.*

Activities

You cannot deactivate the master data subdivision again if master data already exists in your production system which was created with active master data subdivision as it could impede the reliability of the data in the infomation system.

36.2.3.1.6.3 Business Add-Ins (BAdIs)

36.2.3.1.6.3.1 BAdI: Check Subdivision ID

Use

Using this Business Add-In you can check that the subdivision IDs you created are correct.

After the necessary implementation, the system only performs a check, without modification, on the subdivision ID value you enter into table FMMDSTRID.

You can implement the Business Add-In using your own functions, in order to check according to your preferences.

Requirements

This Business Add-In is only called up if you have activated the subdivision of master data in the Customizing of Funds Management in step Activate Subdivision.

Standard settings

This Business Add In is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*.When the application program is executed, the system carries out the code in the method you wrote.

Example

The following example of implementation for this Business Add-In checks the subdivision ID only for the commitment item. If the 7th position of the subdivision ID for the commitment item contains a character other than "E", "G" or "I", an error message appears: Subdivision ID = "ABCD02E " This passes the test.

| Subdivision ID = "ABCD02G1X " | This passes the test. |
|-------------------------------|------------------------------|
| Subdivision ID = "ABCD02R1X " | This does not pass the test. |

Notes

Documentation of BAdI method CHECK_SUBID_TYPE

36.2.3.1.6.3.2 BAdI: Check Substrings

Use

This Business Add-In is used in the Funds Management Master Data (FM-MD) component.

It enables you to check the creation of your customer-defined master data substrings. After the necessary implementation of the Business Add-In, the system performs a check (without modification) on the substring values you have entered in the maintenance tables.

You can implement it using your own functions in order to run your user-defined checks.

Requirements

Only use this Business Add-In if you have previously activated the subdivision of FM master data in Activate Subdivision.

Standard settings

This Business Add-In is not active in the standard system.

Example

There are two sets of examples for the implementation of this Business Add-In.

Example 1:

The first checks the values entered for the first substring of **commitment item** and **fund**.

Such values pass the test only if the **last** position is filled with a digit and the others contain characters. Otherwise an error message is displayed.

| Substring = "ABCD2" | This passes the test. |
|---------------------|------------------------------|
| Substring = "A2" | This passes the test. |
| Substring = "ABC2R" | This does not pass the test. |

Example 2:

The second example checks the values entered for the first substring of **funds center** and **functional area**.

Such values pass the test only if the **first** position is filled with a digit and the others contain characters. Otherwise an error message is displayed.

| Activities | |
|---------------------|------------------------------|
| Substring = "ABCR3" | This does not pass the test. |
| Substring = "3A" | This passes the test. |
| Substring = "3ABCD" | This passes the test. |

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

Further notes

Documentation of BAdI method CHECK_VALUES_CISUB1 Documentation of BAdI method CHECK_VALUES_CISUB2 Documentation of BAdI method CHECK_VALUES_CISUB3 Documentation of BAdI method CHECK_VALUES_CISUB4 Documentation of BAdI method CHECK_VALUES_CISUB5 Documentation of BAdI method CHECK_VALUES_FCSUB1 Documentation of BAdI method CHECK_VALUES_FCSUB2 Documentation of BAdI method CHECK_VALUES_FCSUB3 Documentation of BAdI method CHECK_VALUES_FDSUB1 Documentation of BAdI method CHECK_VALUES_FDSUB2 Documentation of BAdI method CHECK_VALUES_FNSUB1 Documentation of BAdI method CHECK_VALUES_FNSUB1 Documentation of BAdI method

Documentation of BAdI method CHECK_VALUES_FNSUB3

36.2.3.1.6.3.3 BAdI: Check Substrings During Master Data Creation

Use

Using this Business Add-In you can check the creation of your master data.

After the necessary implementation, the BAdI only performs a check, without modification, on the parameters selected for the creation of master data through the concatenation of substrings.

You can implement it using your own functions in order to check according to your preferences.

Requirements

This Business Add-In is called up only if you have previously activated the subdivision of master data in the Customizing of *Funds Management* in step Activate Subdivision.

Standard settings

This Business Add-In is not active in the standard system.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.

9. Choose Activate

The code you stored in the method will be run when the application program is executed.

Example

Here are some examples of implementation for this Business Add-In, one for each type of master data, all checking the subdivision ID.

Commitment item: if the subdivision ID differs from the concatenation of the FM area and the last two digits of the fiscal year, an error message displays.

Example: FM area = "ABCD" fiscal year = 2002 subdivision ID = "ABCD02 "

Funds center and fund: if the subdivision ID differs from FM area, an error message displays.

Example: FM area = "ABCD" subdivision ID = "ABCD "

Functional area: the BADI only calls the method without function modules.

Notes

- Documentation of BAdI method FIPOS_CHECK_SUBSTRINGS Documentation of BAdI method FISTL_CHECK_SUBSTRINGS
- Documentation of BAdI method FUND_CHECK_SUBSTRINGS
- Documentation of BAdI method FUNCTION_CHECK_SUBSTRINGS

36.2.3.1.7 Edit Field Selection

In this section, you can change the master data field selection of commitment items, funds centers and fund is delivered by SAP.

By defining user-defined field selection strings for the master data of an FM area, you have the option of

- hiding functions that are not required
- defining fields as display fields
- defining entry field as required or optional entries

You are offered the selection of fields and settings allowed for a field, in the respective field status string maintenance.

36.2.3.1.7.1 Edit Field Selection Strings

In this section, you define individual field selection strings for the master data commitment item, funds center and fund.

36.2.3.1.7.1.1 Edit Field Selection String for Commitment Items

In this step, you define an individual field selection string for the master record of commitment items.

Activities

- 1. Choose *New entries*, enter an alphanumeric code and a name for the field selection string and choose *Enter*.
- 2. Select the field selection string and choose *Maintain field status for field selection string* in the dialog structure.
- 3. Execute your required settings and save your entry.

Further notes>

In the step *FM area: Assign field selection string* you replace the field selection delivered by SAP with your user- defined field selection string.

36.2.3.1.7.1.2 Edit Field Selection String for Funds Centers

In this step, you define an individual field selection string for the master record of fund centers.

Activities

- 1. Choose *New entries*, enter an alphanumeric code and a name for the field selection string and choose *Enter*.
- 2. Select the field selection string and choose *Maintain field status for field selection string* in the dialog structure.
- 3. Execute your required settings and save your entry.

Further notes>

In the step *FM* area: Assign field selection string you replace the field selection delivered by SAP with your user- defined field selection string.

36.2.3.1.7.1.3 Edit Field Selection String for Funds

In this step, you define an individual field selection string for the fund master record.

Activities

1. Choose *New entries*, enter an alphanumeric code and a name for the field selection string and choose *Enter*.

- 2. Select the field selection string and choose *Maintain field status for field selection string* in the dialog structure.
- 3. Execute your required settings and save your entry.

Further notes>

In the step *FM area: Assign field selection string* you replace the field selection delivered by SAP with your user- defined field selection string.

36.2.3.1.7.1.4 Edit Field Selection String for Funded Programs

Use

In this step, you define a separate field selection string for the master record of the funded program.

Requirements

- 1. Choose *New Entries*, create an alpha-numerical code and a name for the field selection string.
- 2. Select the field selection string and choose *Maintain Field Status for Field Selection String* from the dialog structure.
- 3. Define the required settings and save your entries.

Standard settings

In step *FM Area: Assign Field Selection String* you replace the field selection delivered by SAP with your own customer-specific field selection string.

36.2.3.1.7.1.5 Maintain Field Selection String for Functional Area

Use

Use this step to define a field selection string for your functional area. The string is client-dependent and cannot be assigned to an FM area.

Standard settings

SAP delivers all groups as "Not Specified".

Activities

- 1. In the maintenance view, choose New Entries and create an entry called FMFA.
- 2. Select *Field Grouping* for the new entry.
- 3. Modify each group of fields as required, then save your entries.

36.2.3.1.7.2 Assign Field Selection Strings to FM Area

In this step, you make assignments for an FM area from the field selection of commitment items, funds centers and fund.

Requirements

You want to use a user-defined field selection of master data that differs from the SAP delivery and you have defined the appropriate field selection string for commitment items, funds centers and/or fund.

Standard settings

If you make no entry ("SPACE"), the settings delivered by SAP for the master data field selection are retained.

Activities

Enter the field selection strings you defined for an FM area and save your entry.

36.2.3.1.8 Activate Change Documents from Master Data Groups

In this step, you can determine for each individual master data group in Funds Management whether changes to groups are logged in change documents.

You can call up change documents in master data group maintenance by choosing *Goto -> Change Documents*.

Activities

If you want to activate change documents for a master data group, set the indicator for the relevant group and save your entry.

36.2.3.1.9 Business Add-Ins for Account Assignment Elements (BAdIs)

36.2.3.1.9.1 BAdI: BAPI 0038 - Customer Enhancement for Funded Program

Use

This BAdI can be used to realize customer enhancements for the Funded Program BAPIs. The following methods can be implemented:

- CREATE_IN
- CREATE_OUT
- CHANGE_IN
- CHANGE_OUT
- DELETE_IN
- DELETE_OUT
- GETDETAIL_IN
- GETDETAIL_OUT
- GETLIST_IN
- GETLIST_OUT

The <Function Name>_IN methods are called right after you enter the BAPI and the <Function Name>_OUT right before you leave the BAPI.

Standard settings

We do not deliver any standard settings.

Activities

To create an implementation for the BAdI, follow these steps:

- 1. Open the IMG activity (BAdI: BAPI Customer Enhancements for Funded Program) and create a new Enhancement Implementation:
 - Enhancement Implementation:
 - Enh. Impl: <Name of your enhancement implemenation>
 - ShText: <Short description>
 - Composite: <Name of your composite> (If none exists already, you should create one.)
- 2. Create the implementation <Implementation Name> for the BAdI definition BAPI_0038.

- 3. Open the BAdI Tab and activate the Implementation.
- 4. Expand the tree on the left side and dubble-click the 'Class' entry.
- 5. Create a new class
- 6. Implement all interface methods. (If there are methods you do not need, you can leave them empty but you must implement them.)
- 7. Save and activate the class and go back.
- 8. Save and activate the enhancement implementation.

Now your BAdI-Implementation is active and ready.

Keep in mind that several implementations can be used for this BAdI (Multi. Usability). So if you use several active implementations, all of them are called.

36.2.3.2 Use of Account Assignment Elements

36.2.3.2.1 Budget Structure (BCS)

36.2.3.2.1.1 Define Derivation Strategy for Budget Addresses

For an overview of using a budget structure, see the IMG under Create Budget Structure.

Use

In this IMG activity, you define the assignments of posting addresses to budget addresses using an account assignment derivation. In this process, you can define the **n** : **1** summarizations of several posting addresses to an assigned budget address. Actual/commitment postings can therefore be entered in exact account assignments, and the budget available for this is managed centrally for a number of posting addresses in an assigned budget address.

You define the account assignment derivation as a derivation strategy. A strategy contains derivation steps that use one of the following derivation step types:

- Derivation Rule

In the 'derivation rule' step type, you create a table according to your choice of source and target fields. You can then maintain the table entries in which you make further assignments of postings addresses to budget addresses.

- Table Lookup

In the 'table lookup' step type, you can access individual records from database tables.

- Move

In the 'move' step type, you can define whether the values of individual FM account assignment elements of posting addresses are completely or only partially assigned to account assignment elements of budget addresses. You can also move a constant to the target field.

- Clear

In the 'clear' step type, you can define whether you want to set a target field to initial.

- Function Module

In the step type function module, you can call function modules that allow you to search for account assignment elements in master data hierarchies or to determine master data attributes.

All derivation steps defined may also have conditions that must be fulfilled so that they can be executed.

Note on Grants Management

If you use the account assignment element 'Grant', the values of this account assignment element are always copied from the posting address into the budget address. The 'Grant' account assignment element cannot be used as a target field in your derivation strategy.

Standard settings

SAP delivers strategy SAP00000 as a sample which illustrates how the different step types are used.

If you do not define an account assignment derivation, a standard **1:1** assignment is supported. This means that every FM account assignment you use as a posting address is assigned as a budget address itself.

Activities

- 1. Create your own strategy by copying strategy SAP00000 delivered by SAP as a template.
- 2. Edit your strategy by adding more derivation steps if necessary.
- 3. Save your strategy.

36.2.3.2.1.2 Create Budget Structure

Use

In this IMG activity, you create the key of a budget structure (BS). The key of a BS can be used for several fiscal years. You define a multi-level BS by setting the corresponding indicator in the FM area. However, this is only possible if you have activated the multi-level BS in Customizing by choosing *Activate Multi-Level Budget Structure* in the FM area.

If you work with several versions, SAP recommends that you work with different BS keys.

Selecting Budget Addresses

You need a budget structure if you want to restrict the number of budgetable FM account assignments from the selection of all FM account assignments of an FM area. You define these account assignments as budget postings. All Funds Management account assignments are at first budgetable by default.

 You define budget addresses in the menu of Funds Management, under Master Data -> Use of Account Assignment Elements -> Budgeting -> Budget Structure -> Budget Address -> Mass Processing.

- You activate the check on budget addresses in the menu of Funds Management, under *Budgeting -> Version ->* Assign Status to a Version.

Selecting Posting Addresses

As well as defining budget addresses, you can also restrict the selection of postable FM account assignments in the FM area. You define these account assignments as posting addresses. At first all FM account assignments are postable by default. When you save budget addresses for each budget structure, the posting addresses are <u>not</u> saved in the budget structure but in the respective posting ledger of the FM area/fiscal year.

- You define posting addresses in the menu of Funds Management, under *Master Data -> Use of Account Assignment Elements -> Budget Structure -> Posting Address ->* Mass Processing.
- You activate the check on posting addresses in the Customizing of Funds Management, under Master Data -> Use of Account Assignment Elements -> Budget Structure -> Define Settings for the Budget Structure.

Copying Budget and Posting Addresses

If you want to transfer the budget and posting addresses to the next fiscal year, you copy this master data in the menu of Funds Management, under *Master Data -> Tools -> Use of Account Assignment Elements -> Budget Structure ->* Copy Budget and Posting Address.

When you copy this master data, you can also assign a new budget structure key for the new fiscal year.

Note on Grants Management

If you work with the FM account assignment element "Grant", note that the definition of posting and budget addresses cannot be restricted to certain values of the grant, so irrespective of the selection of other account assignment elements, all values of the grant are included.

Standard settings

SAP does not deliver any default settings.

Activities

Create the BS key(s) for your FM area and save your entries.

36.2.3.2.1.3 Define Settings for the Budget Structure

Use

In this IMG activity, you assign a budget structure as well as derive account assignment budget addresses for an FM area/fiscal year.

Cross-Version Settings

On the *Cross-Version Settings* Screen, you define which settings should be valid for all budget versions in your FM area/fiscal year:

- By setting the *Check posting address* indicator, you specify that postings are only allowed on budget addresses defined for the FM area/fiscal year.
- When you assign a budget structure, you specify which budget addresses can be used. Note that the check on defined budget addresses only takes place when the Check Budget
 Addresses indicator is set in the status maintenance. You define this setting in the menu of Funds
 Management, under Budgeting -> Budget Control System (BCS) -> Version -> Assign Status of a Version.
- By entering a derivation strategy, you define the valid assignment of posting addresses to budget addresses.

Override Cross-Version Settings

In the Version-Specific Settings section, you can override the cross-version settings for individual budget versions by defining different settings:

- By entering a different budget structure, you can assign different budget addresses for a budget version. You activate the check on these budget addresses at the same time as the cross-version settings in the Version Status Maintenance .
- You activate or deactivate the derivation strategy defined in the cross-version setting with the Use Strategy indicator.

Override Multi-Ledger Settings

In section *Ledger-Specific Settings*, you can override the general settings for specific ledgers by defining different settings.

Activities

If you want to work with a budget structure in your FM area/fiscal year, define the required settings here.

If you want to work without a budget structure, you do not need to define any settings here.

Two separate ledgers are updated under specific update profiles (for example, 000359), whereas only one of them is used for the availability control. We recommend that you deactivate the check on the posting address at the level of level-dependent settings and, if there is no budget for the affected ledger, the automatic update of the index for the budget structure.

Note

- You can only assign the multi-level budget structure if you activated it for the FM area and fiscal year. This also applies to the settings at version level.
- You can only assign the flat budget structure if the multi-level budget structure has not been activated for the FM area and fiscal year. This also applies to the settings at version level.
- For a particular FM area and fiscal year, you cannot assign a multi-level budget structure to a version or a single-level budget structure to another version.

36.2.3.2.1.4 Generate Budget Addresses from Budget Data

Use

In this IMG activity, you start the program for generating budget addresses from existing budget values.

You use the program if you first carried out budgeting in the budget control system (BCS) without using a budget structure and now want to convert to maintenance with budget structure.

Requirements

Budget postings have already been entered in the budget control system.

The generation of budget addresses from budget postings that were entered using former budgeting is <u>not</u> supported.

Activities

You can find more information in the program documentation.

36.2.3.2.1.5 Generate Posting Addresses from Actual Data

Use

In this IMG activity, start the program for generating posting account assignments from existing actual/commitment postings.

You use this program if have posted actual and commitment directly to all Funds Management account assignments existing in an FM area up until now, but want to convert to maintenance with budget structure.

Requirements

There are already actual/commitment postings in the FM area/fiscal year.

Activities

You can find more information in the program documentation.

36.2.3.2.1.6 Delete Budget Addresses in the Budget Structure

Use

In this IMG activity, you can delete budget account assignments of a budget structure (BS) in the FM area/fiscal year.

Note:

Only use this program if:

- you are still in the test phase and you want to delete your test data before the live date.
- until now you have entered budget on the budget account assignments of a BS, but want to work without the BS in the future so that you can post to all the FM account assignments that exist in FM area/fiscal year.

When you delete, only the budget account assignments of a BS are deleted, not the respective BS key. You delete the BS key by deleting the corresponding entry in the IMG activity Create Budget Structure.

Requirements

You can only delete budget account assignments if there is no budget on the budget account assignments to be deleted.

36.2.3.2.1.7 Delete Posting Addresses in the Budget Structure

Use

In this IMG activity, you can delete posting account assignments in the FM area/fiscal year.

Note:

Only use this program if:

- You are still in the test phase and want to delete your test data before production startup.
- You have entered actual/commitments postings in posting account assignments up until now, but want to post to all Funds Management account assignments existing in an FM area/fiscal year in the future.

Requirements

You can only delete posting account assignments if there are no actual/commitment postings in the posting account assignments to be deleted.

36.2.3.2.1.8 Change Documents for Budget Structure

36.2.3.2.1.8.1 Activate Change Log for Budget Structure

Use

In this IMG activity, you activate the change log for the budget structure.

The activation influences the following maintenance transactions of budget structure. Note that the activation of change log will also affect the performance of these transactions:

- Manual maintenance of budget/posting addresses (transactions FMBSBO/FMBSPO)
- Mass maintenance of budget/posting addresses (transactions FMBSBO_MULT/FMBSPO_MULT)
- Generation of budget/posting addresses from existing data (transactions FMBSBO_GEN/FMBSPO_GEN)
- Deletion of budget/posting addresses (transaction FMBSBO_DEL/FMBSPO_DEL)
- Copy of budget structure (transaction FMBSCPY)
- Reconstruction of budget structure index (transaction FMBSIDX_RECON)
- For posting addresses: The change document will also be written when updating the budget structure index automatically during FM updating.

Standard settings

In the standard setup, the change log for budget structure is not active.

Activities

In order to activate the change log for budget structure, enter your FM area and checkmark the change log activation indicator. You can activate the change log separately for budget and posting addresses.

36.2.3.2.1.8.2 Delete Change Log for Budget Addresses

Use

In this IMG activity you can delete a change log for budget addresses. See the documentation for further information.

36.2.3.2.1.8.3 Delete Change Log for Posting Addresses

Use

In this IMG activity you can delete a change log for posting addresses. See the documentation for further information.

36.2.3.2.1.9 Business Add-Ins for Budget Structure

36.2.3.2.1.9.1 Validate Budget and Posting Addresses in BS

Title

Business Add-In: Validation of FM Account Assignments in Budget Structure

Use

With this Business Add-In you can enhance the derivation of budget addresses (strategy ID **BSAC**). It can only be implemented for the Budget Control System (BCS) in Funds Management. You can also define validation rules for FM account assignments that are postable and can be budgeted.

The methods of this BAdI are called in function module **FMBS_CALL_DERI_BO**, immediately before or after deriving a budget address.

Furthermore, the methods of this BAdI are called when defining budget addresses and posting addresses if you have decided to work with a budget structure in your FM area. If you do not work with explicitly defined budget or posting addresses of a budget structure, then the methods are called during the check of valid budgeting and posting addresses. For further information, see SAP Library under **Budget Structure of BCS**.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

If you would like to use additional source fields within your derivation, first add these fields to the structure **FMBS_S_BSAC_ADDRESS_SUPPL** in the ABAP Dictionary.

Now implement this BAdI applying the following steps:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.

- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Further notes

Validation of Budget Address

Validation of Posting Address

Fill Supplementary Fields

36.2.3.3 Allocations to Account Assignments from Other Components

In the following steps, you define your derivation strategy. This strategy is used to derive the values for Funds Management account assignments (FM account assignments) from other account assignments.

36.2.3.3.1 Select Derivation Steps

In this IMG activity, you define your account assignment derivation as a derivation strategy. You do this by choosing the derivation steps relevant for your organization from those in the derivation strategy defined by SAP.

You can use account assignment derivation to automatically determine Funds Management account assignments values from other account assignments as long as a logical dependency exists between them.

Recommendation

Customers implementing Funds Management for the first time

SAP recommends that customers implementing Funds Management for the first time define their own derivation strategy by defining their own derivation steps in Define Account Assignment Derivation, as the derivation steps shipped as standard cannot be changed. In this way, you can tailor your account assignment derivation precisely to your individual requirements. It is possible to use the standard derivation steps as a reference when making your own definitions.

Customers already using Funds Management

Customers already using Funds Management (Release 4.6C or IS-PS 4.61) define their derivation strategy by choosing the derivation steps relevant for their organization from those steps shipped as standard.

Note that defining your own derivation strategy can reduce the maintenance of the rules for account assignment derivation.

Up until now, if, for example, the funds center and cost center had the same name, the funds center was derived from the cost center, each cost must be assigned to a funds center. If you define your own derivation strategy, you can map this relationship with a single derivation step.

The derivation strategy delivered by SAP comprises the following nine steps that correspond to the account assignment logic in Funds Management that was in the standard system up until now:

Cost element for commitment item

The "Cost Element to Commitment Item" derivation step uses cost element as source field and commitment item as target field. The assignment is created as date-dependent and can be created using cost element ranges. The step is not dependent on company code, controlling area, or FM area.

Cost center/cost element for commt item/funds ctr/fund/functional area

The "Cost Center/CE to Commitment Item/Funds Ctr/Fund/Function" derivation step uses controlling area, cost center and cost element as source fields and commitment item, funds center, fund, and functional area as target fields. The assignment is created as date-dependent. Any source field can be used via value ranges.

Cost center for commitment item/funds center/fund/functional area

The "Cost Center to Commitment Item/Funds Ctr/Fund/Function" derivation step uses controlling area and cost center as source fields and commitment item, funds center, fund, and functional area as target fields. The assignment is created as date-dependent. Any source field can be assigned via value ranges.

Order/cost element for commt item/funds center/fund/functional area

The "Order/CE to Commitment Item/Funds Ctr/Fund/Function" derivation step uses order number and cost element as source fields and commitment item, funds center, fund, and function as target fields. The assignment is created as date-dependent. Any source field can be used via value ranges.

Order for commitment item/funds center/fund/functional area

The "Order to Commitment Item/Funds Ctr/Fund/Function" derivation step uses order

number as source field and commitment item, funds center, fund, and function as target fields. The assignment is created as date-dependent. Any source field can be used via value ranges.

WBS element/cost element for commt item/funds ctr/fund/functional area

The "WBS Element/CE to Commitment Item/Funds Ctr/Fund/Function" derivation step uses WBS element and cost element as source fields and commitment item, funds center, fund, and function as target fields. The assignment is created as date-dependent. Any source field can be used via value ranges.
WBS element for commitment item/funds center/fund/functional area

The "WBS Element to Commitment Item/Funds Ctr/Fund/Function" derivation step uses WBS element as source field and commitment item, funds center, fund, and function as target fields. The assignment is created as date-dependent and the WBS element can be used via value ranges when creating the assignments.

Profit center/cost element to commt item/funds ctr/fund/functional area

The "Profit Center/CE to Commitment Item/Funds Ctr/Fund/Function" derivation step uses the

- profit center and cost element as the

source fields, and

- commitment item, funds center, fund,

and function as the target fields.

The assignment is created as date-dependent. Any source field can be used via value ranges when maintaining the assignments.

Profit center for commitment item/funds center/fund/functional area

The "Profit Center to Commitment Item/Funds Ctr/Fund/Function" derivation step uses profit center as source field and commitment item, funds center, fund, and function as target fields. The assignment is created as date-dependent and the profit center can be used via value ranges when creating the assignment entries.

Activities

1. Check which derivation steps from the derivation strategy defined by SAP are relevant for the derivation of account assignments in your organization and whether you want to create your own derivation strategy.

If you want to use the account assignment logic that applied up until now, you must select all derivation steps.

- Select the relevant derivation steps. The derivation steps you choose are stored in the system as the derivation strategy valid for your organization under the name SAP.
- 3. You can edit your derivation strategy in the IMG activity Define Account Assignment Derivation. You do this by:
 - a) Defining additional steps yourself
 - b) Deleting standard steps
 - c) Changing the sequence of steps

Further notes

For more information about account assignment derivation, see the SAP Library under SAP ERP Central Component -> Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Account Assignment Derivation.

36.2.3.3.2 Define Account Assignment Derivation

In this IMG activity, you define your account assignment derivation.

You can use account assignment derivation to automatically determine the values of FM account assignments from other account assignments, as long as there is a logical dependency between them.

The account assignment derivation consists of a sequence of derivation steps - known as the **derivation strategy**. It is used to sequentially derive the values for FM account assignments from other account assignments.

Each derivation step describes how a number of target fields can be filled from a number of source fields.

There are a number of different **derivation step types** that can be used to represent different kinds of logical dependency between source and target fields:

- Derivation Rule
- Table Access
- Assignment
- Initialization
- Enhancement
- Function module

You can use each function module as a derivation step. The prerequisite is that the function module has an import parameter with the name "INPUT" and an export parameter with the name "OUTPUT". Import and export parameters must be defined as a structure with at least one field. SAP delivers the following function modules which you can use for your account assignment derivation:

- FMDT_CONVERSION_EXIT_ALPHA_OUT You can use this function module to convert alphanumeric fields to the output format.
- FMDT_READ_MD_ACCOUNT_COMPANY You can use this function module to read data in the G/L account master record.
- FMDT_READ_MD_ASSET You can use this function module to read asset master data
- FMDT_READ_MD_CMMT_ITEM You can use this function module to read commitment item master data.
- FMDT_READ_MD_COST_CENTER You can use this function module to read cost center master data.
- FMDT_READ_MD_FUND
 You can use this function module to read fund master data.
- FMDT_READ_MD_FUNDS_CTR You can use this function module to read funds center master data.
- FMDT_READ_MD_ORDER You can use this function module to read order master data.

- FMDT_READ_MD_ORDER_OPERATION You can use this function module to read order master data using the sequence of activities
- FMDT_READ_MD_ORDER_SD_HEADER You can use this function module to read information in the header data of the sales order.
- FMDT_READ_MD_ORDER_SD_ITEM You can use this function module to read information in the sales order items.
- FMDT_READ_MD_WBS_ELEMENT You can use this function module to read WBS element master data.
- FMDT_READ_ORDER_NP_FROM_FMZUOB
 You can use this function module to read the assignments of FM account assignments to the network header.
- FMDT_READ_ORDER_NV_FROM_FMZUOB You can use this function module to read the assignments of FM account assignments to the network activity.
- FMDT_READ_ORDER_PM_FROM_FMZUOB You can use this function module to read the assignments of FM account assignments to the maintenance order.
- FMDT_READ_ORDER_SD_FROM_FMZUOB You can use this function module to read the assignments of FM account assignments to the sales order.
- Function Call

You cannot define function calls yourself. However, you can include the derivation steps that have been predefined by SAP in your derivation strategy. You can find more information in the IMG activity "Select Derivation Steps".

Note that the account assignment derivation only takes effect when you set the *AcctAssgnDeriv*.(account assignment derivation) in the IMG activity "Activate/Deactivate Funds Management". The activation ensures that the documents are supplied with an FM account assignment that corresponds with the assignments in the account assignment derivation when they are posted in the feeder components of Funds Management (FM).

Standard settings

SAP delivers a standard strategy with the name SAP:

- The strategy is empty if you are using this tool for the first time.
- If you migrate from an earlier release, the strategy contains the rules that you defined in this release.
- You have to assign a company code to each strategy and each company code can only be assigned to one strategy.
- If you do not specify a strategy on the selection screen, the standard **SAP** strategy is proposed by the system.

Activities

You can create, change and delete steps and also change their order.

Create Step

- Choose *Create Step*.
 If you want to add a new step to the derivation strategy, select the step **before** which you want to insert the new step and choose *Create Step*.
- 2. Choose the derivation step type that you want from those offered to you.
- 3. Enter a text and source and target field for the derivation step. For the source and target fields, you can determine **field characteristics**.
 - a) Source Field You can determine that initial values are permitted. This means that a derivation is carried out if the source field is not filled.
 - b) Target FieldFor the target field you can determine that:

The new value is not copied if a value from a previous derivation step already exists.

The new value is copied even if the new value is blank (space)

The new value is copied when the new value is filled. **Note:** If you use this setting you can determine, for example, that the derived value cannot be overwritten manually.

- c) Source Fields and Target Fields
 In addition to the derivation step type "Derivation Rule", you can determine that either the entire field contents, or only a part of the field contents is included.
- 4. If the derivation step should only be performed according to specific **conditions**, for example, only for specific account assignment values, enter this on the *Condition* tabpage. The derivation step is only executed when all conditions for the fields are fulfilled.
- 5. Define **step characteristics** on the *Characteristics* tab page, for example, if an error message should be issued, if no target value can be determined.
 - a) An error message should be issued if the derivation step is not successfully derived. Otherwise the strategy will not be continued.
 - b) The execution of the strategy should be terminated if a suitable value is found in the derivation step. Otherwise the strategy is completed.

Note: If you are using derivation step type "Derivation Rule", you can make the following additional entries:

You can use the *Maintain Rule Entries* function to specify which values should be entered in the target fields from which account assignment values in the source fields. You can make these

assignments in master data maintenance in Funds Management under Assignments -> Edit Account Assignment Derivation.

- You can make additional specifications on the *Characteristics* tabpage; for example, you can allow the entry of a validity date for a step and therefore make it time-dependent. 6. When you have saved the new entry, go back to the complete list.
- 7. To assign a company code to a strategy, select the strategy and choose **company code assignment** in the dialog window.
- 8. Choose **new entries** in the overview that follows and enter the company code you want to assign to the strategy.

Change/Delete Step

- When making a change, you have all the options described under "Create Step".
- To delete an entry, select the relevant step and choose *Delete*.

Change Step Sequence

- 1. Select the step you want to move.
- 2. Position the cursor below the target position.
- 3. Choose Move.

Further notes

Master Data Check

Note that when you enter concrete values, no check is carried out for the existence of master data. This check does not take place until the posting is made.

Test Derivation Strategy

You can use the *Test* function to check your derivation strategy. In the test mode, the following functions are available:

- To test which values are derived, enter the source fields that should be checked and choose *Derive Assignment*.
- To determine which rules were used in the derivation, choose *Display Log*.
- To delete the selection screen, choose Delete Assignment.
- To test the account assignment derivation when posting, choose *TRACE*. If this function is active, the check screen appears before the update where you can check all values. In order to trigger the update, you must leave the check screen by choosing *Leave Assignment*. Note that you can only activate this function if you have authorization.

Transport

You can use the *Transport* function to generate a transport request and transport your derivation strategy to other clients.

Documentation

For more information on account assignment derivation, see the SAP Library under SAP ERP Central Component -> Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Account Assignment Derivation.

36.2.3.3.3 Copy Commitment Items Defined in the G/L Account

In this step, you can copy the commitment items, which you have defined for a particular company code in the G/L accounts, to the G/L accounts for another company code.

Activities

Enter a source company code and a target company code.

36.2.3.3.4 Business Add-Ins (BAdIs)

36.2.3.3.4.1 BAdI: Enhanced Functions for Account Assignment Derivation

Use

SAP provides methods that enable further validation of the FM objects assigned for each rule of the type "Derivation Rule". You must create an implementation using the following predefined methods:

- CHECK_DRULE_BEFORE_SAVE
- CHECK_DRULE_ENTRY
- GET_STRATEGY
- SET_ACTIVITY_CHECK
- STEP_CHECK_ON_ENTER
- STEP_CHECK_ON_EXIT
- SET_DISPLAY_MODE
- SET_STRATEGY_BUTTONS
- STEP_DRULE_ACTIVITY_CHECK
- DERIVE
- DISABLE_ENH_DRULE_MAINT
- ACTIVATE_ENH_DRULE_TOGGLE

Standard settings

We do not deliver any standard settings.

Example

(1) You use the method CHECK_DRULE_BEFORE_SAVE to prevent users from deleting assignments. <SE>*---- Check if table is initial</> <SE><EX>DESCRIBE TABLE I_TAB_DELETED_ENTRIES lines sy-tfill.</> <SE><EX>IF NOT sy-tfill is initial.</> <SE><EX>* Raise MESSAGE not allowed to delete entries</> <SE><EX> e_reject = 'X".</> <SE><EX>ENDIF</></><EX>.</></></></>

(2) You use the method CHECK_DRULE_BEFORE_SAVE to check specific rule IDs.
 <EX> CASE i_stepid</><EX> WHEN 'AAA'.</>
 <EX> Specific Check for Step ID 'AAA'</><EX>
 WHEN OTHERS.
 ENDCASE .

36.2.3.4 Derivation Strategy for Reassignment

36.2.3.4.1 Define Derivation Strategy for Reassignment

Use

In this IMG activity, you define the account assignment derivation for reassigning Funds Management account assignments (FM account assignments) Closing Operations for fiscal year change and mid-year reassignments in Funds Management (FM).

With the account assignment derivation, the values of the new FM account assignment are determined automatically from previous account assignments. Several target account assignments can be determined for some closing operations that allow amounts to be split over several target account assignments and partial amounts to be included. You can also use other objects as source fields for the derivation, provided that a logical dependency exists between them and the target account assignments.

The account assignment derivation consists of a sequence of derivation steps - the **derivation strategy** - through that the values from FM account assignments are derived from other account assignments.

Each derivation step describes how a number of target fields can be filled by a number of source fields.

There are different **derivation step types** to map the different logical dependencies between source and target fields:

- Derivation rule

- Table access
- Move
- Clear
- Enhancement More information can be found in section "*Prerequisites*".
- Function call

You cannot define your own function calls. However, you can include the derivation steps (function calls) defined by SAP in your own derivation strategy.

You can also use different derivation strategies for the different closing operations, by assigning a strategy to an FM area, fiscal year and a particular closing operation in IMG activity Assign Derivation Strategy for Reassignment to FM Area.

The individual closing operations are represented by one or more programs or transactions. When they are executed, the derivation strategy assigned to the FM area is automatically included.

The following is a list of all programs and transactions that include reassignments defined in the derivation strategy. Note that some programs can only be executed when the corresponding global functions have been activated in Customizing. The list contains the relevant programs for each closing operation and global function under the respective heading

| Global Function | <u>Heading</u> |
|-----------------------------|-------------------|
| Funds Management (PSM-FM) | Funds Management |
| Budget Control System (BCS) | BCS |
| German Government | German Government |
| - Commitment Carryforward | |

Funds Management

- Funds Management Closing Operations: Carryforward of Open Items (RFFMCCF1)
- Closing Operations: Carryforward of Open Items (Chains) (RFFMCCF1_CHAIN)
- Closing Operations: Carryforward by Entry DateRFFMCCFD)
- Reassign Standing Request (RFFMSRCICHNG) German Government
- Copy Commitment Items (RFFMMD_COM_ITEM_FYC)
- Copy Assignment of Commitment Item to Revenue Type (RFFMFPCPY)
- Down Payments/Carry Forward Down Payment Clearings (RFFMCCF_DP)
- Carry Forward General Request (RFFMCCF0)
- Copy PCO Assignment (RFFMBGCPY)

- Reassign Commitment Documents

Funds Management

- Select Documents, Overall Reassignment (RFFMCHAG)
- FM Closing Operations: Reassign Open Commitment (RFFMCCOVR)

- Carry Over Residual Budget

Funds Management (former budgeting)

- Prepare Budget Carryover (BPINDX05)
- Determine Budget Carryover (RFFMCF25)
- Carry Over Budget (RFFMCF30) BCS
- Carry Over Residual Budget (RFFMMP_COVR)
- Transfer Budget

BCS

- Transfer Budget Data (RFFMMP_TRANSFER)
- Budget / Copy Budget Versions

Funds Management (former budgeting, but not for German Government)

- Copy Budget Version (BPCOPY00)
- Transfer Budget Values of Previous Year into Stat. Budget Plan Year (BPFRES00)
- Transfer Financial Result from Template Year (BPFRES01)
- Transfer Budget Plan Version to Net Voting Version (RFFMBAL1)
- Transfer Budget Values from Budget Plan of Previous Years (RFFMCPY1) BCS
- Generate Plan Data (RFFMCY_PREP)
- Load Budget Data (RFFMCY_LOAD)

- **Copy Eligible for Cover Relationships** Funds Management (former budgeting)

- Copy Rules for Revenues Increasing the Budget (RFFMKT12)
- Copy Rules for Cover Eligibility (RFFMKT13)
- Copy Rules for Revenues Increasing the Budget RFFMRB_COPY)
- **Copy Budget Structure** Funds Management (former budgeting, but not for German Government)
- Copy Budget Structure from Previous Year (BPCARRY01)
- BS Copier for Converting to Year-Dependent Maintenance(BPCARRY02) BCS
- Copy Budget and Posting Account Assignments (BCS) (RFFMBS_COPY)
- Balance Carryforward

Funds Management, but not German Government

- Balance Carryforward (SAPFMVTR)

For some closing operations - residual budget carryover, budget transfer (**BCS**) and budget / copying budget versions (**BCS**), it is possible to distribute the amounts on an FM account assignment to several FM account assignments with reassignments or to include partial amounts only.

You can do this via a derivation step from the step type Derivation Rule:

For more information on this, see the section "Dependencies" under Carry Over Residual Budget.

It is advisable to create only one derivation strategy that you assign to all closing operations. Note that the availability of source and target fields are different for the individual closing operations. For more information on restrictions resulting from this, see section "Dependencies".

Requirements

If you want to use an enhancement in your strategy, you must implement and activate Business Add-Inn FM_FYC_DERIVE. To do this, execute IMG activity BAdI: FM Closing Operations: Enhanced Function for Derivation Strategy. Note that navigation from the strategy maintenance to the source code of the enhancement is not supported with this release.

Standard settings

If you do not define a derivation strategy for closing operations for the fiscal year change, the FM account assignments are transferred as they are with all permitted closing operations.

You define which year-end closing operations are allowed to be executed in IMG activity Define Default Settings.

Dependencies

For the closing operations of former budgeting, the fund is not allowed to be derived dependent on other account assignment elements in Funds Management. So, if the fund (NEW_FUND, receiver fund) is specified as the target field in a derivation step of step type **derivation rule**, no other account assignment element other than the fund (SOURCE_FUND, sender fund) can be used as the source field.

In addition to this, the following dependencies apply to the closing operations in Funds Management:

- Commitment Carryforward:

Changes to the FM account assignment for documents of the following document type are supported:

- Purchase requisitions
- Purchase orders
- Earmarked funds
- Sales orders
- Receipts Note the restrictions for the reassignment of receipts.

You can use the following source fields to derive the target fields:

- FM_AREA: FM area
- OLD_FISCAL_YEAR: FM Closing operations: Sender fiscal year
- NEW_FISCAL_YEAR: FM Closing operations: Receiver fiscal year

- CASH_YEAR: Year of cash effectivity
- LEDGER: Ledger
- SOURCE_COMMIT_ITEM: Sender commitment item
- SOURCE_FUNDS_CENTER: Sender funds center
- SOURCE_FUND: Sender fund
- SOURCE_FUNCTION_AREA: Sender functional area
- SOURCE_MEASURE: Sender funded program
- SOURCE_GRANT_NBR: Sender grant
- USER_DIMENSION: Customer dimension for FM actual and commitment data

If required, you can add further fields using a customer enhancement. To do this, you must include the corresponding fields in the Customer Include CI_FMYC and implement and activate BAdI FM_FYC_DERIVE.

If it is defined in the Define Basic Settings for Commitment Carryforward that the receiver account assignment should be selected in dialog by the user from several receiver account assignments with the commitment carryforward, you should use the source field NUMBER (sequence number) in your derivation strategy in order to number the receiver account assignments in the rule entries. Note that field FM_LAST_TARGET (last target object must be entered as the target field with field characteristic *Overwrite with New Value* as this field is prepopulated with X. If you do not specify this target field, the system always determines the first value as the sender account assignment, even if you have assigned several receivers to the sender account assignment.

- Reassignment:

Changes to the FM account assignment are supported for documents of the following document types:

- Purchase requisitions
- Purchase orders
- Earmarked funds
- Sales orders
- Parked documents
- Receipts

Note the restrictions for the reassignment of receipts.

With the exception of the target fiscal year, you can use the same source fields to derive the target account assignment as you use for the commitment carryforward. It is advisable to use the source field NUMBER and target field PERCENTAGE for this process.

- Carryover of Residual Budget:

You can use the following source fields to derive target fields in former budgeting:

- FM_AREA: FM area

- OLD_FISCAL_YEAR: FM Closing operations: Sender fiscal year
- NEW_FISCAL_YEAR: FM Closing operations: Receiver fiscal year
- CASH_YEAR: Year of cash effectivity
- LEDGER: Ledger
- NUMBER: Sequence number
- VERSION: Version planning / budgeting
- SOURCE_COMMIT_ITEM: Sender commitment item (FM fiscal year change)
- SOURCE_FUNDS_CENTER: Sender funds center (FM fiscal year change)
- SOURCE_FUND: Sender fund (FM fiscal year change)
- SOURCE_FUNCTION_AREA: Sender functional area (FM fiscal year change)

The following target fields are available:

- TARGET_COMMIT_ITEM: Receiver commitment item (FM fiscal year change)
- TARGET_FUNDS_CENTER: Receiver funds center
- TARGET_FUND: Receiver fund (FM fiscal year change)
- TARGET_FUNCTION_AREA: Receiver functional area (FM fiscal year change)
- PERCENTAGE: FI_FM distribution percentage
- LAST_TARGET: Last target object

If you want to distribute the budget of the sender FM account assignment as a percentage over several receiver account assignments, you must specify the field NUMBER (sequence number) as the source field and field PERCENTAGE (FI-FM distribution percentage) as the target field with the field characteristic *Overwrite with New Value*. (The field NUMBER is prepopulated with X, the field PERCENTAGE with the value 100). You can then enter several target account assignments for each source account assignment in the rule entries and number in field *Sequence Number*. You can assign a maximum of 99 target account assignments to a source account assignment. You define the corresponding percentage for each target account assignment in the field *FI-FM Distribution Percentage*.

enter UP TP HERE111 If less than 100% of the residual budget should be carried forward, the field LAST_TARGET (last target object) should be specified as the target field with field characteristic *Overwrite with New Value* and select the last of the numbered target account assignments in the rules entry.

- **Budget / Copy Budget Version** (former budgeting) The following source fields are available to derive the target fields:
- FM_AREA: FM area
- OLD_FISCAL_YEAR: FM closing operations: Sender fiscal year

- NEW_FISCAL_YEAR: FM closing operations: Receiver fiscal year
- VERSION: Version planning / budgeting
- SOURCE_COMMIT_ITEM: Sender commitment item
- SOURCE_FUNDS_CENTER: Sender funds center
- SOURCE_FUND: Sender fund
- SOURCE_FUNCTION_AREA: Sender functional area

All account assignment elements of the source fields can be used as target fields.

- **Budget /Copy Budget Version** (German Government) The following source fields can be used to derive the target fields:
- FM_AREA: FM area
- OLD_FISCAL_YEAR: FM Closing operations: Sender fiscal year
- NEW_FISCAL_YEAR: FM Closing operations: Receiver fiscal year
- SOURCE_COMMIT_ITEM: Sender commitment item
- SOURCE_FUNDS_CENTER: Sender funds center

You can use all account assignment elements of the source fields as target fields.

- **Closing Operations for the Budget Control System** (Carryover of residual budget, budget transfer, budget / copying budget versions)

If you are using the Budget Control System (BCS), you can use all active account assignment elements as source and target fields. In addition to this, the following fields are available as source fields:

- BCS_BUDGET_CATEGORY: Budget category
- BCS_VALUE_TYPE_BUDGET: Value type
- BCS_BUDGETING_APPLICATION: Original application
- BCS_WORKFLOW_STATE: Workflow status of a data record in the budget totals table
- BCS_BUDGET_PROCESS: Internal budgeting process
- BCS_SOURCE_BUDGET_TYPE: Budget type

In addition to the active account assignment elements, you can use the filed *Budget Type* (BCS_TARGET_BUDGET_TYPE) as a target field. You can use this field to transfer, carry over and copy budget to the new budget type entered in the BCS transactions.

Activities

You can create, change and delete steps and change their order.

Note that all the target fields are prepopulated with the values of the source fields. The target value defined in a derivation strategy is only transferred when the target field is initialized through a previous step or if you define the field attributes so that the target value is transferred.

The procedure matches the procedure for defining the derivation strategy for account assignment derivation in Funds Management. For more information on this, see Define Account Assignment Derivation.

36.2.3.4.2 Assign Strategy for Reassignment to FM Area

Use

In this IMG activity, you assign the derivation strategy(ies) for the reassignment of FM account assignments for closing operations in Funds Management (FM) of a combination of FM area, fiscal year and closing operation.

The individual closing operations are represented by one or more programs or transactions. When these are then executed, the derivation assigned to the FM area is automatically taken into account. For more information on this, see IMG activity "Define Derivation Strategy for Reassignment". You can use different derivation strategies for the different closing operations.

It is advisable to assign one strategy for all closing operations. To do this, enter "All Closing Operations". The value BLANK (initial) is allowed. If you use only one strategy for all closing operations, you can exclude a closing operation if necessary from the reassignment by creating an entry for it with the value BLANK.

Note that the availability of source and target fields are different for the individual closing operations. For more information on the restrictions that result from this, see "Define Derivation Strategy for Reassignment".

Requirements

The strategy must be created in IMG activity "Define Derivation Strategy for Reassignment".

36.2.3.4.3 BAdI: Enhanced Functions for Derivation Strategy

Use

This Business Add-In (BAdI) is used in the following components:

- Actual and Commitment Update (PSM-FM-BU)
- Closing Operations (PSM-FM-CL)

You can use this BAdI to supplement the derivation of FM account assignments for reassignments with the derivation tool as follows:

- You can supplement derivation structure FMYC with your own fields by using enhancement structure CI_FMYC. You can then fill these fields and evaluate them. All components of structure FMIDATA can be included for the commitment carryforward or the mid-year reassignment.
- You can create and program a derivation step of derivation type *Enhancement* in the derivation strategy.

- You can supplement the log of the program for fiscal year change operations with additional output parameters. This enables you to stop the execution of certai closing operations individually.

Requirements

A derivation strategy must be defined for the reassignment and assigned to your FM area, the respective start fiscal year and closing operations.

For more information, see the implementation guide (IMG) of *Funds Management*, under Define Derivation Strategy for Reassignment and Assign Derivation Strategy for Reassignment to FM Area.

Standard settings

The Business Add-In is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*.

The system displays the initial screen for creating Business Add-In implementations.

- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

Example

You want to determine the target account assignment with the commitment carryforward (for example, depending on the document type of the earmarked funds). To do this, you must

- include the document key (such as the reference document number) in enhancement structure CI_FMYC,
- populate the corresponding fields with method *Fill Additional Fields for Derivation* (COPY)
- and, if necessary, program method *Derivation Step as Enhancement* (DERIVE) (for example, read document type and so on).

See also:

Methods

Fill Additional Fields for Derivation

Derivation Step as Enhancement

Additional Return Parameters

36.2.3.5 Status Management

The following contains information on the settings which you must carry out for status management.

36.2.3.5.1 Allocate Authorization Keys

In this step, you define authorization keys which are used as the basis of status-dependent authorization checks.

When you set or delete a user status, the system checks whether you are authorized to carry out this action. In addition to the status profile and the object type, the authorization key of the user status in question is also used for this authorization check.

Example

You want to make sure that certain user statuses may only be changed by a selected group of people.

To do this, you create an authorization key and allocate it to the corresponding user statuses.

In general authorization maintenance, you then assign authorizations for this key via the authorization object B_USERSTAT.

Activities

- 1. Check whether you want to assign authorizations for your user statuses.
- 2. If necessary, create an authorization key as follows:
 - a) Call up the function *Authorization key* and press *New entries*.
 - b) Enter a key and an explanatory text into the corresponding fields and press "Save".

This creates the authorization key.

- 3. Allocate the authorization key to one or more user statuses in the status profile.
- 4. Define corresponding authorizations and include them in the relevant authorization profiles.

36.2.3.5.2 Define Status Profiles

This step tells you how to adapt SAP status management to your specific requirements by creating a Status profile.

SAP status management gives you the option of adding your own user statuses to the system statuses supplied by SAP. You can then assign particular business transactions to the user statuses.

Standard setup

The standard system contains status profile FM000001 which includes the predefined user statuses BUSP (G/L account posting blocked) and MRSP (Funds reservation blocked).

Activities

Define status profiles to meet your requirements as follows:

- 1. Create a status profile
- 2. Assign the status profile to an object type
- 3. Define your user statuses
- 4. Assign business transactions to the user statuses
- 5. If necessary, translate the status profile and user statuses (menu Go To -> Translation -> Status Translation).

1 Create status profile

To create a status profile, proceed as follows:

- 1. Choose **Edit** -> **New entry**.
- 2. Enter a name of your choice for the status profile.
- 3. Enter an explanatory text.
- 4. Specify a maintenance language for the status profile. Changes and additions to the status profile can only be made in the maintenance language and must then be translated into the other languages you use. This guarantees that the entries in the profile are complete and consistent.
- 5. Press Enter to include the status profile in the list.
- 6. Save your entries.

2 Assign the status profile to an object type

To be able to use a status profile for objects of a particular object type , you must assign the profile to the relevant object type:

- 7. Access the screen *Change Status Profile: Overview* and position the cursor on the status profile which you want to assign to an object type.
- 8. Choose Goto -> Object Types.
- 9. Select the object types for which you want to use the status profile in Funds Management.
- 10. Save your entries.

3 Define user statuses

To define user statuses for a status profile, proceed as follows:

- 11. Access the screen "Change Status Profile: Overview" and position the cursor on the status profile you want to maintain.
- 12. Choose Goto -> User status.
- 13. For each user status, you **must** enter a four character language-dependent key, which identifies the status.
- 14. You **can** enter the following for each status.
 - a) Enter a Status number in field *ONr*.The status number determines the sequence in which the statuses in a status profile can be set.
 - b) In the columns "Low" and "High", enter the lowest and highest status numbers.
 - c) Enter a short text. The short text contains a short description of the status.
 - d) Enter a long text for the user status. Choose Goto -> Long text.
 - e) If you wish, flag a status as the initial status.
 If you do this, the system automatically sets a newly created object at this status. You can only set one status with a status number as the initial status, but as many as you want with no status number.
 - f) Use the "Pos" (="Position") field to the position in which the status is displayed in the string in the order header.
 - g) Use the "Priority" field to determine the priority the user status has in a position if the same position is specified for more than one active status.
- 15. Save your entries.

The standard system includes a sequence of user statuses which you can use if you wish.

4 Assign business transactions to a user status To do

this, proceed as follows:

1. Position the cursor on the relevant user status.

a)

- 2. Choose Goto -> Transaction control.
- 3. Choose Edit -> New entries to display a list of the existing business transactions.
- 4. Assign the transactions you need to your user statuses.
- 5. You can use the "Effect" options to activate the following fields for each transaction:
 - *No Effect* The current user status will have no effect on this transaction.
 - b) *Permitted* The current user status will permit the transaction.
 - c) *Warning* The current user status will allow the transaction, but will generate a warning. You choose whether or not to act on the warning.
 - d) *Forbidden* The current user status forbids this transaction.

If you want to use a particular business transaction, it must meet the following

requirements:

- At least one active status must permit the transaction
- The transaction must not be forbidden by any active status
- 6. You can use the "Next action" options to determine the effect which carrying out a particular transaction has on the current status:
 - a) *NoEffect* The transaction neither sets nor deletes this status.
 - b) Set

The transaction sets the relevant status.

- c) Delete The transaction deletes this status. However, if the user status has a status number, you cannot delete it in this way, but must set a follow-up status selected from the other statuses which have a status number.
- 7. Save your entries.

5 Translate the status profile and user statuses

You can translate the status profile and the user statuses assigned to it into other languages.

If you want to create a translation, bear the following points in mind:

- User status can only be created, changed, and deleted in the original maintenance language.
- If not all the user statuses in a status profile are fully translated, the system displays all the user statuses in the original language.

To translate a status profile, proceed as follows:

- 8. Choose **Go To -> Translation -> Profile Translation** in the status profile overview.
- 9. Use the "F4" button to obtain a list of the language abbreviations.
- 10. Use the "F2" button to choose the one you want.
- 11. Choose *Continue*
- 12. Translate the name of your status profile into the desired language.
- 13. Save your translation.

To translate user statuses, proceed as follows:

- 14. Position the cursor on the relevant status profile.
- 15. Choose Goto -> User Status. The system displays a list of all the user statuses in the profile.
- 16. Choose Goto -> Translation -> Status translation.
- 17. Use the "F4" button to obtain a list of the language abbreviations.
- 18. Use the "F2" button to choose the language you want.
- 19. Choose Continue
- 20. Translate the abbreviation, name, and long text (if any) into the desired language.
- 21. Save your translation. Additional information

To activate general SAP status management for Funds Management, assign the key for your status profile to the relevant FM area. For more information, see the documentation on the IMG activity Assign Status Profile to FM Area.

36.2.3.5.3 Assign Status Profile to FM Area

In this step, you assign the status profiles you have defined to your FM areas.

Requirements

You must first have defined status profiles. You can also use status profile FM000001, delivered in the standard.

Standard settings

In the standard system, FM area 0001 is already assigned to status profile FM000001. This profile includes the following, predefined user statuses:

- BUSP G/L account posting locked

- MRSP Funds reservation locked

Activities

Make your assignments as necessary.

36.2.3.5.4 Delete Status Management Entries

In this step, you delete all entries of the status management of an FM area/fiscal year using program **RFFMMDD5**.

Activities

Execute the program

36.2.3.6 Deleting Master Data

In the following steps, you are able to delete different Funds Management master data as well

as master data hierarchies (funds center, commitment item and funds).

36.2.3.6.1 Delete Commitment Items in FM Area/Fiscal Year

In the step you delete the commitment items in the FM area for a fiscal year using a report. You also delete both the master record information and all existing information about hierarchy relations on the level of the FM area.

You should only use this program when you are still in the test phase and you want to delete your test data before the production startup.

Requirements

- You have carried out a data backup for security reasons.
- You have not yet budgeted and you have not carried out any postings, or you have already deleted existing transaction data. On this subject see the Implementation guide (IMG) for Funds Management in sections:
- "Delete FM line items"
- "Delete budget data"
- You have removed the stored commitment items from all G/L accounts. On this subject read the Implementation guide for Funds Managment paragraph "Remove commitment item from G/L account".

Activities

Delete the commitment items in the FM area for a fiscal year.

36.2.3.6.2 Delete Funds Centers in FM Area

In this step, you can delete all funds centers of an FM area with the help of a program You will delete:

- Funds centers key information
- Classification assignments
- Hierarchy references of funds center in hierarchy variants (but: the hierarchy variant key created in the IMG remains preserved)
- Hierarchy variants assignments for all fiscal years

You should only use this program if you are still in the test phase and you want to delete your test data prior to your production startup.

Requirements

A data backup has been done for security reasons. You have not budgeted and have not carried out any postings, or you have already deleted existing transaction data. Read the following sections in the Funds Management Implementation Guide (IMG):

"Delete commitment data and actual data" "Delete budget data"

36.2.3.6.3 Delete Funds Centers of a Hierarchy Variant

In this step you can delete all funds centers of a hierarchy variant using the **RFFMMDD3** program. You will delete:

- Hierarchical structure of the funds center in the hierarchy variant (but: The hierarchy variants key created in the IMG remains intact)
- All assignments of the hierarchy variant to fiscal years

You should only use this program if you are still in the test phase and you want to delete your test data before your production start.

Requirements

You have done a data backup for security reasons. You have done no budgeting and no posting, or you have already deleted all existing transaction data. Read the following sections in the Funds Management implementation guide (IMG):

Delete actual data Delet budget data

36.2.3.6.4 Remove Commitment Item from G/L Account

In this step, you can use program RFFMDL03 to delete all the commitment items stored in G/L accounts for one company code.

You can use this program if you are still in the test phase and want to delete your test data before the production startup.

Requirements

- Make sure you back up your data first.
- Deactivate your FM area by deactivating all the company codes to which you have assigned this FM area. For more information on activating/ deactivating Funds Management, see the section "Activate/Deactivate Funds Management".

Activities

Start program RFFMDL03 to delete commitment items from the G/L account.

36.2.3.6.5 Delete Objects

In this step, you use a report program to delete objects (master data) from Funds Management. This involves deleting both the master data information and all existing assignments to customers and/or bank details.

You should only use this program if you are in the test phase and want to delete your test data before the production startup.

Requirements

The following situations may affect whether an object can be deleted:

- The object is assigned to a customer.

The program only deletes the object if the customer has already been deleted. You delete the customer master data in the *Accounts Receivable and Accounts Payable* IMG, step *Delete customer master data*. Refer to that IMG for more information.

- The object has been used in the assignment of bank details to customers. The program only deletes the object if this assignment is no longer in place. You delete the assignment in the *Funds Management for Germany* IMG, step *Delete bank details for revenue types and/or objects*. Refer to that IMG for more information.

Activities

Delet the objects as required.

Further notes

For more information, read the program documentation.

36.2.3.6.6 Delete Bank Details for Revenue Types and/or Objects

In this step, you use a program to delete revenue type and/or object-specific assignments of bank details to a customer

You should only use this program if you are still in the test phase and want to delete your test data before production startup.

Requirements

You must first delete the customer for whom revenue-type-specific or object-specific bank details have been maintained.

You delete customer master data in the Customizing of accounts payable and accounts receivable accounting. See section "Delete Customer Master Data" in the Financial Accounting IMG for more information.

Activities

Delete the assignments for the selected company codes.

36.2.3.6.7 Delete Bank Details for Revenue Types

You delete the revenue type specific assignments of bank details to a customer with the aid of a program in this step.

You should only use this program if you are still in the test phase and want to delete test data before production start.

Requirements

The customer for whom a revenue type specific bank detail was maintained must be deleted.

You delete customer master data in the Customizing of accounts payable and accounts receivable accounting. See section "Delete Customer Master Data" in the Financial Accounting IMG for more information.

Activities

Delete the assignments for the selected company codes.

36.2.4 Budget Control System (BCS)

In the following sections, you define the Customizing settings for the Budget Control System (BCS) of component *Funds Management Government*.

36.2.4.1 Budgeting

In this section, you define the budgeting settings for the Budget Control System (BCS).

36.2.4.1.1 Basic Settings

36.2.4.1.1.1 Use of Master Data

36.2.4.1.1.1.1 Activate Account Assignment Elements in Budgeting

Use

In this IMG activity, you define which account assignment elements should be used in the budget control system (BCS). When you activate BCS, you define that the input field of an account assignment element is available in BCS budgeting transactions.

You can define the following statuses for activating or deactivating the account assignment elements:

- Not Used

The account assignment element is not active for budgeting. The input field of the account assignment element is not displayed in the budgeting transactions.

- Optional

The account assignment element is activated for budgeting. The input field of the account assignment element is ready for input as an optional field entry in the budgeting transactions. **Initial** is also a possible entry value.

- Mandatory

The account assignment element is activated for budgeting. The input field of the account assignment element is a Required Entry Field.

The following account assignment elements are available:

- Funds center
- Commitment item
- Fund
- Functional area
- Grant
- Funded program

Note:

Although the settings that can be defined here are somewhat more flexible than the other Funds Management Customizing settings, the settings of the BCS budgeting defined here must take the other Funds Management settings into account.

- Account assignment elements that are not activated in Funds Management cannot be activated in the BCS Budgeting. The status **Not Used** should be set for these account assignment elements.

You can find more information on activating account assignment elements under "Activate Account Assignment Elements".

- Account assignment elements that have the input value **initial (blank)** in Funds Management cannot be set with status **Mandatory** in BCS.

Note the following settings for using the component *Grants Management* in the Budget Control System:

- The account assignment element "fund" must have the same status as the account assignment element "grant".
- **Optional** or **mandatory** if the grant is optional
- Mandatory if the grant is mandatory
- The account assignment element "grant" must have the same settings in Funds Management and in BCS for budgeting and posting. The BCS status should be defined in the following way:
- **Optional**: If no input values (value = initial) are allowed for the posting after BCS is activated.
- Mandatory: If a value always has to be entered (because BSC was activated).

Standard settings

The account assignment elements "funds center" and "commitment item" are generally activated as mandatory entry fields in Funds Management and you cannot change them.

Activities

Define the status of the account assignment elements for each FM area according to your requirements and save the entries.

36.2.4.1.1.1.2 Deactivate Account Assignment Elements in Controlling

Use

In this IMG activity, you can deactivate the account assignment elements fund, functional area and grant in Controlling and Asset Accounting.

If you want to use the fund, functional area or grant as the account assignment elements in Funds Management (FM), you must first activate these account assignment elements in IMG activity Activate Account Assignment Elements.

If you want to use these account assignment elements in budgeting (BCS), then you have to activate them in IMG activity Activate Account Assignment Elements in Budgeting.

If you want to use Grants Management, you must activate the fund and the grant.

When you activate an account assignment element, you must then assign it to an account in Controlling and in Asset Accounting.

Deactivating an activated account assignment element for Controlling and Asset Accounting allows you to use this account assignment element within Funds Management or *Grants Management* without affecting business processes in Controlling or Asset Accounting.

Requirements

After activating the account assignment element, no postings were made on this account assignment element and no planning either.

Activities

Deactivate the account assignment elements that you have activated in order to use Funds Management or Grants Management in IMG activity Activate Account Assignment Elements.

36.2.4.1.1.2 Definition of Budget Data

36.2.4.1.1.2.1 Define Budget Category

In this IMG activity, you determine the budget categories you want to use for an FM area in your organization.

You can define the number of years or time horizon that should be used for budgeting for each budget category. You also define the year of cash effectivity and whether the time horizon should start from the following year or not.

Example

You want to use the commitment budget with the following values:

- Time horizon three years
- Indicator set for the start of the time horizon from the next year

Result: The commitment entitlement is valid for the cash effectivity years 2005, 2006 and 2007 in fiscal year 2004.

Standard settings

When using budget categories, the following ledgers are available:

- 9F for the Payment Budget
- 9G for the Commitment Budget 9J for the Financial budget.

Activities

- 1. Define which budget category should be used for your FM area and which time horizon should be used for the year of cash effectivity.
- 2. If you want to manage the year of cash effectivity as "valid from next year", set the indicator in the corresponding column.
- 3. Save your entries.

36.2.4.1.1.2.2 Budget Types

In this section, you determine which combinations of processes and budget types can be used in your FM area for the Budget Control System (BCS).

To do this, carry out the following IMG activities:

- Define budget types
- Assign one or more budgeting processes to each budget type
- If you want to define a budget type for managing a statistical budget, do this in IMG activity Define Budget Type for Statistical Budget.

36.2.4.1.1.2.2.1 Define Budget Types

Use

In this IMG activity, you define the BCS budget types that you want to use in your

organization.

You can also define a budget type as eligible for cover or not eligible for cover.

This setting can only be used with budget types of an FM area activated in IMG activity Activate Cover Eligibility.

You use budget types to differentiate a characteristic of the budget values according to its use:

- In BCS budgeting, you can define for which budget types a budgeting process is allowed. There are two options for this:
- You can do it directly in this IMG activity for an individual budget type (individual maintenance of budget type). You can assign different budgeting processes to each budget type. You can assign all budgeting processes with * (asterisk).
- or for all budget types for mass maintenance in IMG activity Assign Budget Types to Processes
- In the BCS availability control, you can define which budget type is "released" as consumable budget and updated in the availability control. You do this in IMG activity Define AVC Filter Settings for Budget Values.

Different budget types can be used for the budgeting process, amongst other things, for mass transactions in budgeting for example

Standard settings

SAP delivers the following budget types:

| Budget Type | <u>Purpose</u> |
|-------------|---|
| BT01 | Normal budget entry |
| SU01 | Supplement 01 (normal budget supplement) |
| SU02 | Supplement 02 (unusual budget supplement) |
| TR01 | Transfer 01 (normal transfer posting) |
| TR02 | Transfer 02 (unusual transfer posting) |

You can change these budget types to suit your requirements. For example,**BT01** which is set up with the activity "enter" for FM area 0001. You can adjust it to suit your requirements, for example, by assigning another activity.

If you want to enter statistical budget that is to be used for the annual financial account, you do this in IMG activity Define Budget Type for Statistical Budget.

Recommendation

You cannot use special characters in the technical name of a budget type. Activities

- 1. Define the budget types used in your organization for each FM area.
- 2. If necessary, define the budget type as eligible for cover by setting the indicator in the corresponding column.
- 3. Save your entries.

36.2.4.1.1.2.2.2 Assign Budget Types to Processes (Mass Maintenance)

Use

In this IMG activity, you determine which budget types are valid for each Budgeting Process in your FM area.

When you assign processes to a budget type, you can use the * symbol for both the process and the budget type.

This means that all processes and budget types are considered.

Requirements

You have created budget types for your FM area in IMG activity Define Budget Types.

Standard settings

See section "Standard Settings" in the documentation on IMG activity Define Budget Types.

As an example, SAP delivers budget type BT01 assigned with process Enter for FM area 0001, which you can change to suit your requirements.

Activities

- 1. Choose *New Entries* and assign budget types to the relevant activities for your FM area.
- 2. Save your entries.

36.2.4.1.1.2.2.3 Assign Budget Type Groups to Processes (Mass Maintenance)

Use

In this IMG activity, you determine which budget type groups are valid for each budgeting process in your FM area.

When you assign processes to a budget type group, you can use the * symbol for both the process and the budget type group. This means that all process and budget type groups are considered, and all budget types in the budget type group will use the combination settings defined here.

Requirements

Budget type groups must have been created for your FM area in the MG activity Define Budget Type Groups.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Choose New Entries and assign budget type groups to the relevant processes for your FM area.
- 2. Save your entries.

Example

You have created a budget type group BG01, which has the combination payment budget category and budgeting process Enter. This means that all budget types in this budget type group will use this combination.

36.2.4.1.1.2.2.4 Define Budget Type for Consumable Budget

36.2.4.1.1.2.2.4.1 Define Budget Type Groups

Use

In this IMG activity you can bundle different budget types in a budget type group. Budget type groups enable you to define multiple budget types to be used for consumption.

Requirements

You must have defined several budget types in the IMG activity Define Budget Types.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. First create a budget type group to be used for consumption.
- 2. Next, put the cursor on the budget type group you have defined and click on *Edit Budget Type Group*.
- 3. Using the *New Entries* function, you now enter the budget types to be grouped.
- 4. Save your entries.

36.2.4.1.1.2.2.4.2 Define Budget Type for Consumption per Fund Type

Use

In this IMG activity, you define general Customizing settings for budget types for each fund type. If you are using several budget types in your organization and are working with different fund types, in this activity you can define which budget types represent consumable budget for a fund type.

In the columns *Budget Type* and *Budget Type Group*, you can specify either a budget type or a budget type group to be used for consumption, but not both.

Budget types, or budget entered but not defined as consumable budget, are not updated in availability control and therefore cannot be "consumed" for actuals or commitment postings.

Requirements

You must have defined your budget type groups in the IMG activity Define Budget Type Groups.

The settings defined in this IMG activity will only be included in availability control if the budget type is correctly defined. In the view "Define Budget Values as Consumed Amounts" of the IMG activity Define Filter Settings for Budget Values, you must select the value type "Posted budget and preposted budget documents" for this.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Define which of your budget types or budget type groups are intended as consumable budget and enter a "from" fiscal year.
- 2. Save your entries.

Further notes

If you change the definition of consumable budget types, you should:

- reconstruct availability control to obtain updated budget values -

adjust the release amount (via mass release) if necessary.

36.2.4.1.1.2.2.4.3 Define Budget Type for Consumption per Fund

Use

In this IMG activity, you define the general Customizing settings for budget types for each fund.

If you are working with several budget types in your organization, in this activity you can define whether the budget values entered for budget types represent consumable budget or not.

You can specify either one single budget type for consumption or several different budget types, using the budget type group.

Budget types or budget entered which is *not* defined as consumable budget is not updated in availability control and can therefore not be "consumed" by actual and commitment postings.

Requirements

The settings defined in the current IMG activity will only be included in availability control if the budget type is correctly defined. In the view "Define Budget Values as Consumed Amounts" of the IMG activity Define Filter Settings for Budget Values, you must select the value type "Budget or budget/release according to fund-dependent settings" for this.

In this IMG activity, you can also define which budget types are defined as consumable budget, irrespective of the general settings already made.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Define which of your budget types should be budgeted for each fund and enter a "from" fiscal year.
- 2. In the column *Budget Type Group*, you can specify either one or several different budget type groups to be used for consumption.
- 3. Save your entries.

Further notes

If you change the definition of consumable budget types, you must subsequently:

- reconstruct the availability control ledgers, so that the correct budget values are used in AVC
- if necessary, adjust the release amount (via mass release).

36.2.4.1.1.2.3 Budget Releases

36.2.4.1.1.2.3.1 Overview of Release Scenarios

Use

In order to define a release scenario, you have to follow a specific sequence of Customizing steps in the IMG. You first specify that you would like to activate the release functionality in your FM area.

Next you can define exceptions to this rule for a specific fund or fund type.

Then, in the budgeting workbench (BWB) or in the mass release transaction, you can carry out further manual releases of your budget if necessary.

Requirements

You have installed the Budget Control System.

Standard settings

SAP does not deliver any default values.

Activities

Process the IMG activities in the order they appear.

Example

You want to use releases for your FM area, but do not need this function for a specific fund or fund type, for which the voted budget is immediately available and therefore does not need to be released. So you first activate the release for your FM area, then specify the exceptions per fund or fund type by choosing the scenario "no release" for this in the IMG activity Define Release Scenario for each Fund or Define Release Scenario for each Fund Type.

Another option for a fund (or fund type) is to assign the scenario "automatic release" in the IMG activity Define Release Scenario for each Fund. In this case, every time the budget is updated, the release is adjusted accordingly. The full budget amount is then also immediately available.

36.2.4.1.1.2.3.2 Define Release Scenario

Use

In this IMG activity, you activate the release functionality for your FM area.

Standard settings

SAP does not provide any default settings. Therefore, in the default, the release functionality is not activated.

Activities

In this IMG activity you specify whether you want to use a release scenario to release budget for an FM area of your organization. If you choose the release scenario, budget is released following a one-step procedure. The budget release is carried out for the same account assignment elements as the ones to which budget has been assigned. Only one release value is then checked by availability control (for standard ledgers defined according to BCS settings).

You can also use the release function for releasing revenues in your organization. For this, checkmark the column called "Release on Revenues".

Note

It is necessary to distinguish between revenues that are related to a commitment item category and real revenues, that is, actual incoming amounts. The same is true for expenditures and real expenditures (outgoing amounts).

In the default, the release functionality is applicable to real expenditures (outgoing amounts), regardless of the commitment item type. For more information see the information on ceiling types.

If you want to control your real revenues (incoming amounts), you can do this using the BCS Availability Control functionality. If the release function is active, and you want to carry out availability control for real revenues, you must also activate the release on real revenues.

Further notes

Please note that you can also customize the document type for your budget entry documents, in order to have an automatic release for each budget amount entered. You do this in the IMG activity Define Entry Document Types.

For further information, see the documentation on the available scenarios for value types.

36.2.4.1.1.2.3.3 Define Release Scenario per Fund Type

Use

In this IMG activity, you define a release scenario for each fund type. In this way you can have separate release processing for a particular fund type if necessary.

Requirements

You have created a fund type in Funds Management master data in the IMG activity Create FM Fund Types.

You have activated the release functionality for your FM area in the IMG activity Define Release Scenario.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. For each FM area and fund type, enter a from-fiscal year and a release scenario.
- 2. Save your entries.

Further notes

If you want to specify that for a particular fund type, the release function should not be active, you can deactivate it here.

For further information see the IMG documentation on release scenarios for documents.

36.2.4.1.1.2.3.4 Define Release Scenario per Fund

Use

In this IMG activity, you define a release scenario for the FM area, fund and fiscal year.

Requirements

You have created a fund or funds in Funds Management master data via the transaction Create Fund.

You have activated the release functionality for your FM area in the IMG activity Define Release Scenario.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. For each FM area and fund, enter a from-fiscal year and a release scenario.
- 2. Save your entries.

36.2.4.1.1.2.3.5 Define Budget Types for Release

Use

In this IMG activity you define the budget type to use for carrying out budget releases in your organization.

Requirements

You must also have defined a release scenario for your organization in the IMG activity Define Release Scenario.

Standard settings

SAP does not provide any default settings.

Activities

- 1. For your FM area, enter the budget type to be used for budget releases. You can enter a short, medium-length and long text for this combination.
- 2. Save your entry.

Further notes

Please note that you can define only one budget type for releases for your FM area.
36.2.4.1.1.2.3.6 Assign Budget Types for Release to Processes

Use

In this IMG activity you determine the budgeting processes to be used in combination with the budget type defined for release.

SAP only supports some processes for the release: Enter, Return, Supplement. You can decide which of these are relevant for your organization.

Note that when you are doing an automatic release, a budget transfer will lead to a return (for the sender) and a supplement (for the receiver) on the release side. The same rule applies to budget carryovers.

Requirements

You have created a budget type to be used for releases in your FM area in IMG activity Define Budget Type for Release.

Standard settings

SAP does not provide any default settings.

Activities

Using the budget type you created for releases, you can now allocate any number of allowed processes to this budget type.

If you need to delete budget types, access the IMG activity Assign Budget Types to Processes to do so.

36.2.4.1.1.2.4 Budget Type for Statistical Budget

36.2.4.1.1.2.4.1 Define Budget Type for Statistical Budget

Use

In this IMG activity, you define the budget types you want to use for statistical purposes in your organization.

See the IMG activty on budget types for further information.

Standard settings

As an example, SAP delivers budget type **FINR** for FM area 0001.

Activities

- 1. For your FM area, enter the budget type to be used for statistical purposes. You can enter a short, medium and long text for this combination.
- 2. Save your entry.

Example

You can use statistical budget types to store the financial result of a fiscal year for your organization.

36.2.4.1.1.2.4.2 Define Budget Type Group for Statistical Budget

Use

In this IMG activity, you can bundle different statistical budget types in a budget type group. Statistical budget type groups enable you to define multiple statistical budget types to be used for statistical purposes.

Requirements

You must have defined several budget types in the IMG activity Define Budget Type for Statistical Budget.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Create a budget type group to be used for statistics.
- 2. Put the cursor on the budget type group you have defined and click Assign Budget Type Group.
- 3. Using the New Entries function, you now enter the budget types to be grouped.
- 4. Save your entries.

36.2.4.1.1.2.4.3 Assign Statistical Budget for Budgeting Process

Use

In this IMG activity you determine the budgeting processes to be used in combination with the statistical budget type you define.

SAP only supports some of the existing budgeting processes to be used for statistical purposes: Enter, Return, Supplement. You can decide which of these are relevant for your organization.

Requirements

You have created a statistical budget type in your FM area in IMG activity Define Statistical Budget Types

Standard settings

As an example, SAP delivers budget type FINR in combination with process ENTR for FM area 0001. You can adjust it to your requirements, for example, by assigning another activity.

Activities

Using the statistical budget type you created, you can now allocate any number of allowed processes to this budget type.

Example

You can use the combination of statistical budget type and budgeting process ENTR, in order to store the financial result for your organization.

36.2.4.1.1.2.4.4 Assign Statistical Budget Type Group to Budgeting Processes

Use

In this IMG activity you determine the budgeting processes to be used in combination with the statistical budget type groups you define.

SAP only supports some of the existing budgeting processes to be used for statistical purposes: Enter, Return, Supplement. You can decide which of these are relevant for your organization.

All statistical budget types in the statistical budget type group will then use the combination settings defined here.

Requirements

You must create several statistical budget type groups in your FM area in IMG activity Define Budget Type Group for Statistical Budget Group.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Choose New Entries and assign statistical budget type groups to the relevant activities for your FM area.
- 2. Save your entries.

Example

36.2.4.1.1.2.5 Edit Versions

Use

In this IMG activity, you stipulate the versions you want to use for budgeting in your FM area.

When managing different budget data, you can work with several operational versions at the same time when using the budget control system in Funds Management.

Note:

When performing this IMG activity, you use version management functions from the *Controlling* component. If you are already using the CO component in your organization, the CO versions already created will be displayed. You can, of course, also use an existing CO version when budgeting Funds Management. To do this, this CO version must meet the criteria defined under **REQUIREMENTS**.

We **strongly** advise that you do not change the attributes of existing CO versions to make them meet the requirements for budgeting (for example, by setting the *Plan* indicator for a version that is used in CO).

Only use the *General Version Definition* section for editing versions in the dialog structure. All other sections in this IMG activity are special settings for Controlling and not relevant for budgeting in Funds Management.

Frozen Version

If you want to freeze the current budget data using program Freeze Budget Data, you must first create the frozen versions intended for this in this activity.

For a frozen version, you must set the *Plan* indicator and have chosen the setting **Budget Control System (BCS): Frozen Version** in the *Exclusive Use* field. The short text name of the version should be chosen in such a way that the timing of this budget data mapping can be recognized. The program run does not provide such a time memo.

Requirements

Versions you want to use for budgeting must have the following attributes:

- Plan indicator is set
- Value **0** is entered in the *Exclusive Use* field (the version is not used for any special applications)

Standard settings

As an example, SAP delivers status STAT02 which reflects Budget Preparation and Original Entry. You can change it to suit your requirements.

Further notes

For more information on version management in Controlling, see the *Controlling* IMG under Maintain Versions.

36.2.4.1.2 Budget Entry

36.2.4.1.2.1 Planning

In this section you define the planning settings for the Budget Control System (BCS). To do this, carry out the following IMG activities:

- Define planning layouts
- Define planner profiles and then assign the planning layouts to them.
- Define the corresponding authorization groups and generate authorization profiles (roles) for them.

36.2.4.1.2.1.1 Define Planning Layout

Use

Budget values that are posted in the planning transaction must be written in the database format. Postings created as expenditure budget to FM account assignments with the item category 3 (expenditures) in planning must be written to the database with a minus sign before them. If you do not want this to be taken into consideration during plan data entry, you can use a formula definition for the plus/minus sign change in the planning layout. The procedure for using such a formula definition is described below.

For posting as revenue budget to FM account assignments with the item category 2 (revenues), you do not need a specific layout, as these postings are stored in the database with a plus sign.

36.2.4.1.2.1.2 Define Planner Profile

Use

In this IMG activity, you define planner profiles with which you can control planning. In a planner profile, you define which plan tasks are used with which default parameters for each table. You can define any number of plan tasks for each table. Using the profile item, which defines the sequence of the plan tasks for a table, you can assign the same plan task to a planner profile several times, but with different default parameters.

The processing of planner profiles is structured in hierarchies in the following partial activities:

General planner profile

Planning tables (Only table FMBDT is available for BCS)

Plan tasks for the table

Default parameters

You have the following options when defining a planner profile:

Navigation

You can navigate in the hierarchy by selecting an entry in the list area and selecting the next hierarchy level under it by double clicking on it. You can go to the next highest hierarchy level using *Back*.

General planning profile

- You can assign an authorization group to each planner profile.
 You can assign authorizations for entering plan data using the combination of authorization groups and default parameters that cannot be overwritten.
- Choose New Entries, to create a new planner profile.
- To copy a planner profile, select any existing planner profile and choose Copy as.....

Planning table

- You can only assign the totals table **FMBDT** to each planner profile. This is used as the basis for your planning.
- You can define distribution keys as default values for currency and quantity fields.

Plan tasks for table

- You can assign plan tasks to table **FMBDT**. To assign a new plan task, choose *New Entries*. Enter an item and a planning layout that is already defined.
- You determine the order in which the plan tasks are offered using the item.
- The indicator *Default Parameters* specifies whether a default parameter has been entered for your plan task.
- You can activate the following functions:
- **Can be Overwritten** specifies whether your default values can be overwritten when planning is carried out. If the indicator is activated, the preassignments apply as default values that can be overwritten. If the indicator is deactivated, the preassignments <u>cannot</u> be overwritten.
- You specify whether it is possible to enter plan data via Excel with Excel-Integration.

If you activate E_x cel-Integration, enter a file name in the field *File Description*. If you do not enter a name, the system automatically assigns one.

Default parameters

- You can assign default parameters for each plan task. Enter the value that you want.
- The values entered appear as an initial screen during the execution of the planning. Plan data must exist for the layout of the Excel worksheet.

Requirements

You have already defined the planning layouts of the totals table **FMBDT** for the budget control system.

Standard settings

SAP delivers the planner profile **SAPFIFM** with some sample layouts.

Activities

- 1. Create your planner profile again or use the SAP sample layouts as templates. The functions described above are available for this.
- 2. Save your planner profile.

Notes on Transport

Planner profile maintenance is connected to the automatic recording of transport data.

This also includes the settings for integrated Excel. The system includes file descriptions and Excel sheet templates in the transport request, provided you have created them in Customizing.

The system also transports the settings for integrated Excel if you have manually included a planner profile in - or manually deleted a planner profile from - a transport request (you do both by choosing *Table View -> Transport*).

Warning

- When performing the transport, ensure that you have not manually created any *integrated Excel* settings in the target system.
 - Only supply the target system by means of transports, otherwise inconsistencies could arise. When importing the Excel sheet templates from the source system, the system does **not** overwrite the settings already made in the target system.
- If, however, planner profiles with corresponding Excel sheet templates already exist in the target system, you have to delete them before performing any imports. In planner profile maintenance, you can delete these Excel sheet templates for specific planner profiles or profile items.

Further notes

You can find more information in the SAP Library under Planning in the Budget Control System.

36.2.4.1.2.1.3 Define Authorization Group

Use

In this IMG activity you define your authorization groups, with which you manage the authorizations for your planner profiles.

The authorization management for planner profiles is carried out by using authorization object **K_TKA50**. You can define authorization groups for your planner profiles for this authorization object. To do this, choose *New Entries*.

You must make the following assignments so that your authorization groups take effect:

- 1. In step Define Planner Profile you assign an authorization group to each planner profile.
- 2. Assign the individual users to a user group. By doing so, you define which planner profile the user works with. To do this, choose the IMG activity Manage Authorizations in the Customizing of the budget control system.

Activities

Define your authorization groups and save your entries.

36.2.4.1.2.1.4 Manage Authorizations

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.

Further notes

Authorization objects

The following lists shows the authorization objects that are checked by the individual functions of the Special Purpose Ledger. You can find these authorizations in the objects "Financial Accounting" and "Cross-Application Authorization Objects."

| Functions for | Authorization object |
|--------------------------------|----------------------|
| Central administrative objects | G_ADMI_CUS |

| Database | G_GLTP |
|-----------------------|-------------------------------|
| Ledger | G_881_GRLD |
| Global company | G_880_GRMP |
| Activity | G_022_GACT |
| Field grouping code | G_888_GFGC |
| Planning parameters | G_820_GPL |
| Distribution key | G_821S_GSP |
| Rollup | G_806H_GRJ |
| Allocation | G_ALLOCTN |
| Report Writer | G_800_GRP Report |
| | G_803J_GJB Report group |
| | G_801K_GLB Library |
| | G_801H_GCL Parallel report |
| | G_801U_GSY Standard layout |
| | G_REPO_GLO Reporting (global) |
| | G_REPO_LOC Reporting (local) |
| Sets | G_800S_GSE Set |
| | G_802G_GSV Variable |
| Validation | G_GB93_ |
| Substitution | G_GB92_ |
| Boolean logical rules | G_GB90_ |

Profile

The individual profiles of the Special Purpose Ledger are combined in the composite profile G_ALL. The following is a list of the individual profiles:

- G_BASE_ALL All authorizations for the base functions (system settings, rollup, allocation, database) in FI-SL
- G_PLAN_ALL All authorizations for maintaining and displaying planning parameters and distribution keys
- G_REPO_ALL All authorizations for displaying summary records and line items in FI-SL reporting
- G_RULES_ALL All authorizations for maintaining and displaying rules

- G_RW_ALL All authorizations for working with the Report Writer
- G_SETS_ALL All authorizations for maintaining and displaying sets and variables
- G_SUBST_ALL All authorizations for maintaining and displaying substitutions
- G_VALID_ALL All authorizations for maintaining and displaying validations

36.2.4.1.2.1.5 Technical Help

36.2.4.1.2.1.5.1 Import Planning Layouts

Use

In this IMG activity, you can import planning layouts from a source client to your client.

Activities

To import a planning layout:

- 1. Enter the source client from which you want to import a planning layout. Select *Execute*.
- 2. Select the planning layout you want.
- 3. Select Execute or Execute in Background Processing.

The planning layout is imported.

36.2.4.1.2.1.5.2 Transport Planning Layouts

Use

In this IMG activity you can transport planning layouts. For example, you can transport your planning layout from a test client to a production client.

Activities

To transport a planning layout:

- 1. Select the planning layout you want to transport.
- 2. Select *Execute* or *Execute in Background Processing*. The planning layouts are transported.

36.2.4.1.2.1.5.3 Delete Generated Planning Programs

In this activity, you delete previously generated planning reports.

During planning, a report with the abbreviation RK5* is generated. If you want to change the Customizing of a Special Purpose Ledger table, all generated planning reports are automatically deleted. You should complete this activity if you have syntax errors in a generated planning report.

Activities

Confirm the prompt, do you really want to delete the generated reports, by selecting Yes. Your planning reports are deleted.

36.2.4.1.2.2 Plan Data Transfer to BCS 36.2.4.1.2.2.1 Define Field Assignments for Plan Data Transfer from SAP BW

Use

In this operation, you determine which fields in a SAP BW query are transferred to which fields in Funds Management when transferring plan data from the BW system. You can also set up a field assignment for all queries in the BW system. This reduces the maintenance load when the assignment is the same for all queries in the BW system. If a field assignment has been made at **both** system and query level, the more detailed assignment is made at query level. Note that key figures must always be assigned at query level.

The following account assignment derivation options are available in the SAP system to implement additional functions, for example, to map customer fields to SAP fields or to postprocess query data.

- Commitment/Actual Derivation

You determine commitment/actual derivation in Customizing for *Funds Management Government*, in the Customizing activity "Defining Account Assignment Derivation". **Caution:** The derivation strategy you set here is for account assignment in Funds Management for commitment/actual update. You are not allowed to change the derivation strategy for the plan data transfer.

You can change this derivation type where, in the derivation strategy, the Funds Management account assignments are obtained from CO account assignments, and when you have performed planning for CO objects (cost centers, orders and projects).

- Budget Planning Derivation

You set budget planning derivation in the budget menu in the *Funds Management Government*. You can define several derivation strategies using this type of derivation. You can decide which derivation strategy to use when performing the plan data transfer. This derivation type can be used when you want to test different derivation scenarios. You

must use this derivation if you have to change the derivation of commitment/actual values. If you

want to use your own fields, add these in the *CI_SBPBWRET* include.

When using the commitment/actual derivation, you also need to add the fields, under the same name, to the *CI_FMDERIVE* include in the FMDERIVE database structure.

For more information about the fields that need to be filled in Funds Management and about valid fixed values, see the documentation for the "Creating a Budget Entry Document" function module.

Requirements

- The query must be RFC-enabled; The *Release for OLE DB for OLAP* indicator must be set.
- The query must not contain more than one structure.

Activities

1. From the available RFC systems, select the BW system from which the data is to be transferred. Note that a dialog user must be used for the RFC connection.

Note

If you are using several BW systems, you must make these Customizing settings for each BW system with an RFC connection. If you are for example using one system for the implementation, one for quality control and one for operational purposes, you must make these settings three times.

- 2. Select a query from which the data is to be transferred.
- 3. On the detail screen, you can assign the BW objects to the fields in Funds Management. BW objects include:
 - All query InfoObjects
 - Formulas defined in the query
 - All InfoObject attributes
 - InfoObjects that define a restriction to a key figure.
 The prerequisite is that the restriction contains a single value.

Not included are filter values defined in the query. These values cannot be assigned.

All fields in the structure SBPBWRET and, if applicable, the customer-defined fields in the include *CI_SBPBWRET_BCS* are available in Funds Management.

- 4. If a value cannot or is not to be transferred from the BW system, you can specify a fixed value for the FM field. This may apply to the *FM area* field if this field does not exist in the query and cannot be obtained using a derivation.
- 5. When selecting the option of setting up a field assignment for the entire BW system, all BW system InfoObjects are made available as are all fields for the SBPBWRET_BCS structure. An assignment in this case is overridden by the assignment of the corresponding Info Objects at query level.

Note

Note that all the data required for posting in FM must be specified by a fixed value or a BW object.

Further notes

Fixed values for the modeling of a budget category in BW and in the ERP system

Budget Cat. in the BW (0FM_BUCAT) Budget Cat. in the ERP system (BUDCAT)

0 Payment Budget 9F Payment Budget

1 Commitment Budget 9G Commitment Budget

36.2.4.1.2.2.2 Define Budgeting Data for Transfer from Position Budgeting and Control

Use

In this IMG activity, you define how the budget data that was created using budget creation of *Personnel Budget Planning* (based on *Personnel Cost Planning*) should be stored in *Funds Management*. The subtypes of the infotype *financing status* that you created in *Position Budgeting Control* are available for storing this budget data. You can also link these subtypes with different budget versions and use different planning scenarios of *Personnel Cost Planning* for creating budget versions in *Funds Management*.

Requirements

If you want to create budget in *Funds Management*, you must have installed at least SAP ECC 5.0, Human Resources Extension (EA-HR 500) Public Services (EA-PS 500) with the component *Budget Control System*. These two components either have to run in one system or be connected by ALE.

In addition, you must have edited the following IMG activities in Customizing of Position

Budgeting and Control:

- Define Subtypes for Budget Creation
- Determine Period for Budget Creation

- Define Run Variant for Budget Creation

36.2.4.1.2.2.3 Customer-Specific Field Assignment for Position Budgeting and Control

Use

In Position Budgeting and Control in SAP BW, you must assign characteristics in BW to account assignment elements in Public Sector Management. This is necessary when the derivation of the funds center should be carried out from the cost center.

Remote Function Call from the BW system.

If you use customer-specific fields in Position Budgeting and Control, you must define the assignment to objects in the structure COBL.

Standard settings

The assignments necessary for Position Budgeting and Control are delivered in the standard and do not exist in this table.

Activities

Maintain the assignment for any additional fields or fields used differently.

Example

In the standard settings, company code 0CO_AREA is assigned from BW to field BUKRS of structure COBL. If you use, for example, customer-specific characteristic ZCO_AREA instead of 0CO_AREA in your planning application, maintain the assignment ZCO_AREA to field BUKRS.

36.2.4.1.2.3 Budget Entry Documents

In this section, you define the necessary settings for budget entry documents for the Budget Control System (BCS).

Entry documents log the generation of budget data.

36.2.4.1.2.3.1 Document Definition

36.2.4.1.2.3.1.1 Define Document Types

Use

In this IMG activity, you define the document types you want to use for budget postings in Funds Management.

You can use different document types to classify your budget entry documents. By using different document types, you can classify budget entry documents according to your user-specific criteria, by assigning meaningful names to the individual document types used within your organization.

Workflow

Using the entry document type, you also control whether the budget posted provisionally in a budget entry document is to be used in a workflow-controlled approval procedure or not. If you want to use a workflow for provisionally posted budget, set the Workflow indicator for this document type in this IMG activity.

For more information on activating the workflow in BCS, see Role Definition: Preposted Budget in Budget Control System.

Using the document type, you also control the scenario to be supported within an entry document. You can choose between the following scenarios:

- Budget only only budgeted amounts are contained in the entry document
- Release only only released amounts are contained in the entry document
- Budget with automatic release you can restrict the entry document to specific budgeting processes: *enter, return, supplement, transfer*. In the specific case of a transfer process (send / receive), the following applies:
- If the sender side is chosen, only released budget can be transferred. Budget will be updated on the receiver side.
- If the receiver side is chosen, only unreleased budget can be transferred. Budget will be released on the receiver side.
- Statistical only only statistical values are contained in the entry document.

Requirements

You must assign each entry document type that you define here to a number range. It is also possible to assign the same number range for different document types. To do this, you must first create a number range and a number range interval for budget entry documents.

Standard settings

SAP does not provide any predefined settings.

Activities

- 1. Choose *New Entries* and define the document types and their number range assignments.
- 2. Save your entries.

36.2.4.1.2.3.1.2 Maintain Number Range Interval for Entry Documents

In this IMG activity, you define the number range interval for budget entry documents of an FM area for each fiscal year for the industry-specific component *Funds Management*.

When you post budget values directly or temporarily in the budgeting workbench, the system generates automatically numbered entry documents according to the number range interval you define here.

Requirements

Only internal number allocations are permitted. You must <u>not</u> set the *Ext* (external number allocation) indicator.

Activities

- 1. Define a Number range and number range interval for an FM area for each fiscal year.
- 2. Save your entry.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.4.1.2.3.1.3 Maintain Number Range Interval for Budget Change Documents Use

In this IMG activity, you define the number range interval of budget change documents in an FM area for each fiscal year in the component *Funds Management*.

Change documents are always generated, when changes are made to the totals records for existing budget values. Change documents provide a complete history of the changes made to budget values.

Requirements

- Use Number range **01** for Funds Management budget change documents. Enter **01** and not **1** as the number range.
- Only internal number allocations are valid. You must <u>not</u> set the *Ext* (external number allocation) indicator.

Activities

1. Define number range **01** and the number interval for an FM area for each fiscal year.

2. Save your entry.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.4.1.2.3.1.4 Define Number Range Interval for Document Family

Use

In this IMG activity, you define the number range interval to assign document family numbers. Several budget entry documents are grouped together under one document family which were created at the same time in a mass activity.

For example, for mass activities whereby a document family number is automatically assigned to an entry document:

- With the fiscal year change, all residual budgets carried forward to the following year get the same document family number.
- Grants Management (GM): When generating a GM document, the budget entry documents generated in the BCS are grouped together under the same document family number.
- When generating entry documents with BAPI_0050_CREATE, you can define which documents can be assigned to the same document family.

The document family number references all the budget entry documents generated at the same time in a mass run and makes drilldown reporting and further processing easier (such as a mass reversal with the program Reverse documents). In this way, an entry document also gets a document family number as well as the individual budget entry-document number. The respective document family is displayed in the budgeting workbench in the header data of a budget entry document. For entry documents without a family document, the *Document Family* field in the budgeting workbench is hidden.

Customer enhancement

By using Business Add-In FMKU_BUDGET_EVNT, you can use the document family for your customer enhancement.

Requirements

- If you use the Number range **01** for the budget change documents of Funds Management. Enter **01** for the number range and not **1**. - Only internal number assignment is allowed. You are <u>not</u> allowed to set the *Ext* indicator (external number assignment).

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Define number range **01** and the number range interval for an FM area and for each fiscal year.
- 2. Save your entries.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.4.1.2.3.1.5 Define Layout for Budgeting Workbench

Use

In the budgeting workbench, you can define whether a specific input field appears in the header area of the budgeting workbench or in the BWB table area of the screen. The table area contains the document lines of a budget entry document. Whether an input field is placed in the header area or as a column of the table affects how the user makes entries:

Input Field in Header

If you define an input field for the header, the value entered is valid for all rows of the table. If you are making a budget transfer, entry fields will be shown for both the sender and the receiver.

If you are sure that certain document fields of the sender are always the same as the receiver, you can choose the option *Header: same for sender and receiver* for these fields. In this case, the receiver can be copied from the sender automatically.

Input Field in Table Area

If you define an input value as a column in the table area, these input values can be entered in lines and are therefore different.

The following fields are available for defining the layout:

- Funds center
- *Commitment item* and, if desired, with the item category If you chose the commitment item for the table area, you can display the item category as an extra column.
- Budget Type
- Year of Cash Effectivity

The following additional fields are available if you have activated the respective FM account assignment elements for Funds Management (FM):

- Fund
- Functional area
- Grant
- Funded program

When defining a layout variant, you can choose between the two fixed values **header** or **column**. You can also define the fixed value **no display** for the FM account assignment elements that can be activated (fund, functional area, grant, funded program).

You can define the sequence for column data in which the data in the table area of the budgeting workbench should be displayed.

Display/Hide Automatically Generated Lines

In the layout you can determine the standard value that determines whether automatically generated line items are displayed or not in the Budgeting Workbench.

To display or hide the automatically generated line items in the Budgeting Workbench, choose *Hide Automatic Lines* or *Display Automatic Lines*.

Distribution key

When you enter a distribution key, you define the default value that is set as standard in the budgeting workbench when new budget documents are created. You can change the default value in the budgeting workbench.

Note:

The distribution keys **3**, **4**, **5** and **6** cannot be used for automatic document creation. SAP recommends that you use the keys **1**, **2** or **7** as default values. You can also use your own distribution keys.

Layout selection

You can find the layout variants in the budgeting workbench under *Extras -> Change Layout*. The layout variant used is saved in the user data when you leave the budgeting workbench.

If you have selected a layout variant in the budgeting workbench that does not match your organization's requirements, the system adjusts the BWB entry screen automatically.

Example

The account assignment element *Fund* is selected in the layout variant as an input field even though the fund is not activated in your organization. In this instance, the input field *Fund* remains automatically hidden in the BWB.

Layout with the SAP List Viewer

The SAP List Viewer (ALV) is the standard tool for displaying and formatting lists in the SAP system. You can use this layout to display your BWB data by clicking on *Document -> Preview*.

Standard settings

SAP provides the following predefined layout variants:

| <u>SAP001</u> | SAP BWB Minimum Standard |
|--|--|
| Header: | Budget Type |
| Column: | Funds Center, Commitment Item |
| No display: | Fund, Functional Area, Grant, Funded |
| Program | |
| <u>SAP002</u> | SAP BWB Minimum Standard - Flexible |
| Header: | - |
| Column: | Funds Center, Commitment Item, Budget |
| No display: | Fund Functional Area Grant Funded |
| Program | r und, r undional r troa, Orani, r undou |
| <u>SAP003</u> | SAP BWB Minimum - Operative |
| Header: | Fund, Budget Type |
| Column: | Funds Center, Commitment Item |
| No display: | Functional Area, Grant, Funded Program |
| <u>SAP004</u> | SAP BWB Standard - Operative |
| Header: | Budget Type |
| Column: | Funds Center, Commitment Item, Fund, |
| Functional Area, Funded Program | |
| No display: | Grant |
| <u>SAP005</u> | <u>SAP BWB Decentral</u> |
| Header: Program | Funds Center, Budget Type, Grant, Funded |
| Column: | Commitment Item, Fund, Functional Area |
| No display: | - |
| <u>SAP007</u> | SAP BWB with two budget categories |
| Budget Category | Payment budget and commitment budget |
| Header: | Budget Type, Grant, Fund, Budget Period, |
| Period | |
| Column: | Year of Cash Effectivity, Funds Center, |
| Commitment item, Functional Area, Funded Program | |
| No display: | - |

The following is also preset for all layout variants:

- Distribution key **1** (even distribution)
- Commitment Item Category is not displayed

Activities

If you want to use a layout variant different from those delivered by SAP, define your own layout variant.

You can use a layout variant delivered by SAP as a template by selecting one and saving it with a userdefined description via *Copy as...*

36.2.4.1.2.3.1.6 Define Layout for Multiple Budget Entry

Use

In this IMG activity, you can define one or several layouts for the multiple budget entry transaction FMPEP. This transaction enables you to maintain budget for several budget categories on one screen, as well as select between different types of database update (additive/non-additive modes) for budgeting.

Standard settings

The following standard layouts beginning with SAP* are predelivered:

- SAP001 Posted Payment Budget
- SAP002 Payment and Commitment Budgets This layout can be used to enter the payment budget for the current fiscal year and the commitment budget for the four following years of cash effectivity.
- SAP005 Payment Budget Preposted This layout can be used to create preposted entry documents. The documents can be posted in the Budgeting Workbench.
- SAP006 RECHNUNGSERG This layout can be used in the context of the financial result scenario. See Release Note Financial Result for further information.

Activities

You can define as many layouts as you want:

- 1. In order to define a new layout, click on **New Entries** and enter a name starting with Y or Z.
- 2. Select the line you created and click on *Header*.
- 3. Assign values to the parameters belonging to the header section of transaction FMPEP.

- 4. Save the header data.
- 5. Next, double click on *Tabstrips* to define one or several tabstrips, and activate them. At present, only one tabstrip can be used. The tabstrips allow you to group individual columns into different categories. If you do not want to split your set of columns, create only one tabstrip.
- 6. Save the tabstrip data.
- 7. Then define the contents of individual columns for each created tabstrip: select the desired tabstrip and double-click on *Entry Columns* or *Display Columns*. Entry columns are columns for which a parameter has to be entered by the user, while display columns are columns used to display the value of a predefined key figure, for example. Display columns are greyed out in Tr. FMPEP.
- 8. Create as many entry columns and display columns as you want. Note that you must number your columns sequentially, that is, you cannot use "1" as the column header more than once. You must start numbering with the number "01" and create numbers sequentially without any gap.
- 9. By scrolling to the right, you can enter up to four predefined text variables, containing, for example, the budget categories and/or fiscal years that you will be using (available for *Entry Columns* only)
- 10. Save your entries individually for the entry columns and for the display columns.
- 11. Repeat the last three operations for each tabstrip you have created.

Consistency checks on columns

Some checks are performed on the entry and display columns each time you save your data. These checks are intended to prevent you from creating inconsistent columns, such as duplicate columns. When creating your columns, follow these rules:

- Do not create exact duplicate columns (columns whose values in all fields are identical)
- When using the # metavalue in a field (user input required) of an entry column, be careful not to define another column with a standard value in the same field and with all other fields identical. See the example below.

If you do not observe these rules, you will receive error or warning messages.

Example

Example of redundant columns which trigger a warning message:

Column Budget Category Fiscal Year YCE Value Type Budget Type

- 1 Payment # 2006 Budget BT01
- 2 Payment 2005 2006 Budget BT01
- 3 Payment 2006 2006 # #

All three columns are potentially redundant, because an inappropriate entry in place of the # metavalue can lead to duplicate columns.

36.2.4.1.2.3.1.7 Define Mask for Easy Multiple Budget Entry

Use

In this Customizing activity, you define a mask for the *Easy Multiple Budget Entry* (FMPEPE) transaction. You use this mask to hide some of the options on the FMPEPE transaction screen when using the transaction.

Note:

The mask you define in this activity needs to be consistent with the session variant that you will define later in the *Create Template for Easy Multiple Budget Entry* (FMPEP_ADMIN) transaction.

Standard settings

The following standard masks beginning with SAP* are predelivered:

- SAP01 Enter only budget amounts
- SAP02 Add/delete commitment items

Activities

You can define as many masks as you want.

To define a new mask, proceed as follows:

- 1. Click on *New Entries* and enter a name for the mask in the the *Mask ID* field.
- 2. Select the checkbox of the options you want to hide.
- 3. Enter a description for the mask in the *Descritpion* field.
- 4. Save your entries.

36.2.4.1.2.3.1.8 Assignment of Forms for Printing Budget Documents

Use

In this IMG activity, you define the forms to be used when you print budget entry documents in the budgeting workbench (transaction FMBB) or in the entry document display transaction (FMEDD).

This form is defined for a specific document type and process.

Requirements

If you want to define your own forms, enter the name of the form that you have previously created in transaction Form Builder with the SAP form interface "FM_ENTRY_DOCUMENT". If you do not define your form with this interface, you cannot print any budget entry documents.

Activities

- 1. Select a form for your document type and process. As a template, SAP proposes the delivered form interface "FM_ENTRY_DOCUMENT".
- 2. Save your entry.

36.2.4.1.2.3.2 Field Control for Budget Entry Documents

36.2.4.1.2.3.2.1 Field Status

36.2.4.1.2.3.2.1.1 Define Field Status Variant

Use

In this step, you can create and delete field status variants for Budget Control System (BCS). A field status variant enables you to control whether the fields your users see when they create budget entry documents are hidden, displayed, optional, or mandatory.

You assign a field status variant to each FM area. You can enter a field status variant for as many FM areas as you want.

By assigning a field status variant and field status group to a field status definition, you can control the document entry parameters for the various business transactions differently for each of your FM areas.

Standard settings

We do not deliver any standard settings.

Activities

In order to work with field status variants, proceed as follows.

- 1. Use the *New entries* option to create a field status variant.
- 2. Save your entries.

Further notes

If there are any field status variants you do not need any more, you can delete them by choosing **Edit-> Delete**

36.2.4.1.2.3.2.1.2 Assign Field Status Variant

Use

In this step, you assign a field status variant to your FM areas. You can assign a different field status variant to each FM area. However, please note that you can only assign one field status variant per FM area.

Requirements

You have defined one or more field status variants in the previous IMG activity.

Standard settings

SAP does not deliver any standard settings.

Activities

Using the field status variants you defined in the previous activity, you now assign this variant or these variants to your FM area(s).

36.2.4.1.2.3.2.1.3 Define Field Status Group

Use

In this step, you define field status groups. Together with the field status variant, the field status group is used for the field status definition. You carry out this assignment in the subsequent IMG activity.

Requirements

You have already defined a field status variant and assigned it to your FM area in the previous IMG activities.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Choose *Edit -> New entries* to create new field status groups. There is a copy function available. To use it, select an entry in the standard list and choose *Edit -> Copy as*.
- 2. Save your entries.

36.2.4.1.2.3.2.1.4 Assign Field Status Group

Use

In this step, you assign a field status group to a document type and process. You can assign a field status group to as many document types/processes as necessary.

The document types and the processes, which are optional entries, subdivide the business transactions in budgeting.

You can define separate field status groups for the various budgeting transactions and control

the document entry by defining the assignment to document type and process accordingly.

If you do not specify the process for your assignment, the field status group will be valid for all budgeting processes.

Requirements

You have already defined a field status group in the previous IMG activity.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Allocate your field status group or groups to a document type and budgeting process. You can create several entries.
- 2. Save your entries.

36.2.4.1.2.3.2.1.5 Maintain Field Status Definition

Use

In this step, you create field status definitions. For this, you specify which fields are:

- hidden
- for display only
- optional, or mandatory.

Requirements

You have already defined field status variants and field status groups in the previous IMG activities.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Create a new field status definition.
- 2. Save your entry.
- 3. Put your cursor on the new entry and open the view which enables you to select whether fields are hidden, etc. and select or deselect the assignments.
- 4. Save your entry.

36.2.4.1.2.3.2.1.6 Assign Field Status Definition

Use

In this step, you assign a field status variant and field status group to a field selection definition you want to use.

By assigning a field status variant and field status group to a field status definition, you can control the document entry parameters for the various business transactions differently for each of your FM areas.

Requirements

You must have maintained field status variants and field status groups, as well as created a field status definition, in the previous IMG activities.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Assign the field status variants and the field status groups you created in the previous activity to the field status definitions you have created.
- 2. Save your entries.

36.2.4.1.2.3.2.2 Changeable Fields in Budget Docs

36.2.4.1.2.3.2.2.1 Define Profile of Changeable Fields in Budget Docs

Use

Use this step to define a profile of changeable fields for your preposted and posted budget documents.

Standard settings

SAP delivers default settings for each profile. The default settings are that the text fields in the header and line of the document can be changed in preposted or posted budget documents.

Activities

- 1. In the first maintenance view, choose New Entries and enter a definition and description for your profile of changeable fields.
- 2. Save the new profile, then select it and choose Edit Profile for Preposted Documents or Edit Profile for Posted Documents in the Dialog Structure.
- Choose the changeable fields to be included in your profile. The header text, text and text name are selected to be changeable by default, but you can deselect them.

36.2.4.1.2.3.2.2.2 Assign Profile of Chngble Flds to Doc. Types

Use

Use this step to assign your profiles of changeable fields in preposted or posted budget documents.

Requirements

You must define the profile first in the IMG activity Define Profile of Changeable Fields in Budget Documents

Standard settings

SAP does not deliver any standard settings.

Activities

In the maintenance view, choose New Entries and enter the FM area(s), document type(s), and profile(s) that suit your requirements.

Note

If you do not enter any settings here, only the text fields will be changeable in later processing of preposted or posted budget documents.

You can enter "*" as the value for the document type. If you do, all the document types in this FM area use this profile except for any document types for which specific entries are made (see example below).

Example

You enter the following settings:FM AreaDocument TypeProfile0001DT01PF010001*PF02The effect of these settings is that document type DT01 in FM area 0001 uses profile PF01. All the otherdocument types in FM area 0001 use profile PF02.

36.2.4.1.2.3.2.2.3 Change Log for Preposted Budget Documents

36.2.4.1.2.3.2.2.3.1 Activate Change Log for Preposted Budget Documents

Use

Use this step to activate the change log relating to preposted budget documents in the Budget Control System (BCS). Funds Management (FM)

Activities

- 1. In the maintenance view, choose New Entries.
- 2. Enter the FM area(s) whose change log activation status you want to process and choose whichever of the following options suits your requirements for each FM area:
 - Change log not active
 - Change history active for document headers only -

Change history active for document headers and lines

3. Save your entries. Example

36.2.4.1.2.3.2.2.3.2 Display Change Log for Preposted Budget Documents

Use

Use this step to display the change log relating to preposted budget documents in the Budget Control System (BCS).

Requirements

Changes in the preposted documents are only recorded if the change log has been activated, so you may encounter cases where only part of the changes have been traced.

36.2.4.1.2.3.2.2.3.3 Delete Change Log for Preposted Budget Documents

Use

Use this step to delete the change log relating to preposted budget documents in the Budget Control System (BCS).

This frees up memory in your system.

Standard settings

The deletion cannot be done document by document. It is a mass tool for which you have to enter the following:

- FM area
- Budget category
- Date up to which you want to delete the changes. Everything up to and including this date will be deleted from the log.
- You can test the future result of this transaction setting using the "Test Run" option. Then the number of records to be deleted is displayed in the detailed list.

36.2.4.1.2.3.3 Additional Budget Line Items 36.2.4.1.2.3.3.1 Define Derivation Strategy for Additional Budget Line Items

Use

In this IMG activity, you can generate additional lines in budget entry documents via a derivation strategy. The derivation strategy is called for each original line of the entry document. You can choose the relevant fields from the document header and original document line as source fields to define the derivation steps. When you assign the target fields, you define which fields are displayed in the additional document lines of an entry document. The additional document lines are displayed in the budgeting workbench (BWB) directly under the respective original document line. The values of an additional document line generated cannot be changed manually in the BWB and are also saved in the database when an entry document in posted.

For example, if you are a US client working with the budgetary ledger, you can display offsetting postings of a budget posting in the additional line items of the entry document.

You define the display of additional line items using a derivation strategy. You define the individual derivation steps of the strategy in this IMG. The same steps are available for this strategy as are available for the IMG activity Define Substitution for Entry Documents namely **Clear** - **Move** - **Derivation Rule** - **Table Lookup**). You activate the strategy for displaying additional line items in another assignment step delivered by SAP.

Note:

If you want to work with additional document lines, you must activate these in your derivation strategy in a 'move' step.

Requirements

- 1. In IMG activity Activate Additional Budget Document Lines, you have define in which Original Applications you should work with additional document lines.
- 2. You activate the derivation strategy for additional line items by setting the activation indicator for a target field **FLG_ADD_LINE** in an assignment step in the strategy. SAP recommends that you assign all defined derivation steps to these activating derivation steps.

Standard settings

The strategy for additional line items is inactive when delivered.

When you activate the strategy, it is supported in the budgeting workbench and for the business method **Create Entry Document**. If you want to use this strategy for other applications, you can define this in the IMG activity Activate Additional Line Items.

The standard implementation is delivered by SAP for additional line items.

Notes

You can add additional line items either by using only the standard implementation delivered by SAP and/or the Business Add In (BAdI) Enhance Budget Line Items (FMKU_BUDGET_LINES).

Additional line items are supported by the method Create Additional Line Items (ADD_LINES) in the BAdI.

36.2.4.1.2.3.3.2 Activate Additional Budget Line Items

Use

In this IMG activity, you define in which applications you want to work with additional line items during budget document entry.

Note that the settings defined here affect all clients.

Standard settings

In the standard system, SAP delivers the applications **BAPI-ED** (business object: budget entry document) and **BWB** (budgeting workbench) as activated.

It is recommended that you do not deactivate the areas activated by SAP.

Activities

If you want to use additional line items in other applications, activate them by setting the indicator Additional Line Items.

36.2.4.1.2.3.4 Define Editing Options for Budget Amounts

Use

In this activity you define the number of decimal places to be used in the budgeting workbench and for document display, as well as in key figure evaluation, for your FM area.

You also define whether the revenues and expenditures have to be entered as positive or negative values in the budgeting workbench.

These editing options are not considered within budget planning (however, similar features can be defined separately within the planning transaction).

Standard settings

The number of decimals corresponds to the FM area currency you have set in Customizing. Please note that expenditures and revenues are both positive.

Activities

Enter the number of decimal places, the necessary signs and save your data.

36.2.4.1.2.3.5 Define Substitution for Entry Documents

Use

In this IMG activity, you define settings so that you can work with substitutions when entering budget documents. It is then possible to influence the input values in the entry document, for example, if you want to work with standard values. Substitution is only supported for document entry in the budgeting workbench at the moment.

The substitution of input values is supported by a derivation strategy. In this activity, you define the individual derivation steps.

Note:

If you want to use the substitution, you must activate this in the derivation strategy in a 'move' step.

A derivation strategy contains sequences of derivation steps in which you can define the influence of input values in the system. You define a reference between the input values of source fields and the values of target fields that result from it in a derivation step.

The following derivation step types are supported in this:

- Clear

In the 'clear' derivation step type, you can set a target field to **Initial**.

- Move

In the 'move' derivation step type, you can define that the value of a source field or a constant value is transferred into the target field.

- Derivation rule

In the 'derivation rule' step type, you create a table according to your choice of source and target fields. You can then maintain the table entries in which you make more assignments.

- Table lookup

In the 'table lookup' step type, you can access individual records from database tables.

All derivation steps defined here can be linked to conditions which must be fulfilled before they can be executed.

Requirements

You activate your derivation strategy for substituting input values by setting the activation flag for the target field **FLG_SUBSTITUTE** in a 'move' step.

SAP recommends that you always activate this step at the end when you are defining derivation steps.

Standard settings

Substitution is inactive in the standard system.

SAP delivers a standard implementation for substitution.

Example

You want to define in a derivation step that the fund **Fund1** is automatically filled by the system when the funds center **FC1** is entered in entry documents:

- 1. You create a new derivation step Assignment.
- 2. On the tab page *Definition*, choose the option *Constant* and enter **Fund1** as a fixed value.
- 3. Select the value **FUND** as the *target field* using F4 help.
- 4. Select the push button (blue arrow) beside the *target field* to define the field control in the dialog box *Substitution of Field Values in Budget Documents: Change Field Attributes*. Select the option **Copy new value even if value is zero or blank**.
- 5. Switch to the tab page *Conditions* and select the value **FUNDSCTR** (funds center) as the *source field* using F4 help.
- 6. Define the following condition: **funds center = FC1**.

Notes

Alternatively, you can carry out the substitution using the Business Add-In (BAdI) Enhance Budget Document Lines (FMKU_BUDGET_LINES) in combination with the standard implementation delivered by SAP. The substitution derivation strategy is supported by the method Replace Fields in Line Items (SUBSTITUTE_DATA) in the BAdI.

36.2.4.1.3 Control Budgeting Flow

36.2.4.1.3.1 Activate Period Control

Use

In this IMG activity, you activate period control for budgeting per FM area and budget version. You can also specify all versions by entering an asterisk (*) in the corresponding column.

Note

If period control is not activated (no entry), all periods are open for budgeting by default.

You can open and close periods by specifying a period range in the menu of *Funds Management ->* Additional Functions -> Closing Operations -> Open and Close Posting Periods -> Budget (BCS) -> Individual Processing (Transaction FMOPER).

You can only use Transaction FMOPER to open and close budgeting periods if period control has been activated in this IMG activity.

Standard settings

SAP does not deliver any default settings.

Activities

Activate period control for each FM area and version according to your requirements and save the entries.

If you want to implement fund-based period control, call up transaction FMOPER and select a budgeting period line. Then double-click on the left node *Open Budgeting Periods per Fund* in order to make the corresponding entries.

36.2.4.1.3.2 Edit Status

Use

In this IMG activity, you define which phases the budgeting contains during the course of a fiscal year. You define a budget status here for each phase.

The budgeting typically runs through a sequence of different phases such as:

- Budget planning
- Budget entry
- Budget consumption
- Changes to the approved budget
- Budget block

Each phase of budgeting is thereby distinguished by the fact that only certain processes should be performed. To define these different phases, proceed as follows:

- 1. You define a budget status for each phase.
- 2. You define which combination of budget category, process, and budget type are allowed for each phase.
- 3. You define an authorization group for each phase.

The statuses defined here are available in the menu of Funds Management for defining the individual budgeting phases, under *Budgeting -> Budget Control System (BCS) -> Version ->* Assign Status to Version.

If you maintain a status for budgeting, you can assign all of the budgeting processes to the relevant budget types using the placeholder *. Depending on the budget type or budget type group, it is possible that * does not correspond to the same processes. For example, if you use the budget type financial budget, * means all statistical processes (in other words, processes such as carryover, revenues increasing the budget and cover eligibility) are not supported.

If the status is assigned to a combination of budget type, process, and budget type group, all the budget types in the group will have the same combination for the status.

Example:

The budget type group BG01 is defined as follows:

- It contains the budget types BT01 and BT02
- It uses a combination of payment budget type and process ENTR
- It is assigned to status STAT01

This means that the following two combinations are relevant for STAT01:

- Payment budget/Process ENTR/Budget type BT01 - Payment budget/Process ENTR/Budget

type BT02

Requirements

You can only select those budget types for a process whose combination was defined beforehand in IMG activity Assign Budget Types to Processes.

You can only select those budget types for the release for a process whose combinations were defined beforehand in IMG activity Assign Budget Type for Release to Processes .

You can only select those budget types for a process whose combinations were defined beforehand in IMG activity Assign Statistical Budget for Budgeting Process.

You can only select those budget type groups for a process whose combinations were defined beforehand in IMG activity Assign Budget Type Groups to Processes (Mass Maintenance)

You can only select those statistical budget type groups for a process whose combinations have been defined in IMG activity Assign Statistical Budget Type Group to Budgeting Processes.

Standard settings

As an example, SAP provides status STAT02 for the phases budget planning (process PREP) and entry (process ENTR). You can change this status to suit your requirements.

36.2.4.1.3.3 Define Key Figures

Use

You define key figures in this IMG activity. You use these key figures for the following functions in BCS:

- Consistency check of budgeting
- Activities for the end of the year For example, to carry forward your residual budget.
- As additional information in the budgeting workbench You can display up to 5 columns with key figures in the budgeting workbench as additional information at the document line level.
- For reporting purposes with report FMKF_REPORT01
 You execute the report in the Funds Management menu under Infosystem -> Budget Control

System (BCS) -> Budget -> Evaluation Using Key Figures. - If you use an individual budget

type for the consumable budget for each fund or fund type - Execute transfers in a Transfer Budget Data.

Key Figure Category

When you define a key figure, you define a *Category* on the tab page specifying for which of the above functions a key figure should be used. If the indicator for a category is not set, the key figure in the respective function is not displayed in F4 help.

In this IMG activity, you can restrict the selection of existing key figures according to their category on the initial screen. The key figures of all categories are displayed by default.

Customer Name Space

Note the specifications for the customer name space when creating your user-specific key figures. The key of user-specific key figures must start with **YY**... or with **ZZ**....
Defining Key Figures

The data of particular data sources is read in a key figure. If you select a data source, all the fields for defining key figures contained in it are available. If you have selected a number of data sources, they are displayed on different tab pages.

- Key Figure Term

A key figure combines one or several terms for each selected data source. You define the filtering and totaling of the data in the term by defining attributes or fixed values for the data fields. You can set a differentiated data aggregation by assigning (plus/minus sign) a number of terms to each other.

- Meta Values

When you select attributes that you can define for a data field, the interpretation of meta values is supported in addition to the direct entry of original data of the data source. This means that the original data can be totaled or modified, or the fields can be set to entrydependent. The following meta values are supported for key figures:

| Attribute | Meta value interpretation |
|---------------------------------------|---------------------------------|
| # | the input value is adopted as a |
| value | |
| * | all existing values for the |
| attribute are totaled up | C C |
| -1,-2+1,+2 | the meta value entered is |
| added/subtracted for the input value. | |
| & | Only valid for the fields |
| Budget Type and Fiscal Year | 5 |
| | |

Note

Depending on the fund in question, some budgets are considered as consumable and others as "not available for consumption". This means that when you choose the meta-value &, the key figure will only evaluate the amount of all consumable budget types for the fund currently being processed. Other budget values which are assigned with non-consumable budget types are not totaled up.

Please find further information on the budget type under IMG activity Define Budget Type for Consumed Amount for Each Fund .

Depending on the fund in question, some budgets are based on annual values and others on overall values. This is defined in the IMG activity for fund types.

- If the fund you are processing is defined as *annual*, the input value for the Fiscal Year is adopted as a value. In this case, the meta-value & is dynamically replaced by #.
- If the fund you are processing is defined as *overall*, all existing values for the Fiscal Year are totaled up. In this case, the meta-value & is dynamically replaced by *.

Please find more information on the fund type under the IMG activity Create FM Fund Types.

Standard settings

SAP delivers a group of key figures that you can use in your FM area. You can also define your own key figures and use the key figures delivered by SAP as templates.

Note:

Key figures of the Year End category are subject to certain restrictions. You can only create customerdefined key figures of the year end category by using the key figures delivered by SAP as a template. Furthermore, changes can only be made in the budget data term. It is not possible to make changes in the actual data term.

Example

You want to display the budget values of the budget category **9F** (payment budget) entered in the previous year in the budgeting workbench as additional data. As you work with several budget versions, define that the budget of the previous year for the version entered is displayed using the attribute "#".

You define a key figure with the following term:

Plus/minus sign version category value type activity budget type WF status fiscal year

+ # 9F B1 ENTR* P -1

Activities

- 1. Select Create.
- 2. Define the key of a key figure, the description and the heading. The heading is displayed in the budgeting workbench as the column description of this key figure.
- 3. Select the pushbutton *Select Data Source* and select one or more data sources. Hold down the CTRL key to select more than one data source. The data fields of the selected data sources are displayed in a tab page.
- 4. Create a line that is ready for input for a key figure term by selecting the pushbutton Add Line.
- 5. Define the key figure term by selecting an entry via F4 for each input field, or define the appropriate attribute using meta values.
- 6. Repeat steps 4 and 5 if the key figure is made up of several terms. In such a case, define the reference of the terms to each other using the plus/minus sign control (field *Plus/Minus Sign+/-*).
- 7. Save your entries.

Further notes

When you are on the entry screen, you can transport several key figures between systems by selecting the pushbutton *Transport of Key Figure* and defining the assignment made to a transport request.

You can find more information in the SAP Library under Budget Control System (BCS).

36.2.4.1.3.4 Define Distribution Keys

In this activity, you can define a distribution key.

Using a distribution key, you can distribute plan totals over individual plan periods.

The following options are available for defining distribution keys:

- You can define a distribution key that **references** an existing standard distribution key (1, 2, 3, 4, 5, 6, 7).
- You can define an **independent** distribution key without using a reference.

Standard settings

The SAP Standard System includes multiple distribution keys. You can copy these standard distribution keys and then change them.

To copy a standard distribution key, position the cursor on the desired distribution key in the tree structure, and use the right mouse key to *copy* it.

Note

If you use one of the standard distribution keys as a reference, you cannot change the number of periods and the relative factor of the distribution key.

Activities

To define a distribution key, proceed as follows:

- 1. Position the cursor in the tree on
 - *referenced*, if you want to reference a standard distribution key
 - *Independent*, if you want to define a new distribution key
- 2. Using the right mouse button, choose *Create*.
- 3. Enter a key up to four characters long and a name for your distribution key.
- 4. Enter the posting periods to which the plan values are to be distributed.
 - You can enter the numbers of the posting periods in any order: the system automatically sorts the period numbers entered and the numbers assigned to these values in ascending order. You can enter any number of periods.

Example

If you want to distribute the totals to the first period of each quarter, enter 1, 4, 7 and 10 in the *posting period* column.

- The relative distribution factor determines the share of the total plan amount that the period in question receives. Each period receives a specific share of the plan total based on the following formula.

Example

(Distribution factor * Total plan amount) / Total of the relative factors If a distribution factor of 40 is assigned to period 1, the total of all relative factors for the distribution key is 320, and the entire plan amount is 5000, period 1 receives: (40 * 5000) / 320 = 625

5. The following functions are also available:

- To suppress the display of all periods with a distribution factor of **0**, choose *Hide zero values*. To redisplay these posting periods, choose *Display zero values*.
- If you set the distribution factor of a period at a later date to **0**, you can recalculate the factors of the remaining periods. To do so, choose *Calculation*.
- To compare your new distribution key with your original distribution key, choose Compare.
- To view the change history of a distribution key, choose *History*.
- 6. Save your distribution key.

36.2.4.1.3.5 Consistency Check

In this section, you define the settings for the consistency checks of the Budget Control System (BCS). The consistency checks are called in the background as soon as you try to save a

budget entry document and to save it in the database. Consistency checks also take place when planning data is entered. This means: if you enter plan data in the BCS with the planning tool.

In a consistency check, the budget values to be posted are checked against the rules you set. Consistency checks are supported for:

- budget entry documents. In other words, only the budget amounts in an entry document are checked
- budget addresses and the budget amounts in the entry document are compared (account assignment-related) with the current budget data in the database.

In order to set up consistency checks in the BCS, do the following:

- 1. Use user-specific key figures in the consistency checks as well as system messages. Both must have already been created.
- 2. You define check libraries, in which the rules of the respective consistency checks should be defined.
- 3. You assign the check libraries to the version of an FM area/ fiscal year in which you want to use them.

For more information, see the IMG activity and the SAP library on the Budget Control System (BCS).

36.2.4.1.3.5.1 Define Check Libraries for Budget Entry Documents

Use

In this IMG activity, you define check libraries for budget entry documents. The check libraries for budget entry documents contain check rules. The consistency of the budget amounts in documents is checked in accordance with these rules. The consistency checks are always carried out when you try to save an entry document.

Aggregation of FM Account Assignments

You define which FM account assignment elements should undergo a consistency check for each check rule. For this purpose, you exclude all FM account assignments that are not relevant for the check using aggregation. You define this setting in the header data of a check rule in the screen area *Aggregation*.

For example, in budget transfers, you can check whether the amount transfer postings from sender to receiver are carried out for each fund. In this case you set the aggregation indicator for all FM account assignments that are not to be checked except for the fund.

A check library contains consistency checks that you can define as check rules for budget values. If a check rule is not complied with, a message is issued. You can also set which system message is issued if

errors occur for a check rule. If the message class *Error* is set, a budget posting can be prevented.

Once check libraries are defined, they can be used for all FM areas. You can define the FM

area currency required in the header data of a check library.

Rule Definition

You can define a sequence of individual rules for each check library, that are carried out one after the other during the consistency check. Rules are subdivided into three parts:

- Prerequisite

You define which budget documents should be checked according to this rule. You define a formula using the formula editor for the budget documents that should be included in the consistency check. If you do not define a formula, the consistency check takes place for each budget posting. For more information, see Formula Builder.

- Check Rule

In this step, you define the rule to be checked. You define a formula between the amounts of two operands using an operator (>; = ; <...). Two key figures or one key figure can be checked against a fixed value. If you select the operator "=" you can also define a tolerance value.

- Messages

An error message is issued if the check of a rule is not complied with. You can define which error message is issued in this section. For this purpose, you must already have created a customer-defined message class containing the corresponding messages.

Message Variables:

The message control youdefine here also supports the use of message variables. You can transfer the specific data on inconsistencies (e.g. which FM account assignment is affected) to the respective error message to be issued via the message variable. Up to four message variables can be transferred for each message, provided that the selected message also contains the same number of variables. In the case of an error, the selected messages are filled dynamically with the corresponding values and facilitate the reproduction of the error. Error messages are forwarded to the Application log.

Requirements

- Key Figure for Consistency Check

You have defined the key figures that you want to use for the check rules in Customizing of Funds Management under Define Key Figures. Note that you must have checkmarked the key figures for the category *consistency check*. If a key figure is not assigned to the category *consistency check*, the definition of the check rule is not displayed in the F4 selection.

- Messages for Consistency Check

You have selected the system messages you want to issue if errors occur. You define a message class and the system messages contained in it in the SAP Easy Access Menu under *Tools -> ABAP* Workbench -> Development -> Programming Environment -> Messages.

Standard settings

SAP delivers a sample check library with a predefined check rule for the consistency check on budget entry documents and for budget account assignments. You can use these as a template for your own check libraries.

SAP delivers a selection of message variables that you can call in the *Message Variables* field via F4 input help.

Activities

- 1. Create a **library** by selecting *Create* and entering the key of the library in the dialog box *Create New Library*. Define a suitable description for the check library and a currency that applies to all other numeric values and save your entries. The new library is displayed in the selection frame on the left.
- 2. Create a **rule** in the library by selecting the library, choosing *Create* and entering the library key in the dialog box *Create New Check Rule*. Define a suitable description for the check rule. You can also define an aggregation of an account assignment in the screen area *Aggregation*. Save your entries. The new check rule is displayed in the selection frame on the left under the library.
- 3. Expand the structure of the library in the selection frame on the left and the rule assigned under it, then double click on *Prerequisite*. Create a formula using the formula editor. The budget documents to be checked are selected using this formula. Save your entries.
- 4. Double click on *Check* in the selection frame on the left. Select a suitable key figure for the left operand using F4, then define the check to be carried out for the right operand using an operator (<; = ; > ...). You can also select a key figure as a right operand, or enter a constant.
- 5. Double click on *Message* in the left selection frame. Enter the message class and the message number, then create a message type. Save your entries.

If you want to use the check library defined for the consistency check, define the appropriate settings in the IMG activity

Assign Budget Address Check Libraries.

Example

You want to ensure that the budget transfers are cleared in a fund. You define this in a check rule as follows:

a) Define the aggregation of all account assignment elements, except for funds to be evaluated.

- b) Formula for prerequisite: '' (If you do not enter a formula, this check rule takes place for all budget postings)
- c) Formula for check rule: Key Figure Balance from Transfer (Total)= 0
- d) If the check rule is not adhered to, the posting is prevented with an error message. The example is available as a sample (check rule 0000001 of check library 0000001) for budget entry documents.

36.2.4.1.3.5.2 Define Check Libraries for Budget Addresses

Use

In this IMG activity, you define check libraries for budget addresses.

During consistency checks of budget addresses, budget amounts entered in budget entry documents are evaluated with the budget already posted. Note that this form of consistency check affects system performance because the database entries are accessed each time an entry document is saved for each budget address.

A check library contains consistency checks that you can define as check rules for budget values. If a check rule is not complied with, a message is issued. You can also set which system message is issued if errors occur for a check rule. If the message class *Error* is set, a budget posting can be prevented.

Once check libraries are defined, they can be used for all FM areas. You can define the FM area currency required in the header data of a check library.

Rule Definition

You can define a sequence of individual rules for each check library, that are carried out one after the other during the consistency check. Rules are subdivided into three parts:

- Prerequisite

You define which budget documents should be checked according to this rule. You define a formula using the formula editor for the budget documents that should be included in the consistency check. If you do not define a formula, the consistency check takes place for each budget posting. For more information, see Formula Builder.

- Check Rule

In this step, you define the rule to be checked. You define a formula between the amounts of two operands using an operator (>; = ; <...). Two key figures or one key figure can be checked against a fixed value. If you select the operator "=" you can also define a tolerance value.

- Messages

An error message is issued if the check of a rule is not complied with. You can define which error message is issued in this section. For this purpose, you must already have created a customer-defined message class containing the corresponding messages.

Message Variables:

The message control youdefine here also supports the use of message variables. You can transfer the specific data on inconsistencies (e.g. which FM account assignment is affected) to the respective error message to be issued via the message variable. Up to four message variables can be transferred for each message, provided that the selected message also contains the same number of variables. In

the case of an error, the selected messages are filled dynamically with the corresponding values and facilitate the reproduction of the error. Error messages are forwarded to the Application log.

Requirements

- Key Figure for Consistency Check

You have defined the key figures that you want to use for the check rules in Customizing of Funds Management under Define Key Figures.

Note that you must have checkmarked the key figures for the category *consistency check*. If a key figure is not assigned to the category *consistency check*, the definition of the check rule is not displayed in the F4 selection.

- Messages for Consistency Check

You have selected the system messages you want to issue if errors occur. You define a message class and the system messages contained in it in the SAP Easy Access Menu under *Tools -> ABAP* Workbench -> Development -> Programming Environment -> Messages.

Standard settings

SAP delivers a sample check library with a predefined check rule for the consistency check on budget entry documents and for budget account assignments. You can use these as a template for your own check libraries.

SAP delivers a selection of message variables that you can call in the *Message Variables* field via F4 input help.

Activities

- 1. Create a **library** by selecting *Create* and entering the key of the library in the dialog box *Create New Library*. Define a suitable description for the check library and a currency that applies to all other numeric values and save your entries. The new library is displayed in the selection frame on the left.
- 2. Create a **rule** in the library by selecting the library, choosing *Create* and entering the library key in the dialog box *Create New Check Rule*. Define a suitable description for the check rule, then save your entries.

The new check rule is displayed in the selection frame on the left under the library.

- 3. Expand the structure of the library in the selection frame on the left and the rule assigned under it, then double click on *Prerequisite*. Create a formula using the formula editor. The budget documents to be checked are selected using this formula. Save your entries.
- 4. Double click on *Check* in the selection frame on the left. Select a suitable key figure for the left operand using F4, then define the check to be carried out for the right operand using an operator (<; = ; > ...). You can also select a key figure as a right operand, or enter a constant value.
- 5. Double click on *Message* in the left selection frame. Enter the message class and the message number, then create a message type. Save your entries.

If you want to use the check library defined for the consistency check, define the appropriate settings in the IMG activity Assign Budget Address Check Libraries.

Example

In the Budget Control System, by default you are allowed to post negative budget. The indicator *Negative Budget* in the master record of commitment items is not relevant in BCS. If you want to prevent negative budget occurring on a budget account assignment when budget is entered or updated (returns, transfers, carryforwards), define a corresponding consistency check. In the following check rule, the posting of negative budget values is checked for each budget type.

- a) Formula for prerequisite: Workflow Status of a Data Record in Budget Totals Table = 'P'
- b) Formula for check rule: Key Figure Current Budget for each Budget Type >= 0
- c) Example of an error message: **Current Budget must be greater than or equal to 0**.

This example is available as a sample (check rule 0000002 in check library 0000002).

36.2.4.1.3.5.3 Assign Budget Entry Document Check Libraries

Use

In this IMG activity you define which consistency checks are carried out during posting of budget entry documents. You assign the appropriate check libraries to the versions of the FM area/fiscal year for this.

Requirements

The check libraries required were created in IMG activity Define Check Libraries for Budget Entry Documents first.

If you use an existing check library (across all FM areas) that is therefore linked to another currency, the currency entered in the header data of the check library must be brought into line with your FM area currency.

Standard settings

Standard settings

Activities

Assign the check libraries to an appropriate version in the FM area/fiscal year.

36.2.4.1.3.5.4 Assign Budget Address Check Libraries

Use

In this IMG activity, you define which consistency checks should be carried out per budget address during posting of budget entry documents. You assign these check libraries for the relevant version of the FM area/fiscal year.

Requirements

The check libraries defined were created in IMG activity Define Check Libraries for Budget Addresses.

If you use an existing check library (across all FM areas) that is therefore linked to another currency, the currency entered in the header data of the check library must be brought into line with your FM area currency.

Activities

Assign the check libraries to an appropriate version in the FM area/fiscal year.

36.2.4.1.3.5.5 Check Consistency Rules

Use

With this report, you can verify active or inactive rules that have been defined in the Consistency Check tool.

Standard settings

SAP does not deliver any standard settings.

Further notes

For more information, please see the documentation for Consistency Check Report.

36.2.4.1.3.6 Budget Texts

36.2.4.1.3.6.1 Define Templates for Budget Texts/Budget Memos

Use

In this IMG activity, you create templates for budget memos to be used in the Budget Control System for the following:

- Cover groups in BCS cover eligibility
- Revenues Increasing the Budget (RIB)

These budget memos provide details to better describe the planned budget, or to explain the reasons for specific decisions relating to cover eligibility or RIB. You can use variables containing, for example, account assignment elements, in order to create the budget memo long texts.

Note

You cannot create any variables yourself. In the standard system, a large number of variables are predelivered.

Standard settings

SAP provides predefined variables for your use.

Activities

In order to create text templates for budget memos, proceed as follows:

- 1. Click on **New Entries** and select a budget text category to work with.
- 2. Enter the name of your new text template and a short text for it.
- 3. Save your entry.
- 4. Select a line and click on **Enter Long Text**.
- 5. Enter a long text using the variables on the left side. For this, you use the Drag&Drop function to pull the variable from the left to the right side, and write your text before and after the variables. Note that the variables do not contain any text, so you must include the name of the objects, for example, the *funds center* &BA_FUNDSCTR&..
- 6. Save your entry.

Example

You want to display the budget memo linked to a cover group. After carrying out the necessary Customizing activities as described above, you proceed as follows:

- You have assigned a budget memo template in one of the three fields (receiver and sender, or only receiver, only sender) in the detail screen of Transaction FMCERULE.
- You next mark a budget address line in the lower screen section, and access menu *Goto -> Display Budget Memo*.
- The budget memo text is displayed in a separate window. The search function within this text is active, if you want to look for a specific term or phrase in a longer budget memo text.

36.2.4.1.3.6.2 Define Key Fields for Budget Texts

Use

In this IMG activity, you define the key fields to be used when you create budget texts in your FM area. In this way you can define the structure of texts to be displayed in the budgeting workbench or in your budget structure.

These texts can be maintained during budget planning or with the text maintenance transaction FMTEXT. They can be copied via program Copy Budget Text.

If you have checkmarked a column in this IMG activity, this field will be used as a key field in budget texts:

- Used The field is active for the budget text transaction and the input field is a required entry for text maintenance.
- Not Used The field is not active for defining the budget text key. The input field is not displayed in the budget text transactions.

Together, these key fields form the default name of budget texts that you create.

Standard settings

SAP does not provide any standard settings for this activity.

Activities

- 1. Create a new entry for your FM area.
- 2. Checkmark the objects that are relevant keys for defining budget texts.
- 3. Save your data.

36.2.4.1.3.6.3 Activate Processing Mode for Budget Texts

Use

In this IMG activity, you can activate an editing mode for budget text in BCS transactions.

Activities

- 1. Enter the FM area in the first column and specify whether you want your budget texts to be edited only in the Budget Text Organizer (transaction FMTEXT), or also in other transactions.
- 2. Save your data.

36.2.4.1.3.6.4 Assign Forms for FM Budget Texts

Use

In this IMG activity, you can define the forms to be used when you create budget texts for the account assignment elements of your FM area. This form will be then defined for all FM account assignment texts ("budget texts") used in the planning transaction, the budgeting workbench, the budget structure maintenance transaction, the key figures report and the RIB rule maintenance transaction.

Requirements

If you want to define your own forms, enter the name of the form that you previously created in transaction Smartforms. If you want to use PDF-based forms, you can define your own form with transaction Form Builder.

Activities

- For your FM area, select a form. As a template, SAP proposes the delivered Smartform
 "FMBUDGET_TEXT". If you do not select a template, this one will be selected by default. In case
 you want to use a PDF-based form, SAP proposes the delivered form
 "FM_BUDGET_TEXT".
- 2. Save your entries.

36.2.4.1.3.7 Revenues Increasing the Budget

36.2.4.1.3.7.1 Activate Budget Memos for RIB

Use

In this IMG activity, you activate budget memos to be used for Revenues Increasing the Budget (RIB).

You can specify whether budget memos are not used, are optional, or are mandatory. If you activate the use of budget memos for RIB, you can assign a text template for budget memos to each RIB rule. In reporting these templates are then used to generate budget memos, based on the actual data of the corresponding RIB rule.

Standard settings

In the standard setup, the functionality of budget memos is not active for RIB.

Activities

In order to activate budget memos, enter your FM area, choose between "optional" and "mandatory", and then save your entries.

Note

You define text templates for budget memos in the IMG activity Define Text Templates.

36.2.4.1.3.7.2 Define Derivation Strategy for RIB Objects

Use

In this IMG activity, you define the account assignment derivation for RIB objects used for revenues increasing the budget.

Each account assignment to which you post revenues (such as customer invoices or expected revenues) is assigned to a budget address through the account assignment derivation of the budget structure. If you do not define a derivation strategy for your RIB objects, they will always be identical to the budget addresses assigned to the posting addresses used for collecting your revenues.

RIB objects serve two basic functions:

- Aggregation of revenues and, if applicable, of revenue budget
- Posted revenues are assigned to a RIB object in two steps: first using the derivation strategy for budget addresses of the budget structure and then using the derivation strategy defined in this IMG activity. This allows for an independent definition of your budget structure and the creation of socalled "RIB rules". If you define RIB rules using relative limits (or thresholds), you have to enter revenue budget values for the budget addresses assigned to a RIB object, aggregating the revenue budget from several budget addresses.
- Assignment of RIB rules

Each rule for revenues increasing the budget must be assigned to a RIB object (= a particular revenues budget address). In this a rule, you specify the amount available for a budget increase, the relevant type of revenues and the receiving expenditures budget addresses.

Requirements

You have set up and assigned your derivation strategy for budget addresses of the budget structure in the IMG activity Define Derivation Strategy for Budget Addresses.

Notes

The derivation strategy for RIB objects consists of a sequence of derivation steps that are executed in the given order and which use one of the following step types:

- Initialization

In derivation steps of step type *Initialization* you can set the value of any target field to its initial value (usually = SPACE).

- Assignment

In steps of step type *Assignment*, you can assign the value of any source field or a constant value to some target field.

- Derivation rule

In derivation steps of step type *Derivation rule*, you can set up database tables, where you can enter combinations of values of source fields corresponding to certain combinations of target fields.

- Table lookup

In steps of step type *Table lookup*, you can access single individual records of database tables.

- Function module

In steps of type *Function module*, you can call a specific function module, for instance, for reading master data attributes of account assignment elements, or for searching for account assignment elements in master data hierarchies.

All derivation steps defined here can be linked to conditions which must be met in order for the derivation step to be executed.

Standard settings

SAP does not deliver any standard implementation for the derivation strategy for RIB objects.

Recommendation

If you want to assign RIB rules on the level of revenue budget addresses assigned to your posting addresses (or even at the level of the posting addresses), you should not implement a derivation strategy for RIB objects: In this case, RIB objects will automatically be identical to the revenues budget addresses.

Activities

- 1. If required, edit the derivation strategy by adding appropriate derivation steps.
- 2. Save your strategy.
- 3. Test or transport your strategy using the appropriate buttons or menu functions.

Further notes

- The value of the account assignment element *Grant* is always identical in the budget address and the assigned RIB object.
- The value of each account assignment element of the RIB object is identical with the value of the budget address, provided there is no step in the derivation strategy that changes the value of this target field.

36.2.4.1.3.7.3 Maintain Calculation Formulas for RIB

Use

In this IMG activity, you maintain the calculation formulas to be used for defining rules for revenues increasing the budget.

With a calculation formula, you can define:

- The percentage of collected revenues that will be relevant for a budget increase (usually = 100%)
- A lower limit for revenues with budget-increasing effect
- An upper limit for revenues with budget-increasing effect

You have the option to work without lower or upper limits. If you decide to set up a lower or upper limit, then you have to choose the type limit (for instance, absolute value of relative percentage) and enter a value for it.

If you do not work with limits or if you only set up limits using absolute values, it is not necessary to enter revenue budget. Revenue budget values are only needed to calculate limits which are defined by relative percentages.

Standard settings

SAP only delivers the standard formula **1000** as template.

Activities

- 1. Create your own calculation formulas using the currency of the your FM area.
- 2. Save your calculation formulas.

Example

You set up the following calculation formula:

- Relevant percentage of revenues: 50% -

Lower limit: absolute value =

\$1,000

- Upper limit: relative percentage = 200%

The current revenue budget amount may be \$1,500, which means that the upper limit will be equal to \$3,000.

If you have collected revenues of \$1,800, then this will not be sufficient for a budget increase, because only 50% of the revenues, i.e. \$900, enter the calculation.

If the collected amount of revenues is \$4,000, then \$2,000 will become relevant. Since this amount exceeds the lower limit of \$1,000, the amount of \$1,000 (out of \$2,000) has a budget increasing effect and may be distributed to some expenditure budget address.

If no surplus budget address is used, then revenues up to 6,000 may have budget increasing effect, because of the upper limit given by the current revenue budget of 1,500, multiplied by a factor of 2, as defined by the upper limit. Therefore the maximum budget increase will be 2,000 (= upper limit - lower limit), which is reached with collected revenues of 6,000.

Further notes

- Each calculation formula must be assigned to a currency. This currency must be identical to the local currency of the FM area, which this calculation formula is to be used for.

- Usually only the revenues between the lower and upper limit will have a budget-increasing effect. You may, however, set up rules for revenues increasing the budget which use surplus budget addresses. In this case, you must set the indicator Use Surplus Amount?. This indicator refers to revenues that exceed the upper limit as defined in the calculation formula, and will then increase the budget of the assigned surplus budget address.
- Revenues below the lower limit or residual revenues from calculation formulas with percentages < 100% have no budget-increasing effect.

36.2.4.1.3.7.4 Maintain Derivation Strategy for Rule Generation

Use

In this Customizing activity, you can maintain the derivation strategy for proposing values for the automatic generation of rules for Revenues Increasing the Budget ("RIB rules").

Using this derivation strategy, you can assign values for the definition of RIB rules. You define the source fields by assigning the following values to a given RIB object or revenue cover group:

- Activation status
- Filter profile Calculation formula
- Indicator Use surplus amount?
- RIB procedure
- Receiving expenditure budget address (fixed percentage = 100%)
- Surplus budget address (fixed percentage = 100%), if the indicator *Use surplus amount?* is set
- Automatic cover group (RIB rule is to be assigned to), if the *RIB procedure* is selected as *Call Procedure* (value C)
- A budget memo template for revenue addresses and a budget memo template for expenditure addresses, if you work with budget memos for RIB rules.

Notes

The derivation strategy for the generation of RIB rules consists of a sequence of derivation steps. These are executed in a given order and use one of the following step types:

- Initialization

In derivation steps of step type *Initialization*, you can set the value of any target field to its initial value (usually = SPACE).

- Assignment

In derivation steps of step type *Assignment*, you can assign the value of any source field or assign a constant value to a target field.

- Derivation rule

In derivation steps of step type *Derivation rule*, you can set up database tables in which you can enter combinations of values of source fields that should correspond to certain combinations of target fields.

- Table lookup

In derivation steps of step type *Table lookup*, you can access single individual records of database tables.

- Function module

In derivation steps of step type *Function module*, you can call a function module to determine the values of target fields.

All derivation steps defined here can be linked to conditions which must be met in order that the derivation step can be executed.

Requirements

You have made settings in all previous Customizing activities in this section.

Standard settings

SAP does not deliver any standard implementation of the derivation strategy.

Recommendation

If you want to generate rules for Revenues Increasing the Budget using the program Generate RIB Rules (transaction **FMRBGENMD**), then you must implement this derivation strategy.

Activities

- 1. Edit the derivation strategy by adding appropriate derivation steps.
- 2. Save your strategy.
- 3. Test or transport your strategy using the appropriate buttons or menu functions.

Further notes

- For further details on the automatic generation of RIB rules, refer to the documentation of program Generate RIB Rules.
- If you create an RIB rule for an RIB object, then the values of the source fields for the RIB rule (FM account assignment element values) are determined by the RIB object.
 However, if you create an RIB rule for a revenue cover group, then these source fields (example: funds center and commitment item of the RIB rule) are determined by the RIB source address of the revenue cover group.
- Only a single receiving expenditure budget address (with fixed percentage = 100%) can be assigned with this derivation strategy. If you want to maintain multiple receivers, you can add them manually in the transaction *Process Single RIB Rule* (transaction code **FMRBRULE**).
- If you do not specify derivation steps for the account assignment elements of the receiving expenditures budget address, all the values of these account assignment elements will be identical to

the values of the RIB object or of the RIB source address (if you base the new RIB rule on a revenue cover group). Since the RIB object or the RIB source address, is a revenues budget address, this will cause an error message. Therefore, you must in any case specify the value of the account assignment element *commitment item*.

- A surplus budget address can only be assigned if the indicator *Use Surplus Amount* is set. If not set, any assigned surplus budget address value will be automatically cleared by the system without any message. In addition, the surplus budget address must be different from the receiving expenditure budget address. Furthermore, you cannot set this indicator for RIB rules with call procedure.
- An automatic cover group can be assigned if *Call Procedure* (value**C**) is selected for the field *RIB procedure*. For RIB rules with distribution procedure, however, any value entered for the automatic cover group field will be automatically cleared by the system without any message.

36.2.4.1.3.7.5 Activate Change Log for RIB Rules

Use

In this IMG activity, you activate the change log for RIB rules in Funds Management (FM) budgeting. The activation influences the following maintenance transactions for RIB rules:

- Manual maintenance of RIB rules (transaction FMRBRULE)
- Mass generation of RIB rules (transaction FMRBGENMD)
- Mass deletion of RIB rules (transaction FMRBDEL)
- Copy of RIB rules (transaction FMRBCPY)
- Reconstruction of index for RIB rules (transaction FMRBIDXREC)

If the change log is activated, document change records are updated in the history tables when RIB rules are created, deleted, or changed in any of the above transactions.

Standard settings

In the standard setup, the change log for RIB rules is not active.

Activities

- 1. In order to activate the change log for RIB rules, enter your FM area and checkmark the change log activation.
- 2. Save your data.

36.2.4.1.3.7.6 Delete Change Log for RIB Rules

Use

In this IMG activity, you can delete a change log for RIB rules. If the change log was active for a period in the past, you may want to delete it for performance reasons.

Standard settings

SAP does not provide any default settings.

Activities

- 1. Enter the FM area, budget category for RIB and the date up to which you want to delete the change records.
- 2. Set the test run indicator if you want to simulate the deletion before actually deleting.
- 3. Run the transaction.

For more information, see the documentation of the transaction.

36.2.4.1.3.7.7 Activate Period Control for Distribution Procedure

Use

In this IMG activity, you activate period control for RIB rules with distribution procedure.

You have the choice between the following values:

- Annual Totals: This is the default value. The RIB process cumulates all periods of the fiscal year to calculate the amounts for increasing the budget through the RIB process.
- Single Period: The RIB process is separated for each single period. To increase the budget of a given period only the revenues and the previous budget increases from this single period are taken into account.
- Cumulative Periods (To-Period): To calculate the process amounts for budget increase the RIB process takes into account the amounts of a selected period, plus the amounts from all preceding periods, starting with period 1.

The activation influences the following transactions:

- Increase Budget from Revenues (transaction FMMPRBB)
 If you activate period control, you can only increase the budget on a single period. The use of a distribution key is forbidden. Furthermore, the selected periods for the source and target part of new RIB documents must be identical.
- Overview of RIB Rules Values (transaction **FMRBMON01**)

If you activate period control, an option for period selection is shown to restrict the calculated and displayed RIB values to the selected periods.

Requirements

You have defined RIB rules with distribution procedure.

Standard settings

In the system standard, period control is not active. The default value is "Annual Totals".

Activities

- 1. Enter the FM Area, for which you want to activate period control for RIB.
- 2. Select the desired option for period control.
- 3. Save your entries.

Example

You have activated period control with the option "Cumulative Period".

You use a RIB rule without any lower and upper limits and have posted the following revenues in the first 5 periods of your fiscal year:

Period 1 Period 2 Period 3 Period 4 Period 5

500.00600.00300.00200.00500.00

Suppose that you have not increased the budget of this year via RIB and you now select period 3 in transaction **FMMPRBB**.

This transaction selects all revenues from period 1 until the selected period 3 to calculate the budget amount for increase:

500.00 + 600.00 + 300.00 = 1,400.00

You will increase the budget of period 3 by the cumulative revenues of the 2 previous periods and of the selected period, that is by 1,400.00.

36.2.4.1.3.8 Cover Eligibility

36.2.4.1.3.8.1 Activate Cover Eligibility

Use

In this Customizing activity, you can activate the cover eligibility functions in the Budget Control System (BCS).

The activation of cover eligibility influences the following areas:

- Maintenance of cover groups: you can create and maintain rules for cover eligibility or more general cover groups.
- Manual budget transfers using cover eligibility: you can enter manual transfers with process *Transfer Cover Eligibility* (**TRCE**) in the Budgeting Workbench, which makes use of the definition of **manual** cover eligibility rules (or manual cover groups).
- Cover groups in availability control: you can define automatic cover groups, which automatically share the budget and budget consumption of assigned budget addresses for purposes of availability control.

Note that each budget address that does not belong to an automatic cover group is

automatically assigned to a standard control object using the derivation strategy for control objects.

- Use of budget memos: in this Customizing activity you can also decide whether you want to use budget memos for expenditure budget addresses in cover eligibility rules (manual or automatic cover groups). If you activate the use of budget memos here, you can assign text templates for budget memos to each manual or automatic cover group. For reporting purposes, these templates can then be used to generate your budget memos, based on the current definition of the corresponding cover eligibility rule.

If you want to use budget memos for revenue budget addresses or for expenditure budget addresses receiving budget from RIB rules, you must activate budget memos for RIB rules in Customizing activity Activate Budget Memos for RIB.

- Use of RIB rules based on revenue cover groups: you can define revenue cover groups, which bundle different revenue budget addresses, and then create rules for Revenue Increasing the Budget (RIB) based on these revenue cover groups. This means that all budget addresses from the revenue cover group will then contribute their resources (revenues or revenue budget values) to the RIB rule. Note that you can still use RIB rules based on "RIB objects" in parallel. However, a specific revenue budget address for use in the RIB process must then be assigned to either a revenue cover group or an RIB object - it cannot be used simultaneously in both types of RIB rules.
- Activation of RIB call procedure ("pseudo cover eligibility"): if you set the indicator Activation of RIB Call Procedure, you can create RIB rules with call procedure. Such a rule makes additional revenues available for use in an automatic cover group that is, other members of this automatic cover group can automatically consume these additional resources from RIB in availability control checks.

Note that after activation of the RIB call procedure, the system no longer allows you to use availability control objects which join expenditure budget addresses and revenue budget addresses in a single control object or where the commitment item is set to the initial value ('SPACE').

- Sequence of budget processes to balance automatic cover groups: with this indicator you can define the sequence of budget processes for the creation of budget documents in the transaction FMMPCEPCLO.

Standard settings

In the standard setup, the cover eligibility function is not active.

Activities

To activate the cover eligibility functions, enter the FM area and fiscal year for which these functions are to be used, decide on additional definitions such as the use of budget memos, then save your entries.

Notes

- If you want to use Revenues Increasing the Budget (RIB) functions, for example RIB rules with call procedure ("pseudo cover eligibility"), you must carry out the steps in Customizing activity **Revenues Increasing the Budget**.
- You can distinguish between budget types that are eligible for cover from budget types that are noneligible for cover (*only relevant for automatic cover groups and for availability control*) by making the corresponding setting in Customizing activity Define Budget Types.
- You define text templates for budget memos in Customizing activity Define Text Templates.

36.2.4.1.3.8.2 Maintain Number Range for Cover Groups

Use

In this Customizing activity, you can define number range intervals for cover groups to be used in BCS cover eligibility.

Requirements

If you want to generate cover eligibility rules (or more general, cover groups) using transaction *Generate Cover Eligibility Rule* (FMCEGENCG), you must maintain at least the number range interval **01** with an internal number allocation. You should therefore <u>not</u> set the *Ext* (external number allocation) indicator for number range interval **01**.

Standard settings

In the standard system, no number range interval is defined.

Activities

- 1. Define the internal number range interval **01** for your FM area for each fiscal year if you want to automatically allocate numbers when creating cover eligibility rules using transaction *Edit Cover Eligibility Rule* (FMCERULE) or *Generate Cover Eligibility Rule* (FMCEGENCG). Do not set the *Ext* (external number allocation) indicator for this particular number range interval.
- 2. If you want to use external number assignment, choose another number range interval (<u>not</u>01) and set the *Ext* indicator. Note that number range interval 01 must always be internal.
- 3. Save your entries.

Further notes

Transport number range objects as follows:

- After you have defined your number ranges, select *Interval -> Transport* in the number range screen.
- All intervals for the selected number range object (that is, for the cover groups you are defining number ranges for) are first deleted in the target system.
- After the import, only the intervals you have exported exist in the target system. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.4.1.3.8.3 Define Derivation Strategy for Generating CE Rules

Use

In this Customizing activity, you can define a derivation strategy for generating cover groups.

Using a derivation strategy, you can assign budget addresses to new cover groups or to existing cover groups. required for defining cover eligibility rules.

You must assign the following values to a given budget address:

- Role of the selected budget address. This is the role assumed in the cover group.
- Cover group, if the budget address is to be assigned to an existing cover group. or
- Another budget address, which should belong to the same cover group as the selected budget address.
- Check the indicator "Do Not Assign Budget Address" if the selected budget address is not to be assigned to a cover group.
- A cover group text, if you want to assign a text to the cover group description.
- If you work with budget memos for cover eligibility rules, you must also assign a budget memo template for each possible role of the budget address, for instance, a template for receiver addresses.

Notes

The derivation strategy for the generation of cover groups consists of a sequence of derivation steps. These are executed in a given order and use one of the following step types:

- Initialization

In derivation steps of step type *Initialization* you can set the value of any target field to its initial value (usually = BLANK).

- Assignment

In derivation steps of step type *Assignment*, you can assign a value to any source field or a constant value to a target field.

- Derivation rule

In derivation steps of step type *Derivation rule*, you set up database tables in which you can enter combinations of values of source fields that should correspond to certain combinations of target fields.

Note that you can maintain table entries for derivation steps of type *Derivation rule* from the menu using transaction FMCERGR.

- Table lookup

In derivation steps of step type *Table lookup*, you can access individual records of database tables.

All derivation steps defined here can be linked to conditions which must be met before the derivation step can be executed.

For further information, see the documentation on derivation strategies used in FM.

Requirements

Before starting the mass generation of cover groups using transaction *Generate Cover Eligibility Rule* (FMCEGENCG), you must have carried out all previous Customizing activities in this section, as well as implemented the derivation strategy for generating cover groups

Standard settings

SAP does not deliver any standard implementation of the derivation strategy.

Activities

- 1. Edit the derivation strategy by adding the appropriate derivation steps.
- 2. Save your strategy.
- 3. Test or transport your strategy using the appropriate buttons or menu functions.

Further notes

For further details on the automatic generation of cover groups, refer to the documentation of the program Generate Cover Groups.

36.2.4.1.3.8.4 Activate Change Log for Cover Eligibility

Use

In this IMG activity, you activate a change log for cover groups in the Budget Control System (BCS).

The activation affects the following cover group maintenance transactions:

- Mass generation of cover groups (transaction FMCEGENCG)
- Mass deletion of cover groups (transaction FMCEDELCG)
- Mass copy of cover groups (transaction FMCECPYCG)

- Manual maintenance of cover groups (transaction FMCERULE)
- Migrate cover pools and unilateral cover eligibility rules from Former Budgeting (transaction **FMMIGCE**)
- If the change log is activated, document change records are updated in the history tables whenever cover groups are created, deleted or changed by any of the above transactions.

Standard settings

In the standard setup, the change log for cover groups is not active.

Activities

Activate the change log for cover groups by entering your FM area(s) and checking the *Change Log Activation* indicator.

36.2.4.1.3.8.5 Delete Change Log for Cover Eligibility

Use

In this IMG activity, you can delete the change log for cover groups.

If the change log was active for a period in the past, you may want to delete it for performance reasons.

Requirements

The cover eligibility feature must be activated.

Standard settings

SAP does not provide any default settings.

Activities

- 1. Enter the FM area, budget category and the date up to which you want to delete the change records.
- 2. Set the test run indicator if you want to simulate the deletion before actually carrying it out.
- 3. Run the transaction.

For further information, read the SAP Library and program documentation.

36.2.4.1.4 Migration of Former Budgeting to BCS

36.2.4.1.4.1 Overview of Migration Activities

Use

The following IMG activities enable you to migrate budget data that you have been using in Former Budgeting to the Budget Control System.

Standard settings

The following IMG display settings are predefined by SAP:

- Rules that enable you to assign or map the existing budgeting processes to the BCS processes, in the IMG activity Display Assignment Rules for Budgeting Process
- Assignment rules for mapping BCS value types in Display Assignment Rules for Value Type

Activities

In order to migrate your budgeting data to BCS, proceed as follows:

- Define a derivation strategy to migrate budget document header data in the IMG activity Define Derivation Strategy for Migration of Header Data Note
 - This activity is optional, and is only relevant if you want to carry out document-based migration.
- Define a derivation strategy to migrate line items in the IMG activity Define Derivation Strategy for Line Items
- If you want to migrate the carryover documents of the last year before BCS activation via document migration, you must activate the Full Migration for Carryover Documents
- Carry out the migration of your previous budgeting totals in Migrate Budget Totals
- Migrate your budget documents for the BCS years in Migrate Budget Documents
- If you are working with cover pools and/or unilateral cover eligibility rules in Former Budgeting, you can migrate them to BCS in the IMG activity Migrate Cover Pools and Unilateral CE Rules.

36.2.4.1.4.2 Display Assignment Rules for Budgeting Process

Use

In this IMG activity you display the budgeting process and value type to be used in the Budget Control System.

The data source for the budgeting process is the Former Budgeting **budget type** in the first column.

For each budget type listed, you can see the combination of value type and BCS internal budgeting process assigned for migration to BCS, and whether (column "Ignore") the budget tables in Former Budgeting contain data that should not be migrated to Budget Control System. For example, all entries related to availability control should be ignored during migration.

Standard settings

Assignment rules are predefined by SAP and cannot be changed.

Activities

No activity required. This is informational data.

Further notes

Some budget types from Former Budgeting should not be migrated to BCS (for example, for availability control data). These budget types are flagged to be ignored during the migration run.

36.2.4.1.4.3 Display Assignment Rules for Value Type

Use

In this IMG activity you can display the assignments of the value type, the budget category and the workflow status to be used for migration of budget data to the Budget Control System.

The data source is the value type in the Former Budgeting system.

Standard settings

Assignment rules are predefined by SAP and cannot be changed.

Activities

No activity required. This is informational data only.

Further notes

Some value types from Former Budgeting should not be migrated to BCS (for example, for availability control data). These value types are flagged to be ignored during the migration run.

36.2.4.1.4.4 Define Derivation Strategy for Header Data

Use

In this IMG activity you create a derivation strategy to derive the necessary fields for your budget document header from different source fields. You do this by creating the corresponding derivation steps in the derivation strategy.

Standard settings

SAP does not deliver any standard settings.

Activities

Create a derivation strategy for the migration of your budgeting documents and save it.

36.2.4.1.4.5 Define Derivation Strategy for Line Items

Use

In this IMG activity, you can define the derivation strategy to be called for each budget line during the migration run. The relevant fields from Former Budgeting are displayed as source fields in the definition of the derivation steps.

Standard settings

SAP does not deliver a standard derivation strategy.

Activities

Enter a derivation strategy for the migration of budget lines and save your data.

36.2.4.1.4.6 Activate Full Migration for Carryover Documents

Use

Note

This IMG activity is only relevant if you have carried out fiscal year-end closing for the last fiscal year that you are using the Former Budgeting (FB) system.

In this IMG activity, you determine whether to apply a specific handling procedure for migrating the corresponding data. Document migration normally deals with data used since BCS activation. Therefore, the **sender part** of the carryover document (referring to the last fiscal year before BCS activation) is not taken into account by the document migration program.

Only the **receiver part** is migrated. As this leads to an unbalanced carryover, the FB process is mapped to represent a budget supplement in BCS.

To also migrate the **sender part** of the carryover, you need to carry out a migration of your budget totals including totals from the last year before BCS activation. Since no budgeting document is involved here, the budgeting process is not changed.

By checkmarking the full migration of carryover documents in this IMG activity, you to migrate the entire carryover document from FB via document-based migration. The corresponding data will then not be taken into account by the totals migration. The advantages are:

- the original process (carryover) is kept

- delta migration is sufficient if the year-end closing process is performed after the migration.

Note

This specific handling procedure cannot be used for **budget release data**. If you are using the release functionality, the system will not be able to determine which part of the released amount concerns carryover data. The specific handling of carryover documents will then lead to inconsistencies between released amounts and budgeted amounts in BCS.

Furthermore, for "carryback documents", the same logic also applies: the sender year is the first BCS year and receiver year is the last FB year. Unfortunately, such documents cannot be migrated, as BCS does not permit a carryback procedure.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. If necessary, set the indicator for full migration of carryover documents in your FM area by checkmarking the last column *Carryover*. Note that only FM areas for which BCS has been activated are available for selection.
- 2. Save your entry.

36.2.4.1.4.7 Migrate Budget Totals

Use

In this IMG activity, you migrate your budgeting totals from the former budgeting system to the Budget Control System.

Read the documentation on Migration of Totals from Former Budgeting to BCS and then carry out the activities as specified there.

Standard settings

SAP does not deliver any standard settings.

36.2.4.1.4.8 Migrate Budget Documents

Use

In this IMG activity, you carry out a document-based migration of budgeting data from Former Budgeting the Budget Control System.

Read the documentation on the Migration of Budget Documents and then carry out the activities as specified there.

Standard settings

SAP does not deliver any standard settings.

36.2.4.1.4.9 Migrate Cover Pools and Unilateral CE Rules

Use

In this IMG activity, you migrate the cover pools created in Former Budgeting and/or unilateral cover eligibility rules to the Budget Control System.

Requirements

BCS must be installed. Cover eligibility should be activated in the IMG activity Activate Cover Eligibility.

Standard settings

SAP does not deliver any standard settings.

Activities

Please read the program documentation Migrate Cover Pools and Unilateral CE Rules and then carry out the activities as specified there.

36.2.4.1.5 Tools

36.2.4.1.5.1 Delete Budget Data

Use

In this step, you start the program for deleting budget data in BCS Funds Management.

You can use this program in the following situations:

- If you are still in the test phase and want to delete your test data before the production startup.
- If you have transferred budget for a future year to the production system using batch input and you want to delete the existing budget data for the current year.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Specify the scope of data you want to delete.
- 2. Specify whether you first want to create a test run in order to get an overview of the data that will be deleted in the current selection.
- 3. Run the report.

For further information, please refer to the program documentation.

36.2.4.1.5.2 ALE Distribution of Budget Data

36.2.4.1.5.2.1 Create Standard ALE Customizing Settings

Use

This IMG activity is a link to the standard Customizing settings of Application Link Enabling (ALE), where you make all the settings necessary to communicate between different systems.

Note the following with respect to the distribution of BCS data:

- The message type to use is **FMEDMSGTYPE**.
- The IDoc that you must use is called **FMEDIDOC.**

For further information see the Application Help of the Budget Control System under BCS Budgeting, "Distribution of Data using Application Link Enabling".

Activities

Carry out the standard Customizing settings for Application Link Enabling.

36.2.4.1.5.2.2 Define Derivation Strategy for Distributed Budget Data

Use

In this IMG activity you create a derivation strategy which enables the distribution of budget entry documents to ALE-linked systems for the following source fields:

- FM area
- Fiscal year
- Budget category
- Version

- Funds center

The system derives the following target fields:

- a distribution model created from the ALE standard, which at minimum determines the sender and the receiver systems (mandatory in order to set the distribution)
- the name of the funds center in the receiver system, if different from the sender system (optional)
- the name of the FM area in the receiver system, if different from the sender system (optional)

Requirements

In order to use this derivation strategy, you must first make the ALE customizing settings in the IMG activity Create Standard ALE Customizing Settings. You must define at least one distribution model.

Activities

Create a derivation strategy by first selecting a derivation step type and then entering a step description, conditions and attributes.

Example

See the documentation of the IMG activity Select Derivation Steps for further information on how to maintain a derivation strategy.

36.2.4.1.5.3 Business Add-Ins for Budgeting (BAdIs)

36.2.4.1.5.3.1 BAdI: Create User-Defined Fields in Budget Entry Document

Title

Business Add-In: Customer-Specific Fields in Budgeting Workbench (entry document)

Use

With this Business Add-In you can define a su-screen for the input/output of your specific fields associated with an entry document.

It can only be implemented for Funds Management, component Budget Control System (BCS).

The methods of this BAdI are called in the PBO (Process Before Output) and PAI (Process After Input) of the screen that contains additional data.

Additionally, the method PRINT is called when the entry document is printed.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

If you would like to have customer-specific fields for entry documents, you should first define the corresponding customer include (CI_FMBH). Now implement this BAdI applying the following steps:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose Create. The screen for creating BAdI implementations is now displayed.

- Enter a short text for the implementation in the Short text for implementation field. 2.
- 3. From the tab index, choose Interface. The Name of implemented class field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- Enter the code for the implementation between the statements method <Interface name> ~ 6. <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate The code you stored in the method will be run when the application program is executed.

Example

Define a subscreen that contains customer-specific fields.

- 10. The method GET DATA FROM SCREEN should be called in the PBO of your subscreen.
 - The method PUT_DATA_TO_SCREEN should be called in the PAI of your subscreen. -
 - The method PRINT is called when the entry document is printed.
- 11. Assign the subscreen to the BAdI implementation.
- 12. Activate your BAdI implementation.

Requirements

The structure CI_FMBH (customer include for entry document) should be defined.

Recommendation

Only use character-like fields in the structure.

Further notes

Documentation for the BAdI method PUT_DATA_TO_SCREEN Documentation for the BAdI method GET_DATA_FROM_SCREEN Documentation for the BAdI method PRINT

36.2.4.1.5.3.2 BAdI: Control Budgeting Periods

Use

With this Business Add-In you specify the time periods that are open for budgeting in the following areas:

- Budget entry using the budget planning transaction or the budgeting workbench
- Budget mass transactions (copy, carryforward of residual budget, ...)

This Business Add-In provides various features enabling you to control periods. For instance:

- You can distinguish whether you want to open specific periods when creating entry documents and/or change documents.
- You can also distinguish per original application during budget planning or execution (using the budgeting workbench)
- You can also open periods only for certain users.

Requirements

You have carried out the IMG activity to activate period control.

Standard settings

SAP does not provide any default settings.

Activities

This is a single-use BAdI, meaning that only one implementation can be activated.

Please note that if you open budgeting periods using transaction FMOPER (Open Budgeting Periods), the open periods are then changed according to the implementation.

After you have made the period control settings, you can implement the BAdI applying the following steps:

Notes

See method Get Open Periods

36.2.4.1.5.3.3 BAdI: Enhance Budget Entry Documents

Title

Business Add-In: Customer enhancement for entry document.

Use

With this Business Add-In you can define customer enhancements related to the business object **BudgetEntryDocFM** (BUS0050).

It can only be implemented for Funds Management, component Budget Control System (BCS).

The methods of this BAdI are called during the processing of the business object methods.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

If you would like to handle customer specific fields for entry documents, you should first define the corresponding customer include (CI_FMBH).

Now implement this BAdI applying the following steps:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.
The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- Enter the code for the implementation between the statements method <Interface name> ~
 <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

Activate your BAdI implementation.

Recommendation

Only use character-like fields in the structure.

Further notes

Documentation for method CREATE_IN Documentation for method CREATE_OUT Documentation for method GETDETAIL_IN Documentation for method GETDETAIL_OUT Documentation for method GETLIST_IN Documentation for method GETLIST_OUT Documentation for method REVERSE_IN Documentation for method REVERSE_OUT

36.2.4.1.5.3.4 BAdI: Enhance Checks and Document Postings

Title

Budgeting Interface: Enhance Checks and Post Data

Use

With this Business Add-In (BAdI) you can:

- Improve checks on budget entry documents
- Improve checks on line items
- Post data for purposes other than BCS

The corresponding methods are called by the check and posting events of the Budget Control System.

Standard settings

SAP delivers the following default implementations:

| FMKU_BUDGET_EVNT_AVC | Update and post data for availability control |
|-----------------------|---|
| FMKU_BUDGET_EVNT_BL | Add checks and post data for the budgetary |
| ledger | |
| FMKU_BUDGET_EVNT_CC | For document consistency checks |
| FMKU_BUDGET_EVNT_GM | Specific checks for Grants Management |
| FM_CHECK_EXP_DATE | Check against the expiration date of the master |
| records on FM objects | |

Activities

This is a multiple-use BAdI, meaning that all active implementations will be triggered for each event called. You implement the BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Further information

For further information on each method, see:

- Enhance Checks on Entry Documents

- Enhance Checks on Line Items

- Post Budgeting Data

36.2.4.1.5.3.5 BAdl: Enhance Budget Line Items

Title

Budgeting Interface : Add Lines / Substitute Data

Use

With this Business Add-In you can :

- Create additional lines in budget entry documents
- Substitute fields contained in the original lines

The corresponding methods are called in the kernel of the Budget Control System (BCS).

Standard settings

SAP offers a default implementation using the CO-PA derivation tool:

For both implementations use the CO-PA derivation tool. Source fields are derived to create target fields. Source fields and target fields are part of the fields contained in a line. For each methode you have to define your derivation strategy in the IMG activities:

Define Derivation Strategy for Additional Budget Line Items

Define Substitution for Entry Documents

Implementation of the method ADD_LINES:

The target fields are initialized with the values of the source fields. After this, processing depends on the derivation strategy involved. If the commitment item category has changed (for example, from expenditures to revenues), the signs of the values are reversed. If a target field is ultimately empty, but the corresponding source field is not "blank", a message is generated in the application log to warn the user.

Implementation of the method SUBSTITUTE_DATA:

The target fields are initialized with the values of the source fields. After this, processing depends on the derivation strategy involved. If a target field is ultimately empty, but the corresponding source field is not "blank", a message is generated in the application log to warn the user.

Activities

This is a single-use BAdI, meaning that only one implementation can be activated.

Now implement the BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Further information

For further information on each method, see:

- Creates Additional Lines
- Substitutes Fields in Line Items

36.2.4.1.5.3.6 BAdI: Define Grouping Key

Use

Using this Business Add-In (BAdI), you can assign any FM account assignment to a group of FM account assignments, which can be identified by a **grouping key**. If an active implementation exists, the system ensures that:

- posting and budget addresses belong to the same group
- in AVC the grouping keys of budget addresses and the corresponding control objects are identical
- in the case of residual carryforward, the grouping key of the sender FM account assignment is the same as that of the receiver FM account assignment
- the mass transfer of residual budget supports only one grouping key for all referenced sender FM account assignments and one for the receiver FM account assignments.

Example

In your FM area, the multi-year budget execution has been activated. The budget ID has been coded into the fund data, so that each fund is uniquely assigned to a budget ID. You need to ensure the following:

- Every posting object and the corresponding budget object must be assigned to the same budget ID.

- In availability control, the control object and the corresponding budget objects must have the same budget ID.

You do this by creating an implementation of this BAdI, which returns the budget ID as the grouping key for each FM account assignment.

Requirements

In order to use the grouping key for multi-year budget execution, you must first activate period-based encumbrance tracking (PBET) in the IMG activity Override Update Profile.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.2.4.1.5.3.7 BAdI: Enhance Reassignment Rules

With this Business Add-In you can enhance FM account reassignment rules in BCS transactions when you are:

- Copying planned / budget data
- Transferring budget data
- Carrying over budget data to another year
- Transferring CO planning data to BCS

On the target/ receiver side, you can use this Business Add-In to:

- Split budget among different FM account assignments
- Split budget using a specific distribution key, shift budget according to a period shift or aggregate budget using a specific period
- Revaluate budget using a percentage value
- Change budget amounts in the transaction and FM area currency

Standard settings

SAP does not provide any default settings.

Activities

This is a single-use BAdI, meaning that only one implementation can be activated. This BAdI is filtered by applications. Please note that reassignment rules can only be integrated in the following applications:

- Copy planning data (COPY)
- Carry over residual budget data (COVR)
- Freeze budget data (FREEZE)
- Generate budget data (LOAD)
- Generate budget data from CO planning data (LOAD-CO)
- Transfer budget data (MASS-TRANS)

After you have defined your reassignment rules, you should implement the BAdI applying the following steps:

After you call up the activity, a dialog box appears.

1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by

choosing Create button.

- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.

- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Further notes

For further information on the method, see:

Enhance Reassignment Rules

36.2.4.1.5.3.8 BAdI: Enhance Plan Data Transfer from CO

Use

With this Business Add-In you can overwrite the target budget type using CO planning data when you transfer the CO planning data to BCS with transaction FMCYCOPI_CO.

Standard settings

SAP does not provide any default settings.

Activities

After you have defined your reassignment rules, you should implement the BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.

8. Save and activate all the objects.

Example

| Here is an example: |
|----------------------------------|
| *Primary cost planning |
| IF I_S_COSP-VRGNG EQ 'RKP1'. |
| MOVE 'CAT1' TO C_TBUDTYPE |
| *Revenue element planning |
| ELSEIF I_S_COSP-VRGNG EQ 'RKP5'. |
| MOVE 'CAT2' TO C_TBUDTYPE ENDIF. |

36.2.4.1.5.3.9 BAdI: Enhance Report Writer Implementation

Use

This BAdI is used to enhance the Report Writer implementation of table FMRBCS. Method GET_TEXT is used to supply texts for field values that are not provided by the system.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.

- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.2.4.1.5.3.10 BAdI: Enhance Cover Groups/Cover Rules

Title

Business Add-In: Enhancements for Cover Groups (Cover Eligibility Rules)

Use

With this Business Add-In you can implement specific checks for new or modified cover groups.

Requirements

You have activated cover eligibility functions in Customizing.

Standard settings

SAP delivers a default BAdI implementation, which is implemented by the class **CL_FMCE_COVER_GROUP_DEFAULT**, and which performs the following checks in method **CHECK_COVER_GROUP**:

- All budget addresses of a cover group are assigned to the same value of the account assignment element Fund.
- The commitment items of all budget addresses have the same value of the master data attribute commitment item type. However, if you do not use this attribute in the commitment item master data, then this check will not have any effect.

If you do not want to carry out these default checks or if you want to implement other checks, you can overwrite this default implementation with your own BAdI implementation.

If you are copying cover groups, you can change the number or short text of the target cover group by implementing the method COPY_COVER_GROUP.

If you are balancing automatic cover groups, you can change the sequence of budget senders and budget receivers by implementing methods:

SORT_BUD_SENDER

SORT_BUD_RECEIVER

Activities

Create your BAdI implementation by applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Further notes

For further information see:

- Documentation for the BAdI method CHECK_COVER_GROUP
- Documentation for the BAdI method COPY_COVER_GROUP
- Documentation for the BAdI method SORT_BUD_SENDER
- Documentation for the BAdI method SORT_BUD_RECEIVER

36.2.4.1.5.3.11 BAdI: Check for New or Changed RIB Rules

Title

Business Add-In: Enhancements for Rules for Revenues Increasing the Budget (RIB)

Use

With this Business Add-In, you can implement specific checks for new or modified rules for Revenues Increasing the Budget (RIB).

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

Implement this BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Example

You want to check that all budget addresses receiving budget from a single RIB rule are assigned the same value from the account assignment element Fund.

See the example implementation of this BAdI, which is implemented by the class **CL_FMRB_RIB_SAMPLE**.

Further notes

For further information see:

- Documentation for the BAdI method CHECK_RULE

36.2.4.1.5.3.12 BAdI: Enhance Key Figures

Title

Enhance Key Figures

Use

With this Business Add-In you can:

- Check before evaluation whether a key figure has to be evaluated or not
- The corresponding methods are called from the key figure evaluation of the Budget Control System (BCS).

Requirements

SAP offers a default implementation for GLA customers. For further information, see Default implementation for Total Cost.

Activities

This is a single-use BAdI, meaning that only one implementation can be activated using a filter which is a key figure name.

You implement the BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.2.4.1.5.3.13 BAdI: Activate CO-PA Enhancements

Use

This BAdI enables you to activate enhancements of the CO-PA derivation tool for all the derivation strategies used in BCS Budgeting and Availability Control (AVC), starting with Rel. ECC 5.0, Public Services EA_PS 500.

Standard settings

No standard implementation is delivered by SAP. You must create your own implementation to activate the CO-PA enhancements that you want to use.

Activities

Method **ACTIVATE_CHANGE_DOC**: if you set the flag as active, any changes in a given derivation strategy, including the sequence of the rules and their attributes, will be recorded in the change document. Example

36.2.4.1.5.3.14 BAdI: Enhance Copy Process for Budget Entry Documents

Use

With this Business Add-In you can manage budget documents lists for the Budget Entry Document Copying process.

You can add or delete budget entry documents from this list.

The corresponding methods are called in the Copy Budget Documents program.

Requirements

Standard settings

SAP delivers an active implementation which will exclude some kind of documents like carry over / Revenues Increasing Budget / Balance CE document.

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.

- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects. Example

36.2.4.2 Availability Control

In this step you define the availability control settings for the Budget Control System (BCS).

You can find more information on activating the availability control under Prepare Activation of Availability Control.

36.2.4.2.1 Prepare Activation of Availability Control

Availability Control of Budget Control System (BCS)

Active availability control works with ledgers on the summarization and saving of the overall **consumable budget** and amounts already assigned as **consumed amounts**.

Each Availability Control Ledger requires entries of two Data Sources in order to match the summarized values.

In IMG activity Check Standard Customizing of Availability Control, you ensure that all necessary standard Customizing settings that SAP delivers and those you require for the IMG activities of this section are available.

In the IMG activity Activate/Deactivate Some AVC Messages for Applications, you define which posting activities trigger AVC error messages and for which activities messages are suppressed.

In the IMG activity *Edit Tolerance Profiles*, you define a tolerance profile which allows you group together tolerance limits of availability control for different activity groups. You maintain these in the IMG activity Edit Activity Groups.

In IMG activity Define AVC Filter Settings for Budget Values, you determine which budget values of BCS budgeting are relevant for availability control.

In the IMG activity Define Derivation Strategy for Control Objects, you define strategies which you can use to define on which account assignment of the ledger (Control Object) a posting activity is summarized.

In the IMG activity Assign Tolerance Profiles and Strategy for Control Objects, you have to assign a tolerance profile to the AVC ledgers and to your FM area. You can also assign a derivation strategy for overriding this tolerance profile and for AVC objects.

You have to activate a ledger before you can update the AVC values and carry out availability control checks. Different Activation Levels are available for the Activation of the Availability Control.

Recommendation

Execute the availability control Customizing settings in the same order as the individual IMG activities appear in the structure.

36.2.4.2.2 Check Standard Customizing of Availability Control

Use

In this IMG activity check whether the standard Customizing delivered by SAP required for activating availability control exists in the current client.

The missing setting can be transferred from client 000 if required.

Note

Missing Customizing Settings are not automatically transferred to a transport request. Therefore, it is recommended that you also execute this IMG activity in your target system or in your target client.

36.2.4.2.3 Activate/Deactivate Some AVC Messages for Applications

Use

In this IMG activity, you can selectively deactivate availability control (AVC) messages for certain Applications of BCS Budgeting.

Note:

- Even if you deactivate the AVC messages for the applications of BCS budgeting, the Funds Management update of posting data for this area still takes place using the control objects of the AVC. You cannot deactivate the AVC here.
- With the deactivation, you suppress <u>only</u> the messages that are triggered by AVC because of a budget overrun, which are issued by the system during posting. Messages that are not suppressed are those related to incorrect functions (for example, incorrect Customizing settings). You cannot deactivate these messages they will still be issued.

Standard settings

By default, the AVC messages are already activated for a number applications of BCS budgeting.

You should not deactivate the applications activated by SAP.

Activities

If necessary, activate or deactivate the AVC messages selectively for individual applications by setting or deleting the *AVC active* indicator. Example

36.2.4.2.4 Activity Groups

In this section you define the activity group settings for availability control for the Budget Control System (BCS).

In the following IMG activities you can define your own activity groups in addition to the

activity groups delivered by SAP and enhance or change the derivation rules delivered by SAP. You can define a tolerance limit for each activity group in IMG activity Edit Tolerance Profiles.

Example

You want to divide all posting activities of the Funds Managment update into two new activity groups:

To do this, define an activity group for commitment postings and one for actual postings in IMG activity *Edit Activity Group*.

Then assign all the relevant posting activities to the two activity groups in IMG activity *Edit Derivation Strategy for Activity Groups*.

36.2.4.2.4.1 Edit Activity Groups

In this IMG activity you can display the activity groups delivered by SAP and create your own activity groups.

Recommendation

Avoid changing or deleting the activity groups delivered by SAP.

Activities

- 1. Select *New Entries* and define the key and name of the activity groups.
- 2. Save your entries.

36.2.4.2.4.2 Edit Derivation Strategy for Activity Groups

Use

In this IMG activity you can adjust the strategy for the activity groups derivation delivered by SAP.

- The activity groups are derived from different parameters; these parameters depend on the application you are working with, whether it is CO Activity or Value Types for example.
- The derivation strategy comprises steps that uses one of the following derivation methods:
- Move

In a "move" derivation step the activity group is assigned a certain value.

- Derivation rule

In a derivation rule step you assign certain values as input parameters (source field) to an activity group as target field.

All derivation steps can be linked to requirements which must be met so that the derivation step can be executed.

Example

You wish to derive certain activity groups directly from the CO activity. To do this you create a derivation rule step with source field *CO Activity* and target field *Activity Group*. Then maintain derivation rules for all relevant CO activities.

Standard settings

At the moment only the strategy maintenance on the derivation of activity groups is supported for the FM update.

The new FM budgeting activities are not available for strategy maintenance. They are assigned to activity groups **90** (posted budget) or **95** (preposted budget).

36.2.4.2.5 Edit Tolerance Profiles

Use

In this IMG activity, you define the tolerance profile for the active availability control in the budgeting of Funds Management (FM).

For each tolerance profile, you define whether you only want to work with percentage usage rates or also with maximum permissable absolute differences. If you allow absolute variances as tolerance limits, you must assign a currency to the tolerance profile - this currency must match your FM area currency.

In a tolerance profile you group together the tolerance limits for the different activity groups. You can define one or more tolerance limits for each activity group by specifying different usage rates or also absolute variances. You also define the check sequence of the different tolerance limits. Assign a message type to each of these defined check events. As message type, an error message, a warning, or an information can be issued.

Ceiling Type

You can use the ceiling type to control whether the availability control should limit expenditures (*outgoing amounts* and/or revenues (*incoming amounts*) from bottom to top.

Normally the availability control checks only expenditures (for example, outgoing payments). Under the **revenues** ceiling type, you can also maintain tolerance limits to check revenues (for example, incoming payments).

Usage Type for Tolerance Limits

If you allow both percentage usage rates and absolute variances in your tolerance profile, you can use indicator Usage Type for Tolerance Limits to control whether the tolerance limit is derived only from the usage rate or whether the tolerance rate is determined as minimum or maximum value from both values.

Event Control

You can assign an availability control check to each check event. This event is triggered if you post your document despite the tolerance limit being overrun. At the moment, you can only send mails from SAP office for this. You can define whether the system only sends a mail *the first time*, the specified tolerance limit is exceeded, or whether a mail should be sent *each time* the tolerance limit is exceeded when a document is checked.

Deactivating Individual Check Events

You can exclude individual check events from the active availability control by setting the *lnactive* indicator.

Procedure for Searching for Matching Entries

The active availability control proceeds as follows when searching for matching entries:

- a) Determines the tolerance profile to be used
- b) Determines all matching entries (check events with their tolerance limits) of the tolerance profile, which fit the activity group
- c) Checks the tolerance limit in inverted sequence of the check events, starting with the highest percentage tolerance limit
- d) Determines the action (=message type and if necessary event) when the first of these tolerance limits is exceeded.
- e) Suppresses the action found, if the *lnactive* indicator is set for the entry.

Note

Note that all tolerance limits for each activity group must be entered in order of the check events (with increasing values).

Example

The tolerance limits of the availability control for actual postings (activity group 40) could, for example, be defined in a tolerance profile such as this for example:

| <u>Activity Group Sequence</u> | | <u>Message Type</u> | <u>Usage rate</u> |
|--------------------------------|----|---------------------|-------------------|
| 40 | 01 | Information | 70% |
| 40 | 02 | Warning | 85% |
| 40 | 03 | Error Message | 100% |
| Standard settings | | | |

If no matching entry is found for a tolerance profile, the checks are carried out according to the following standard setting:

- Ceiling type: expenditures (outgoing amounts)
- Message type: error message
- Usage rate: 0%
- Usage type for tolerance limits: **only usage rate**
- Check: active

36.2.4.2.6 Settings for Availability Control Ledger

36.2.4.2.6.1 Maintain Customer-Specific Ledger for Availability Check

This IMG activity is optional. As far as possible, you should use the AVC ledgers 9H and 9I delivered by SAP for AVC checks, and only create new AVC ledgers if they are required for additional checks.

Use

In this IMG activity, you maintain the list of availability control ledgers (AVC ledgers). You can define new (customer-defined) availability control ledgers, modify some of their attributes, or delete ledgers, providing some conditions are fulfilled.

When creating a new AVC ledger, you can have most of its attributes copied from a reference ledger taken as template. The following settings and assignments are copied from the reference ledger:

- Filter settings for budget values
- Assignment of tolerance profiles and derivation strategy for control objects
- Assignment of checking horizon for availability control

The new ledger and the settings are automatically copied to the IMG activities Define Filter Settings for Budget Values, Assign Tolerance Profiles and Derivation Strategy for Control Objects and Select Checking Horizon for Availability Control.

You can change the settings of the new ledger in these IMG activities. You can also modify the following ledger settings:

- For the predefined ledgers 9H and 9I, you can only modify the name (short text) of the ledger.
- For customer-defined ledgers you can also modify the AVC data sources assigned to the ledger. By default, availability control for BCS is set in such a way that it checks the budget for actuals/commitments that have already been posted (Data Source for Consumed Amount) against the budget entered in Funds Management (FM) for assigned funds (Data Source for Consumable Budget).

In this IMG activity, you can define a different user-specific AVC ledger by checking one set of budget values against another set of budget values. For this, select *two budget data sources* (one as Data Source for Consumed Amount and one as the Data Source for Consumable Budget), instead of a single budget data source together with an actuals data source.

This means that you select another budget category as the Data Source for Consumed Amount, instead of a posting ledger. The Data Source for Consumable Budget of each ledger can also be modified, but the choice is restricted to budget data sources. For further information, see the documentation of the IMG activity Define Filter Settings for Budget Values.

When deleting a ledger, some checks are performed before deletion to prevent any inconsistency:

- the deletion of the predefined ledgers 9H and 9I is forbidden.
- the ledger to be deleted should be empty, that is, no data should be recorded in table FMAVCT for this record.
- the ledger should not be active (see IMG activity Define Activation of Availability Control)

Note

The copying of AVC ledgers is only supported within an FM area. The keys of your new ledger are entered with the copy process and cannot be changed.

By default, the activation status of a newly created AVC ledger is set at "not active" .

Standard settings

SAP delivers the following AVC ledgers for Funds Management budget categories:

| AVC ledger | Budget category |
|------------|------------------------|
| 9H | payment budget |
| 9I | commitment budget |

Use these AVC ledgers to carry out the standard checks of the budget in the corresponding budget category.

Activities

If you want to use a new customer-defined AVC ledger for your FM area, carry out the activities in the following order:

- 1. Create a new AVC ledger in this IMG activity.
- 2. Activate the new AVC ledger by setting the appropriate activation status in the IMG activity Define Activation of Availability Control.
- 3. Reconstruct availability control in the new AVC ledger using transaction Re-Initialize AVC Ledgers.

36.2.4.2.6.2 Define Filter Settings for Budget Values

Use

In this IMG activity, you define which budget values should be included in active availability control.

You generally define the total **consumable budget** against which consumable budget (commitment or actual values) is checked using the AVC filter settings. You define this in the activity *Define the Consumable Budget*.

You also have the option of creating your own availability control ledger in which you check **budget** values against the consumable budget instead of consumed amounts. In cases like this, you have to maintain the filter settings of the activity *Define Budget Values as Consumed Amounts* in addition to the activity *Define Consumable Budget*.

You can set filter values for the following budget attributes:

- Version:

If you do not enter a version, the system automatically uses the active budget version, which is usually version **000**.

- Selection of Value Type:

If you select the value " " (or *Budget or Release in Accordance with Fund-Specific Settings*), you cannot define any filter settings for selecting the value type and the relevant budget types. The general Customizing settings apply to the budget type in this case.

- WF STATUS Combination:

With the WF-STATUS combination, you define whether only posted budget or also preposted budget is included in availability control. If you want to permit preposted budget documents for availability control, the security principle applies: preposted budget is **only** included if it **decreases the budget**.

Standard settings

If you do not define any filter settings for a control ledger, the system automatically uses the following standard settings:

- Version = *active version*
- Selection of value type = " "
- WF-STATUS Combination = " " (or *posted and preposted budget documents*)

Recommendation

SAP recommends the following filter settings for the standard control ledgers **9H** and **9l**:

- Version = *active version*
- Selection of value type = " "

Further notes

- If you change the filter settings of an AVC ledger that is *already active*, you have to Reconstruct Availability Control for this ledger.
 You start the reconstruction of availability control from the Funds Management menu under *Budgeting -> Tools -> Availability Control -> Reconstruct.*
- If you want to define AVC filter settings for budget values in the role of consumed amounts, you have to defined your own ledger first in which *budget values* are checked against *consumable budget*.

You define your own ledgers in the IMG activity Maintain Customer-Specific Ledger for Availability Check.

- Selecting Budget Types

You can only select relevant budget types in the AVC filter settings if you have selected the value **B** or *budget*) for the field Selection of Value Types. If you do not define any settings for selecting budget types, all budget types are automatically taken into account by availability control. If you only want certain individual budget types to be checked by availability control, you have to determine them individually in this IMG activity. The selection applies to all AVC checks in the control ledger entered.

Example

You want to flag the budget of version **002** and budget types **BT01** and **BT02** as consumable budget.

Enter the value **001** for the version and the value **B** for the Selection of Value Types for the ledger you want and for a fiscal year (from fiscal year) (from fiscal year) in the activity *Define Consumable Budget*.

Then enter the values **BT01** and **BT02** as permitted budget types in the view Select Budget Types.

Note that the setting defined applies to all fiscal years after this "from fiscal year" if you do not make any other entries for future from years.

Activities

- 1. Enter your FM area, the availability control ledger and "from fiscal year" of the fiscal year.
- 2. Define the budget version and choose whether availability control should include preposted budget or not.
- 3. Determine the selection of the value types and budget types. If you enter the value **B**, you can control the selection of the budget types using AVC settings:
- 4. If only individual budget types are relevant for availability control, enter these individually in the IMG activity Define Budget Types.

If you do not enter any individual budget types, all budget types are included automatically.

5. Save your entries.

36.2.4.2.6.3 Define Filter Settings for Commitment/Actual Values

Use

In this IMG activity, you define the actual and commitment values that should be excluded from active availability control. Usually all posting records containing such actual and commitment values that are updated to Funds Management in a non-statistical manner define the **consumed amount**, which AVC checks against the **consumable budget**, as defined in the previous IMG activity Define Filter Settings for Budget Values. For particular purposes or for checks in special customer-defined control ledgers, you may, however, want to exclude certain FM value types from availability control.

Example

You want to check "soft" commitments, such as purchase requisitions and funds reservations, by using tolerance limits or budget values defining the consumable budget, which differ from the values used for checking actuals or other "hard" commitments. In this case, you must set up two control ledgers:

- Standard ledger (for example, 9H): Define posting filter settings that exclude all "soft" commitments according to your definition. Then assign normal tolerance profiles (for example, with error at usage rate 100%) and define filter settings for budget values as usual.
- Customer-defined ledger for "soft" checks: Do not define any posting filter settings, but assign tolerance profiles with "soft" limits (for example, warning at usage rate 100%) or define filter settings for budget values that result in higher amounts available in the consumable budget.

Requirements

- As far as possible, exclude only the value types that are at the start of a commitment chain (for example, purchase requisitions, funds reservations, purchase orders and so on), but not cash-relevant value types, such as invoices or payments.
- When excluding a given value type, you must also exclude **all** other value types of earlier steps in the commitment chain. Example: If you exclude funds precommitments, then you must at least exclude funds reservations, too.
- Note that you must set the GR/IR update indicator for the value **MM invoice receipt** in the Customizing settings of your FM update profile (transaction **OFUP**), if you exclude value type **60** (*parked documents*), but not value type **54** (*invoices*).

Standard settings

If you do not define any settings here, then availability control considers all non-statistical posting records as relevant for budget consumption.

Further notes

If you change the filter settings of an AVC ledger that is *already active*, then you have to "reinitialize" or Reconstruct Availability Control for this ledger (transaction **FMAVCREINIT**).

You start the reconstruction of availability control from the Funds Management menu under Budgeting - > Budget Control System (BCS) -> Tools -> Availability Control -> Reconstruct.

Activities

- 1. Enter filter settings for your FM area and for all relevant availability control ledgers.
- 2. Specify from which fiscal year onwards the filter settings apply.
- 3. For each new entry, enter all the FM value types to be excluded from availability control.
- 4. Save your entries.

36.2.4.2.6.4 Define Derivation Strategy for Control Objects

Use

In this IMG activity, you can define your own strategies for deriving Funds Management account assignments (FM account assignments) for availability control.

Each FM account assignment in which you create budget or to which you post budget consumption is assigned an account assignment in the availability control ledger. In this IMG activity, you define the logic on how the account assignments of the availability control ledger (availability control object) should derive the budget addresses and posting addresses.

One and two-step derivation of control object

The derivation strategy that you define in this IMG activity controls the assignment of the control object to one or more budget addresses. For a budget posting, the corresponding control object is determined on the basis of this derivation strategy. Budget postings are updated in the AVC in a single step. In

comparison, actual/commitment postings are updated in two steps in the AVC, using two consecutive derivation strategies. First the corresponding budget address is determined from the posting address - this occurs with the derivation strategy of the budget structure (IMG activity Define Derivation Strategy for Budget Addresses). The control object is then derived from the respective budget address in the same way as the budget posting.

The derivation strategy for availability control objects consists of a sequence of steps that uses one of the following derivation step types:

- Clear

In the "clear" derivation step type, you can define whether you want to exclude individual FM account assignment elements from the availability control ledger.

- Move

In the "move" derivation step type, you can determine whether the values for the individual FM account assignment elements of your postings should be carried forward partially or in full to the account assignment elements of the ledger.

- Derivation rule

In the "derivation rule" step, you can directly enter the assignment of the FM account assignments of your postings to the ledger account assignments.

- Table Lookup

In the step "table access", you can access individual records from database tables.

- Function Module

In the step "function module", you can call function modules that allow you to search for account assignment elements in master data hierarchies or to determine master data attributes, for example.

All derivation steps defined here can be linked to requirements which must be met before the derivation step can be executed.

Example

You want to aggregate the budget for consumed amounts in the AVC ledger in the following way when entering budget values:

| <u>Posting to account assignments</u> Fund/Funds center/Commitment item item | | Acct assgmts in AVC ledger | |
|---|------|------------------------------|--|
| | | Fund/Funds center/Commitment | |
| | Move | | |
| FND1/FC1/CI1 | -> | FND1/FC1/CI | |
| FND1/FC1/CI2 | -> | FND1/FC1/CI | |
| FND1/FC1/CI3 | -> | FND1/FC1/CI | |
| | | | |

A possible derivation strategy in this case consists of three derivation steps which carry forward the values of the account assignment elements one after the other to the relevant account assignment elements in the ledger, the fund and funds center being carried forward in full, whereas only the first five characters of the commitment item are carried forward.

Requirements

The example makes clear that a suitable technical name is required for the FM account assignments when you use "move" steps for this type of summarization.

If you use descriptive names for your FM account assignments, there are function module steps available that carry out an evaluation during the derivation of master data hierarchies.

Standard settings

SAP provides standard strategy **9HSAP000**, which contains examples of how to use different step types.

Note

If you do not need a summarization of budget values in one of your availability control ledgers, that is, if all control objects in this ledger match the Funds Management budget objects, then it is not necessary to to define your own strategy. In this case, leave the field Strategy for Derivation of Control Objects blank in the IMG activity Assign Tolerance Profiles and Strategy for Control Objects.

Recommendation

- 1. Create your own strategy by copying the strategy **9HSAP000** delivered by SAP.
- 2. Edit your strategy by adding more derivation steps.
- 3. Save your strategy.

Further notes

If you change a strategy that is used by already active AVC ledgers, you must execute Re-Initialize Availability Control Ledgers (FM) for all these ledgers.

You start the reconstruction of availability control from the Funds Management menu under *Budgeting* - > *Tools* -> *Availability Control* -> *Reconstruction*.

36.2.4.2.6.5 Define Derivation Strategy for Tolerance Profiles

Use

In this IMG activity you define the derivation rules with which you can replace the standard tolerance profile by an alternative tolerance profile.

You normally assign a standard tolerance profile to the availability control ledger for each fiscal year and FM area. This defines the tolerance limits for all postings.

If you want to make the tolerance limits valid for postings to certain FM account assignments or users, you can define a derivation rule which derives an overriding tolerance profile with different tolerance limits for the relevant FM account assignments.

A strategy includes successive steps that uses one of the following derivation step types:

- Clear

In the "clear" derivation step type, you can reset the value of the tolerance profile or of other available target fields to blank or zero.

- Move

In the "move" derivation step type, you can assign particular values to the overriding tolerance profile or other available target fields.

- Derivation Rule

In the "derivation rule" derivation step type, you can, for example, assign your tolerance profile to certain values of FM account assignment elements of the availability control ledger or the name of the user.

- Table Lookup

In the "table lookup" derivation step type, you can access individual records from the database table.

- Function Module

In the "function module" step type, a function module is called when the derivation step is executed. In this way, the target fields you specified will be filled with values.

You can assign additional conditions to all derivation steps which must be fulfilled before the derivation step can be carried out.

Further notes

If you work with cover eligibility rules, the system usually calls the derivation strategy twice:

- 1. Once for AVC at the budget address level which is assigned to an automatic Cover Group (= *control object first level*) and
- 2. Again during the check at the cover group level (=control object second level).

You can differentiate between the two check levels using source field **TYPE_CONTROL_OBJECT** in the derivation strategy:

- The value **TYPE_CONTROL_OBJECT** is **"X"**: The derivation strategy is called for a budget address with automatic cover eligibility. In this case, you have the budget address in source fields **CG_FUND, CG_FUNDSCTR, CG_CMMTITEM,** ... and the automatically assigned cover group in source field **RCVRGRP_9**.
- The value TYPE_CONTROL_OBJECT is " ": The derivation strategy is called either for a normal control object (in other words, for an FM account assignment with no reference to a rule for automatic cover eligibility) or for an automatic cover group (*control object second level*). In this case, the control object is either in the usual source fields RFUND, RFUNDSCTR, RCMMTITEM, or, if a rule exists for automatic cover eligibility, in the source field RCVRGRP_9. Source fields CG_FUND, CG_FUNDSCTR, CG_CMMTITEM, remain empty.

Example

You want to use tolerance limits that are different from the standard tolerance profiles for postings that are summarized to a certain account assignment of availability control ledger **9H**. You use tolerance profile **1000** as the standard tolerance profile for ledger **9H**

You define different tolerance limits for certain ledger account assignments of the AVC tolerance profile by using other tolerance profiles. You define a strategy for this, which executes the following assignment steps:

| <u>Fund/Funds center/Commitment item</u> | <u>T</u> (| olerance profile |
|--|------------|------------------|
| | Assignn | nent |
| FND1/FC1/CI | -> | 1001 |
| FND1/FC2/CI | -> | 1002 |

According to the strategy defined, for postings that are summarized on the FM account assignment FND1/FC1/CI of the ledger **9H**, the tolerance limits of the tolerance profile **1001** are valid. The tolerance limits of standard tolerance profile **1000** are overridden.

->

1003

Requirements

FND1/FC3/CI

You have defined tolerance profiles with different tolerance limits in IMG activity Edit Tolerance Profiles.

Standard settings

Availability control will work with the standard tolerance profile of the ledger, in case the derivation rule does not find an alternative tolerance profile.

Activities

- 1. Create a strategy for your tolerance profile by copying the strategy delivered by SAP.
- 2. Maintain your strategy by including further derivation steps in your strategy if necessary.
- 3. Save your strategy.

36.2.4.2.6.6 Assign Tolerance Profiles and Strategy for Control Objects

Use

In this IMG activity you define the derivation of availability control objects and the assignment of the tolerance profile for each availability control ledger.

You define these attributes for each FM area, ledger and fiscal year (from fiscal year). **Derivation and summarization of FM postings to availability control objects**

If you want to define your own derivation strategy for deriving FM account assignments to the availability control ledgers, you assign this in the field *Strategy for Deriving Control Objects*.

If you do not enter a strategy, the account assignment of the availability control object is always identical to the posting or budget address that is either assigned as the FM account assignment of a budget transaction or that is derived from the posting address of a posting transaction (possibly with the exception of the value of the account assignment element "grant").

Note on deriving the FM account assignment element "grant"

If you use the FM account assignment element "grant" in your organization, note that the value of this account assignment element is **not** defined by the strategy for account assignment derivation. You define

the value of the grant in the field Defining the grant in control objects. You can select one of the following settings:

- a) The value of the grant is always taken from the budget address
- b) All grants are summarized; that is, the grant is always set to zero or blank in control objects.

Assigning and overriding the standard tolerance profile

You must assign a standard profile to the availability control ledger by entering a profile in the field *Tolerance Profile*. If you do not make an entry in the field *Strategy for deriving a tolerance profile* the tolerance limits of this profile are used for all postings.

However, if you want to use different tolerance limits for particular posting activities, you can override the tolerance limits defined in the standard tolerance profile by assigning one of the strategies you defined for determining a tolerance profile to be overridden in the field *Strategy for deriving a tolerance profile*.

Example

You want to maintain attributes for the ledger **9H** and for the fiscal year **2005** and define the following entry:

| | Ledger | <u>fiscal year</u> |
|---|--------|--------------------|
| | 9H | 2005 |
| c | . 1 | |

If you do not make any other entries for the ledger **9H**, these attributes apply to all other fiscal years from the fiscal year **2005**.

Requirements

You have already created tolerance profiles and strategies in the following IMG activities:

- Edit Tolerance Profiles
- Define Derivation Strategy for Control Objects
- Define Derivation Strategy for Tolerance Profile

Recommendation

Maintain entries for all availability control ledgers that you want to activate.

Further notes

If you want to change the account assignment derivation of an AVC ledger that is *already active*, you have to Reconstruct Availability Control for this ledger.

You start the reconstruction of availability control in the Funds Management menu under *Budgeting -> Tools -> Availability Control -> Reconstruct.*

36.2.4.2.6.7 Specify Checking Horizon

36.2.4.2.6.7.1 Select Checking Horizon for Availability Control

In this IMG activity you define how the checking horizon is selected for availability checks in a specified control ledger. For this, you can select one of the following values for the field Selection of Checking Horizon:

- "": The checking horizon is entirely determined by the fund-specific settings in the FM master data and cannot be overwritten.
- **"A"**: The default value *Annual Period* is used for checks in this control ledger, which means that availability control will normally aggregate data over all periods of a fiscal year and thus perform checks on annual values. You can overwrite this default value, if you maintain a derivation strategy in the IMG activity Define Derivation Strategy for Checking Horizon.
- **"O"**: The default value *Overall Period* is used for checks in the selected control ledger, which means that availability control will normally aggregate data over all periods of all fiscal years and therefore perform checks on overall values. You can overwrite this default value, if you maintain a derivation strategy in the IMG activity Define Derivation Strategy for Checking Horizon.

Standard settings

If you do not enter a value for a control ledger in your FM area, the system will automatically take the value " " as the default value for the field *Selection of Checking Horizon*.

Recommendation

SAP recommends that you assign the value " " to the standard control ledgers **9H** and **9I** shipped by SAP. However, you can also select another value for a customer-defined control ledger that has been created in the step Maintain Customer-Specific Ledger for Availability Check.

Activities

- 1. Select your FM area.
- 2. Enter values for all relevant control ledgers.
- 3. Save your entries.

36.2.4.2.6.7.2 Define Specific Assignments for Checking Horizon

In this IMG activity you can define specific assignments for the checking horizon by implementing a derivation strategy. This specific assignment overwrites the default value of the checking horizon selected in the activity Select Checking Horizon for Availability Control.

Requirements

The derivation strategy defined here is not used, if no entry exists for a given control ledger in the activity Select Checking Horizon for Availability Control or if you have chosen the value " " for the field

Selection of Checking Horizon. In this case the checking horizon is entirely determined by FM master data settings.

Notes

Each derivation strategy consists of a sequence of steps that uses one of the following step types:

- Initialization In derivation steps of this type, you can set the value of any target field to initial BLANK.
- Assignment In steps of step type assignment, you can assign specific values to any target field. You can also transfer only part of the field contents of source fields to a target field.
- Derivation rule

In derivation rule steps, you can directly enter specific assignments of the checking horizon (for instance) to any combination of source fields.

- Table lookup

In a step of this step type, you can access individual records from database tables.

All derivation steps defined here can be linked to conditions, which must be met in order for the derivation step to be executed.

Example

You have selected checking horizon *Overall Period* as the default value for control ledger 9H in the activity Select Checking Horizon for Availability Control. But for availability checks on control objects with certain values of the account assignment element Fund, you can overwrite this default value and use the checking horizon *Annual period* for checks with control ledger 9H.

Create a derivation step of step type *Derivation rule*, select *Definition* and choose as source field the field *RFUND* and as target field the field *CHECKHORIZON*. Then select *Condition* and enter the following as condition for this derivation rule:

| Name of column | Value |
|----------------|-------|
| Field | ALDNR |
| Op. | = |
| Value | 9H |

After saving this new derivation step, you maintain rule entries for all desired fund values.

Standard settings

SAP does not provide any implementation of the derivation strategy.

Recommendation

Since SAP recommends that you choose the value " " of the field Selection of Checking Horizon in the activity Select Checking Horizon for Availability Control for the standard control ledgers **9H** and **9I**, the derivation strategy is usually only relevant for customer-defined control ledgers that have been created in the step Maintain Customer-Specific Ledger for Availability Check.

Activities

- 1. Implement your derivation strategy.
- 2. Save your strategy.

36.2.4.2.7 Define Activation of Availability Control

Use

In this IMG activity, you activate availability control by assigning an activity status for each ledger and fiscal year (from year). You can choose between five activation statuses for each availability control ledger:

- Ledger not active

Posting values (including budget values) are not updated in the availability control ledger and no availability control takes place.

- Active without availability checks Posting values are updated in the availability control ledger. No availability control takes place.
- Active with usual check logic

Posting values are updated in the availability control ledger. The *usual* availability control takes place. In the usual availability control, the error messages of AVC checks are always issued as warning messages if the *available amount* (= difference between the consumable budget and consumed amounts) is *not reduced* by the posting activity for each availability control object.

- Active with soft check logic

Posting values are updated in the availability control ledger and an availability control check is carried out. During this check, the system stops all AVC messages if the available amount for the availability control object is not reduced by the posting.

- Active with strict check logic for document chains

Posting values are updated in the availability control ledger. The usual availability control takes place, except for document chains. Strict availability control applies to document chains. This means that each document of a document chain is checked again and can be rejected by an error message of the availability control, even if the new document does not contain any additional budget consumption.

This means, for example, that the posting of an invoice must always undergo this strict check again even though availability control has already taken place for the commitment of the corresponding purchase order.

- Active with strict check logic

Posting values are updated in the availability ledger. All postings undergo the strict check logic. This strict check logic can also stop postings if the available amount of a control object is increased. This activation is only used in special situations.

SAP recommends that you use the normal check logic or the check logic with strict check for document chains.

Note

In this activity you can also define whether you want to exclude revenue items from the availability control in the chosen Availability Control Ledger. Set indicator Ignore Revenue Items for this. In this case, budget values and commitment/actual values of revenue account assignments are neither checked nor updated in the availability control ledger.

Example

You want to use the ledger **9H** from the year **2002** without checks and only update values first. You want to use the ledger with availability checks from the fiscal year **2003**.

You define the following settings for this:

| Ledger | <u>FYear</u> | Status of AVC |
|---------|--------------|-----------------------------|
| 9H | 2002 | Active without availability |
| control | | |
| 9H | 2003 | Active with normal check |
| loaic | | |

Example of check logic for document chains

You selected the setting *Active with strict check logic for document chains*. The following tolerance limits are set in the tolerance profile for postings of the document chain purchase requisition -> purchase order -> invoice:

| <u>Activity group</u> | <u>Tolerance limit</u> | <u>Message type</u> |
|---------------------------|------------------------|---------------------|
| 20 (purchase requisition) | 120 % | warning |
| 30 (purchase order) | 110 % | warning |
| 40 (invoice) | 100 % | errors |

You create a purchase order of **230** that follows a corresponding purchase order and invoice with the same amount. The current consumable budget of the control object remains constant at **200** for all 3 postings. If the strict check logic for document chains is active, the system acts in the following way (example):

- The purchase order can be posted without a message (the tolerance limit set is only exceeded by amounts >240)
- The purchase order can also be posted, but the system issues a warning (the tolerance limit is exceeded by amounts >220)
- The invoice posting cannot be posted, the system issues an error message (the tolerance limit is exceeded by amounts >200)

In the usual check logic, the availability control would not reject the invoice posting in the last step because the invoice does not contain any additional budget consumption against the purchase order (the consumable amount on the affected control object stays the same) and because of this only a warning is issued instead of an error message.

Requirements

You can only assign an activation status to an availability control ledger (and activate it) if you have defined all the settings required in the availability control IMG activities.

Activities

- 1. Select an availability control ledger you want to use and a "from fiscal year" as well as an activation status for it.
- 2. Save your entries.

Further notes

Note that activating several AVC ledgers when using parallel availability controls influences performance. You should therefore not activate more than 3-4 AVC ledgers.

Carry out the Reconstruction of Availability Control after you have activated your AVC ledger.

You start the reconstruction of availability control in the Funds Management menu under *Budgeting -> Tools -> Availability Control -> Reconstruct.*

36.2.4.2.8 Other Settings for Availability Control

36.2.4.2.8.1 Define Multi-Annual Budgeting

Use

This IMG activity is relevant for Spanish customers but may be of interest for other customers who want to automatically run availability control for commitments taking effect only in the future.

In this IMG activity, you customize the budget option and the time horizon for percentages per FM area and budget category, in order to be able to carry out multi-annual budgeting, that is, budgeting for several years.

Furthermore per availability control ledger, you assign standard percentages to be used for the years of cash effectivity within the time horizon defined.

Note

If you are using BCS Cover Eligibility, note that the percentages defined at the beginning of a fiscal year are independent of cover groups. The percentages defined here are valid for all cover groups. If - during the course of a fiscal year - the percentages defined must be changed for a particular cover group, you can change them by making entries in the view "Assign Percentages for YCE to Cover Groups". You do this in transaction FMMACGPERC.

Using transaction FMAVCREINIT, you must subsequently reconstruct the Availability Control Ledger for the cover group for which you changed the percentages, if this cover group already contains budget or posting data.

Requirements

The following prerequisites apply:

- The fields customized by this IMG activity are only used by the sample coding of the following Business Add-Ins:
- FMAVC_ADD_LINES

- FMAVC_ENTRY_FILTER
- FMKU_BUDGET_EVNT

This means that you must create your implementation for these Business Add Ins by copying the sample coding.

- The year of cash effectivity has been customized in the IMG activity Choose Budget Category for the FM area and budget category in question.

Standard settings

SAP does not deliver any standard settings.

Activities

In order to customize multi-annual budgeting in BCS, proceed as follows:

- 1. Enter the FM area.
- 2. Enter the budget category and assign the budget option and the time horizon for percentages.
- 3. Select the line and assign the percentages for the years of cash effectivity to be used within the time horizon.
- 4. Save your entries.

Note

The maximum value for the time horizon for percentages is 20.

36.2.4.2.8.2 Commitment/Actual Values: Define Filter for Revenue-Based Expenditures

Use

This IMG activity is relevant for Spanish customers but may be of interest for other customers who want to perform a further availability control check, in which FM commitment/actual documents consuming expenditure budget are checked against FM commitment/actual documents consuming revenue budget. This process is known as "revenue-based expenditure control (RBE)". In this way, FM execution documents consuming expenditure budget can be posted **only** if FM execution documents consuming revenue budget were previously posted with a sufficient amount.

Note

The commitment item category, which is maintained in the commitment item master record, is used in order to distinguish FM documents consuming revenue budget from those consuming expenditure budget.

In this IMG activity, you define the **AVC filters** for commitment/actual values for revenue-based expenditures. AVC filters combine value types with the corresponding filter types. You must specify whether the filter should be used for revenue operations or for expenditure operations.

You must also maintain the second IMG activity where you define the settings for revenue-based expenditure control and assign them to an availability control ledger. An example of an RBE control scenario is provided in the documentation of this second IMG activity.

Requirements

The fields customized by this IMG activity are only used by the sample coding of the Business Add-In FMAVC_ENTRY_FILTER, Enhance Filter Settings for Availability Control, and from the IMG activity "Assign settings for RBE to control ledger".

This means that you must create your implementation for these Business Add-Ins by copying the sample coding.

Furthermore, you must:

- Define a customer availability control ledger to be used for revenue-based expenditure

control.

- Define a derivation strategy for availability control objects, where you aggregate all budget addresses at the fund level. In this way, RBE is performed at the fund level of the control objects.
- Define a tolerance profile, where the tolerance limits are inactive.
- Define a derivation strategy for the tolerance profiles, where you assign the previous tolerance profile to all fund types which are not RBE-relevant. Assign the standard tolerance profile to the fund type used in RBE.
- Assign the derivation strategies for control objects and tolerance profile to the RBE customerspecific availability control objects.
- Activate the AVC for your control ledger.

Standard settings

SAP delivers the following six standard filters:

- **01** "Funds Reservation" is a filter for expenditure operations and filters all FM earmarked funds, invoices and payments consuming expenditure budget for the AVC ledger for RBE.
- **02** "Funds Precommitment" is a filter for expenditure operations and filters all FM earmarked funds starting from the precommitment level, invoices and payments consuming expenditure budget for the AVC ledger for RBE. Note: If you use this filter in your settings, funds reservations will not be checked.
- **03** "Funds Commitment" is a filter for expenditure operations and filters all FM earmarked funds starting from the commitment level, invoices and payments consuming expenditure budget for the AVC ledger for RBE. Funds reservations and precommitments are not checked using this filter.
- **04** "Forecast of Revenue" is a filter for revenue operations and filters all forecasts of revenues, invoices and payments consuming revenue budget for the AVC ledger for RBE.

- **05** "Invoice" is a filter which can be used for revenue or expenditure operations and filters all invoices and payments for the AVC ledger for RBE. Earmarked funds are not checked using this filter.
- 06 "Payment" is a filter which can be used for revenue or expenditure operations and filters all
 payments for the AVC ledger for RBE. Earmarked funds and invoices are not checked using this
 filter.

Note

You cannot use this filter if payments are updated in Funds Management via program RFFMS200, because this program does not access the BCS availability control functions.

Activities

You can use the standard filters. If not, proceed as follows:

- 1. Enter your filter choosing the key from the permitted namespace.
- 2. Assign the filter type, which can be "Revenue", "Expenditure" or "Revenue and Expenditure".
- 3. Select the corresponding line and assign the value types involved.
- 4. Save your entries.

36.2.4.2.8.3 Assign Revenue-Based Expenditure Settings to Availability Control Ledger

Use

This IMG activity is relevant for Spanish customers but may be of interest for other customers who want to perform a further availability control check, in which FM commitment/actual documents consuming expenditure budget are checked against FM commitment/actual documents consuming revenue budget. This process is known as revenue-based expenditure control (RBE).

In this way, FM execution documents consuming expenditure budget can be posted only if FM execution documents consuming revenue budget were previously posted.

Note

The commitment item category, which is maintained in the commitment item master record, is used in order to distinguish FM documents consuming revenue budget from those consuming expenditure budget.

In this IMG activity you make specific settings for revenue-based expenditures and assign them to an availability control ledger.

Requirements

See the prerequisites for the IMG activity: Commitment/Actual Values: Define Filter for Revenue-Based Expenditures

Standard settings
SAP does not deliver any standard settings.

Activities

In order to maintain the settings for RBE, proceed as follows:

- 1. Enter an FM area and the availability control ledger.
- 2. Enter a combination of "From Fiscal Year" and "Fund Type".
- 3. Assign the filters for your revenue and expenditure operations to a combination of "From Fiscal Year" and "Fund Type". Here, you can only use the filters you defined in the IMG activity *Commitment/Actual Values: Define Filter for Revenue-Based Expenditures.*
- 4. Save your entries.

Example

You want to use the filter "02 - Funds-Precommitments" as a filter for expenditure operations and "05 - Invoices" as a filter for revenue operations. These settings are valid for a given fund type and fiscal year.

This means that all earmarked funds (with the exception of funds reservations), invoices and payments (however, note that in this case you cannot carry out the update of payments via RFFMS200) consuming expenditure budget are checked against invoices and payments consuming revenue budget. The following will result from this:

- The check is now carried out at the fund level, for the funds whose fund type is used by RBE. This means that the postings can have different posting addresses, but however have the same fund.
- If you post a forecast of revenue, this will not be checked and filtered in the AVC ledger for RBE.

You now post an invoice consuming revenue budget of 100 Euro. This means that you can post funds precommitments, commitments, invoices and payment (see above exception) up to 100 Euros. A funds reservation can be posted because it will not be checked and will not consume the 100 Euros.

36.2.4.2.8.4 Enhance Availability Control for Changes in HR

Use

Organizational changes in HR (Position Budgeting and Control (PBC)) frequently demand additional budget during a certain period of time - for example, until the HR changes are settled by retroactive payroll calculations. However, such HR changes may be rejected by availability control if insufficient budget is available to cover both them and the corresponding changes in earmarked funds documents. In such situations, you are forced to increase the budget temporarily before you can perform the organizational changes.

To avoid such unnecessary budget changes, you can now implement a Business Add-In (BAdI) (method POSTING_FILTER of the BAdI FMAVC_ENTRY_FILTER) to filter out additional budget requests arising from HR changes. Such additional budget requests are characterized by the FM amount type 0500 and the new CO business transaction values HRM1 and HRM2.

You can use the sample BAdI implementation FMAVC_ENTRY_FILTER_SMPL_HRPBC as a template for your own implementation.

Note

You may also need to adjust your reporting to filter out actual data correspondingly - for example, by adjusting the definition of your Key Figures in BCS.

36.2.4.2.9 Business Add-Ins for Availability Control (BAdIs)

36.2.4.2.9.1 BAdI: Add Additional Lines for Availability Control Checks

Use

Using this Business Add-In (BAdI), you can add further lines to the availability control ledger.

Requirements

Availability Control has been activated in the Budget Control System

Standard settings

SAP does not deliver any default settings.

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name>

~ <Name of method> and endmethod. Note that sample implementation is copied automatically.

8. Save and activate all the objects.

Further notes

For further information see:

- Documentation for the BAdI method ADD_BUDGET_LINES
- Documentation for the BAdI method ADD_POSTING_LINES

36.2.4.2.9.2 BAdI: Enhance Filter Settings for Availability Control

Title

Business Add-In: Enhance Filter Settings for Availability Control

Use

With this Business Add-In you can selectively exclude budget records or commitment/actual records from availability control checking. You can also modify individual amounts of budget or commitment/actual records by creating an availability control ledger.

Requirements

The methods of this BAdI are only executed for budget and commitment/actual records that correspond to the filter settings made for the availability control ledger in question, as defined in the Customizing activities:

- Define Filter Settings for Budget Values or
- Define Filter Settings for Commitment/Actual Values.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

Implement this BAdI applying the following steps:

After you call up the activity, a dialog box appears.

1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by

choosing Create button.

- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Example

You want to multiply all budget amounts entering a specific availability control ledger by a fixed factor (such as 0.90).

- Implement the method **BUDGET_FILTER** of the BAdI. For budget records of the selected availability control ledger, multiply all fields (**LVAL01** etc.) of the changing parameter **C_S_AVC_VALUES** by the fixed factor.
- Save the method and activate your BAdI implementation.

Further notes

For further information see:

- Documentation for the BAdI method BUDGET_FILTER
- Documentation for the BAdI method POSTING_FILTER

36.2.4.2.9.3 BAdI: Enhance Account Assignment Derivation for AVC Control Objects

Title

Business Add-In: Account Assignment Derivation of AVC Ledger

Use

With this Business Add-In you can enhance the derivation of availability control objects (strategy ID **AFMA**). It can only be implemented for the Budget Control System (BCS) in Funds

Management. The methods of this BAdI are called in function module FMAVC_CALL_DERIVATION_ACO, immediately before or after deriving an availability

control object.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

If you would like to use additional source fields within your derivation strategy, first add these fields to the structure **FMAVC_S_AFMA_ADDRESS_SUPPL** in the ABAP Dictionary.

Next, implement this BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Example

You wish to use the field **AUGRP** (authorization group) of the commitment item master data records as an additional source field in your derivation strategy:

- Add the field AUGRP (data element FM_AUTHGRP) to the include CI_FMAVC_S_AFMA_ADDRESS_SUPPL of the structure FMAVC_S_AFMA_ADDRESS_SUPPL in the ABAP Dictionary.
- Activate the structure FMAVC_S_AFMA_ADDRESS_SUPPL.
- Implement the method **FILL_ADDRESS_SUPPL** of the BAdI (see also the sample code for this method):
- Read the commitment item master data records, for instance by using the function module **FM_COM_ITEM_READ_SINGLE_DATA**.

- Fill the field AUGRP of structure FMAVC_S_AFMA_ADDRESS_SUPPL.
- Activate your BAdI implementation.

Further notes

- Documentation for the BAdI method FILL_ADDRESS_SUPPL
- Documentation for the BAdI method CHECK_ACO_ADDRESS

36.2.4.2.9.4 BAdI: Enhance Derivation Strategy for Tolerance Profile of AVC Ledger

Title

Business Add-In: Derivation of Tolerance Profile for AVC Ledger

Use

With this Business Add-In you can enhance the derivation of tolerance profiles (strategy ID **AFMT**). It can only be implemented for Funds Management, component Budget Control System (BCS). The methods of this BAdI are called in function module

FMAVC_CALL_DERIVATION_TOLPROF, immediately before or after a tolerance profile is derived.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore, in the standard release, the BAdI is not active.

Activities

If you wish to use additional source fields within your derivation strategy, add these fields to the structure **FMAVC_S_AFMT_ACO_ADDRESS_SUPPL** in the ABAP Dictionary first.

Now implement this BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.

- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Example

You wish to use the field **AUGRP** (authorization group) of the commitment item master data records as an additional source field in your derivation strategy:

- Add the field AUGRP (data element FM_AUTHGRP) to the include CI_FMAVC_S_AFMT_ACO_ADDR_SUPPL of the structure FMAVC_S_AFMT_ACO_ADDRESS_SUPPL in the ABAP Dictionary.
- Activate the structure FMAVC_S_AFMT_ACO_ADDRESS_SUPPL.
- Implement the method **FILL_ACO_ADDRESS_SUPPL** of the BAdI (see also the sample code for this method):
- Read the commitment item master data records, for instance by using the function module **FM_COM_ITEM_READ_SINGLE_DATA**.
- Fill the field AUGRP of structure FMAVC_S_AFMT_ACO_ADDRESS_SUPPL.
- Activate your BAdI implementation.

Further notes

Documentation for the BAdI method FILL_ACO_ADDRESS_SUPPL

36.2.4.2.9.5 BAdl: Define Mail Recipient for Availability Control Check

Title

Business Add-In: Define Mail Recipients for AVC Checks

Use

This Business Add-In enables you to create an individual list of email recipients, if this type of list is to be sent for the "With internal mail" events.

Requirements

The method of this BAdI is only executed if you have maintained availability control (AVC) tolerance profiles for which tolerance limits are defined with event "With internal mail (only once)" or "With internal mail (repeatedly)". You set these tolerance limits in the IMG activity Edit Tolerance Profiles.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

Implement this BAdI applying the following steps:

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Example

You want to send an additional internal email to the person responsible for a particular fund. For this, you carry out the following steps:

- Implement the method MODIFY_MAIL_RECIPIENTS of the BAdI.
- Create a new entry in the table C_T_RECEIVERS, using the first line as template. This line already contains the person responsible for the funds center as the receiver, as well as all other required information.
- Using the fund, the system then derives the receiver field for the new entry.
- Finally, you save the method and activate the BAdI implementation.

Further notes

For further information see:

- Method MODIFY_MAIL_RECIPIENTS documentation
- Method MODIFY_MAIL_HEADER documentation
- Method MODIFY_AVC_MESSAGE documentation

36.2.4.2.9.6 BAdl: Assign Standard AVC Ledger

Use

With this Business Add-In (BAdI), you can define which availability control ledger (AVC ledger) is used to determine the control object.

Requirements

You use Funds Management with the Budget Control System (BCS) and you want to display availability control data for selected FM account assignments.

Standard settings

SAP does not ship any implementation. The following AVC ledgers are used per default:

- Ledger 9H for payment budget (posting ledger 9A)
- Ledger 9I for commitment budget (posting ledger 9B)

Activities

Implement the method of this BAdI if you use other AVC ledgers in your organization:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.

The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.

- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

In reporting you want to display the available budget for selected posting addresses, using the AVC data of your customer ledger ZH instead of the SAP standard ledger 9H.

36.2.4.2.9.7 BAdl: Modify Check Result of Availability Control

Use

With this Business Add-In (BAdI), you can modify the check result from availability control.

Requirements

You use the availability control tool of one of the application components of BCS availability control .

Standard settings

In the standard delivery, no implementation is provided.

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.

- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

Example

Implement the method **VALUES_CHECK_MODIFY** to avoid error messages from the availability control check, if you use "strict checks for document chains" and if the budget situation improves:

```
IF IM_PARAMS-LDGRSTAT = 'D' AND
IM_PARAMS-DOC_CHAIN = 'X' AND
IM_PARAMS-NEW_CONSUMABLE > IM_PARAMS-NEW_CONSUMED AND CH_PARAMS-
MSGTY = 'E'.
CH_PARAMS-MSGTY = 'W'. ENDIF.
```

36.2.5 Funds Management-Specific Postings

In the following steps you enter the settings which are a prerequisite for processing business transactions in Funds Management.

36.2.5.1 Earmarked Funds and Funds Transfers

In the following steps, you will learn how to control document entry for the business transactions in Funds Management.

By defining the field selection strings, you determine the field selection, that is, which fields are optional, required or hidden when you enter documents.

You define field status variants and field status groups and assign these to your field selection strings.

In assigning the field status variant to an FM area, you determine the field selection for this FM area. In assigning the field status group to a document type, you determine the business transactions (such as funds reservations or funds transfers) for which the field selection is valid.

36.2.5.1.1 Maintain Global Settings

In this step you can activate or deactivate specific functions for Earmarked funds.

- Check in Local Currency If this function is active, a check in Local currency takes place when reducing earmarked funds with other documents.
- Value adjustment required

If this function is active, no amount changes may be performed on an earmarked funds document. An additional document, a value adjustment document, must be entered in order to change the amount of earmarked funds.

Standard settings

In the standard delivery the functions Check in local currency are active.

Activities

Deactivate or activate the function(s) required.

36.2.5.1.2 Field Control for Earmarked Funds and Funds Transfers

In the following steps you define the field control for the earmarked funds and the funds transfer.

36.2.5.1.2.1 Define Field Status Variant

You can create and delete field status variants in this step.

You must then assign a field status variant to each FM area. You can enter a field status variant to as many FM areas as you want.

By assigning a field status variant and field status group to a field selection string, you can control the document entry for the various business transactions very differently in your FM areas. The field selection string determines which fields are optional, required or hidden when you enter documents.

Activities

- 1. Use the *New entries* option to create at least one field status variant.
- 2. Then use the step "Assign field status variants to FM area" to assign the field status

variants to your FM areas.

- 3. Then use the step "Assign field selection string"
- 4. to assign field status variants and field status groups to the field selection strings.
- 5. If there are any field status variants you do not need any more, you can delete them by choosing *Edit-> Delete*.

36.2.5.1.2.2 Assign Field Status Variant to Company Code

In this workstep you assign a field status variant to your company codes. You can assign a field status variant to as many company codes as you want.

Activities

Make the assignments.

36.2.5.1.2.3 Define Field Status Groups

In this step, you define field status groups. You must assign the field status groups, along with a field status variant, to a field selection string, and enter them when defining document types.

By defining the field selection string, you determine which fields are optional, required or hidden when you enter documents. The document types classify the business transactions (such as funds blocking and funds commitments) in Funds Management.

You can define separate field status groups for the various business transactions and control document entry by defining the field selection and document type accordingly.

Standard settings

There are field status groups defined in the standard.

Activities

- 1. Check the field status groups delivered in the standard system.
- 2. Choose *Edit -> New entries* to create new field status groups. There is a copy function available. To use it, select an entry in the standard list and choose *Edit -> Copy as*.
- 3. In the step Define field selection string, assign the field status group and the field status variant to a field selection string.
- 4. Remember to specify the field status group you need in the step Define document types.

36.2.5.1.2.4 Define Field Selection String

In this step, you can define the field selection strings - that is, you can specify which fields are ready for entry, required or hidden during Earmarked funds and transfers. In another step, you must assign a field status variant and field status group to the field selection string.

Activities

- 1. Determine which fields on the doucment entry screen are
 - ready for input
 - required
 - to be hidden
 - displayed only

- 2. Use the *New entries* option to create a field selection string, then choose *Maintain field status for field selection string*.
- Choose a desired field status for each field. If you mark the following fields as required entry, the fields are preassigned when entering an FM document and cannot be changed by the user:
 - a) FM account assignment changeable in the follow-on document
 - b) Use may exceed reserved amount without limit
 - c) Reduction only in local currency
 - d) Statistics indicators Funds Management
- 4. Subsequently, assign a field status variant and a field status group to the field selection string in the step "Define Field Selection String".

36.2.5.1.2.5 Assign Field Selection String

In this step, you assign a field status variant and field status group to a field selection string you want to use.

Activities

Enter the assignments you need.

36.2.5.1.3 Reference Types

In the following steps you define reference types and define the field selection for the reference types.

36.2.5.1.3.1 Maintain Template Types

In this step you define reference types. The reference type specifies for which fields the values from the reference document should be copied into the new document.

You need reference types if you want to use an existing document as a reference when creating earmarked funds and funds transfers.

Standard settings

Reference types are defined in the standard.

Activities

- 1. Check whether you want to use the reference types distributed with the standard.
- 2. If necessary, create your own reference documents and, for each document type, select the fields that should be copied from the reference document into the new document.

3. Specify your preferred reference type in IMG activity Define Document Types.

36.2.5.1.4 Tolerance Limits

In the following steps you define the tolerance limits for exceeding the amount earmarked funds.

36.2.5.1.4.1 Define Tolerance Keys

In this step, you define tolerance keys.

In an additional step, you can set up percentage-based or value-based (absolute) tolerance limits for individual tolerance keys that permit the Earmarked Funds to be reduced and the document reducing it to have different amounts as long as the difference does not exceed this limit.

Once you have defined a tolerance key in a document type for an earmarked fund, the tolerance limit applies for all documents posted with this document type.

Activities Define your

tolerance keys.

36.2.5.1.4.2 Define Tolerance Limits for Differing Amounts

In this step you can define percentage and value-dependent (absolute) tolerance limits for amount differences when reducing earmarked funds. The variance types are represented in the SAP system by tolerance keys.

You define the tolerance limits for each tolerance key and local currency, and then assign your tolerance key to the document types for earmarked funds. The tolerance limit is then valid for all documents of this document type and this local currency.

When reducing earmarked funds, the SAP system checks whether the amount of the reduced document is different to the amount of the earmarked fund to be reduced. If you have set, activated, and defined the tolerance limits in the document types, differences within the tolerance limits are allowed. If the difference exceeds the tolerance limit, the system issues a message. If you have defined both a percentage as well as an absolute tolerance limit, the smallest difference takes precedence for the check.

Notes:

- System message

You can define whether the system messages (no. 023, no. 164 und no.165) appear as warning or error messages in step Change Message Control.

To do this, select Funds Management Government in the IMG, then Funds Management-Specific Postings -> Earmarked Funds and Funds Transfer -> Change Message Control.

- Overdraft tolerance in earmarked funds

You can also enter a tolerance limit yourself (indicator % Overrun Tolerance) in the earmarked fund document. If tolerance limits are defined in Customizing and in the document, the smallest difference has priority during the check.

If a **percentage** tolerance limit is defined in Customizing, you can override the Customizing setting by setting the indicator Global (Percentage-Based) Tolerance. Note that you cannot override absolute tolerance limits with this indicator.

However, if the indicator Unlimited Overdraft is set in the earmarked funds, the earmarked funds may then be overdrawn.

You can find more information on this in the SAP library under Funds Management Government -> Funds Management-Specific Postings -> Earmarked Fund and Funds Transfer -> Earmarked Fund Document -> Tolerance Limits for Amount Overrun.

Requirements

The tolerance key must be created in step Define Tolerance Key

Activities

- 1. Define the tolerance limits for each tolerance key.
- 2. Define the tolerance key in step Define Document Types.

36.2.5.1.5 Define Integration Scenarios

36.2.5.1.5.1 Define Company Code Group

Use

In this step, you create a company code group for your company codes. In a extra step, you must assign the company code groups to your company codes.

The same settings are valid for these company codes.

Activities

- 1. Create the company code groups using *New Entries*. You can also copy existing entries via *Edit -> Copy as*.
- 2. Save your entries.

36.2.5.1.5.2 Assign Company Code to a Company Code Group

Use

In this step, you assign your company codes to a company code group.

Requirements

You have created at least one company code group in the previous step.

Activities Make

your assignments.

36.2.5.1.5.3 Maintain Data for Integration Scenario

Use

In this step you maintain the document category, company code group, document type, and block for different integration scenarios.

Requirements

You must have maintained a company code group.

Standard settings

- 1. On the first screen you define the category of the earmarked funds document.
- 2. On the second screen you maintain the company code group, document type, and block. The only values proposed as document type are those that, depending on on the category, are allowed.

Activities

Define the necessary settings.

36.2.5.1.5.4 Create Year-Dependent Earmarked Funds

Use

With this IMG activity you can create year-dependent earmarked funds documents in integration scenarios.

Requirements

You use Grantor Management.

Standard settings

Year-independent earmarked funds documents are created. The value *annual budget - single EF* is selected.

Activities

If you want to create year-dependent earmarked funds documents in integration scenarios, select Annual Budget - Multi EF.

If you want to create year-independent earmarked funds documents in integration scenarios,

select Annual Budget - Single EF.

If you want to create year-independent earmarked funds documents with a line for each year in integration scenarios, choose *Overall Budget - Single EF*.

If you create the whole budget in the first year and want to then transfer the residual budget to the next fiscal year, choose *Overall Budget - Single EF*.

36.2.5.1.6 Define Document Number Ranges

In this work step you create number ranges for the documents. For every Number range you state among other things the following:

- a number interval, from which document numbers are chosen
- the type of Number assignment (internal or external). You assign every number range in a further work step to one or several document categories. The number range takes effect via the document type when entering and posting a document.

Standard settings

In the standard the following number range intervals are supplied for individual document categories:

- 09 Funds transfer
- 02 Funds block
- 03 Funds reservation
- 04 Funds pre-commitment
- 05 Funds commitment
- 06 Estimated revenue

These number ranges are assigned to the document types supplied in the standard.

Recommendation

Check in the work step "Define document types" if you want to use the document types supplied in the standard with the corresponding number ranges.

Activities

- 1. Specify how the document folder is meant to take place.
- 2. Define your number ranges accordingly.
- 3. Assign the number ranges to the corresponding document types.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.5.1.7 Define Number Ranges for Groupings

Use

In this step you create the number range for the grouping number. The grouping numbers are only taken from number range interval 01 (grouping numbers).

Only an internal number assignment is offered.

Notes

If you want to transport number range objects, choose *Transport* on the screen *Number Range Interval for Groupings (earmarked funds)* for the grouping number *Interval*.

Note that in the target system first all intervals of the selected number range object are deleted so that after the import only the exported intervals exist. The current number levels are imported with the value that they have at the time of export.

Dependent tables are not transported or converted.

Activities

You must maintain number range interval 01.

36.2.5.1.8 Define Document Types

In this IMG activity, you create the document types for the documents in Funds Management. Document types are used to classify the documents. You can define characteristics for each document type which control how the document is entered or they may be recorded in the document itself. For each document type, you must specify:

- A number range interval
- A field status group.

The field status group, together with the field status variant, determines, by way of its assignment to a field selection string, which fields are optional, required or hidden when you post documents in your FM area.

You can also control:

- which field contents are copied from the reference document
- which style sheet the system should use when printing a document type
- which tolerance limits are checked when earmarked funds are reduced
- whether the document is to be included in Workflow
- whether the G/L account should automatically be derived from the FM account assignment The G/L account can only be derived automatically when you are using requests.

Requirements

The number range interval must be defined in the IMG activity "Define document number ranges".

If you do **not** want to print a specific document using the SAP standard style sheet, you must define your own form for it.

If you want to define tolerance limits, you must first make the following settings:

- Define Tolerance Key
- Define Tolerance Limits for Amount Differences

Standard settings

The document types defined in the standard cover the types of document used (document category) for the individual business transactions in Funds Management:

- AA Document type with Workflow
- 11 Document type without Workflow

There are two forms in the standard system:

- FMFUNDSRES based on SAP smart forms
- FMFUNDS_RESERVATION based on Adobe

The system used the form FMFUNDRES as a printing template if you do not enter a form.

If you want to change a standard form, SAP recommends that you copy the form and change the copy. Note that the name of the form must be in the customer namespace so that it is not overwritten if the release is upgraded. The descriptions for your own forms should therefore start with Y or Z.

To copy the FMFUNDRES form, choose *Tools -> Form Printout -> Smart Forms* from the *SAP Easy Access* screen.

Use transaction SFP to copy the form FMFUNDS_RESERVATION.

You can find more information on SAP smart forms and PDF-based forms in the SAP Library under SAP-NetWeaver -> Application Platform SAP Web Application Server) -> Business Services -> Smart Forms and PDF-Based Forms.

Recommendation

If you want to change the style sheet, SAP recommends copying the delivered form and then changing the copy. Please note that the form name must be within the customer name area so that it will not be overwritten in a change of releases. The names of your own forms should therefore begin with a Y or Z.

This is how you copy a form:

- 1. Choose *Tools ->Word processing ->Form* from the SAP menu. You reach the initial screen of the Form Painter.
- 2. Choose Utilities -> Copy from client.
- 3. Enter the necessary data and choose *Execute*.
- 4. Change the copied form.
- 5. Save the copied form.

You can find detailed information concerning the maintenance of forms in the SAP Library under BC - SAPscript style and form maintenance.

Activities

- 1. First, check whether you can use the standard settings for the individual document categories (such as funds blocks and funds commitments).
- 2. Change or add to the standard settings as necessary.

Further notes

When posting the forecast of revenues, you should use the document types shipped in the standard system.

The field status groups in the standard contain all fields in the field selection string that you need if you want to make full use of all the different options for posting a forecast of revenue.

36.2.5.1.9 Account Assignment Transfer

In the following steps you define which account assignments are to be transferred when posting a document with reference to a Earmarked funds, from the earmarked funds into the follow-on document.

36.2.5.1.9.1 Define Rules for Account Assignment Transfer

In this step you define which account assignments are to be transferred from the earmarked fund to the follow-on document when posting a document with reference to an Earmarked fund.

You can define different rules for particular activities (e.g. G/L account posting, purchase orders, funds commitments).

You can group together several account assignments in a group. This has the effect that all account assignments of a group are transferred into the follow-on document.

However, if the indicator Account assignment changeable is set in the earmarked fund, the group assignment of the account assignments has the following effect:

- If no account assignment is entered in addition to the earmarked funds all account assignments are transferred from the earmarked funds.
- If an account assignment is entered manually, all other account assignments belonging to the group must be entered manually. Or assignments must exist for these account assignments, from which a derivation can take place (e.g. funds center is defined in the commitment item).

Example

FM account assignments

The fields *Commitment item*, *Funds center* and *Fund* are grouped together. A funds commitment contains the following account assignments:

- Commitment item: Materials expenditures
- Funds center: Department 1
- Fund: Fund 1

The indicator Account assignment changeable is set for the funds commitment.

You want to reduce a funds commitment with an invoice. The invoice must however have different FM account assignments than the funds commitment. Assignments are maintained for the automatic derivation from funds center and fund.

In the invoice, you enter both the funds commitment and that commitment item only that is at variance with the earmarked funds. The grouping has the effect that the funds center 'department 1' and the fund 'fund 1' are **not transferred from the funds commitment. The funds center and the fund are derived from the assignments.**

CO account assignments

The fields G/L account, order and cost center are grouped together.

A funds reservation is assigned to an account in a cost center, the indicator *Account assignment changeable* is set. You would like to refer to an order in an invoice, but still reduce the funds

reservation. You enter the funds reservation and an order in the invoice. The grouping has the effect that the order entered is assigned to an account and **not** the cost center from the funds reservation.

Standard settings

SAP delivers a rule in the standard that groups together the FM account assignments, the CO account assignments and the assignments to sub-ledger accounts.

If you do not change the standard setting, these account assignments are automatically transferred together into the follow-on document. Manual entries in the follow-on document are automatically overwritten by the automatic derivation.

Activities

- 1. Check if you want to use the rule delivered in the standard.
- 2. Create additional rules if required.

36.2.5.1.9.2 Assign Rules

In this IMG activity, you assign the rules for the account assignment transfer from the earmarked funds to individual activities (such as purchase order, G/L account posting).

Standard settings

SAP delivers a rule in the standard that is assigned to all activities.

Activities

- 1. Check if you want to transfer the rule delivered in the standard for all activities.
- 2. If desired, create additional rules and assign them to the activities. If you have defined a rule for "All activities", but another rule is to apply for a particular activity, then make another entry. This entry overwrites the rule for "All activities".

36.2.5.1.10 Define Blocking Reasons

In this step you define the blocking reasons for the earmarked funds and value adjustment documents. With these blocking reasons you can block a document or document item for **manual** processing.

Currently, you cannot block or unblock the documents or items manually. The blocks are set manually, either in Workflow, after approving the document or when generating documents automatically.

Note: It is currently only possible to reverse the block for the documents or items which were blocked in the Workflow, but not for the documents generated automatically.

Blocked earmarked funds and blocked earmarked funds items can no longer be processed but

they can still be reduced.

Activities

Define blocking reasons according to your requirements.

36.2.5.1.11 Delete Earmarked Funds and Funds Transfers

In the following steps, you can delete the earmarked funds and funds transfers.

36.2.5.1.11.1 Delete Earmarked Funds and Funds Transfers per Client

In this step you use a program to delete the earmarked funds and funds transfers of a client.

You should only use this program if you are in the test phase and want to delete your test data before the production startup.

Requirements

The following applications may **not** be in use because their data is only partially deleted and inconsistencies arise:

- Funds reservations in Controlling (cost center, order..)
- Fixed price agreement
- Fixed price clearing

Activities

Delete the earmarked funds and funds transfers for the client required.

Further notes

For additional information, see the Program documentation.

36.2.5.1.11.2 Delete Some Earmarked Funds and Funds Transfers

In this step you can delete Earmarked funds and funds transfers according to the following selection criteria:

- FM area
- Company code
- Document category

- Document number
- Posting date

Dependent entries such as change document, development records and long texts are deleted as well. Note ,however, that this program does not delete the corresponding line items and totals records in Funds Management that were created due to earmarked funds and fund transfers. You have to delete this data using the program .Deleting Commitment Data and Actual Data in Funds Management (RFFMDLOI)

You should only use this program if you are still in the test phase and want to delete your test data before the production start up.

Activities

Delete the documents according the selection chosen.

Further notes

The following documents are not deleted by the program:

- Funds reservations in Controlling
- Fixed price agreements
- Fixed price clearings

36.2.5.1.12 Enhancement Wizard for Customer and Partner-Specific Fields

In this step, SAP clients or SAP partners can integrate their own fields in document entry in a simple manner using an enhancement wizard. At the same time, it is also possible to control the fields using the earmarked funds field control.

Requirements

You can only integrate document entry fields which you have previously defined. The procedure is different for SAP partners and SAP clients.

- SAP Partners

You define new fields by defining append structures for the corresponding tables and include the fields there. See the SAP Partner IMG for more information.

- SAP Clients

You define new fields by filling in the client include structures specified. See the SAP Client IMG for more information.

Activities

Make the necessary settings for the fields in accordance with the enhancement wizard documentation.

36.2.5.1.13 Change Message Control

In this activity you can set system messages to appear as you require them. You can

- determine whether a message is issued as a note in the dialog box or in the footer
- change warnings into error messages
- switch off warnings and error messages

Different specifications are possible for the online mode and for the batch input sessions processed in the background.

You can make the corresponding specifications for a client or, if required, also for the individual user.

Standard settings

Messages 166, 168, 172, 173 appear as warnings if, for earmarked funds having indicators % Overrun Tolerance or Unlimited Overrun, the overrun of the amount still open is allowed and the earmarked funds amount still open was exceeded by a reduction by other documents.

Messages 023, 164 and 165 appear as warnings when the tolerance limits defined in Customizing for the amount variance are exceeded when reducing earmarked funds.

Message 603 appears as a warning if the Account Assignment Changeable indicator was set for an earmarked fund and a deviating FM account assignment was entered in the reduction document of one of these earmarked funds.

Activities

- 1. Enter the following data:
 - Message number Use F4 for field *MsgN* to find out which messages are available.
 - Name of user If you enter a name here, the definitions are only valid for this certain user. If "Blank" is entered, the settings are valid for all users in the client.
 - Message type Use F4 for the fields *Dialog* or *Batchl* to find out the message type valid.
- Save your entries. The accompanying message text will automatically be used by the system.

36.2.5.1.14 Business Add-Ins (BAdIs)

36.2.5.1.14.1 BAdI: Change GUI Status for Funds Precommitments

Use

Using this Business Add-In (BAdI), you can change the GUI status of earmarked funds and of their value adjustment documents.

You can use the BADI in the components *Controlling* (CO) and *Funds Management Public Sector* (IS-PS-FM).

Standard settings

The BAdI is not active in the standard system

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the *Short text for implementation* field.
- 3. From the tab index, choose *Interface*. The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- Choose Activate
 The code you stored in the method will be run when the application program is executed.

 Notes
- Documentation for BADI Method SET_PFSTATUS_DETAIL -

Documentation for BADI Method SET_PFSTATUS_LIST

- Documentation for BADI Method SET_PFSTATUS_PMDOC

36.2.5.1.14.2 BAdI: Additional Form Data for Funds Precommitments

Use

You can provide additional data for the form printout of earmarked funds using this Business-Add-In (BAdI).

You can use the BAdI in the components *Controlling* (CO) and *Funds Management Government* (IS-PS-FM).

Requirements

Before you can provide additional information, you have to add an append structure to the structure KBLD_PRINT which contains the desired data fields. The fields can then be filled in the method FORM_ADDATA.

Standard settings

The BAdI is not active in the standard system.

The BAdI can be used in many ways. All active implementations are called and carried out.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate

The code you stored in the method will be run when the application program is executed.

Notes

Documentation on BAdI Method FORM_ADDATA

36.2.5.1.14.3 BAdI: Define Document Categories for Reduction by Other Documents

Use

This Business Add In (BAdI) is used in Funds Management in the component *Earmarked Funds and Funds Transfer* (PSM-FM-PO-EF).

You can use this BAdI to determine which document categories of earmarked funds (such as funds reservation, funds precommitment) can be reduced by FI documents and documents of the MM invoice check.

Standard settings

The Business Add In is active in the standard system. The default coding is executed automatically.

In the standard system, FI documents and documents of the MM invoice check can only reduce funds reservations, funds commitments and forecast of revenues.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them

in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.

- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

Also see:

Methods Determination of Document Categories Allowed

Example

To display sample coding, select Goto -> Sample Coding -> Display.

The reduction of funds precommitments is allowed in the sample.

36.2.5.1.14.4 BAdI: Activate Grouping Function in Earmarked Funds

Use

This Business Add-In (BAdI) is used in Fund Management in the component *Earmarked Funds and Funds Transfer* (PSM-FM-PO-EF).

You can use this BAdI to activate the grouping function for earmarked funds. Any number of document items of an earmarked funds documents can be grouped together logically with this.

SAP delivers two implementations that you can activate as you wish:

- FM_EF_GROUP_SPAIN This implementation covers the grouping scenario for Spanish customer requirements.
- FMSPLIT_EF_GROUP This implementation is intended for customers who want to use the multi-funding scenario. You can

also create your own implementations.

With active implementation, different methods of this BAdI are called with different events. For more information on the exact call events and the corresponding functions of the implementations, see the documentation on the implementations.

Standard settings

No BAdI implementation is active in the standard system. No methods are called and there are also no screen-relevant changes.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

36.2.5.1.14.5 BAdI: Earmarked Funds Journal

Use

With this Business Add-In you can filter or maintain the output data of the earmarked funds journal. The entire output table is transferred as a changing parameter for this in method FILTER_AND_COMPLETE.

Example

You can use the Business Add-In, for example to make only certain information visible to the user based on rules (such as, authorization check). To do this, do not delete the desired lines from the table.

36.2.5.1.14.6 BAdI: Scenario-Specific Customizing Checks

Use

You can use this Business Add-In (BAdI) to carry out scenario-specific Customizing checks. The earmarked funds data can be checked with certain events. The following methods are used for this:

- Method CHECK_ITEM: If you add a new entry, this method is called to check the individual Customizing entries.
- Method CHECK_ALL_ITEMS: If you want to save the data to the database, this method is first called to check all entries in the table.

Example

You can use the Business Add-In for example to check that only funds precommitments can be used for application variants in the grantor scenario.

36.2.5.1.14.7 Country-Specific Settings

36.2.5.2 Requests

In the following sections you find out which system settings are required if you want to use request in the Funds Management Government.

These settings are only relevant for organizations for which the Financial Accounting has to cover fiscal requirements.

The requests make it possible to generate FI accounting documents in an easy way, via the interface which refers to Funds Management.

36.2.5.2.1 Maintain Global Settings

If you use the request functions in *Funds Management Government*, you can make the following settings in this set, which extend the scope of requests.

Subsequent Bundling

When you enter requests manually or post requests by using the Direct Input Procedure, the system assigns a request ID. You can suppress the automatic allocation of request numbers and subsequently bundle the documents under one request number by using transaction F899 (manual bundling), or program RFFMBUND.

Note: If you want to define that no request number be assigned only for requests posted by using the direct input procedure, you must not activate "Subsequent Bundling". If this is the case, set the *Without* request number indicator in the Define Company Code Variant step.

Use Posting Day

The posting day is the prerequisite for day-end closing: Incoming and outgoing payments are displayed under the date of the posting day, for example.

The posting day does not depend on the documents and posting date in the SAP system. It is defined for each company code in Customizing when the system is used for the first time and is then updated automatically at day-end closing. For more information about this, see Closing Posting Day.

The system sets the posting day in the document header for each Accounting document.

Unless this setting is active, the posting date is filled with the current system date.

Revenue Types

Using revenue types allows you to classify revenues and to implement different dunning procedures depending on the revenue type.

You can also use the revenue types as an entry aid when processing requests. If the revenue type is assigned to a commitment item, the commitment item can be derived from the revenue type.

Enhancement of customer and vendor master data

You can use the following enhancements:

- Address screen

Enhancement of existing fields

The fields *Title*, *First Name*, and *3 name fields* are added to the address. This data is copied to the existing fields *Name1* to *Name4* in the standard system (saved twice, see SAP Note 511906). This ensures that the programs working with this data (such as the payment program) can be used without changes being made.

New Fields

The *Subledger Preprocedure* field was added to store the relationship between customer and vendor. The *Processor Group* field was added to define the responsibilities for a processor. You can assign a processor group to a customer or vendor.

- Validity period for bank details

Only bank details for which no validity period was defined or with a payment run posting date within the validity interval of the bank details are valid for payment.

You can activate additional checks by using User Exits.

- For address data,
 Enhancement SAPMF02D, component EXIT_SAPMF02D_800, development class FBD or enhancement SAPMF02K, component EXIT_SAPMF02K_800, development class FBK
- For bank details, enhancement SAPMF02D, component EXIT_SAPMF02D_801, development class FBD or enhancement SAPMF02K, component EXIT_SAPMF02K_801, development class FBK

Activities

- 1. Check whether you want to use the functions described above in your organization.
- Activate the functions you require.
 Note: Unless you have made settings in this step, the selectable function only appears on the screen if you choose New Entries
- 3. You have to carry out some additional steps to use the functions. For more information, see the sections that describe the settings for the revenue types.

Further notes

For more information about requests, see the Customizing documentation for *Funds Management Government* under *Requests*.

36.2.5.2.2 Activate Customer/Vendor Check Digits

In this step, you stipulate that a check digit is allocated when customer or vendor master records are created. The system then assumes that the last digit in the customer/vendor number is the check digit.

In internal number assignment, the system allocates the check digit automatically; in external number assignment, the system automatically interprets the last digit as the check digit.

Requirements

If you want to work with check digits in internal number assignment, the number range interval for customer/vendor master records may only have nine characters. The system automatically inserts the check digit as the last character.

Activities

- 1. If you want to work with internal number assignment, first verify that the number range interval for the customer/vendor master record has been defined with only nine digits.
- 2. Enter the number range object **CUSTOMER** for customer master records.
- 3. Enter the number range object **VENDOR** for vendor master records.
- 4. The following function is only available for the client German Local Authorities: Enter the number range object **PSOOB** for the object master records.

Further notes

You can also activate the check digit procedure using the enhancement *Master Data Subledger Accounts* (SAPLF0KB) (Component *Active Check Digit Procedure: Return code equals zero* (EXIT_SAPLF0KB_001) package FMKW). If check digits are being used, the MODULO11 procedure is used. If you want to use another procedure, use the appropriate component *Return Number Including Check Digit* (EXIT_SAPLF0KB_002) of enhancement SAPLF0KB.

36.2.5.2.3 Variants

In the following work steps you undertake the required settings for using company code group and fiscal year identification.

36.2.5.2.3.1 Define Company Code Group

In this step, you create a company code group for your company codes. In an additional step, you must assign the company code group to your company codes.

Different assignments take place uniformly for these company codes:

- G/L account to FM account assignment Note: the FM account assignment must exist in **each** company code that belongs to the company code group. If this is not the case the program cannot save the assignment.
- Revenue type for the dunning area
- Revenue type for the commitment item

In addition to this, you can define control information for requests for each company code group. For more information on this, see:

Copy customer master data into the document

Copy vendor master data into the document

Check revenue type against account group (customers)

Only enter complete requests

No request number issued

Interest calculation block for additional receivables

Suppress summary during request printing

This function is only available for customers of German Government: Check revenue type against object class

Activities

- 1. Create the company code group using *New entries*. You can also copy already existing entries using *Edit* ->*Copy* as.
- 2. Save your entries.

36.2.5.2.3.2 Assign Company Code to a Company Code Group

In this step you assign your company codes to a company code group.

Requirements

You have already created at least one company code group.

Activities

Make your assignments.

36.2.5.2.3.3 Define Fiscal Year Identification

In this step you define a fiscal year identification for several fiscal years. In a further step, you have to assign the fiscal year identification to the individual fiscal years.

A fiscal year identification groups together several fiscal years under one identification. The assignment of G/L account to FM account assignment then takes place for these fiscal years, in a uniform way. Note: The FM account assignment must be present in EVERY fiscal year belonging to the

fiscal year identification. If this is not the case, then the program cannot store the assignment.

Activities

- 1. Create the fiscal year identification via *New entries*. You can copy already existing entries via *Edit* ->*Copy as*.
- 2. Save your entries.

36.2.5.2.3.4 Assign Fiscal Year to a Fiscal Year Identification

In this step you assign individual fiscal years to a fiscal year identification.

Requirements

You have already created at least one fiscal year identification.

Activities

Make your assignments.

36.2.5.2.4 Revenue Types

Revenue types classify revenues. Among other things they are used in:

- derivation of account assignments
- controlling of dunning activities
- flexible assignment of bank details to customers

In the customer master record you can assign revenue types and the appropriate bank details to the customers per company code.

These bank details are processed preferentially from the payment program.

If you would like to assing non-permitted revenue types to accounts in acceptance requests, you have to make a setting in Customizing so that the program executes a consistency check when entering a request. For this you must assign the revenue type to a customer account group and activate the check in the company code group.

36.2.5.2.4.1 Define Revenue Types

In this step, you create a revenue type and specify if it is a revenue type for a main claim or a supplementary claim.

Activities

- 1. Create the revenue type via *New entry*. You can also copy already existing entries via *Edit ->Copy* as
- 2. Select the supplementary revenue type (SRT), if it is a supplementary claim. If it is a main claim, leave the field empty.
- 3. Save your entries.

36.2.5.2.4.2 Assign Sub-Revenue Type to Main Revenue Type

In this step you assign an additional revenue type to a main revenue type. You can also assign several additional revenue types to a main revenue type.

Requirements

Before you can execute this section, you must have created the required main and additional revenue types in the step Define revenue types.

Activities

- 1. Make the desired assignment via *New entries*. You can also copy already existing entries via *Edit* >*Copy as*.
- 2. Save your entries.

36.2.5.2.4.3 Assign Revenue Type to Account Group

In this step you assign the account group of the customer to a revenue type.

You require this assignment if you would like to define in the company code group, that the revenue type should be checked against the account group.

For further information on this, see Check Revenue Type Against Account Group.

Requirements

- The account group of the customer must have been created in the Financial Accounting Customizing.
- The revenue type must have been created in the Funds Management Customizing in the step Define Revenue Types.

Activities

Make your assignments.

36.2.5.2.4.4 Assign Revenue Type to Object Class

In this section you can assign one or more revenue types to an object class.

You need this assignment if you want to define in the company code group that the revenue type should be checked against the object class. In this case, the program checks whether the assigned combination of object and revenue type is allowed when entering a request. The check takes place at object class level.

Requirements

Object class and revenue type must have been created in the implementation guide (IMG) of *Funds Management Government*.

Activities

Make the defined assignments.

36.2.5.2.4.5 Define Dunning Areas

In this step, you can define your dunning areas. Dunning areas are used if several organizational units are responsible for carrying out dunning within one company code. These organizational units are referred to as dunning areas. The dunning area can correspond, for example, to a profit center, a distribution channel, a sales organization or a business area.

The individual dunning areas can use different procedures or the same dunning procedure.

- The dunning areas with the required dunning procedures are to be entered into the customer or vendor master record if you use different dunning procedures.
- Otherwise, the system uses the standard dunning procedure. The dunning area is then entered in the line item. The system enters the dunning area into the master record automatically with the corresponding data.

Note

The use of dunning areas is optional.

Requirements

If the field for the dunning area in the line item is to be ready for input, specify in the company codespecific specifications for dunning that you want to dun separately according to dunning areas. Also read "Setting up dunning program".

Activities

- 1. Define your dunning areas if you want to use them.
- 2. Make sure that you specify for the required company codes that you want to dun according to dunning areas .
- 3. Make sure that the required dunning areas are entered into the master records of the business partners with the dunning procedures, if you use different dunning procedures for the individual dunning areas.

36.2.5.2.4.6 Assign Revenue Type to Dunning Area

In this step, you assign a dunning area to the revenue type. This assignment is dependent on the company code. To make the same assignment for several company codes, enter a company code group.

Requirements

You must have executed the following steps:

- 1. Define revenue types
- 2. Define dunning areas
- 3. Define company code group

Activities

- 1. Make the desired assignment via *New entries*. You can also copy existing entries using *Edit* -> *Copy as*.
- 2. Save your entries.

Dependencies

If a request is to be assigned with a revenue type, the program derives the dunning area from the revenue type of the dunning area of the processed documents.

36.2.5.2.4.7 Assign Revenue Type to Commitment Item

In this step you assign a commitment item to the revenue type. This assignment is company code and fiscal year-dependent. If you want to make the same assignment for several company codes and fiscal years, you can reduce maintenance time by entering a company code group and fiscal year variant.

Note that within closing operations, it may be necessary to update the assignments made here for the new fiscal year. The program RFFMFPCPY is available for this purpose. You can find it in the Funds Management menu, under Other Functions -> Additional Functions for German Government -> Closing Operations -> Preparations -> Copy Assignment from Commitment Item to Revenue Type.

You can find more information in the Program Documentation.

Requirements

The commitment items must have been previously created within the master data maintenance and you must have executed the following steps in Customizing:

- 1. Define Revenue Types
- 2. Define Fiscal Year Variant Identification
- 3. Define Company Code Group

Activities

- Make the desired assignment via New entries. You can also copy already existing entries via Edit > Copy as
- 2. Save your entries.

36.2.5.2.5 Number Ranges for Object Classes

In the following work steps you define number ranges for object classes and subsequently assign these number ranges to the desired object classes.

36.2.5.2.5.1 Create Number Ranges for Object Class

This hypertext is only relevant for German local authorities.

36.2.5.2.5.2 Assign Object Class to Number Range Interval

This hypertext is only relevant for German local authorities.

36.2.5.2.6 Account Determination

In the following work steps you make the required settings for the G/L account definition.

36.2.5.2.6.1 Define Characteristics for Account Determination

In this step, you create characteristics for account determination. You can use these characteristics to assign various identical combinations of fiscal year variant, company code group, FM account assignment and request type to various G/L accounts.

You find further information on the functionality of the characteristic for account determination here.

Activities

Using *New Entries* create the characteristic for account determination. You can also use *Edit* ->*Copy as* to copy entries which already exist.

Save your entries.

36.2.5.2.6.2 Define G/L Account Determination

In this IMG activity, you specify the assignment between the Funds Management account assignment *commitment Item* and a corresponding G/L account. Note that making entries in the fields *Funds Center* and *Fund* is not supported in the standard system. You can find more information on this in the section **Standard Settings**.

The system provides you with some ways to save labor:

- You can define a Fiscal Year ID which you can use to specify the G/L derivation from the Funds Management account assignment for several years, in a uniform way.

Similarly you can use the Company Code Group to make the same assignments for several company codes.

If you want to assign a combination of fiscal year variant, company code group, FM account assignment and request type to 2 different G/L accounts, assign a characteristic for account determination to one of the combinations.

You assign a fixed value for a commitment item to a G/L account or mask the value if you want to assign according to a particular template. For information on masking, see the documentation on Commitment Item.

If you assign the G/L account '*' to the entry, you can choose any G/L account in the document entry for the corresponding commitment item.

- You enter a value for commitment item/fund/funds center and assign a G/L account to this triple. The blank character also counts as an entry.
 If you assign the G/L account '*' to a triple, then you have a free choice in the document entry of the G/L account in the document entry for the corresponding FM account assignment.
- You mask a commitment item and assign a G/L account to it. For information on masking, see the documentation on Commitment Item.
- Furthermore, you can differentiate the G/L account determination per request category:
- If you do not enter a request category then the specified G/L account applies to all request categories.
- If you enter a request category, then the program derives the G/L account according to the assignment made here.
- By entering a priority, you can control which G/L account entry has priority if the program finds several G/L accounts for a request.

Using the entries in the G/L account determination table, the system determines the assignment between the FM account assignment and the G/L account.

Note: the FM account assignment must exist in **each** company code belonging to the company code group, or in every fiscal year of the fiscal year identification. If this is not the case, the program cannot save the assignment.

Requirements

Before you can link a Funds Management account assignment with a G/L account, the appropriate master data (commitment item and G/L account) must have been created.

Standard settings

Only assignments between commitment items and G/L account are supported in the standard system since Release 1.10.

You can only use the additional account assignment specification by making entries in the fields *Funds Center* or *Fund* if you have implemented the Business Add-In Enhance Derivation of G/L Account (FM_REQUEST_GL_ACC). You must also deactivate the error message FICUSTOM 072 in IMG activity Change Message Control for this.

Activities

- 1. Create the information for the account determination using *New Entries*. You can copy already existing entries using *Edit* ->*Copy as*.
- 2. Save your entries.

36.2.5.2.6.3 Define Account Determination for Deferrals

In this step you define the G/L account per fiscal year identification and company code group to which the deferral is to be posted.

As soon as the G/L account has been defined, this G/L account will be used in the deferral request as well as in the corresponding inverse posting instead of the one defined in the account determination table.

The special account for the deferral allows for a better overview of the postings that are generated during a deferral. In doing so, these postings must therefore not be followed up on in the the integrated components (such as controlling or earmarked funds).

Requirements

To ensure data consistency, you must make the settings for the FI field status for this G/L account so that the user can only enter one Funds Management account assignment (FM account assignment). All other account assignments must be hidden. You make these settings in the Customizing of Financial Accounting in the "Maintain field status variant" step.

Activities

Define one G/L account per fiscal year variant and company code.

36.2.5.2.7 Number Ranges

In the following work steps you define the number ranges for the request documents.

36.2.5.2.7.1 Create Number Range Intervals for Requests

In this step, you create number ranges per company code for the request documents in funds management.

You specify for each number range the following:

- Number range key You must assign a number range key to the request type for which it should be valid. You carry this out in the next step "Assign request type to number range interval".
- Number range interval from which the document number is to be chosen
- The type of number assignment (internal or external) The numbers are always assigned interally for funds management.

You can define as many intervals per company code as you like. Each request type should have its own number range interval created. If you define several intervals per company code, you must be careful that the number intervals do not overlap.

Activities

- 1. Enter a company code for which you want to create the intervals.
- 2. Choose Interval -> Change.

- 3. Choose Edit -> Insert interval.
- 4. Store all the necessary information about the number range in the dialog box.
- 5. Subsequently save your entries.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.5.2.7.2 Assign Request Type to Number Range Interval

In this step, you define for each request type a number range interval for the actual data documents.

Requirements

You have already defined at least one number range interval in the previous step.

Standard settings

There are **no** number range intervals assigned to request types in the standard system. Therefore, you must define and assign at least one number range interval.

Recommendation

In order to be able to differentiate the documents based on their document number, you should define a different number range interval for each request type.

Activities

Make your assignments.

36.2.5.2.8 Request Types

In the following step you enter the setting for request categories.

36.2.5.2.8.1 Assign Request Category to FI Document Type

In this section, you assign a request type to an FI document type. In section Propose document type for request type, you can choose those combinations that are to be displayed as default values during entry.

You can assign only one request type per document type. However, several document types may exist for one request type.

Requirements

The document type must have been created in component Financial Accounting (FI). See "Define document types" for more information about document types in FI.

Standard settings

No table entries are supplied in the standard.

36.2.5.2.8.2 Propose FI Document Type for Request Category

In this section you define FI document types for request categories. These document types appear as a default value, when entering a request, which you can overwrite if so required.

Requirements

When assigning - and later when entering a request - you can only select combinations which you have defined in the section *Propose FI document type for request category*.

Standard settings

No table entries are delivered in the standard.

36.2.5.2.8.3 Control Processing of Request Categories

In this step, you can define the approval procedure for requests in accordance with the company code group, processor, request type and document type, so that:

- Completed requests are automatically saved with the status *approved*
- Approved requests are automatically posted

This way, you can create a processing profile for various request types and company code groups specifically for one processor.

If you do not define settings for each document type, the settings for each request type are used.

If a processor, for whom **no** settings are maintained in Customizing, processes a request, the program checks whether the entry "empty" exists for the processor of the company code being processed. If so, these settings are copied. If there is **no** entry, the program transfers these fields empty to automatic approving and automatic posting. These fields are also transferred empty if no entries were maintained in the company code group being processed.

Example

This function can, for example, be used to variably control the processing of acceptance requests and payment requests: Completed acceptance requests should automatically be saved with the status *approved*. However, payment requests should not be approved automatically; they should be approved by the responsible cost center.

Requirements

- The company code group must exist in the system.
- A user master record must have been created in the system for the processor.
- The document type must be created in the system.

Standard settings

No table entries are supplied in the standard.

Activities

- 1. Using *New entries* create the assignment.
- 2. Save your entries.

36.2.5.2.9 Field Control for Requests

In the following steps, you define the field control for the requests.

36.2.5.2.9.1 Define Field Selection String

In this step, you define the field selection for the requests. To do so, you define field selection strings. By defining different field selection strings you can individually control the document entry for individual FI document types and in doing so also control individual request types (for example, payment request, clearing request).

Requirements

If you want to format the field selection differently for individual request type, you must observe the following:

- Which FI document type is assigned to the individual request types in step Assign Request Category to FI Document Type?

If the FI document type, for example, does not allow an asset posting in the payment request, the field *Asset* may not be indicated as a an optional entry or required entry.

- Which fields must appear because of the request type and which don't? The fields *Customer* and *Vendor*, for example, must be hidden in the clearing request.

- Which settings have you maintained in section Maintain Global Settings? If you do not use the revenue type function, for example, field *Revenue type* must be hidden in all requests.

Standard settings

SAP does not provide any field selection strings in the standard.

If you do not define any field selection strings, all fields in the request entry screens will be ready for input.

Fields for the proposed values (such as customer, earmarked fund) are always ready for input in the initial screens of the request. The settings in the field selection string are not considered there.

The required entry field check is only performed directly in the individual request screen. In all other cases, the required entry field check is not performed until the request check is performed.

Activities

- 1. Determine which fields in the entry screens during the entry of a request
 - are to be ready for input
 - must be filled
 - should be hidden
 - are to be displayed
- Using New entries create a field selection string and choose Maintain field status for field selection string.
 The field status for all fields is in green. The text fields are preassigned with field status "Proposed", all other fields have status "Optional entry".
- Choose the desired field tatus for each field. By specifying a request type in field Proposed, you can display which field status is required for the individual fields for the individual request types.
- 4. In the following step Assign field selection string, assign the field selection string to a company code variant and FI document type.

Further notes

To avoid inconsistencies with FI field control, you should indicate that all fields that are used in the field control of requests as optional entries in the FI field control.

If, for example, the field *ltem text* is indicated as a required entry in FI field control, but was hidden in the field control for the requests, the posting or "complete" setting of a request is not possible. See Define Field Status Variants for more information about field control in FI.

The tax commitment item is an exception in field control: If the tax update does not require a tax commitment item, (VAT separately), possible setting concerning tax items in the request will be ignored. See section Make Other Settings for more information on tax display.

36.2.5.2.9.2 Assign Field Selection String

In this step, you assign a field selection string to a company code group and document type. You can assign a field selection string to as many company code groups and document types as you wish.

Requirements

Before doing so, you must have carried out the following steps:

- Define Field Selection Screen
- Define Company Code Group
- Assign Request Category to FI Document Type

Standard settings

SAP does not provide any assignments in the standard.

If you do not assign a field selection string, all fields in the entry screens will be ready for entry in the requests.

Activities

Make the desired assignments.

36.2.5.2.10 Additional Details

In the following work steps you undertake different additional settings for requests.

36.2.5.2.10.1 Define Deduction Reasons

In this step you define deduction reasons.

According to the gross principle too many incoming amounts must be estimated and posted as expenditures. Under conditions - stipulated by law - it is possible to have a variance from this.

These exceptions are named as deductions.

Deduction reasons are specified at document postings and are therefore available for evaluations.

Example

The repayment of too many incoming amounts can be deducted from the revenues if the repayment takes place in the same year.

Activities

Create the deduction reason via *New entries*. You can also copy already existing entries via *Edit* - *>Copy as*.

36.2.5.2.10.2 Define Regions

In this step you define regions.

If you specify the regions defined here at document posting, you can evaluate the postings which have taken place per defined region.

Activities

Create the region via *New entries*. You can also copy already existing entries via *Edit ->Copy as*.

36.2.5.2.10.3 Define Funds Usage

In this step you define the funds use.

If you enter the funds use defined here at document posting, you can evaluate the postings after the funds use.

Activities

Create the funds use via New entries. You can also copy already eintries via Edit ->Copy as.

36.2.5.2.10.4 Set Up Amount-Based Payment Block

In this step you define a payment block per company code, amount and currency.

The Amount for payment block document describes how this amount affects the payment program.

Requirements

Payments block reasons must be set up in the system. For this, see the documentation on the step Define Payment Block Reasons in the Financial Accounting component.

For detailed information on configuring the payment program, see the SAP Library under: FI Automatic procedures.

Activities

Make the desired entries in the table.

36.2.5.2.10.5 Define Rounding Unit for Due Dates

You require this setting if you want to divide a request into different due dates. If the partial amounts are not to be divided in the actual currency unit, but rather in a multiple of it, then specify the rounding unit in this section. The residual amount which arises from the rounding is added to the last installment.

Example

For an example of using the rounding unit, see Example.

36.2.5.2.10.6 Create Earmarked Funds for Standing Request

In this step, you stipulate whether the program should automatically create earmarked funds for all standing requests entered in a company code.

The program creates a earmarked funds for the current fiscal year from the data of a standing request source document and from the information that you have defined in this step. The amount of earmarked funds comes from the amount of an execution date and the number of executions in the fiscal year.

If you have stipulated in this step that earmarked funds should be created for standing request source documents, then you cannot manually enter the earmarked funds in the standing request source document. When you make an entry using a template or using a default funds commitment, data derived from the funds commitment is also transferred the request. However the actual earmarked funds are not transferred, instead the program creates new earmarked funds when you save.

To prevent the manual processing of earmarked funds, you must define a block for earmarked funds in this step.

The category of the earmarked funds depends on the assignment document type - request categories. The following earmarked funds categories are generated:

- Funds commitment: if the document type is assigned to request category '01' (payment request)
- Forecast of revenues: if the document type is assigned to request category '02' (acceptance request)

If the assignment document type- request category is to be changed, the entries for the affected document types in "Create Earmarked Funds for Standing Request" must be deleted and recreated.

Activities

Specify which document types for the funds commitment and which block flags you wish to use for your company code and the request document types being used.

Further notes

For further information about features of standing requests, refer to the SAP library under *Funds Management Government* in area *Requests*.

36.2.5.2.10.7 Request Printout: Assign Own Forms

SAP delivers several print format templates (forms) for the printing of requests. Each form is assigned to a form type that groups the different types of requests from a printing perspective. This grouping is done internally in the program and is not identical with the request category.

If the form that is assigned to a form type does not meet the requirements of your organization, you must define your own form. You can use the forms delivered as a reference to do this.

In order for the program to access the form you have defined when printing the request of this request type, you must assign the form to the request type. The assignment is defined in this step.

If you do not assign a form to a request type, the printing of the request type will be done using the style sheet as defined by SAP in the program. The relevant SAPscript form for the corresponding form type is used.

Standard settings

The standard system contains a number of different form types. The different **collective request types** differ from one another by the account assignment information they contain:

| Collective Request | Account Assignment Information |
|--------------------------------|--|
| Type 1 or vendors | an FM account assignment but various customers |
| Type 2 customer or vendor | various FM account assignments but one |
| Type 3 customers or vendors | various FM account assignments and various |

Type 4 an FM account assignment and a customer or vendor

The request type and the form type differ from each other in the following cases: Deferral request, temporary waiver and remission are assigned to form type *acceptance or payment request*.

Standard forms are delivered by SAP in two different technologies:

- SAPscript Forms
- PDF-based Forms

SAP delivers the following templates for PDF-based forms:

- FM_ACCEPTANCEREQUEST Acceptance request
- FM_ACCEPTANCEREQUEST_TYP1 Acceptance request type1 -

FM_ACCEPTANCEREQUEST_TYP2 Acceptance request type2 -

- FM_ACCEPTANCEREQUEST_TYP3 Acceptance request type3
- FM_ACCEPTANCEREQUEST_TYP4 Acceptance request type4
- FM_CLEARINGREQUEST Clearing request
- FM_PAYMENTREQUEST Payment request
- FM_PAYMENTREQUEST_TYP1 Payment request Type1

- FM_PAYMENTREQUEST_TYP2 Payment request Type2 -

FM_PAYMENTREQUEST_TYP3 Payment request Type3 -

FM_PAYMENTREQUEST_TYP4 Payment request Type4

Recommendation

If you want to change the standard system form, SAP recommends copying the delivered form and then changing the copy.

You maintain SAPscript forms in transaction Form Painter and PDF-based forms in the transaction Form Builder.

To change or recreate a PDF-based form, you must use the form interface FM_REQUEST. Only these are used to print the requests.

Activities

Make the required assignments.

Further notes

Form types collective request type 1, type 2 and type 3 reduce the printing volume. The option of suppressing the grouping of data is available in the Customizing of *Funds Management Government* because under certain circumstances some interesting data may not be printed. You make this setting for a company code group in the IMG activity Define Company Code Group.

36.2.5.2.10.8 Define Interest Calculation

Use

You create an interest formula in this IMG activity. The interest formula combines the following factors:

- Whether one or a number of interest items should be generated
- An interest calculation indicator that is defined in Customizing of *Financial Accounting*. Interest that is calculated using the interest calculation indicator is always on a year basis.
- An interest rate that you enter manually if you do not want to work with an interest calculation indicator.
- The interest base defines whether the interest rate is an annual, monthly or daily interest rate.
- Using the interest basis, you define whether the interest should be calculated for started or completed months or for days.

In addition, you can define the following **currency-dependent** entries:

- The so-called petty amount. The program only generates an interest item if the interest amount calculated is above this amount.

- Rounding units for the base amount and for the interest calculated.
- You can also define whether the interest amount should be rounded up or down.

If you want to generate interest items for a request, the program displays the interest formula that you created as input help. The program saves the interest formula in the interest document generated. In this way, the type of interest calculation can be traced for each interest document. When you print the interest document, the interest formula and the interest calculation date are not printed. However, they are in the structure used for transferring the data to the printing program, so you can print them in customer-defined forms.

If you want to change an interest formula, you must check whether interest documents with this interest formula are already saved in the system. If this is the case, SAP recommends that you create a new interest formula in Customizing, otherwise the interest calculation of the old interest documents can no longer be traced.

Requirements

You define the interest calculation indicator in Customizing of *Financial Accounting* in the IMG activity Define Interest Calculation Types.

Standard settings

SAP does not deliver any standard settings.

Activities

Define the settings required.

36.2.5.2.10.9 Permit Negative Postings

Use

In this activity you allow negative postings. You define whether negative postings are allowed for each company code group, fiscal year variant, and document type.

Requirements

You must have defined the required settings for negative postings in FI Customizing.

In Funds Management, no check is carried out on the FI Customizing for negative postings in this activity. If the negative postings are not allowed in FI, you cannot enter any negative postings in requests.

Example

In the following example, a negative posting is carried out for the entry for company code group 1000 with fiscal year ID if a deduction with document type DZ (customer payment) or a request with a set inverse posting indicator and the document type DZ (customer payment) is entered.

CCGFYIDTypeAllow negative postings10002006DZYes

36.2.5.2.10.10 Define Additional Lines for Advance Payment (Spain)

Use

This IMG activity is for the use of Spanish customers. Here you can define:

- A G/L account to be derived from the document type when a payment request is created
- New documents to be automatically posted when a payment request is posted See the example below for further details.

Requirements

The following prerequisites apply:

- The Business Add-In implementation BAdI: Activate Posting of Subsequent Documents must be active.
- The Spanish Budgetary Ledger must have been maintained.

Example

For the two functions involved, there are two examples:

- **G/L account to be derived from the document type** Under the node *Payment Request* you enter the following data:

| | CoCode | D | ос. Тур | be | First Year | G/L | _ Account | |
|--|--|------------------|----------|---------------|------------------|--------------|-----------------|--|
| | 001 | А | A | | 2005 | 99 | 9999 | |
| Note | | | | | | | | |
| This li | This line is entered only once. Then, every time you create a payment request for company code | | | | | | | |
| 001, d | ocument type A | AA, in fiscal ye | ear 2005 | or the follow | ving, G/L accord | unt 999999 i | s automatically | |
| derive | derived for the payment request. | | | | | | | |
| - New documents to be automatically posted | | | | | | | | |
| Under the node <i>Payment Request</i> , you enter the same data as in the above example. Under the | | | | | | | | |
| node Lines for New Postings, you enter the following: | | | | | | | | |
| Counter | Doc.Type | Vendor | PK | SpGLAc | Acct | Off.PK | Off. Acct | |

1 A1 X 29 Z - 50 111111

| 2 | A1 | Х | 29 | Н | - | 50 | 1111 | 11 |
|---|----|---|----|---|--------|----|------|--------|
| 3 | A1 | Х | 21 | | - | 50 | 1111 | 11 |
| 4 | A1 | | 40 | | 111111 | | 50 | 444111 |
| 5 | A2 | | 40 | | 111555 | | 50 | 555000 |

In this case, when you post a payment request as specified in the first example, two new documents are generated and posted. Both of them contain the same amount as the payment request:

- The first document has document type A1 and contains four line items:
- One line item is to be posted for the vendor. In this example, there are three lines

for vendor posting (for different special GL indicators). When the payment request is posted, only the line with the same GL indicator as the one used in the payment request is used for the new document.

If the payment request has special GL indicator Z, Customizing lines 2 and 3 will be ignored. If the request has special GL indicator H, Customizing lines 1 and 3 will be ignored. And if the request has no special GL indicator at all, Customizing lines 1 and 2 will be ignored.

- The second line uses posting key 50 to post to account 111111.
- The third line uses posting key 40 to post to account 111111.
- The fourth line uses posting key 50 to post to account 444111.
- A second document is posted with document type A2 using posting key 40 to post to account 111555. As the counterpart, posting key 50 is used to post to account 555000.

36.2.5.2.11 Business Add-Ins (BAdIs)

36.2.5.2.11.1 BAdI: Change GUI Status of Requests

Use

This Business Add-In (BAdI) is used in component *Funds Management* (PSM-FM). You can use this Business Add-In (BADI) to change the GUI Status of Requests.

Standard settings

The BAdI is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

See also:

Methods Change of GUI status on the request screen Ok Code Processing Interfaces Interface Docu

36.2.5.2.11.2 BAdI: Enhance Derivation of G/L Account

Use

You use this Business Add-In (BAdI) to implement your own derivation of G/L account from commitment item, funds center and fund.

The BAdI is mainly called when entering requests. However, the BAdI is also run for programs that use the G/L account determination for requests, for example, when the derivation is configured for earmarked funds.

Starting from Release 1.10, the derivation of the G/L account is supported only in accordance with the commitment item. The funds center or fund are no longer considered with the G/L account determination as this can cause an error to occur in the account assignment when using component CO at the same time. This is due to the flow of account assignment derivations:

Overview of flow of account assignment derivation for requests

- 1. Manual entry of account assignments such as commitment item, CO account assignment and so on.
- 2. Derivation of G/L account from the commitment item and calling the BAdI
- 3. Derivation of more account assignments using the account assignment block and simultaneous calling of the Define Account Assignment Derivation for deriving FM account assignments (for example, funds center from cost center or funds center as default funds center of the respective commitment item).

In accordance with this flow logic (steps 1 - 3), the following problems may occur when using the BAdIs:

- If you do not enter the funds center in step 1 manually, but it is first derived in step 3, you cannot use the funds center to derive the G/L account in step 2.
- If you enter the funds center in step one instead, then the G/L account is derived through the activated BAdI depending on step 2. If a different funds center is derived in step 3, the derived G/L account may not match the derived funds center.

If you want to enter a funds center and fund (in spite of the mentioned problems) for the G/L account derivation, you can create a customer- specific implementation using this BAdIs. You can use the coding example of the BAdI delivered by SAP for this. With this coding example the G/L account is derived in accordance with the commitment item, funds center and fund entered in the request.

In this case, you **must** ensure that:

- a) the funds center or fund of the user necessary for the derivation (step 1) has been entered
- b) the funds center and fund entered are not overwritten by derived values with the account assignment derivation (step 3)

Standard settings

The BAdI is not active in the standard delivery.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.

- 5. Place the cursor on the method, and double-click to enter method processing.
- Enter the code for the implementation between the statements method <Interface name> ~
 <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such

a case, end the processing stage at this point.

9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

In order to copy the sample coding example to your customer method, on the initial screen of your implementation, choose *Go To -> Coding Example -> Copy*.

Notes

Documentation on BAdI method DERIVE_GL_ACCOUNT

36.2.5.2.11.3 BAdI: Activate Authorizations on FI Accounts

Use

Using this Business Add-In (BAdI), you can enhance the authorization check for the reports document journal and request journal with the following authorization objects:

- F_BKPF_BES Accounting document: account authorization for subledger accounts
- F_BKPF_BED Accounting document: account authorization for customers
- F_BKPF_BEK Accounting document: account authorization for vendors

Standard settings

The checks are delivered using the implementation FMRP_ACCOUNT_AUTH. The activity '03' (*Display*) is used for calling them from the reports.

The BAdI is not active in the standard system.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Also see:

Method: FI-Check Account Authorization

36.2.5.2.11.4 BAdI: Check and Post Documents Subsequently

Use

You can use this Business Add-In (BAdI) to post more documents with requests.

Requirements

Note that documents that are posted with this BAdI are saved in all request transactions. Because of this, a COMMIT WORK in the implementation is not allowed. This can cause errors in all request transactions.

Standard settings

For Spanish processes, the active implementation FM_REQUEST_FLLW_DOC_SPAIN is delivered. The implementation is filter-dependent and will only run if you have activated it in the Customizing of the Spanish budgetary ledger.

For more information on Spanish processes, see the documentation on class interface CL_FM_REQUEST_FLLW_DOC.

Activities

The BAdI is filter-dependent. Possible filter values are:

| 20 Spain | Active Implementation for Spanish processes are run |
|----------|---|
|----------|---|

99 Customer implementation Active customer implementation

Active customer implementations can be run even when the filter value is 20. If this is the case, the customer implementation must be checked for filter value 20.

The *BAdl: Check and Post Documents Subsequently* (FM_REQUEST_FLLW_DOC) is called with each request transaction. The key for the individual transactions is delivered in the BAdI method. Possible values are:

| 01 | Enter |
|----|---------|
| 02 | Change |
| | 03 |
| | Dis |
| | play |
| 43 | Approve |
| 10 | Post |
| | |

36.2.5.2.11.5 BAdI: Activate Posting of Subsequent Documents

Use

In this IMG activity, you activate the BAdI implementation to create additional documents for a payment request.

Standard settings

If the implementation is inactive, click on this activity and you will see a pop-up to confirm the activation of the implementation.

Activities

To customize the documents that will be posted after you post a payment request, make the necessary settings in the IMG activity Additional Lines for Advance Cash Payment.

For further information read the documentation of the IMG activity.

36.2.5.3 Payment Directives

Use

In this IMG activity, you customize payment directives for a company code.

Requirements

You must have set up a special G/L reconciliation account in SAP Financial Accounting (FI), which must contain at least one commitment item processed with financial transaction 80.

Furthermore, you must make an entry in the special G/L account configuration transaction OBXT.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Choose New Entries. Then use the dropdown box to choose the settings.
- 2. In the company code field, enter the company code for which these settings are valid.
- Select a *document type*. The document type must be the one for which the payment directive is posted. Note that this document is not the one used in the payment directive itself. The payment directive references a document of this type.
 You can use payment directives for an invoice document type, if you want a payment directive to be

You can use payment directives for an invoice document type, if you want a payment directive to be mandatory for the invoice.

- 4. Select the posting key for the *payment directive line item* that matches the original (referenced) document.
- 5. Select the posting key and the special G/L indicator for the *offsetting line item* of the payment directive.
- 6. Finally, select the *payment blocking key* to be used to block the payment of the original document (for example, the invoice).
- 7. Save your entry.

Example

You want to customize payment directives for document type KR (invoices) in company code 0000.

First you specify the company code and document type as described above. Then enter a payment block, for example "B". This is the payment block with which the invoices in that company code are blocked for payment. The only way to pay these invoices is by creating a payment directive.

Next , you enter the posting characteristics of the payment directive, which means entering the posting keys (PK) and the special G/L indicator for the payment directives. For example, here the posting keys would be 22 and 39Z, as follows.

1) For the invoice, blocked for payment with payment blocking key "B":

| Itm | PK | Account | Account short text Assignment | Τx | Amount |
|-----|----|---------|-------------------------------|----|--------|
| | | | | | |

1 31 AAAA Vendor AAAA V0 - 10

2 40 400000 Purch. raw material V0 10

2) For the resulting payment directive:

| Itm | PK | Account | Account short text As | Tx | Amount | |
|-----|-----|---------|-----------------------|------------|--------|--|
| 1 | 22 | AAAA | Vendor AAAA | V0 | 10 | |
| 2 | 39Z | AAAA | Vendor AAAA | V 0 | - 10 | |

36.2.5.4 Cash Desk

In the following steps, you make the settings required for the cash desk, more specifically, the settings for day-end closing and the dunning procedure.

36.2.5.4.1 Payment at Cash Desk

In this section you maintain the settings required for cash desk processing.

36.2.5.4.1.1 Create Number Range Intervals for Cash Desk Documents

In this step you create the number range for the cash desk documents in Funds Management for each company code and each fiscal year.

Standard settings

The number range 01 is delivered with the Standard system for Funds Management.

The number assignment for cash desk documents always takes place internally in Funds Management.

Activities

1. Specify the company code for which you want to create the interval.

2. You should only use number range interval 01, which is delivered with the standard. You cannot create a new number range interval, as, by default, the system only assigns numbers from number range interval 01. You can extend this number range interval if necessary.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.5.4.1.2 Define Payment Transactions

In this step you define payment transactions. Payment transactions differentiate the payment transactions in the cash desk, for example dividing them into incoming and outgoing payments. You can also differentiate between cash and check payments.

When entering a cash desk document, a payment transaction must always be specified. This identifies the type of payment and controls the further processing of the document.

Incoming and outgoing payments

You differentiate incoming payments from outgoing payments by setting the appropriate D/C ind. for the payment transaction.

Checks

Checks are usually entered with the manual check deposit transaction and posted in component Financial Accounting. Checks accepted at the cash desk must be entered with a payment transaction, for which the indicator "Statistical transaction" has been set.

Outgoing payments - such as special social welfare payments - that are related to a financial accounting document must have a payment transaction, for which the indicator FI outgoing payments is set. Indicator "PB (payment block)" should also be set for this payment transaction.

Down payments

Down payments that are to be posted from a customer or a vendor with a special G/L indicator in Financial Accounting must have a payment transaction, for which the relevant G/L indicator is set.

Reversal Documents

You can assign a reversal document type to a payment transaction. If you have maintained a user-defined form printout for this reversal document type in step *Maintain Receipt Printout*, differents forms are used for the cash document and the corresponding reversal document. If you have not defined a reversal document type for a payment transaction, the form assigned to the payment transaction is used for the printout of the reversal document.

You define reversal document types in the Customizing of Financial Accounting under Define Document Types.

Requirements

Any payment blocks you want to define for a payment transaction must be defined in the Financial Accounting Customizing. For more information about payment blocks, see the *Financial Accounting* IMG in section "Check payment block reason".

Activities

Define your payment transactions.

36.2.5.4.1.3 Assign General Ledger Account to Cashier

In this step you can define an individual account for each company code and each payment transaction for every cashier.

Activities

Make the assignments.

If you only enter a company code and a G/L account, all of the payment transactions processed by the cashiers are posted to this account.

If you only enter a company code, a cashier and a G/L account, all of the transactions processed by that cashier are posted to the specified account.

36.2.5.4.1.4 Define Printed Receipt

In this IMG activity, you assign the receipt forms of a document type. You also determine how many receipts should automatically be printed when the cash desk document is saved.

Requirements

In step Determine Payment Transactions, you define payment transactions for document types.

Standard settings

SAP delivers a *SAPscript* form (RECEIPT) as an example with the standard system and a PDF-based form (FM_RECEIPT) as an example.

Recommendation

If you want to change the form of the standard system, we recommend copying the form delivered and then changing it.

You maintain *SAPscript* forms in the transaction Form Painter and PDF-based forms in transaction Form Builder.

To change or recreate a PDF-based form, you must use the form interface FM_RECEIPT. Only

this is used for printing the receipt.

Activities

- 1. Check whether you want to use the form included in the standard delivery. To display or change forms, from the menu, choose *Tools -> Text Processing -> Form*.
- 2. If necessary, change the form or create a new form.
- 3. Assign the forms to document types and determine the number of receipts that should be printed.

36.2.5.4.2 Close Posting Day

In the following steps, you make the settings required for executing a day-end closing.

36.2.5.4.2.1 Assign Posting Day to Company Code/FM Area

In this activity, you stipulate the closing groups for day-end closing. You must assign each group to at least one FM area/company code combination. This ensures that all FM areas and company codes in a closing group are working with the same posting date.

The posting date is required for the day-end closing. To be able to carry out day-end closing, you must also maintain a summary key in the next step.

You only need to enter the posting date the first time you use the system.

When you carry out day-end closing for the current posting date, the system sets the posting date to the next posting date, based on the factory calendar you have defined. It also deletes all the posting dates earlier than the next one, because postings for these dates are either not permitted or simply superfluous.

The system enteres the posting date in the document header for each posting document.

Activities

- 1. Make the assignments for the FM area and company codes used.
- 2. Use the next step to maintain the summary keys.

36.2.5.4.2.2 Maintain Summarization Key (FI Accounts) for Day-End Closing

This hypertext is only relevant for German Local Authorities customers.

36.2.5.4.2.3 BAdI: Definition of Print Layout for Day-End Closing

Use

With this Business Add-In (BADI) you can print the totals list of day-end closing to suit your own requirements, for example in a SAPScript form.

Standard settings

The Business Add-In is not active in the standard system. The list printed is based on the SAP List Viewer. The functions of the SAP List Viewer can be found in the documentation on this tool. This documentation is in the SAP Library under CA - Cross-Application Components -> General Application Functions -> SAP List Viewer.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Notes

- Documentation on BADI Method PRINT_TABS
- Documentation on BADI Method PRINT_ACTIVE

36.2.5.4.3 Dunning Procedure

In this step, you make the settings that you require for the IS-PS enhancement of the dunning program.

36.2.5.4.3.1 Extend Dunning Procedure

In this section you extend the dunning procedure of component FI to include funds management specific settings.

You can stipulate the following for all dunning procedures:

- If dunning charge and/or dunning interest are posted
- Due date for dunning interest
- Whether it is a private law or a public law dunning procedure.
- For **Public law dunning procedures**, the calculation of the dunning charge and dunning interest will deviate from the calculation in the dunning procedure in component *Financial Accounting*. Using the additional data for public law dunning procedures you can adjust the calculation of dunning charges and interest according to the needs of your organization. For information about the individual control options see the field help while entering additional data for public law dunning procedures.

Requirements

You can only use dunning procedures which you have previously defined in component *Financial Accounting*.

If you are a **German Government** customer, a dunning procedure can only lead to execution if the Use Execution indicator was set in the "Maintain Global Settings" step.

Standard settings

No table entries are delivered in the standard.

Activities

Select the desired Funds Management specific function for the dunning procedure.

36.2.5.4.3.2 Define Grace Period for Public Law Dunning Procedure

Use

In this IMG activity, you define grace periods for a combination of dunning procedure and document type.

Grace periods can only be defined for public law dunning procedures. Entering document types means that you can control the grace period per payment type. For example, if you want to define that the program considers a grace period of 5 days for a bank transfer, but not for cash payments, then you must

have created a document type for both payments (bank transfer and cash payment) in the system. Define a grace period of 5 days for the bank transfer and you do not have to enter anything for the cash payment.

When public law dunning interest is calculated (penalty surcharges), grace period is added in days or months at the end of the due date of the invoice. If the day calculated is a weekend or a public holiday, the end of the grace period is moved to the next weekday. All payments for this invoice for which this grace period is set and were made within this grace period are treated as if they were already made by the due date when the penalty surcharges are calculated.

Note that the grace period only changes the due date of particular documents at the time of the calculation of the dunning interest. It has no effect on whether, for example, the invoice is dunned within the grace period. If you want to prevent an item being dunned within the grace period, you have to define the relevant days in arrears for each dunning level when you define the dunning procedure.

Note:

The program also evaluates the settings that you define here during the calculation of dunning interest according to receivables clearing.

Requirements

You have flagged at least one dunning procedure as public law in the IMG activity Enhance Dunning Procedure.

Standard settings

SAP does not deliver any standard settings.

Example

The following example is based on German law:

If you want to follow § 240 of the general tax code, enter a grace period of 5 days for the document type bank transfer and for the relevant public law dunning procedure.

36.2.5.4.3.3 Assign Dunning Procedure to a Dunning Area

In this step, you assign a dunning area to a dunning procedure. This assignment is the basis for the program RFFMKWD0 and RFFMKWD1 which you can enter or update the assignment of dunning areas to dunning procedures in customer and vendor master records.

Requirements

You can only use dunning procedures and areas which have been defined in Financial Accounting.

Standard settings

The tables in the system we deliver are empty.

Activities

Make the assignments.

36.2.5.4.4 Petty Amount Rule

You enter the settings for the petty amounts rule in the following steps. This rule applies if customers or vendors do not pay the exact amount due, but pay too much (overpayment) or too little (underpayment).

See the Process petty amounts documentation for more information about how the petty amounts rule works.

36.2.5.4.4.1 Define Petty Amount Limits

You define the amounts for the petty amounts rule in this step - one for underpayment and one for overpayment. The petty amounts rule applies if the overpaid or underpaid amount is less than the defined amount.

You enter the respective amounts naming a revenue type. When determining the overpayment or underpayment, the program first processes all postings it finds with a revenue type entry (the entry "empty" is also considered).

In addition, you can define a dunning level at which the petty amounts rule should apply.

Recommendation

We recommend entering amounts for underpayment and overpayment for generic revenue type "*". In doing so, the program can also process postings in which revenue items assigned to

account that were not explicitly assigned in this step.

Further notes

See the Process petty amounts documentation for more information about the petty amounts rule.

36.2.5.4.4.2 Define Posting Information for Petty Amounts

You define the posting information for the petty amounts rule in this step. This rule applies if customers or venders do not pay the amount due exactly, but pay too much (overpayment) or too little (underpayment).

If you have stipulated, in the Customizing of *Funds Management Government* in step *Maintain global settings*, that you are working with revenues types, you must enter a revenues type here for account assignment information. In this case, the program does not evaluate any funds center or commitment item entries.

Activities

Define the account assignment information separately for overpayment and underpayment.

Further notes

See the Process Petty Amounts documentation for more information about the petty amount rule.

36.2.5.4.5 Derive Processor from Customer Master

In the following steps you make the system settings which are required for automatically deriving the responsible accounting clerk in each case, from the name of the customer.

Note:

The name enhancement must be activated so that the program can derive the assignment of the responsibilities from the last names of the customers. The first and last names are stored separately in this case. You activate the name enhancement in the implementation guide of *Funds Management Government* in IMG activity Maintain Global Settings.

36.2.5.4.5.1 Define User Role

This hypertext is only relevant for German Local Authorities customers.

36.2.5.4.5.2 Assign Name Interval to Processors

In this step, you assign the customers to the accounting clerks that are responsible for them for each company code.

You define a name interval and a validity period from which the assignment is valid.

The accounting clerk responsible can be derived from the last name of the customer and does not have to be entered manually when you create or change a customer master record.

Requirements

- A user role must be assigned to the company code used. You can find more information in the section "Define User Role".
- The accounting clerks must be created in Customizing of *Financial Accounting*. You can find more information in the implementation guide (IMG) of *Financial Accounting* in section "Enter Accounting Clerk Identification Code for Customer".
- If automatic derivation is always necessary and if it should not be possible to overwrite it with a manual entry, you have to define that messages 032 and 033 appear as error messages in message control.

You can find more information on message control in the IMG of *Funds Management Government* in the section "Change Message Control".

Activities

Assign the name interval to the accounting clerk responsible.

You can adapt existing customer master data using program RFFMSETB. This program includes all assignments of name intervals to accounting clerks maintained in Customizing.

36.2.5.4.6 Payment Transfer

In the next steps, you make the definitions that are required for the processing of payment transfers using transaction FMITPO.

Using this transaction, you can transfer automatically generated payment items without a reference to invoice (receivable) of sub-ledger accounts wrongly posted to, or interim accounts created especially for this purpose to a sub-ledger account in which an invoice can be assigned or is expected. In every posting transaction, a received down payment or partial payment to a target account (customer or vendor) is posted as a target item.

In addition, the payment transfer transaction contains other functions as well. These functions differ in their business relevance, but are realized by one transfer each. The following functions are available:

Transfer

You can use this function to transfer an incoming payment, a partial payment, a credit memo or down payment received.

- Distribute and transfer

You can distribute and transfer an incoming payment, a partial payment, a customer credit memo or a down payment received to several account assignments using this function.

- Statement for reimbursement

The function represents an interim for the reimbursement of a credit item in a customer account. In doing so, an optional partial amount is transferred to a special general ledger activity to be set up for this. This special general ledger activity can take part in the automatic payment run via the payment program. In addition, the reimbursement document can be paid in cash.

- Assign invoice

You can assign an incoming payment, partial payment, a customer credit memo or a down payment received to an invoice using this function. In doing so, a transfer with a partial payment as a target item is created.

36.2.5.4.6.1 Enter Settings for Functions Distribute/Transfer Posting

In this step, you make the settings for a company code, that are required for functions **Transfer** and **Distribute and transfer** in the payment transfer function (FMITPO). You can also define default values for the entry of these payment transfers.

You must maintain the following settings:

- Define a baseline date for payment, that is suggested when entering a document. For this type of payment transfer, SAP recommends the *Baseline date of the initial item*.
- Define special G/L indicator, which determines the reconciliation account in which the line items in the general ledger are updated.
 To do this, you can use the special G/L indicator A which is delivered with the standard.
- Define interim account
 For technical reasons, the Interim account is necessary for updating payments in *Funds Management Government*.
 This account can **only** be used for these automatic postings.

You can maintain the following settings:

- Define the document type that is suggested when entering a document.
- Set indicator for the initial item comment in the document header text of the payment transfer.
- Set indicator for automatic document print on saving.
- Define correspondence type for print.

Requirements
- Special G/L indicator

If you want to use your own special G/L indicator for this type of payment transfer, you must have created it in the Customizing of Financial Accounting. To do this, select the following in the Customizing of Financial Accounting

- for customer down payments

Accounts receivable accounting and accounts payable accounting -> Business transactions -> Down payments received -> Define reconciliation accounts for customer down payments.

- for vendor payments

Accounts receivable accounting and accounts payable accounting -> Business transactions -> Down payments made -> Define different reconciliation account for down payments.

- Document type

The document type must be created in the Customizing of Financial Accounting under *Basic* settings *Financial Accounting -> Document -> Document header -> Overview*.

- Interim account

The interim account must be created as a bank clearing account. A commitment item must be created in this account using Financial transaction *Post cash holdings* (90).

Correspondence

The correspondence type must be created in the Customizing of Financial Accounting along the path *Basic settings Financial Accounting -> Correspondence -> Define correspondence types.* You should use the correspondence type *Internal document* (SAP09), which is delivered with the standard, as a template. You must also have executed all the other IMG activities that are required for the correspondence, if you want to print out payment transfer documents. These activities include the creation of your own form, for example.

Activities

Make your definitions for the functions Transfer and Distribute and transfer.

36.2.5.4.6.2 Enter Settings for the Statement for Reimbursement Function

In this step, you make the settings for a company code, that are required for the function **Statement of reimbursements** using transaction payment transfer (FMITPO). You can also define default values for the entry of these payment transfers.

You must maintain the following settings:

- Define a baseline date for payment that is suggested when entering a document. SAP recommends the *Current date* for statements for reimbursement.

Define special G/L indicator that determines the reconciliation account in which the line items in the general ledger are updated.

SAP recommends that you define your own special G/L indicator for statements for reimbursement. You should have already created this special G/L indicator in the Customizing of Financial Accounting.

- Define payment method
- Define interim account
 For technical reasons, the Interim account is necessary for updating payments in *Funds Management Government*.
 This account can **only** be used for these automatic postings.

You can maintain the following settings:

- Define the document type that is suggested when entering a document.
- Set indicator for the initial item comment in the document header text of the statements for reimbursement.
- Set indicator for automatic document print on saving.
- Define correspondence type for print.

Requirements

- Special G/L indicator

The special G/L indicator that you want to use for the statements for reimbursement must be created in Customizing of Financial Accounting. This G/L indicator must be assigned to class "Payments". You must create the special G/L indicator for account types D and K, even if negative payments are reimbursed to a vendor account. The description that you define for the posting keys is printed out in the reimbursement document. To create a special G/L indicator select the following in Customizing of

Financial Accounting for customer down payments

Accounts receivable accounting and accounts payable accounting -> Business transactions -> Down payments received -> Define reconciliation accounts for customer down payments.

- for vendor down payments

Accounts receivable accounting and accounts payable accounting -> Business transactions -> Down payments made -> Define different reconciliation account for down payments.

- Document type

The document type must be created in the Customizing of Financial Accounting under *Basic* settings Financial Accounting -> Document ->Document header -> Overview.

- Interim account

The interim account must be created as a bank clearing account. A commitment item must be created in this account using Financial Transaction *Post cash holdings* (90).

Correspondence

The correspondence type must be created in the Customizing of Financial Accounting along the path *Basic settings Financial Accounting -> Correspondence -> Define correspondence types.* You should use the correspondence type *Internal document* (SAP09), which is delivered with the standard, as a template. You must also have executed all the other IMG activities that are required for the correspondence, if you want to print out payment transfer documents. These activities include the creation of your own form, for example.

Activities

Make your definitions for statements for reimbursement.

36.2.5.4.6.3 Enter Settings for the Assignment of Invoices Function

In this step you make the settings for a company code, that are required for **Assign invoices** function using the payment transfer transaction (FMITPO). You can also define default values for the assignment of invoices. During the assignment of invoices, a transfer posting with a partial payment is generated as a target item.

You must maintain the following settings:

- Define a baseline date for payment that is suggested when entering a document. SAP recommends the *Baseline date of the initial item* for the assignment of invoices.
- Define interim account
 For technical reasons, the Interim account is necessary for the updating of payments in *Funds Management Government*.
 You must **only** use this account for automatic postings.

You can maintain the following settings:

- Define the document type that is suggested during document entry (entry of partial payment).
- Set indicator for the initial item comment in the document header text of the partial payment.
- Set indicator for automatic document print on saving.
- Define correspondence type for document print.

Requirements

- Document type

The document type must be created in the Customizing of Financial Accounting along the path Basic settings Financial Accounting -> Document -> Document header -> Overview

- Interim account

The interim account must be created as a bank clearing account. A commitment item must be defined in this account using the Financial transaction *Post cash holdings* (90).

Correspondence

The correspondence type must be created in the Customizing of Financial Accounting along the path *Basic settings Financial Accounting -> Correspondence -> Define correspondence types*. You should use the correspondence type *Internal document* (SAP09), which is delivered with the standard, as a template. You must also have executed all the other IMG activities that are required for the correspondence, if you want to print out payment transfer documents. These activities include the creation of your own form, for example.

Activities

Make your definitions for the assignment of invoices.

36.2.5.4.7 Payment Distribution

You should use the payment distribution if you want to enter received payments and distribute a bank item over several customers or vendor accounts. The posted payment in the budget is only traceable if you use this function.

In the following IMG activities you make all the settings that you need to use the payment distribution.

36.2.5.4.7.1 Define Number Ranges for Payment Distribution

In this step, you create number range intervals for a company code for payment distribution.

For each number range interval, you must enter:

- Number range key
- Number interval from which the program chooses the number for the payment document generated
- Number range status
- Type of number allocation (internal or external)

You can define any number of intervals. However, a single interval is sufficient. If you define more than one interval, you must ensure that the number intervals do not overlap.

Activities

- 1. Choose Interval -> Change.
- 2. Choose Edit -> Add Interval.
- 3. Define all the necessary information for the number range in the dialog box.
- 4. Save your entries.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.5.4.7.2 Define Settings for Payment Distribution

In this IMG activity, you make the settings that allow you to use payment distribution. The distribution logic for payment distribution is comparable to the distribution logic for manual account statements.

This activity determines how the document generated is posted.

The **folder name** corresponds to the batch input session to which the program writes the documents generated.

Once payments have been divided among several customer or vendor accounts, the postings are displayed in an account statement.

If you want to process payment distribution data with the clearing control of *Funds Management* (PSM-FM), you must define an activity category so that you can make the required settings in the Customizing of Clearing Control.

If you do not set the clearing control, you can leave this field empty.

Requirements

The activities offered when you make your entry (F4) must first be defined in the Customizing of Financial Accounting under Bank Accounting -> Business Transactions -> Payment Transactions -> Manual Bank Statement.

During this process, you should take ensure that all payment distribution transactions are defined for posting area **2 (Subledger Accounting)** (the actual incoming payment must however be posted at the bank for posting area 1 (General ledger)).

- Your heuristics is set up so that it can process entries for payment distribution.

Standard settings

SAP does not provide any standard settings.

Activities

- 1. Call the IMG activity.
- 2. Create new entries for all relevant company codes.
- 3. Save your entries.

Further notes

For documentation on the settings for the manual account statement in component *Financial Accounting*, see:

- Create and Assign Business Transactions
- Define Posting Keys and Posting Rules for Manual Bank Statement

36.2.5.4.8 Clearing Control

36.2.5.4.8.1 Prerequisites and Functional Clearing Control

Use

With clearing control you can map the automatic assigning and clearing logic of your organization's payments from an electronic account statement for open customer/vendor items.

You can use clearing control for the electronic account statement instead of the interpretation algorithms available in Financial Accounting.

Clearing control carries out the following functions:

- Interpretation of individual turnover of an account statement
- Account and item determination according to this interpretation
- Posting of processed turnover

Clearing control can therefore interpret the note to payee and assign different sort keys (customer, reference, etc.). Based on the sort key, the clearing control looks for open items and can include different sequences in which the open items are cleared (for example, according to the German Civil Code public law). As well as simple processes such as a partial payment and the full clearing, you can use it to control complex processes such as residual item mapping, and complex partial payments with clearing and payments in all company codes.

Clearing control can process the following business transactions:

- Customer down payment (received payment)
- Vendor down payment (down payment made)
- Debit G/L account posting (outgoing payment)

- Credit G/L posting (incoming payment)
- Vendor down payment with general request (down payment made with account assignment of a funds commitment)
- Customer down payment with general request (down payment received with account assignment of an estimated revenue)
- Customer bank credit memo (post with clearing on customer account)

The following process interfaces (events) are available to adjust the clearing control to suit your requirements:

- Clearing control turnover interpretation(00102021)
 With this event, SAP provides a sample function module called *Interpretation of note to payee* (FU.FM_LGD_VWEZW_ANALYSE_MUSTER) which you usually have to adjust to suit your requirements.
- Clearing control, change clearing order (00102022)
- Clearing control indicator for clarification case (00102024)
- Change clearing control posting/account assignment (00102025)
- Clearing control, predefine clearing sequence (00102026)

Requirements

Customizing for electronic account statement

You must carry out Customizing for the electronic account statement. Note the following for the electronic bank statement:

Clearing control is only called if no interpretation algorithm is defined in the < DS:SIMG.FIBLEBS_VC_T028_DC>Basic Settings for Electronic Account Statement for the respective external process. Therefore, the interpretation algorithm *000 No Interpretation* must be defined for all relevant external processes.

Customer Bank Credit Memo (Posting Type 07)

So that residual items are displayed correctly in the reference of Financial Accounting documents, you must set up a substitution for residual items.

During posting in Financial Accounting, the field BSEG-REBZT (type of follow-on document) cannot be specified. The consequence of this is that the indicator **Z** is automtically entered in all postings. In the FI document, the document is displayed as a reference *Payment for* ..., in other words, always as a partial payment. In payment selection only (program RFFMS200), these postings are represented as partial payments.

So that these postings are displayed correctly, the indicator **V** must be entered in field BSEG-REBZT. In the FI document, the reference *Residual Item to* ... can be displayed.

In order to ensure that what is displayed is correct, you must make a substitution at the document segment level.

You do this as follows:

```
1. You must make field BSEG-REBZT available for substitutions
(For more information on this, see SAP note 0042615.) You must
change table GB01 as follows for this:
```

*/ program
tables: gb01.
select single * from gb01 where BOOLCLASS = '009' and
CLASSTYPE = 'S' and
BCLTAB = 'BSEG' and
BCLFIELD = 'REBZT'. if gb01bexclude= 'X'. gb01-bexclude= ' '
modify gb01. endif.

2. You must make the substitutions at the document item level You make substitutions in the Customizing of Financial Accounting, under *Financial Accounting Global Settings-> Document -> Line Item ->* Define Substitution in Accounting Documents.

36.2.5.4.8.2 Account Assignment Profile 36.2.5.4.8.2.1 Set Account Assignment Profile for Customer-View Down

Payments

Use

In this step, you configure the account assignment profile for customer down payments (posting type 01).

By assigning an account assignment profile in the of clearing control together with the posting type and account assignment method 01 to a sort key, you define the processing of an interpreted sort key (for example, of an interpreted cash reference number) as a customer down payment through clearing control.

Customer down payments are assigned to a customer account. The account assignment is also required on a funds centers and commitment item. You can define the funds center and commitment item directly in the account assignment profile or derive these account assignment elements from other account assignment elements by defining a revenue type (for deriving the commitment item) or an estimated revenue in the account assignment profile. If you do not make any specifications, the funds center and commitment item may be derived from the different conciliation account of the customer.

Further notes

Alternatively, you can determine the necessary account assignments from your own note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)).

If the derivation should take place from your function module, you do not need to define any settings for the account assignment profile.

In the note to payee for clearing control, you must define account assignment method 00 for the sort keys that should be processed on the basis of their function module.

36.2.5.4.8.2.2 Set Account Assignment Profile for Vendor-View Down Payments

Use

In this step, you configure the account assignment profile for vendor down payments (posting type 02).

By assigning an account assignment profile to a sort key in the Note to Payee Control of clearing control, together with the company code and account assignment method 01, you define the processing of an interpreted sort key (for example, of an interpreted cash reference number) as vendor down payment . You do this using clearing control.

Vendor down payments are assigned to a vendor account. In addition to this, an account assignment to a funds center and a commitment item is required. You can define the funds center and commitment item directly in the account assignment profile or derive these account assignment elements from a funds commitment by defining a funds commitment in the account assignment profile. If you do not specify a funds center/commitment item, they can be derived from the different reconciliation account of the vendor.

Further notes

Alternatively, you can determine the necessary account assignments from your own note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)).

If the derivation should take place from your function module, you do not need to define any settings for the account assignment profile.

In the note to payee for clearing control, you must define account assignment method 00 for the sort keys that should be processed on the basis of their function module.

36.2.5.4.8.2.3 Set Account Assignment Profile for Debit G/L Account Postings

Use

In this step, you configure the account assignment profile for debit G/L account postings (posting type 03).

By assigning an account assignment profile to a sort key in the Note to Payee Control of clearing control, together with the posting type and account assignment method 01, you define the processing of an

interpreted sort key (for example, of an interpreted cash reference number) as the G/L account debit posting. You do this through clearing control.

G/L account postings are assigned directly - without a subledger account (actual = target) - to a G/L account. Additional account assignment information is required for this such as a CO account assignment or the account assignment of a funds center and commitment item in accordance with the selection outsorting of the G/L account.

If you define a G/L account and a commitment item, the G/L account and the commitment item are assigned to an account. If you only define a G/L account, the commitment item is derived from the G/L account. If you only specify one commitment item, the G/L account is derived from the commitment item.

Further notes

Alternatively, you can determine the necessary account assignments from your own note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)).

If the derivation should take place from your function module, you do not need to define any settings for the account assignment profile.

In the note to payee for clearing control, you must define account assignment method 00 for the sort keys that should be processed on the basis of their function module.

36.2.5.4.8.2.4 Set Account Assignment Profile for Credit G/L Account Postings

Use

In this step, you configure the account assignment profile for credit G/L account postings

(posting type 04).

By assigning an account assignment profile to a sort key in the Note to Payee Control of clearing control, together with the posting type and account assignment method 01, you define the processing of an interpreted sort key (for example, of an interpreted cash reference number) as the G/L account credit posting. You do this using clearing control.

G/L account postings are assigned directly - without a subledger account (actual = target) - to a G/L account. Additional account assignment information is required for this, such as a CO account assignment or the account assignment of a funds center and commitment item, in accordance with the selection outsorting of the G/L account.

If you define a G/L account and a commitment item, the G/L account and the commitment item are assigned to an account. If you only define a G/L account, the commitment item is derived from the G/L

account. If you only specify one commitment item, the G/L account is derived from the commitment item.

Further notes

Alternatively, you can determine the necessary account assignments from your own note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)).

If the derivation should take place from your function module, you do not need to define any settings for the account assignment profile.

In the note to payee for clearing control, you must define account assignment method 00 for the sort keys that should be processed on the basis of their function module.

36.2.5.4.8.2.5 Set Acct Assignment Profile for Vendor-View Down Pymnt with General Request

Use

In this step, you configure the account assignment profile for the vendor direct debit (posting type 05).

The vendor direct debit is updated as a vendor down payment with an account assignment on a funds commitment.

By assigning an account assignment profile to a sort key in the Note to Payee Control of clearing control, together with the posting type and account assignment method 01 or 02, you define the processing of an interpreted sort key (for example, of an interpreted cash reference number) as vendor down payment with a general request. You do this using clearing control.

Vendor down payments are assigned to a vendor account. In addition to this, an account assignment to a funds center and commitment item is required.

- Account Assignment Method 01

By defining a funds commitment in the account assignment profile, the company code, vendor, funds center and commitment item are derived from the funds commitment.

- Account assignment method 02

By defining the bank details of the business partner (bank key and account) and a funds commitment, you can derive the company code, vendor, funds center and commitment. This means that the correct account assignment is determined by comparing the texts of the note to payee and the text of the funds commitment items. (The text of the note to payee must match the text of the fund commitment items).

Therefore, it is prerequisite that a corresponding funds commitment item is created for each account assignment.

Requirements

Fund commitments that you want to define in the account assignment profile must be created in the menu of *Funds Management* with amount 0. The indictor *Unlimited Overpayment* must be set.

Further notes

Alternatively, you can determine the necessary account assignments from your own note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)).

If the derivation should take place from your function module, you do not need to define any settings for the account assignment profile.

In the note to payee for clearing control, you must define account assignment method 00 for the sort keys that should be processed on the basis of their function module.

36.2.5.4.8.2.6 Set Acct Assgnmnt Profile for Customer-View Down Pymnt with General Request

Use

In this step, you set the account assignment profile for customer down payments with account assignment on a general request (posting type 06).

By assigning an account assignment profile in the DS:SIMG._ISPSFM_FMLGD_H_CUST> Note to Payee Control of the clearing control together with the posting type and account assignment method 01, you define the processing of an interpreted sort key (e.g. of an interpreted cash reference number) as customer down payment with general request through clearing control.

Customer down payments are assigned to a customer account. The account assignment is also

required on a funds center and commitment item. By specifying an estimated revenue, the company code, customer, funds center and commitment item is derived from the estimated revenue.

You require an account assignment profile for customer down payments with general request if you want to post similar revenues without the amount, the payer or the due date being known (for example, with donations).

Requirements

Estimated revenues that you want to define in the account assignment profile must be created in the menu of *Funds Management* with the amount 0. Apart from this, the indicator *Unlimited Overpayment* must be set.

Further notes

Alternatively, you can determine the necessary account assignments from your own note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)).

If the derivation should take place from your function module, you do not need to define any settings for the account assignment profile.

In the note to payee for clearing control, you must define account assignment method 00 for the sort keys that should be processed on the basis of their function module.

36.2.5.4.8.3 Create Session Variants for Grouping of Postings

Use

In this step you define folder variants. You only need folder variants if the posting of the turnover processed from the clearing control should take place with the Batch Input Procedure.

Folder variants enable you to group turnover by deriving a two-figure folder prefix from the folder variant when the folder is created and is added to the beginning of the folder name.

For each folder variant you define the prefix of the first and last folder that you want to use and the number of postings a folder should include.

When processing an electronic account statement, the defined number of postings, starting from the lowest interval level to the highest interval limit, are put in a Batch Input Session. The last batch input session (highest interval limit) contains more than the defined number of postings if the number of postings exceeds the number of postings specified.

If you do not define any settings in this step, all postings are put in one session.

Activities

Define the settings you want.

Further notes

Note that when processing the electronic account statement, a maximum of two sessions per bank turnover are generated. A session for the general ledger and a session for the subsidiary ledger. The subsidiary ledger receives / (slash) before the prefix.

36.2.5.4.8.4 Define Error Handling

Use

In this step, you can determine how non-assignable payments can be processed further and updated correctly based on errors that occur.

The error handling enables you to generate batch input sessions that are processed automatically in the Background.

If you do not use error handling, batch input sessions are generated for the corresponding bank turnover that you must process manually in order to carry out the necessary adjustments or supplements for an update.

Certain problems may arise with the update, such as incomplete Customizing settings, unclear entries in the note to payee or an unclear account situation which can cause errors. Each error that occurs is represented by an error message in message class FMLGD.

In this step, you can define how the bank turnover should be processed further for these error messages. In addition to this, you can also outsort your own messages.

The error messages delivered in message class FMLGD are divided into the following areas:

- 0XX Technical error messages
- 1XX Customer down payments
- 2XX Vendor down payments
- 3XX G/L account debit posting
- 4XX G/L account credit posting
- 5XX Vendor down payment with general request
- 6XX Customer down payment with general request
- 7XX Customer bank credit memo
- 80X Clearing Sequence of Open Items
- 85X Turnover interpretation (credit memo)
- 87X Turnover interpretation (debit memo)
- 9XX Customer-specific errors

You must define at least one error message for each company code and transaction type for the processing of credit memos **001** and one error message for the processing of debit memos **002**. Otherwise the turnover cannot be processed if errors occur.

In addition to this, you can use a general error message for each posting type (**X00** basic setting) that you can define if you want to use error handling. It is advisable to define this basic setting, otherwise the system cannot carry out the posting automatically.

You can also trigger a specific error handling, depending on the request by defining further error messages for this posting type accordingly.

If an error is triggered for a posting type and no setting exists for this in the Customizing of error occurrences, the system checks whether a basic setting exists for the error handling of the posting type. If a basic setting does not exist either, the program carries out the posting in accordance with the settings for message 001 or 002.

Requirements

The account assignment profile for the corresponding posting types must be created as well as folder variants.

Activities

- You create an error message for processing credit memos 001 and one for processing debit memos 002 for each company code and transaction type. Note that you are not allowed to make any entries for the posting rule, business transaction code, +/- sign and amount for these error messages.
- 2. Check which problems you want to define automatic error handling for and define the error messages accordingly.

Further notes

For more information on the error messages delivered, see the long text on messages in message class FMLGD. You can also create your own messages here if you wish, in area 9XX.

Special handling is possible for error message **712**. The message is issued if no open items exist for a payment, but the customer and company code can be determined from items already cleared. You can use this message to control that the payment occurs as a down payment on the company code and customer determined beforehand from the first cleared item.

The following setting is necessary for this:

- Posting type 01 (customer down payment) This allows payments to be updated automatically without open items having been cleared.
- An account assignment profile for posting type 01 for which neither a customer or company code has been specified.
 - Note that an account assignment profile in which neither a customer or company code is specified can only be used for errors 712 and 713.

36.2.5.4.8.5 Define Clearing Sequence for Additional Receivables

Use

-

In this step, you define the clearing sequence for additional receivables.

This involves defining the relative position (rank) in the clearing sequence at which the additional receivable item should be cleared if several items with additional receivables are determined by the clearing control.

Requirements

The clearing control must be able to determine all related receivables.

If you are using a cash reference number as a sort key, the additional receivables that occur from dunning open items must contain the corresponding cash reference number for the correct open items to be selected.

You can use BTE process Requests: Field Substitution for dunning interest with sample function module SAMPLE_PROCESS_00102026 as a template for your own function module; or BTE process Post Dunning Interest (00103020).

For dunning charges you can use BTE process Post Dunning Charges (00103025). Prerequisite for this is that only the items of a cash reference number are included in dunning. You can ensure this by defining a corresponding dunning grouping (reference in document header) in the Customizing of the dunning program (IMG activity Define Dunning Groupings.

Activities

Define the relative position in the clearing sequence for additional receivables for each revenue type.

Further notes

Note that the clearing sequence for main/additional receivables could also affect other system areas.

When processing customer credit memos, the clearing control executes an account analysis. With

an account analysis, the clearing sequence of the selected open items (receivables, payables, partial payments) is determined. Note that down payments are not included in the clearing.

The clearing control supports two kinds of clearing sequence:

- **Public-law clearing sequence** The main receivables are cleared before additional receivables.
- **Private law clearing sequence** The additional receivables are cleared before the main receivables.

For the clearing, both the main and additional receivables are sorted according to their due date and the oldest receivable is cleared first.

Which of the two sequences is used by the clearing control is determined by the runtime and depends on which dunning procedure is defined in the master record of the customer and therefore also by the settings for the dunning procedure in step Enhance Dunning Procedure.

If a dunning procedure is defined in the customer, that is flagged as a public-law dunning procedure (Indicator Public-Law in step *Enhance Dunning Procedure*, then the open items are in accordance with the public-law clearing sequence. If a dunning procedure defined in the customer is not flagged as a public-law dunning procedure, the clearing is carried out according to the private-law clearing sequence.

You can influence the standard setting as follows:

You can define that only the public-law clearing sequence should be used or only the private law; or you can d efine the sequence to suit your own requirements.

To do this, you can use BTE process Clearing Control. Convert Clearing Sequence with the sample function module SAMPLE_PROCESS_00102026 as a template for your own function module.

IF you want to define your own clearing sequence, you should first convert the clearing sequence (BTE Process Clearing Control. Convert Clearing Sequence (00102022).

36.2.5.4.8.6 Define Processing Variants

Use

In this step, you can create your own processing variants for clearing control.

You need your own processing variants when you want to process an interpreted sort key or you want to work with different sort keys (for example, cash reference number and customer).

You can process differently by making an additional entry with your different processing variant for these sort keys in the note to payee control of clearing control.

In number range 9000 to 9999, you can create your own variants if you wish. Number range 0000 to 8999 is reserved in the standard system for predefined processing variants.

Requirements

If you want to use your own processing variants, you must define this criteria in your note to payee interpretation (BTE process Clearing Control Turnover Interpretation (00102021)) which stipulates how the different processing should occur.

Standard settings

SAP delivers standard variant 0001 which you can use for all entries in the note to payee control.

If you want to assign payments with the clearing control using the function *Payment Distribution*, you do not need your own processing variants, you can use variants 1001, 1002 or 1003.

With variant 1001, the clearing control processes data from the payment distribution which includes a posting reference (XBLNR).

With variant 1002, the clearing control processes data from the payment distribution which includes a customer (KUNNR).

With variant 1003, the clearing control processes data from the payment distribution which includes an FI document number (BELNR).

36.2.5.4.8.7 Define Note to Payee Control

Use

In this step, you define the settings for the note to payee control.

The clearing control can only process the turnover if a valid sort key (for example, cash reference number) can be determined. The clearing control interprets the data of an individual turnover from SAP bank data storage in order to determine a valid sort key. Relevant data is, for example external transactions, internal transactions, +/- sign, note to payee, payer (name and bank details of the payer) and the amount.

The turnover interpretation matches your own note to payee interpretation (BTE process clearing control turnover interpretation (00102021)). The target of the interpretation is to return a sort key and processing variant. The sort key returned in addition to the processing variant is compared with the settings that you define here. This then controls the subsequent processing.

Note the following if you define settings for customer credit memos (posting type 07):

For customer credit memos an open item or several open items should be cleared when a payment is successful. The items to be cleared contain the necessary account assignment information. It is therefore not necessary for you to specify an account assignment profile.

In the first step, the clearing control selects the open items, whilst the account assignment method controls which criteria the selection should follow:

- Account assignment method 00

All the necessary information for the posting is transferred by the system from your note to payee interpretation.

- Account assignment method 01 (reference in document - for example, cash reference number)

The sort key defined is interpreted as the reference in the document (field XBLNR). The clearing control selects all open items for this posting reference. If you specified a company code in your note to payee interpretation, only the open items for this company code will be selected; otherwise all company codes are included.

If no open items exist for this posting reference, the system determines the corresponding customer based on the items already cleared for this reference (customer of the first cleared item). You can then update the payment as a down payment for this customer through error handling (error message 712) (see Define Error Handling).

- Account assignment method 02 (customer)

The define sort key is interpreted as the customer (field KUNNR). Clearing control selects all open items for this customer. If you specified a company code in your note to payee interpretation, only the open items for this company code will be selected; otherwise all company codes will be included.

- Account assignment method 03 (document number)

The defined sort key is interpreted as the document number (field BELNR). Clearing control selects all open items for this document number. If a company code was specified in your note to payee interpretation, only the open items for this compnay code will be selected; otherwise all company codes are included.

Once the open items have been selected, the account analysis takes place through clearing control. This determines the clearing sequence of the open items. (For more information on this, see Define Clearing Sequence for Additional Receivables).

The clearing control then tries to clear the open items in accordance with the clearing sequence.

The following postings can occur with this:

- **Full clearing** Note that small differences are not considered.

- Residual item creation

The open items are cleared in accordance with the clearing sequence. As the payment amount is more than the total of open items, the residual amount is posted as a payment with residual items for the last cleared item.

- Partial payment

For a partial payment, not all open items can be cleared in accordance with the clearing sequence as the payment is smaller than the total of open items. Note the following different cases:

- The clearing control cannot clear any open items.

In this case, a partial payment occurs for the first open item in accordance with the clearing sequence. When updated, the system generates a line with posting key 15 for the customer.

- The clearing control can clear several but not all open items.

In this case, the partial payment occurs in accordance with the clearing sequence on the last open item which cannot be cleared. The system adds an additional line with posting key 15 for the customer.

Note

If the FI document numbers are assigned fiscal year-dependently, problems may arise when a clearing is posted (transaction FB05) if the transferred document number is not clear. These postings cannot be processed automatically. See SAP note (**105985**).

Activities

Define the note to payee control for posting types.

36.2.5.4.8.8 Check Customizing Settings

Use

In this step you check whether the settings in the Customizing of clearing control are consistent.

For more information on this program, see the Program documentation (RFFM_CHECK_VERRECHNUNG).

Activities

You can only use applications that use clearing control when a check is run without any errors occurring.

In order to ensure that your Customizing settings are consistent, you must carry out the check each time you make changes in Customizing for the clearing control.

If errors are displayed in the Application Log, you must correct the fields in the corresponding IMG activities.

36.2.5.4.8.9 Activate Clearing Control

Use

In this step, you activate the clearing control.

Requirements

- The Customizing settings for clearing control must be consistent. For more information on this, see Check Customizing Settings.
- You must have provided a user-specific function module with the BTE event *Clearing Control Turnover Interpretation* (00102021).
 SAP provides sample module *Interpretation of Note to Payee* (FM_LGD_VWEZW_ANALYSE_MUSTER) for this event which you must adjust to suit your own requirements.
- For more general prerequisites, see Prerequisites and Functions of Clearing control.

Activities

Check whether all prerequisites are fulfilled and activate the clearing control.

36.2.5.4.9 Clarification Worklist

36.2.5.4.9.1 Define Processing Status

Use

In this IMG activity, you can create your own user-defined processing statuses for processing clarification cases in addition to those delivered by SAP.

You use a processing status to select clarification cases for processing. You can find the statuses in F4 help (field *Processing Status*) under Process Clarification Worklist.

The following statuses are set automatically:

- Clarification cases included in the clarification worklist receive the status 000 (new)

- If a resubmission date is set for a clarification case, it receives the status 130 (put back)
- If a clarification case is completed and posted without errors, the status is set to 200 (completed) and the assigned processor is removed.

You can set all other statuses manually when processing a clarification case.

Standard settings

| The following statuse | s are in the standard system | |
|-----------------------|------------------------------|-----------------------------|
| <u>Symbol</u> | Key | Description/Meaning |
| - | 000 | new |
| @5W@ | 100 | allocated |
| @AJ@ | 110 | in processing |
| @A0@ | 120 | customer response |
| @FR@ | 130 | put back (for resubmission) |
| @8Y@ | 190 | not to be clarified |
| @0V@ | 200 | completed (clarified) |
| Activities | | |

If you want to create more user-defined statuses, use the key interval 900 - 999.

36.2.5.4.10 Data Transfer

You can use the following IMG activities when transferring the data you require for cash desk operations.

36.2.5.4.10.1 Assign Preprocessing Procedure Subledger Account to a SAP Subledger Account

You can use this IMG activity to assign subledger accounts from the preprocessing procedure to customer/vendor accounts in the SAP system.

For more detailed documentation on the functions of this program, see the Program documentation.

Activities

- 1. Call the IMG activity.
- 2. Enter the file path.
- 3. Execute the program.

36.2.5.4.10.2 Delete "Preprocess. Proc. Subldgr Acct to SAP Subldgr Account" Assignment

You use this IMG activity to delete assignments of subledger accounts from the preprocessing procedure to vendor/customer accounts in the SAP system.

For more information, see the Program Documentation.

Activities

- 1. Call the IMG activity.
- 2. Choose the required selection criteria.
- 3. Execute the program.

36.2.5.4.10.3 Delete Help Data for Execution

You can use this IMG activity to delete help files for execution. For detailed information, see the Program documentation.

Activities

- 1. Call the IMG activity.
- 2. Choose the required selection criteria.
- 3. Execute the program.

36.2.5.5 Public-Owned Commercial Operations

You enter the settings for public-owned commercial operations in the following steps.

36.2.5.5.1 Enter Settings for the Taxation Procedure in FI

This hypertext is only relevant for German Local Authorities customers.

36.2.5.5.2 Maintain Global Settings

In this step you define the document type for the documents for input tax adjustment.

Requirements

The document type must be created in Financial Accounting Customizing under *Financial Accounting Global Settings -> Document -> Document Header -> Overview*. The document type must have the following characteristics:

- *Reversal document type* The reversal document type should retain the document type of the original document. Therefore do not enter a reversal document type or, otherwise, define the document type for public-owned commercial operations as reversal document.
- *Permitted account types* Only G/L account postings are allowed.

Activities

Enter the document type for correction documents.

36.2.5.5.3 Create Public-Owned Commercial Operations

You create the public-owned commercial operations (PCO) per FM area in this step.

In addition, you can define a cost center and an order for each PCO. These account assignments then appear when entering input tax corrections as default values and, if required, can be overwritten.

Activities

Enter the public-owned commercial operations per FM area.

36.2.5.5.4 Define Tax Code for Budget

This hypertext is only relevant for German Local Authorities customers.

36.2.5.5.5 Define Document Type for Transfer Postings

Use

In this IMG activity, you define the document types you want to use for transfer postings in public-owned commercial operations (PCO). You also have to enter the reversal document types for consistency.

Transfer postings such as clearing requests between PCOs can only be executed if you have defined the corresponding document types in these settings. You can only define document types that are allowed for fixed asset or G/L account postings for transfer postings.

If you use the document type for transfer postings in PCO to transfer one commitment item to another, the corresponding tax share is determined from the tax code and displayed. This is necessary because G/L or fixed asset transfer postings are made net with the same tax code in Financial Accounting provided that the posting stays in the same company code.

Requirements

You have selected or created the appropriate document types in Customizing of Financial Accounting under Define Document Type.

Activities

Select the appropriate document types for transfer postings in your PCOs and save your entries.

36.2.5.5.6 Assign FM Account Assignments to Public-Owned Commercial

Operations

In this step, you assign the FM account assignment to your public-owned commercial operation (PCO) a combination of FM area and fiscal year.

FM account assignments without assignments belong to the budget.

Note:

Do not assign the FM account assignments you have already assigned in the budget or which have already had postings made to them for your PCOs. Re-create the appropriate master data this applies to commitment items in this case.

Requirements

- The FM account assignments must be created in master data maintenance.
- The PCOs must be created in the step Create Public-Owned Commerical Operations.

Activities

Assign the FM account assignments to your public-owned commercial operation.

36.2.5.5.7 Activate Processes for Public-Owned Commercial Operations

This hypertext is only relevant for German Local Authorities customers.

36.2.5.5.8 Business Add-Ins (BAdIs) 36.2.5.5.8.1 BAdI: Derive CO Account Assignment for Correction Documents

You can use this Business Add-In (BAdI) to determine which CO account assignments should have a tax adjustment posted. This is especially easy if a 1:1 relationship exists between Funds Management and CO.

The BAdI is used in Funds Management for public-owned commercial operations (PCOs).

The following parameters are specified:

| I_FIPEX: | Commitment item |
|----------|-----------------|
| I_FISTL: | Funds center |
| I_FONDS: | Fund |
| C_SAKNR: | G/L account |
| C_KOSTL: | Cost center |
| C_AUFNR: | Order number |
| Example | |

Assuming, each subsection has its own cost center that has the same name as the subsection. The following derivation rule would then be possible:

 $C_KOSTL = I_FIPEX + OFS_UA(4).$

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- Enter the code for the implementation between the statements method <Interface name> ~
 <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.

8. Save the entries on the *Edit Implementation* screen.

Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.

9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.2.6 Actual and Commitment Update/Integration

In the following sections you find out:

- which system settings are required for updating commitment and actual data.
- how you can set the Funds Management integration to other SAP components according to your requirements.

36.2.6.1 General Settings

In the following steps, you process the settings you must enter so that actual and commitment data from the Funds Management feeder systems are recorded.

The essential control parameters for updating in Funds Management are summarized in update profiles pre-defined by SAP. You must select the update profile relevant to you and assign it to your FM area. You can override settings supplied in the standard per update profile.

36.2.6.1.1 Assign Update Profile to FM Area

In this step you define your update profile per FM area.

You make the following specifications in the existing update profiles:

- With which budget categories you want to work
- Payment budget
- Payment budget and commitment budget
- Which document date (such as purchase order, invoice, payment) is to be used when assigning commitment/actual data to a period in Funds Management, that is in which period the actual data is displayed in the information system for the payment budget and/or the commitment budget
- Update period from posting date/document date.
- Update period from due date

- Whether the commitments and budget are allowed to be carried forward at the fiscal year change and for which value types.

You can find more information on the specifications in the individual profiles in the "Funds Management Government" document in the "Update Profiles" section of the "Integration" chapter.

Activities

- 1. Check to see which update profile you want to work with in the "Funds Management Government" document.
- 2. Assign an update profile per FM area.

Further notes

- Line items in Funds Management are only recorded **online** if you specified a commitment item with financial transaction **30** as the additional account assignment when posting. Bank postings and check postings are, for example, **not recorded online**.
- Only when an invoice has been completely cleared in Financial Accounting can you use program **RFFMS200** in Funds Management to convert the invoice from the status invoice to the status payment. Depending on the update profile you have chosen, the cleared invoice is then displayed in the information system in the **Payments** column with either the invoice or the payment date.
- **Due date** The period in Funds Management is determined for updates with a due date for the following business transactions as follows:
- Purchase order: Delivery date and terms of payment
- Invoice: Payment baseline date and terms of payment
- Vendor credit memos: Payment baseline date without terms of payment
- Payment: Invoice clearing date The clearing date of the invoice is generally the posting date.

36.2.6.1.2 Override Update Profile

In this IMG activity, you can override the valid settings of an update profile in the standard system.

Override for a value type

You can individually specify for each update profile and value type, which document date should be called for the period assignment of commitment and actual data in Funds Management. This refers to the period in which the actual data in the Information system should be displayed for the payment budget and/or the commitment budget.

The update periods are determined by one of the following:

- Posting/Document date

- Due date
- Delivery date

In addition, you can specify for each value type that the update in Funds Management should only be statistical. This means that the posting is not subject to availability control and does not use any budget.

Note: A document statistically updated cannot refer to a document that was "really" updated. Ensure that the start of a document chain is flagged as statistical - for example, the purchase requisition or the funds reservation and fund precommitment.

Override for an FM area

You can stipulate for an update profile and FM area whether the updating of commitment data should take place on an annual basis or a periodic basis.

- Commitment update on annual basis

For the commitment update on a yearly basis, there is only **one** data record representing commitments in table FMIOI for each fiscal year and amount type (*Original, Reduction, Previous year carryforward commitments, Following year carryforward commitments, Change*). Changes to amounts or account assignments in the original document are not logged under amount type *Change*, but instead they overwrite the record for amount type *Original*. An existing reduction record is overwritten the same way as the commitments are reduced by a follow-on document.

The commitments are updated according to the chosen update profile or, if necessary, according to the chosen update date for the value types with the posting/document date, due date, or delivery date. Commitments that were carried forward into the new fiscal year using the commitment carryforward are displayed in the new fiscal year in period 0 under amount type *Following year carryforward commitments*. A data record under amount type *Change* is only generated for changes to a document that already exists, the amount type is overwritten again for further changes.

Restrictions: If you select the update of commitment on an annual basis, you cannot track document changes and as a result you are also unable to analyze the precise budget situation as it was previously. You are also unable to close posting periods, as they are still being posted to when changes are made to the original document, because changes are updated in Funds Management under the original update date.

Advantage: This type of update offers the advantage that the volume of documents is kept small.

- Commitments update on a periodic basis

Updating commitments on a periodic basis allows you to log all changes to documents and account assignments. For each change, an appropriate data record with the amount type *Change* is generated in table FMIOI. The changes, including those made to documents that have executed a year change, are updated under a configurable update date. Therefore you have a "historical" view in the Information system, which gives the precise point in time at which the budget was used.

Warning: If you want to set up the commitment update on a periodic basis, you need to be aware that it results in approximately three times the volume of data, as compared to the commitment update on an annual basis. Frequent changes to the amounts and the account assignments also increase this volume of data.

Requirements

If you want to set up commitments update on a periodic basis, you must use an update profile that updates the commitment value types under the posting date (for example, 101 or 102).

Standard settings

The commitment update is set up on an annual basis in all the update profiles in the standard delivery.

Exceptions to this rule are profiles 000300 and 000600, which SAP only releases for specific customer groups.

Note that you can change the commitment update from an annual basis to a periodic basis at any time. However, the opposite is not true. Once commitment data has been posted, a change from period-based to annual-based commitment update is no longer possible.

Activities

 Make the desired settings for an update profile and value type. When you save, the system displays a message if your entries are different from the configuration delivered as standard. Note: You should not make any changes to the settings after production startup, as this may

adversely affect the reliability of the data in the Information system.

2. Activate commitment update on a periodic basis for your FM area, if you need this type of update. Note: Make sure all posting periods/fiscal years are closed. Postings to closed periods are not possible. You must therefore open the required posting periods/fiscal years for posting for your FM areas. You can use either transaction *Individual processing of open intervals* (FMIR) or transaction *Mass processing of open intervals* (FMMI) to do so.

Further notes

Posting Integration with Cost and Project Controlling

If you have used the step Choose Business Transactions for Integration to activate posting integration for CO business transactions, the following settings must be active for the individual documents:

- Purchase order: *Delivery date*
- Invoice: Posting date
- Payment: Invoice posting date

Documentation

For further information on updating commitments, refer to the SAP library under SAP ERP Central Component -> Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Period-Based Encumbrance Tracking.

36.2.6.1.3 Make Other Settings

When you post business transactions to other components, such as Materials Management and Financial Accounting components, the system passes on the data to Funds Management (FM). The actual data is updated there and displayed in the information system.

In this IMG activity, you can define:

- When the goods receipt should be included in Funds Management
- The process by which tax should be displayed
- Whether the derivation of FM Account Assignments only occurs for real Controlling Objects or also for statistical Controlling objects.
- Which documents should be used for determining the Carryforward Level
- Which Currency Type is used for currency integration (see section "Define Currency Type for Currency Integration")
- Whether sales orders should be updated in FM Note the following:
- GR/IR Updating
- If you choose Goods Receipt, the actual data is displayed in *Invoice* column in the information system, per the goods receipt date.
 - If you work on payment basis (RFFMS200) and have chosen a corresponding update profile, you cannot set this indicator, you must choose either *MM Invoice Receipt* or *GR and IR for the GR/IR update.*
- If you choose Invoice Receipt, the actual data is displayed in the *Invoice* column in the information system, per the invoice receipt date.
- If you choose GR and IR, both the goods receipt and the invoice receipt are displayed in the *Invoice* column according to the period, however with the corresponding activity *Goods Receipt Purchase Order* (RMWE) and *Invoice Receipt* (RMRP).
 - Additional postings to expense accounts, such as price differences, are also included in the GR/IR updating.
- Tax Display
- If you choose *Net*, the information system on the commitment item shows no value added tax but only the net tax.
- If you choose *Gross*, the information system on the same commitment item shows, in addition to the line with the net amount, a further line with the corresponding tax amount.
- If you choose *Separate*, all the VAT amounts are updated in **their own** commitment item. **Precondition:** Create a commitment item for the input tax and another for the output tax (financial transaction 30 for both and item category 2 (revenues) or 3 (expenditures)) in the Funds Management menu and store them in the input/output tax account.

- Define Currency Type for Currency Integration

The local currency is not recalculated in the FM area currency when amounts are transferred from Financial Accounting to *Funds Management*. The currency of each company code assigned to the FM area must therefore match the FM area currency. If the first local currency (currency type 10 =

company code currency) of all company codes assigned to a FM area does not match the FM area currency, you have to use an additional local currency in these company codes. The additional local currencies must each have the same currency type and the same currency as the FM area currency. You create additional local currencies in the Customizing of *Financial Accounting* in IMG activity "Define Additional Local Currencies". Then you define the currency type in this IMG activity. **Examples**

- Company code 1: 1. local currency (currency type 10); currency EUR Company code 2: 1. local currency (currency type 10); currency EUR FM area: Currency EUR
 - You do not have to define any settings in this IMG activity because the FM area currency corresponds to the company code currency.
- Company code 1: 1. local currency (currency type 10); currency EUR Company code 1: 2. local currency (currency type 40); currency US\$
 - Company code 2: 1. local currency (currency type 10); currency US\$
 - FM area: Currency EUR
 - You have to define an additional local currency for **both** company codes.
 - Company code 1: 3. local currency (currency type 30); currency EUR Company code
 - 2: 2. local currency (currency type 30); currency EUR and
 - define currency type 30 in this IMG activity.

Requirements

If no automatic derivation of FM account assignments takes place from other components, then the prerequisite for including posting data from other components is that the fields for the additional account assignments *Commitment Item*, *Funds Center* and *Fund* and *Functional Area* are ready for input when posting transactions. This applies to all assigned activities in Financial Accounting and Materials Management (e.g. purchase orders, goods issue). You enter the required settings in the Customizing for *Financial Accounting* and *Materials Management*.

For more information:

- for postings in Financial Accounting, go to the Financial Accounting implementation guide (IMG) *Accounting Basic Settings* under Define Field Status Variants.
- for posting purchase requisitions and purchase orders which do not go to the warehouse, the IMG *Purchasing* under "Maintain Account Assignment Categories"
- for posting Goods Issues and Goods Receipts in the IMG for *Inventory Management* under "Specify Screen Layout".

Standard settings

If you do not enter any settings in this IMG activity, the system updates the posting data from the feeder components as follows:

- GR/IR updating: MM Invoice Receipt
- Goods issues: WA not relevant for budget
- Value-added Tax display: Gross Value-Added Tax
- Currency type for currency integration: 10 company code currency

- Sales orders: are updated

Activities

Read the documentation on the relevant IMG activity and define the settings you need.

Further notes

You should not change the settings for update control after production startup because this may negatively influence the data in the information system.

Integration Cost and Project Controlling

If you have activated the integration for the CO business transaction in IMG activity Choose Business Transactions for Integration, you can find more information on the effects of this on the update in Funds Management in the SAP Library under SAP ERP Central Component -> Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Integration Costs and Project Controlling.

36.2.6.2 Basic Settings

In the following steps you define the basic settings for the Funds Management line items.

36.2.6.2.1 FM Line Items

In the following steps, you:

- Define the number ranges for updating actual data documents in Funds Management
- Store the number range key in the FM area
- Delete the commitment data and the actual data

36.2.6.2.1.1 Define Number Ranges for Actual Transactions

In this step, you define number ranges in each FM area for the actual data documents in Funds Management.

For each number range, you specify the following:

- Number range key

You must store the number range key in the FM area, to which it is to apply. You do this in the step Assign number range to FM area below.

- Number range from which the document numbers are to be selected
- The type of number assignment (internal or external) The numbers are always assigned **internally** for Funds Management.

You can define as many number ranges as you want for each FM area. However, one number range is usually enough. If you define more than one number range, make sure that they do not overlap.

Activities

- 1. Specify the FM area for which you want to maintain number ranges.
- 2. Choose Interval ->Change.
- 3. Choose *Edit -> Add interval*.
- 4. In the dialog box, enter all the necessary information on the number range.
- 5. Save your input.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.6.2.1.2 Assign Number Range to FM Area

In this step, you store a number range interval for actual data documents for each FM area.

Requirements

You must first have defined at least a number range interval in the previous step.

Standard settings

In the standard system, there is **no** number range key assigned to the standard FM area 0001. You must, therefore, define and assign at least one number range interval.

Activities

Make your assignments.

Further notes

You can use the same number range key for different FM areas. Despite this, each FM area has its own number range, which is independently counted.

36.2.6.2.1.3 Delete Commitment Data and Actual Data

In this step, you can delete all commitment data and actual data in Funds Management (FM) using program RFFMDLFM. Both line items and totals records are deleted.

The program does not allow individual documents to selected, instead it deletes all data for an FM area.

Note: You should only use this program to delete data in the test system. In the production system, you must use transaction **SARA** with which you can archive or delete commitment/actual line items and, if required, reload them into the production system.

Activities

Delete the commitment data and actual data for the appropriate FM area.

Further notes

For further information refer to the program documentation.

36.2.6.3 Integration

In the following sections you find out which system settings are required for integrated use of Funds Management with other components of the SAP System.

36.2.6.3.1 Define Settings for Payment Transfer

Use

In this IMG activity, you define the settings for payment transfer. Depending on the system requirements, this activity can have different entries:

If the enhanced or original function of the payment conversion were already active, the existing possible entries remain.

If *no* payment conversion was active in the system until now, you can only activate the online conversion of payments.

Activation of payment matching

New customers can only activate the online update of payments. Existing customers keep the most recent activated version of payment conversions automatically.

In the standard system, a check to see whether the invoice and payment are in the same year takes place with the payment conversion. You can deactivate this check if necessary. Note that the check on whether they have the same fiscal year with the payment selection can only be deactivated if you do not want to carry out fiscal year change operations. Otherwise inconsistencies in the update may occur.

Activation of online payment update

The online payment update requires the use of the new general ledger and suitable Customizing for document splitting. You make your settings in the relevant IMG activity by choosing *Financial Accounting (new) -> General Ledger Accounting (new)-> Business Transactions -> Document Splitting.* Here you can use the standard splitting procedure 0000000012 as a basis.

You must also define the fields KNBELNR and VOBELNR as document splitting characteristics of the general ledger.

The corresponding path in IMG is as follows: Financial Accounting (new) -> General Ledger Accounting (new) -> Business Transactions -> Document Splitting -> Define Document Splitting Characteristics for General Ledger Accounting.

For payments without invoice reference, you must define the constant AKONT in the Customizing for document splitting for nonassigned processes and assign the corresponding Funds Management account assignments.

The corresponding path in IMG is: Financial Accounting (new) -> Business Transactions ->Document Splitting -> Edit Constants for Nonassigned Processes.

Define a business transaction variant in the document splitting that assigns the defined constant to an account with the business transaction payment to the customers or vendors and cash account lines. You can use the delivered business transaction variant payment as a template for this and copy this to your own variant. Adjust this business transaction variant accordingly.

Define a document type and assign this business transaction variant to the document type. This document type must be used for payments without invoice reference.

Transfer postings in the document splitting must be processed using the business transaction variant 1010 / 0001 (clearing transaction).

Activation of payment matching

If you activate the payment matching, you can execute the program for payment matching at document level (RFFMRC07).

You can use this program to compare account movement in bank and bank clearing accounts of Financial Accounting with Funds Management data.

Note that you cannot use payment matching if you are using the original payment selection function.

Payments without invoice reference

In order to create a reliable data basis for these evaluations (payment matching), you must transfer the payments without reference to Funds Management (FM) during payment selection (RFFMS200). So that these postings can be transferred, you have to activate the update of payments on account from Financial Accounting (FI) and, if necessary, from Contract Accounting.

Note that it only makes sense to update payments without invoice reference if payment matching is active.

ActivateSplitting Procedure

If you activate the splitting procedure, the partial payment of an invoice that is distributed between a number of account assignments is updated in Funds Management in proportion to the invoice amounts.

ActivateUpdate Check-/Bank Clearing

If you activate the update check-/bank clearing:

- Payments made via a bank or check clearing account controlled by a commitment item with **financial transaction 80** are documented in Funds Management.
- The status for down payments is converted

Control of Parallel Processing

You can distribute the processing of payment selection between a number of dialog processes in order to reduce the overall runtime of the program execution.

Other Documents

You can define that expense transfer postings are also evaluated during payment matching.

Requirements

You must have assigned an update profile to your FM area in which it is defined that the update is carried out on a payment basis. You do this in the step Assign Update Profile to FM Area.

Activities

Define the relevant settings for an FM area.

Further notes

You can find more information on payment matching and payment transfer in the SAP library under Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Integration Financial Accounting.

36.2.6.3.2 Maintain Field Status for Assigning FM Account Assignments

In order for data from other components to be updated in Funds Management, you must specify the Funds Management account assignment elements when making a posting to another component (additional account assignment).

You can include the account assignment elements by making fixed assignments of account assignments to assignment objects in other components (for example: commitment item to G/L account, commitment item to cost element). The effect of this is that you do not have to enter the FM account assignment manually when you make a posting; the system can derive it from the assignment of the account assignment object.

It is not possible to make assign fixed account assignments for plant maintenance orders, SD order items, network headers or network activities. You can maintain the field status for the FM account assignment.

In addition, you can define the field status of the FM account assignment elements for the object types purchase requisitions and purchase orders that are not assigned to an account. No assigned to an account means here that no account assignment category was specified during budget entry.

The field status determines which fields are ready for entry as an additional account assignment, must be filled or hidden, for example, when you post a SD order item. Note that it is only possible to enter a FM account assignment element and therefore update data in Funds Management if the respective fields are ready for entry.

Standard settings

The field status is only an optional entry in the transations ME2*N and ME5*N for purchase requisition and purchase order without account assignments. All fields in the item screen on the tab page *account assignment* are ready for entry in the processing transaction if Funds Management is active.
No field status is maintained for all other object types.

Example

- Integration with Plant Maintenance

You want to integrate the plant maintenance processes with Funds Management. To this end, you stipulate that the commitment item, funds center, and fund for an FM area and for object type **03** will accept input. When you create a maintenance order, you can enter the FM account assignments by choosing *Extras -> Assignments -> Funds Management*.

- Integration with Sales and Distribution(SD)

You want to integrate Sales and Distribution with Funds Management. To this end, you stipulate that the commitment item, funds center, and fund for an FM area and object type **04** will accept input. When you enter an SD order item, you can then enter the account assignment by choosing *Item -> Account Assignment -> FM Account Assignment*.

- Integrating Project System (Networks)

You want to integrate the **Project System** component with Funds Management. If you assign networks to an account in the network header, you specify that the commitment item, the funds center and, if required, the fund are ready for input for an FM area and object type **05**. When creating a network, you can enter FM account assignments by choosing *Assignments* -> *Funds Management*.

If you want to assign networks to an account for specific activities, you specify that the commitment item, the funds center and, if necessary, the fund accept input for an FM area and object type **06**. You can then enter the FM account assignments within the activity by choosing *Assignments -> Funds Management*.

Recommendation

If you want to integrate Plant Maintenance, Sales and Distribution or Project System with Funds Management, flag funds center and, if necessary, fund as required entry fields. Account Assignment Derivation can be used to derive the commitment item either from the G/L account or the cost element for automatically generated purchase requisitions, material reservations, goods issues or revenue postings.

Activities

- 1. Enter the required object type for each FM area.
- 2. Choose *New entries* and define the field status for the FM account assignment elements.

Further notes

For more information on integrating Plant Maintenance, Sales and Distribution and Project System, see the SAP Library Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Integration with Plant Maintenance, Integration with Sales and Distribution and Integration with Project System (Network).

36.2.6.3.3 Configure Automatic Clearing of Down Payments/Down Payment Requests

Use

Use this step to configure automatic clearing of down payments and down payment requests. In doing so, you make the following selections:

- Whether you want to update a down payment request (DPR) to the purchase order history. If you decide to do this and create a down payment referencing that DPR, the DPR is automatically cleared.
- Where you want to clear a down payment automatically when a goods receipt or invoice receipt is created and references it.

Activities

In the maintenance view, set the DPR clearing flag and/or the down payment clearing flag for each company code where you want this feature to be active.

36.2.6.3.4 Integration with Cost and Project Controlling

In the following steps, you make the settings for the integration of Cost and Project Controlling with Funds Management.

These include specifying which Controlling business transactions are to be reflected in Funds Management and which ones are not.

36.2.6.3.4.1 Define Number Ranges for Posting Integration with Controlling

In this step, you create, per FM area, the number ranges for the actual data documents in Funds Management which are created due to Controlling business transactions.

Enter the following for each number range:

- Number range key
- Number range interval from which the document numbers are to be selected
- Type of number assignment (internal or external) The numbers are always assigned internally for Funds Management.

You can define as many intervals as you like for each FM area. Setting just one interval is, however, sufficient. If you define several intervals for each FM area, you must make sure that the number intervals do not overlap.

Activities

1. Enter the FM area for which you want to maintain the number ranges.

- 2. Choose Interval -> Change.
- 3. Choose *Edit -> Insert interval.*
- 4. Enter all the necessary information on the number range in the dialog box.
- 5. Save your entries afterwards.

Further notes

You can transport number range objects in the following way:

Choose "Interval - Transport" on the initial screen.

Note that all the intervals from the selected number range object are deleted first in the target system so that only the exported intervals exist after the import. The number levels are imported using the value which you have at the time of the export.

Dependent tables are not transported or converted.

36.2.6.3.4.2 Choose Business Transactions for Integration

In this IMG activity, you select the Controlling business transactions for a FM area which are to be reflected in Funds Management.

Requirements

Integration of indirect activity allocation (activity RKIL) is only possible if you have not made any settings in the IMG activity Activate Account Assignment Elements. Neither the fund or the functional area or grant can be activated.

Activities

Select those business transactions which are relevant to you for each FM area. If you choose "All transactions", posting integration is carried out for all business transactions which you can call up via *F4*.

Note that the selected business transactions can only be reconstructed in Funds Management if you have activated the integration in the step Activate Integration Costs and Project Controlling.

Further notes

For further information on the integration of Cost and Project Controlling with Funds Management, see the SAP Library under SAP ERP Central Component -> Accounting ->

Public Sector Management -> Funds Management -> Actual and Commitment Update -> Integration of Cost and Project Controlling.

36.2.6.3.4.3 Activate Integration Costs and Project Controlling

Use

In this IMG activity, you activate the integration between Controlling and Funds Management.

Note that after the activation the only business transactions reconstructed in Funds Management are those that you chose in the IMG activity Select Business Transactions for Integration.

In addition, only the postings to CO objects with a company code assigned to a FM in the IMG activity Assign Company Code to Controlling Area are taken into account.

Requirements

- The controlling areas relevant for your organization must be assigned to CO object and cost element.

Set the derivation rules in such a way that the funds center and commitment item have to be derived from the CO object and cost element in the IMG activity Define Account Assignment Derivation.

By specifying *Transfer New Value When the New Value is Entered* for the target fields *Funds center* and *Commitment item*.

This ensures that no other funds center or commitment item can be assigned through a manual entry that is different to what the derivation logic would derive.

- The funds center and commitment item can only be assigned (manually) in Funds Management itself.

The funds center and commitment item should, therefore, be hidden on the posting screens of Financial Accounting and Material Management or should not be ready for input. You can set this in the Customizing of Financial Accounting by hiding the fields in the field status control. The system hides these fields in the HR screens.

- Currency Type for Currency Integration

If currency type 10 = company code currency is not defined for currency integration in the IMG activity Define Other Settings, the currency types of the controlling area must correspond to the currency type defined there.

36.2.6.3.4.4 Set Checks for CO Plan Version

Use

In this IMG activity, you can set the checks for planning functions in Controlling.

If you use Controlling integrated with Funds Management, a check takes place on each period for the derivation of FM account assignment elements.

To improve performance, you can define how the derivation of account assignment elements and a check should occur for each plan version.

- Unrestricted Check
- Only first period of planning horizon

- No check

Standard settings

In the standard system, the system checks the derivation of the account assignment elements completely.

Activities

Note that you are not allowed to change this setting if you use the scenario Fund Accounting.

If you use *Fund Accounting*, the planning must take place at the level of account assignment elements fund, functional area and (if required) grant in Controlling; this means that an existence check on the account assignment elements is necessary. As the account assignment elements funds center and commitment item cannot be entered in the planning functions, a check for the derivation of funds center and commitment item must also be carried out with planning. You can only switch off the checks for the test version with active *Fund Accounting*.

36.2.6.3.4.5 Delete Internal Documents of Controlling in Funds Management

In this step, you can use the RFFMDLCU program to delete the internal controlling postings in Fund Management which were updated in Funds Management. You can delete line items as well as totals records.

The program does not allow the selection of individual documents, but deletes all data of a Company code. In addition, you can make other restrictions for the fiscal year and individual periods.

Note:

You should only use this program in the test phase and prior to production startup.

Activities

- 1. Specify to which extent data in Funds Management is to be deleted.
- 2. Specify whether the system is to output an overview of the data that is to be deleted in the actual selection in a test run.
- 3. If necessary, request the statistics of the deleted data.

36.2.6.3.4.6 Business Add-Ins (BAdIs) for Cost and Project Controlling

36.2.6.3.4.6.1 BAdI: Override Check Mode in FM for CO Planning

Use

If you use Controlling (CO) integrated with Funds Management (FM), a check takes place on each period for the derivation of FM account assignment elements.

To improve performance, you can define in Set Checks for CO Plan Version how the derivation of account assignment elements and a check should occur for each plan version. This CHECK_MODE can be defined as:

- Unrestricted check
- Only first period of planning horizon
- No check

Currently, the CHECK_MODE can be defined per controlling area and is only performed for planning transactions.

This Businsss Add-In (BAdI) allows you to override the value of the CHECK_MODE based on the current CO business transaction (CO_VORGANG).

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.2.6.3.5 Integration with Human Resources (HR)

If you integrate Funds Management and HR (Human Resources), you can assign HR expenditures - HR commitments and payroll expenditures - specifically to the individual areas that are responsible in Funds Management. Depending on the tasks of an employee, a number of assignments can be made to the expenditures account assignments in Funds Management.

The creation of commitment for personnel is carried out using the commitment process of component *Position Budgeting and Control* (PA-PM-PB). This commitment is then reduced successively by payroll postings.

If you do not use the commitment processor, no personnel commitment is generated in Funds Management. The assignment of personnel expense takes place with payroll execution.

There are 2 possible scenarios for the integration of HR with Funds Management. You can choose either of these scenarios for each company code.

The commitment creation can be combined with both scenarios. The difference between the scenarios lies in how the account assignments for Funds Management (funds center, fund, functional area, grant) are determined with the business transactions in HR.

- Scenario 1

The assignment of personnel expense occurs from the CO integration (assignment of FM account assignments to CO account assignments) or from other assignments (for example, commitment item is derived from G/L account). If you want to use this scenario, you must **not** define any settings in the following steps.

- Scenario 2

The assignment of personnel expense takes place from the master data or the master data of Organizational Management.

If you want to use this scenario, you must define from which date the funds center must be assigned to an account in step Define Start Date for HR Integration (Scenario 2).

Note

For more information on the individual scenarios, see the SAP Library under Accounting -> Financial Accounting -> Funds Management -> Actual and Commitment Update -> Integration Human Resources Management. You should read this documentation before choosing one of the scenarios.

36.2.6.3.5.1 Define Start Date for HR Integration (Scenario 2)

In this IMG activity, you define when you want to integrate Funds Management with Human Resources (HR) for a company code.

Note that this setting is only necessary if you want to integrate using scenario 2.

You can find more information on the different scenarios in the SAP Library under SAP ERP Central Component -> Accounting -> Public Sector Management -> Funds Management -> Actual and Commitment Update -> Integration Human Resources Management -> Integration Human Resources Management Account Assignment Determination.

By defining funds centers, HR expenditures (payroll costs) are assigned specifically to the individual areas of responsibility in Funds Management. The HR expenditures are assigned by means of employees' master data and, if necessary, by means of Organizational Management master data (when using component *Organizational Management*).

Once you have set the integration date, you *must* specify the FM account assignment objects (funds center and, if required, fund), when creating or changing existing HR master records for all infotypes used (0001, 0027, 1018 (Organizational Management), 0014, 0015, 2001, 2002, 2003, 2005, 2010). For infotypes that have an individual cost assignment, you can also specify a commitment item.

Note

If you have been using HR for a long time, the infotypes of the existing HR master records are not automatically provided with an FM account assignment. As a result, you cannot execute payroll, as no funds center will be found during the settlement run.

You must therefore define the FM account assignment objects for the infotypes from the entered date in the HR master records.

If you want to use scenario 1 and the FM account assignments for postings by the system are derived either from the CO account assignments or other account assignments, you should enter **no date** for integration. In this case, the HR expenditures are updated in Funds Management, as of the date on which Funds Management is activated.

Requirements

If, during integration, you want to divide up single salary elements individually, you must ensure that, in the Customizing of Human Resources, the FM account assignments are ready for input for the entry of account assignment default values in these infotypes.

- For infotypes *Recurring payments and deductions/additional payment* (0014/0015), you make these settings in the Customizing of *Personnel Administration*. For more information on this topic, see the *Personnel Administration* IMG under: *Interfaces and Integration -> Integration with Accounting -> Entering Funds Management Data*.
- For infotypes 2001, 2002, 2003, 2004, 2005 and 2010, you make these settings in the Customizing of *Personnel Time Management*.
 For more information on this topic, see the *Personnel Time Management* IMG under *Integrating Time Management with Other SAP Applications -> Recording Cost Assignment Specifications*.

Note: Infotype Cost Distribution (0027)

If you want to use infotype 0027 to assign various funds centers/funds to employees, these fields are automatically ready for input as soon as the start of integration has been determined and you use screen **2500**. For more information, see the *Personnel Administration* IMG under *Customizing User Interfaces -> Determine Screen Control for Cost Distribution*.

Activities

Enter the required data for each company code.

ADDITIONAL_HINTS&

In this IMG activity, you only define the date from which the funds centers must be assigned to an account. If you use account assignment elements grant, fund, functional area or funded program, you must enter the date from when these account assignment elements should be assigned when activating the account assignment elements in IMG activity Activate Account Assignment Elements.

36.2.6.3.5.2 Position Budgeting and Control

36.2.6.3.5.2.1 Define Document Type for Earmarked Funds

In this IMG activity, you define a document type for each of your funds precommitments, funds commitments and, if necessary, funds blocks in an FM area.

You need this assignment if you use Funds Management integrated with the component *Position Budgeting and Control* (PA-PM-PB) or *Position Management* (PA-PM-FP).

The document type controls:

- That funds precommitments are generated automatically to finance planned positions of Position Budgeting and Control or Position Management in Funds Management.
- That funds commitments are generated automatically to finance personnel in Position Management or Position Budgeting and Control; these automatically reduce the funds precommitments.
- That funds blocks are generated automatically for the lock rules set in Position Management or Position Budgeting and Control.

Standard settings

The document types defined in the standard system cover the types of document used for

individual business transactions in Funds Management.

Activities

- 1. SAP recommends that you create separate document types with their own number range for Position Management or Position Budgeting and Control in the IMG activity "Choose Document Types ". In this way, you can prevent manual changes to the documents using authorizations and identify these document types during the fiscal year change operations.
- 2. Enter one document type for funds precommitments, one for funds commitments and, if necessary, one for funds block.

36.2.6.3.5.2.2 Define Automatic Budget Postings for Personnel Cost Savings

Use

In this IMG activity, you can define settings for the generation of budget postings with personnel cost savings.

If earmarked funds documents in Position Budgeting and Control have changes that affect the budget, the budget that becomes available can be consumed by other commitments if these settings are not set. These settings ensure that a certain percentage of the budget made available through the personnel cost savings is automatically posted to one or more budget account assignments that you have defined.

Requirements

The Budget Control System (BCS) is set up and activated.

Standard settings

In the standard system, the budget released through changes to earmarked funds documents is then available for general consumption.

Activities

Define the following settings:

- Activate the automatic budget postings (ABP) for personnel cost savings for your FM area and the corresponding fiscal year.
- Define the document header attributes for the budget documents to be generated.
- Create a derivation strategy for the derivation of document line attributes of budget documents, maintain the derivation steps and assign the derivation strategy to the FM area and fiscal year.

To create a suitable **derivation strategy**, you must fill the target fields of the derivation

strategy in accordance with the source fields:

- Determine whether the respective transaction (target field **BUDGET_RELEVANT**) is relevant for the generation of automatic budget documents.
- Define whether a sender line (target field **SENDER_DATA**) should be generated, in other words, whether the budget document has the structure of a transfer posting.
- Define the budget type for receiver and, if necessary, sender lines (target fields **RBUDTYPE** and **SBUDTYPE**) and fill the target fields for the budget account assignments.

To be able to **define a derivation strategy**, you can choose the relevant source fields from the input help. You can use the following step types to fill the target fields:

- Derivation rules
- Table Access
- Assignment
- Clear
- Function modules

If you only want to repost part of the budget made available from the transaction, you must fill target field *Percentage*. If you want to generate more than one or pair of sender and receiver document lines, you must differentiate the relevant document line attrributes using the source fields NUMBER.

36.2.6.3.6 Integration Materials Management

36.2.6.3.6.1 Contracts

36.2.6.3.6.1.1 Define Integration Scenarios

Use

This organizational IMG activity describes how you specify that earmarked funds can be created from contracts in Funds Management.

At the moment, you can only use the document category *Funds Reservation*. Other funds reservation document categories are not supported.

Requirements

In IMG activity Define Company Code Group, you have created one or more company code groups in accordance with your requirements.

In IMG activity Assign Company Code to a Company Code Group, you have assigned the relevant company codes to the corresponding company code groups.

If you want your own number range interval to be used for the funds reservations created from contracts, you must define your own document type in IMG activity Define Document Types. This also applies when there is no suitable document type for funds reservations.

If you want to use a special blocking reason, define a blocking reason in IMG activity Define Blocking Reasons that is reserved **only** for funds reservations generated from contracts.

Note

To use the integration scenarios, in Customizing for Materials Management (MM) in the IMG activity Define Document Types, you need to select the *CP Active* field (*Commitment Plan Active*) for all the required document types.

If this field is no longer visible, check that the *Funds Management (PSM-FM)* field has been selected in the IMG for Funds Management in the IMG activity Activate Global Funds Management Functions (PSM-FM)

Activities

You define the required Customizing settings in IMG activityMaintain Data for Integration Scenario.

To do this, proceed as follows:

- 1. Assign the document type *funds reservation* to the scenario contract integration (without scenario variant).
- 2. For each company code group you need, assign the following:
 - a document type for funds reservations

It is advisable to define a new document type beforehand and set up your own number range interval so that these documents are easier to distinguish from other earmarked funds documents.

- a blocking reason

We advise that you define a blocking reason to prevent documents being processed manually. This prevents inconsistencies from arising.

36.2.6.3.7 Business Add-Ins (BAdIs)

36.2.6.3.7.1 BAdI: Define Expiry Month

Use

You use this Business Add-In (BAdI) to define an expiry month for the end of a fiscal year. You define the expiry month as a date with the format YYYYMMDD (year, month, day).

This achieves the following:

The system still updates all payments that refer to invoices from the old fiscal year and that were posted from the beginning of the fiscal year up to the date you defined in in the old fiscal year in Funds Management (FM). You should also define the date by which the payments should be updated in this BAdI.

Requirements

The payment selection is active in the Customizing of Funds Management .

For more information on this, see the Implementation Guide (IMG) *Funds Management* under Define Settings for Payment Transfer.

Standard settings

The Business Add-In is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.

- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

Example

In order to display coding examples, choose Go To -> Code Example -> Display

See also:

Methods Define Expiry Period

36.2.6.3.7.2 BAdI: Update Target/Actual

Use

You can use this Business Add-In (BAdI) to influence the update of FI documents in the component *Funds Management (PSM-FM)*.

Standard settings

This Business Add-In is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.

- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*.

When the application program is executed, the system carries out the code in the method you wrote.

See also:

Methods

Define Data Summarization for FMIFIIT/FMIT

Account Determination for Payment Without Clearing

Fill Customer-Specific Field: FI Documents

CFLEV Set CFLEV : Yes or No

36.2.6.3.7.3 BAdl: Field Status for FM Account Assignment for Orders

Use

SAP provides the BAdI definition FM_ONLINE_ASSIGNMENT and methods that enable further customizing of field status for the FM objetcs used in the online order assignments (Sales Distribution, Plant Maintenance, Network, and Network Activity). For each order type you must create an implementation using the following predefined methods:

- Method GET_FIELD_STATUS_SD Order type Sales Distribution
- Method GET_FIELD_STATUS_PM Order Type Plant Maintenance
- Method GET_FIELD_STATUS_NP Order Type Network
- Method GET_FIELD_STATUS_NV Order Type Network Activity

SAP provides the BAdI definition FM_ONLINE_ASSIGNMENT and the following methods that enable to copy aditional values from the online order (Sales Distribution, Plant Maintenance, Network, and Network Activity) to be used in the determination of the default FM Account Assignment:

- Method SD_DATA_COPY_TO_COBL - Copy SD Order Data to the structure COBL

- Method PM_DATA_COPY_TO_COBL Copy PM Order Data to the structure COBL
- Method NP_DATA_COPY_TO_COBL Copy NP Order Data to the structure COBL
- Method NV_DATA_COPY_TO_COBL Copy NV Order Data to the structure COBL

Requirements

The FM integration to online orders must be active.

Standard settings

We do not deliver any standard settings.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.2.6.3.7.4 BAdI: Fill Customer Field

Use

The field USERDIM (customer field for FM actual and commitment data) in the table FMIFIIT is available to you, but it is not used by SAP. It is a key field in the update tables of Funds Management. You can, for example, use the field as an additional account assignment element along with the commitment item, funds center and fund.

Activities

You can use this BAdI to set the field USERDIM in the payment records created.

With input parameter I_F_FMIFIIT, you receive all information that is updated in Funds Management per line item.

Note that this field is a key field in the line items and totals records. Each new value in this field creates its own entry in the totals item. A very large number of totals items can have a negative affect on system performance.

36.2.6.3.7.5 BAdI: FI Updates in Funds Management

Use

You can use this Business Add-In (BAdI) to adapt the actual update to customer requirements. The following methods are used:

- FMRI_BADI_1: Value Type Determination for 30-30 Postings
- FMRI_BADI_2: Ledger-Dependent Statistics Update
- FMRI_BADI_3: Fill Field FMVOR
- FMRI_BADI_4: Determine Due Date
- FMRI_BADI_5: Account Assignment Derivation After Reassignment
- FMRI_BADI_6: Update Date for Reduction Records of Parked Documents
- FMRI_BDAI_7: Principle of Prudence
- FMRI_BDAI_8: Due Date for Reversal
- FMRI_BDAI_9: Modify Year of Cash Effectivity
- FMRI_BADI_10: Tax Split in FM with Active FI Doc. Splitting
- FMRI_BADI_11: Suppresses Bank Clearing Online
- FMRI_BADI_12: Specify Reversal Document for Subsequent Posting
- FMRI_BADI_13: MM documents with multiple FI documents
- FMRI_BADI_15: Derive Financial Transaction for Consignment Postings

- FMRI_BADI_16: Update Date for Changed Parked Documents
- FMRI_BADI_17: Updating Control for Account Maintenance (MR11)
- FMRI_BADI_18: Adjust Invoice Reference for Carryforward Level
- FMRI_BADI_19: Determine Default Funds Center for Tax Item
- FMRI_BADI_20: Set the field FMIFIIT-PAYFLG
- FMRI_BADI_90: Activation of Summary Update

Documentation with a more detailed description of the parameters is available for each method. The documentation gives an exact description of the parameters.

36.2.6.3.7.6 BAdI: Control Postings Using Master Data Attributes

Use

Use this Business Add-In (BAdI) to perform additional validations in the posting process into Funds Management (FM). It is foreseen that additional authorization checks are carried out depending on master data attributes such as a fund or funds center status. With this BAdI, you can set up the rules governing the nature and severity of messages when checking specific postings.

The rules use source fields selected from the following:

- Fund
- Funds center
- Commitment item
- Funded program
- Grant
- User
- Fund's status
- Fund type
- GL account
- Commitment item
- Message variables
- Amount type

- Value type

The target fields for the rules are selected from the following:

- Message class
- Message severity
- Message number

Activities

- 1. Select the Create icon.
- In the dialog box, enter a name (Z_ABC_123) for the BAdI implementation in the Implementation Name field and press Enter. The screen for changing the BAdI implementations is now displayed.
- 3. Enter a short text for the implementation in the Implementation Short text field.
- 4. Choose the Interface tab.
 - You can implement check rules as ABAP code, but implementation with the formula builder as described below is usually easier.
- 5. Change the Implementation Type to Formula.
- 6. Save your entries, and assign the implementation package to a customer development class
- 7. Provide transport information.
- 8. Use the developer's key to proceed and save.
- 9. Double click the method name to enter method processing.
- 10. Choose the "Create Condition" icon.
- 11. Enter a name for the first rule and press Enter.
- 12. Change the "Show Me" fields to Parameters Controlling Postings with Master Data Attributes
- 13. Create the first rule # (Condition 1) and (Condition 2).
 - a) Expand the subtree.
 - b) Double click "True".
 - c) Select "Create Exception"
 Enter the message number, message class, and message type. If you enter message type
 "Warning" or "Error" and leave the other fields empty, a default message of the specified type is issued.
- 14. Repeat the above process for any additional rules and conditions.
- 15. Choose Activate for this implementation. The code you stored in the method will be run when the application program is executed.

Further notes

This BAdI can also be implemented with ABAP code. If there is the need to check authorizations for a given user under specific conditions for certain master data attributes, an authorization object should be created and evaluated at this calling point. SAP recommends the use of customer authorization objects to perform any detailed role-user dependent controls.

In previous releases, tables FMUSERGROUP and FMGROUP supported a grouping of users for specific checks within this BAdI. Although this functionality could still be used, the use of authorization objects is preferred and recommended.

36.2.6.4 Internal Data Transfer to Funds Management

The following sections explain how you can automatically transfer postings relevant to Funds Management (FM) into FM at a later stage if you are implementing FM after you have implemented other components.

A prerequisite for the data transfer is that the documents have a complete FM account assignment.

In the following steps you can:

- Supplement documents with incomplete FM account assignments Transfer documents from the following components:
- Financial Accounting
- Materials Management
- Sales and Distribution
- Controlling

In addition, you can reconstruct the actual data in Funds Management based on the earmarked funds and funds transfer documents.

36.2.6.4.1 Supplementary Account Assignment

The following steps illustrate how you can enter account assignments for components which do not have a complete FM account assignment. You can have the system copy documents with a supplementary account assignment into Funds Management.

36.2.6.4.1.1 Select Documents

In this step you can select documents, based on particular selection criteria, for which you want to provide a supplementary account assignment within a specific company code. The documents selected are

displayed in a worklist. You can provide the documents with a supplementary account assignment in an additional step by converting the worklist.

The program provides documents from other components that you want to transfer to Funds Management (FM) with a complete FM account assignment (commitment item, funds center and,

if necessary, fund and functional area).

The FM account assignment is determined by the system from the valid FM account assignment derivation. For example, the commitment item is either derived from the assignment to the G/L account or from the assignment to a CO object or cost element. For more information on account assignment derivation, refer to the *Account Assignment Derivation* section of the *Funds Management Government* documentation. This program does not provide cash discount lines with account assignments.

Requirements

The system must be able to derive a complete FM account assignment from existing data. In order to ensure this, you can do one of the following:

- Adjust your account assignment derivation accordingly
- Program your own account assignment derivation in enhancement SAPLFMCH (component EXIT_SAPLFMCH_001, development class FMFS).
- Specify a default account assignment for the account assignment elements of Funds Management for the program run. These default account assignments must first be created in the master data maintenance in FM.

Note that the default account assignment can only be transferred if the program cannot determine the FM account assignment elements from the account assignment derivation or the enhancement.

Recommendation

You can only provide documents with supplementary account assignments if no FM documents exist on the basis of postings in other components.

Therefore only provide documents with supplementary account assignments if you are implementing FM after other components and want to post the documents which already exist there.

If FM is already active and FM documents already exist, you have to first of all delete these documents before you can provide documents from other components with supplementary account assignments for posting purposes.

Activities

- 1. Make sure that FM has been activated. See also "Activate/Deactivate Funds Management".
- 2. Start supplementary account assignment as required.

Note

Note that the FM account assignments are adjusted by the system in certain tables when supplementing account assignments:

- EKPO (e. g. purchase orders not assigned to an account)
- EKKN (e. g. purchase orders assigned to an account)
- BSEG, BSIK, BSAK, BSID, BSAD line item table of Financial Accounting and the
- index tables for vendors and customers
- KBLK, KBPL (e. g. earmarked funds, funds reservations and funds precommitments)
- EBAN e. g. (purchase requisitions not assigned to an account)
- EBKN e.g. (purchase requisitions assigned to an account)

If you want to reassign documents for fiscal year change operations which are not saved in these tables (for example, from other systems), you should first test whether the system executes the reassignment. If the reassignment is not executed, you must set up a corresponding project.

36.2.6.4.1.2 Convert Worklist

In this section you add account assignments to the documents contained in the work list for an FM area. The documents to which an account assignment is added are displayed in a list which shows the original account assignment and the changed account assignment for each document.

With each program run, the system assigns a run number. You can use this run number as a selection criterion for selective deletion or selective display of the work list.

Requirements

You must first have selected the documents to which you want to add an account assignment. For this, see "Select documents".

Recommendation

To achieve good system performance, you should deselect *Change documents* and *Block documents* for a large volume of documents.

Activities

- Start conversion of the work list according to your requirements. Do not select *Adjust assigned values*. This control parameters for availability control are not taken into account during supplementary account assignment since there are not yet any assigned values in Funds Management (FM).
- 2. When an account assignment has been added to all documents relevant to FM, you can post the documents.

36.2.6.4.1.3 Display Worklist

In this section, you can display the worklist for a specific FM area based on particular selection criteria, for example, according to reference document category or number.

If no data was deleted from the worklist, the worklist contains all the information on the supplementary account assignment:

- The history of the documents already provided with a supplementary account assignment

The system assigns a run number during each program run for converting the work list. You can use this number as a selection criterion when displaying the work list.

- The documents already selected which are still to be converted

You can display these documents by starting the program without specifying a run number.

Activities

- 1. Choose A (supplementary account assignment) as the reassignment category.
- 2. Run the program as required.

36.2.6.4.1.4 Delete Worklist

In this section, you can delete the data from the work list for a specific FM area based on particular selection criteria, such as by reference document category or number.

If no data was deleted from the work list, the work list contains all the information on the supplementary account assignment:

- The history of the documents already provided with a supplementary account assignment

The system assigns a run number during each program run for converting the work list. You can use this number as a selection criterion when deleting the work list.

- The documents already selected which are still to be converted

You can delete these documents from the work list by starting the program without specifying a run number.

Activities

- 1. Choose A (supplementary account assignment) as the reassignment category.
- 2. Run the program as required.

36.2.6.4.2 Subsequent Posting

This section explains:

- How you can automatically and subsequently copy postings that are relevant for Funds Management to the Funds Management component, if you implement FM after other components.
- How you can subsequently post documents that you post in Funds Management (Earmarked Funds and funds transfers).

36.2.6.4.2.1 Post Purchase Requisitions

In this step, you can reconstruct the commitment data in Funds Management (FM) on the basis of the purchase requisitions from Materials Management (MM).

You can use this program to correct documents that have been carried forward to the new fiscal year or if you activated Period-Based Encumbrance Tracking (PBET).

Activities

- 1. Start reconstruction in test mode.
- 2. If inconsistencies are found, run the program again in live mode.

Further notes

For more information, see the documentation for program RFFMRP34N.

36.2.6.4.2.2 Post Purchase Orders

In this step, you can reconstruct the commitment data in Funds Management (FM) on the basis of the purchase orders from Materials Management (MM).

You can use this program to correct documents that have been carried forward to the new fiscal year or if you activated Period-Based Encumbrance Tracking (PBET).

Activities

1. Start reconstruction in test mode.

2. If inconsistencies are found, run the program again in live mode.

Further notes

For more information, see the documentation for program RFFMRP02N.

36.2.6.4.2.3 Reconstruct FM Open Items for SD Orders

Use

Use this step to rebuild FM open item data relating to SD orders.

Requirements

- Back up your data before executing this step.
- Make sure that no new SD orders can be posted while the rebuild is running.

Activities

- Select the company code and document(s) in respect of which you want to rebuild data.
- In addition, you need to specify how existing FM open item data is handled:
- Choose **Check Existing FM Data** to have the system verify whether such data exists. If it does, the system displays it.
- Choose **Delete Old FM Data** to have the system simply delete any existing FM data and replace it with the rebuilt data.
- Check the test run option if you want to check the effect of the program before running it live.

36.2.6.4.2.4 Post Financial Accounting Documents

In this step, you can subsequently copy Financial Accounting documents to Funds Management (FM). During this process, you can choose whether documents already existing in Funds Management should not be reconstructed or whether these documents should be deleted before the reconstruction.

Activities

1. Make sure that FM has been activated. See also "Activate/Deactivate Funds Management".

- 2. Enter a company code, fiscal year and, if required, a period.
- 3. Choose the documents to be reconstructed according to your requirements.
- 4. Start the reconstruction.

Further notes

You can find more information in the documentation on the program Document Transfer from Financial Accounting (RFFMRPFI).

36.2.6.4.2.5 Post Parked Financial Accounting Documents

In this step, you can copy parked documents from Accounting to Funds Management. In the process, you can opt either not to post documents already in Funds Management or to delete the documents before the subsequent posting.

Documents already selected for the commitment carry forward in the new fiscal year or carried forward into the new fiscal year cannot be posted subsequently. This is because information is lost with subsequent posting.

If you want to post documents subsequently, you must first reverse the carryforward with program RFFMCCFR and then delete the documents with report RFFMDLFI. You can then post the documents subsequently.

You must remember that the commitment carryforward for these documents must then be carried out again.

Note: The tax lines are not included (posted subsequently) during the subsequent posting.

Recommendation

- Posting in this process can adversely affect system performance if the data volume is large. For this reason, carry out such postings in background processing.
- If a large number of documents are to be posted subsequently, you should first delete the commitment and actual data, to improve system performance. For more information on the report program which does this, go to the step Delete commitment and actual data.
- If the number of documents to be posted subsequently is small and you want to delete existing actual data in FIFM first, choose *Delete old data* when you start the program.

Requirements

- You should only carry out such postings in the implementation phase, before going live, as the reconstruction of actual data may lead to data getting lost.

- The documents to be posted must have an FM account assignment. You can add these to documents which do not have them. See Supplementary Account Assignment for details.
- Back up your data first.
- You have put organizational measures in place to ensure that **no other activities** are carried out in the system, most particularly that **no documents are entered**.

Activities

- 1. Make sure that FIFM has been activated. See also: Activate/Deactivate Funds Management.
- 2. Start subsequent posting.
- After subsequent posting, you must reconstruct the assigned values. To do this, go to the Funds Management menu and choose Budgeting -> Tools -> Reconstruct assigned values.

This reconstruction ensures that availability control can identify excessive funds commitments in your funds center and commitment item hierarchies.

36.2.6.4.2.6 Post Controlling Documents

In this step, you can transfer internal Controlling (CO) documents to Funds Management. In the process, you can choose whether to not post documents already in Funds Management subsequently or whether to delete these documents prior to subsequent posting.

Recommendation

Posting in this process can adversely affect system performance if the data volume is large. Because of this reason, as a rule, carry out such postings in background processing.

Requirements

- You should only conduct subsequent postings in the implementation phase, before going live, as the reconstruction of actual data may lead to data getting lost.
- Back up your data first.
- You have put organizational measures in place to ensure that **no other activities** are carried out in the system, most particularly that **no documents are entered**.

Activities

1. Start subsequent posting. To delete existing actual data already in Funds Management prior to subsequent posting, select *Delete old data* before executing the program.

 After subsequent posting, you must reconstruct the assigned values. To do this, go to the Funds Management menu and choose Budgeting -> Tools -> Reconstruct assigned values.

This reconstruction ensures that availability control can identify excessive funds commitments in your funds center and commitment item hierarchies.

36.2.6.4.2.7 Post Earmarked Funds and Funds Transfers

In this step, you can reconstruct the commitment data in Funds Management (FM) on the basis of the funds reservations, funds precommitments, funds commitments, funds blockings, and forecasts of revenue.

You can use this program to correct documents that have been carried forward to the new fiscal year or if you activated Period-Based Encumbrance Tracking (PBET).

Activities

- 1. Start reconstruction in test mode.
- 2. If inconsistencies are found, run the program again in live mode.

Further notes

For more information, see the documentation for program RFFMRP03N.

36.2.6.5 Check Company Code

In this step, you can subject the company codes, which are relevant to Funds Management, to particular consistency checks.

The checks are carried out in the following order:

- is an FM area assigned to the company code?
- does the FM area actually exist?
- does the currency key for the FM area exist?
- is there a fiscal year variant for the FM area?
- is there a budget profile for the FM area (only if you use former budgeting)?
- is there a budget profile for funds for the FM area? (only if you use former budgeting and have defined a budget profile for funds in the FM area)
- is there a status profile for the FM area? (if you have defined a status profile in the FM area)

- is there a number range interval (for FM line items) for the FM area?
- is there an update profile for the FM area?

is cost of sales accounting active for all the company codes that are assigned to the FM area? (if you have activated the functional area for the assigned FM area)

Activities

Enter a company code and choose *Company code -> Check*. If any errors are found, choose *Extras -> Display error log* to access the error log. Double click on the error message to access the long text, which directs you how to proceed.

36.2.6.6 Activate/Deactivate Funds Management

In this step, you activate the Funds Management (FM) account assignment derivation and update of documents from the feeder components for FM to FM for specific company codes. If you have combined a number of company codes under an FM area, you have the option of activating specific company codes only or of leaving other company codes deactivated.

If you only activate the account assignment derivation, the documents are given an FM account assignment in accordance with the assignment in the account assignment derivation during posting in the feeder components for FM. If you also activate the update, the documents are also updated in FM.

You can implement Funds Management in two steps if you only activate account assignment derivation. In the first step, you only activate account assignment derivation. If you want to activate the update of documents at a later time, you can activate the update in a second step and reconstruct the documents.

You can deactivate the update again in FM if necessary. No checks are carried out on postings in the feeder components for FM after the update has been deactivated. The prerequisite is that the corresponding assignments from company codes to FM areas are not removed. If you want to stop the update and account assignment derivation, you have to deactivate the account assignment derivation as well.

If you do not want to use FM anymore, you can delete all master data and transaction data as soon as you have deactivated the account assignment derivation and update.

Requirements

Activate Account Assignment Derivation

Before you can activate the account assignment derivation for a company code, the following prerequisites must have been met:

- An FM area must be assigned to the company code
- Account assignment derivation must be defined

Activate Update

Before you can activate the update for a company code, the following prerequisites must have been met:

- An FM area must be assigned to the company code

A currency key must exist for the FM area

- A fiscal year variant must be assigned to the FM area
- A budget profile must be assigned to the FM area (only if you use former budgeting)
- A budget profile for the fund is assigned to the FM area (only if you use former budgeting and work with funds)
- A status profile must have been assigned to the FM area if you are working with status management
- A number range interval (for FM line items) must have been assigned to the FM area
- An update profile must have been assigned to the FM area
- The account assignment derivation must be defined

If any of these prerequisites are not met, an error message appears when you try to save your entries, directing your attention to the error log. You can access this by choosing *Extras -> Display error log*. Double click on an error message to access the long text, which tells you how to proceed.

You can also use the Check company code step to verify that these requirements have been met in each company code before you activate Funds Management there.

Note:

Application component *Funds Management* can not be used at the same time as application components *Cash Budget Management* and/or *Project Cash Management* if you use yeardependent master data in Funds Management.

If you want to implement *Funds Management* with Cash Budget Management and/or Project Cash Management, note that Cash Budget Management and Project Cash Management only process commitment items with 10 characters.

Deactivate Update

The assignment of company codes to FM areas cannot be removed.

Activities

- 1. Decide whether you want to activate the account assignment derivation only or the update as well.
- 2. Select the company codes you want to activate and save your table entries.

Note

If you only activate the update, the account assignment derivation is activated automatically.

Additional information

Performance problems can occur in the following scenario:

- In the account assignment derivation, you have allocated FM account assignment to CO assignments.
- You are working with orders and projects

The availability control is active in Funds Management and for orders and projects.

For this reason, you must make a clear decision on what the task of the availability control is to be in Funds Management and for orders and projects.

For Funds Management, you can activate/deactivate the availability control in step Activate/Deactivate Availability Control.

36.2.7 Budgetary Ledger

36.2.7.1 Information on Budgetary Ledger

Use

The FM budgetary ledger is used to record budget consumption due to financial operations such as the creation of new budgets or commitment items, and the posting of earmarked funds or invoices. It is an additional ledger that is linked to the General Ledger (SAP Financial Accounting).

In some countries, it is a legal requirement to store such financial data in the budgetary ledger as well as in the financial accounting area of an organization. This means that when a user creates a reservation or commitment item that consumes or increases the budget, this information is also stored in SAP Financial Accounting (FI).

Note

If you are using the budgetary ledger for the United States, you must work in the

Implementation Guide for this country. This can be found in the Implementation Guide of Public Sector Management -> Functions for US Federal Government -> Ledgers -> Budgetary Ledger -> Activate Budgetary Ledger Variant and subsequent IMG activities.

After making the Basic Settings, you can set up the General Budgetary Ledger or the specific Spanish Budgetary Ledger, which contains the same activities of the general one plus others created specifically for Spain.

In the individual IMG activities, you can make the corresponding settings to set up a budgetary ledger in your organization.

Requirements

Since for budgeting processes the budgetary ledger only works together with Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any default settings.

Activities

Process the IMG activities in the sequence they appear.

36.2.7.2 Basic Settings

36.2.7.2.1 Activate Variant for Budgetary Ledger

Use

In this IMG activity, you define the specific budgetary ledger (BL) to be activated. You also specify the default document type to be used for BL postings, and define whether you want negative postings and/or whether you want to define that documents can be split because you are using a split ledger.

Note

If you are using the budgetary ledger for the United States, you must work in the

Implementation Guide for this country. This can be found in the Implementation Guide of *Public Sector* Management -> Functions for US Federal Government -> Ledgers -> Budgetary Ledger -> Activate Budgetary Ledger Variant.

Furthermore, you can select only one budgetary ledger variant and one document type, and create only one entry.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. In the *Basic Settings* for the Budgetary Ledger, choose *New Entries*.
- 2. In the next screen, use the dropdown to select the applicable BL variant and the document type.
- 3. Specify whether you want to use negative postings and/or split documents.
- 4. Save your entry.

36.2.7.2.2 Classify BL Accounts

Use

In this IMG activity, you define how posting is to be carried out for specific G/L account intervals of your chart of accounts. You have to define whether posting is to be carried out for budgeted and/or for posted amounts, and using the budgetary ledger or not.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. In the initial popup, enter the chart of accounts you are using.
- 2. In the first dialog structure *By Posting Type*, use *New Entries* to define one or several GL account intervals.
- 3. Specify whether posting is to be carried out using budget amounts, actual (posted) amounts, or both.
- 4. Save your entries.
- 5. Next, place your cursor on the second dialog structure *By Source*. Proceed as for the first dialog structure, and specify whether the BL account is to be posted to through the budgetary ledger or not by selecting an item from the dropdown box.
- 6. Save your entries.

36.2.7.2.3 Define Posting Keys for Budgetary Ledger

Use

In this IMG activity you specify the posting keys to be used with the FM budgetary ledger.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. For transaction key FMB, define the posting keys to be used for the FM budgetary ledger.
- 2. Save your entries.

36.2.7.3 Settings for General Budgetary Ledger

36.2.7.3.1 Select Budget Categories and Value Types for BL Update

Use

In this IMG activity, you select the value types per FM area and budget category to enable budgetary ledger postings. Note that there are two different value types to be selected, one for budgeted amounts and one for commitments/actuals.

For budgeted amounts, you can choose to work with or without offsetting entries in a G/L account, due to the self-balancing of BCS.

For commitments/actuals, you can also activate the budgetary ledger for statistical postings.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Click on *New Entries* and enter the FM area and budget category to be used in the budgetary ledger.
- 2. Save your entry.
- 3. Next, mark the item you have defined and double-click on Value Types for Budgets.
- 4. Using the *New Entries* function, maintain the value types to be used in the budgetary ledger.
- 5. Checkmark the column "BL active" if the budgetary ledger is active.
- 6. If you want to work with offsetting accounts, checkmark the column *Offset Account Required* and save your entry.
- 7. Repeat this action for Value Types for Commitments.

- 8. If appropriate, checkmark the column Stat. Ind (Statistical Indicator).
- 9. Save your entry.

36.2.7.3.2 Select Source Fields for Account Assignment Derivation

Use

In this IMG activity, you specify the fields to be used by the Derivation Tool. This enables the budgetary ledger to derive G/L accounts from the corresponding FM account assignment elements.

In the database of possible *source fields* there are two structures, one for budgeted amounts and another for posted commitments/actuals.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Select a budgetary ledger Derivation Tool structure to work with.
- 2. Next, click on **Select Fields** and add any fields you need to have in the Derivation Tool for budgetary ledger.
- 3. Save your entries.

36.2.7.3.3 Define Derivation Strategy for BL Accounts

Use

In this IMG activity, you use the Derivation Tool to create derivation rules. These enable you to derive the G/L accounts to be used for the budgetary ledger.

Note

The Derivation Tool is designed to strictly derive G/L accounts. You cannot use it to check whether to post a BL document or not, because if the tool does not find a result, it issues an error message of incomplete Customizing. Nevertheless, by setting up the Derivation Tool in order to derive the pairs of

G/L accounts suitable for deletion, you can avoid the creation of additional budgetary ledger posting lines.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Furthermore, you must previously have selected the source fields to be used for creating a derivation strategy for the budgetary ledger in the IMG activity Select Source Fields for Account Assignment Derivation.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. In the popup for this IMG activity, select a strategy environment, determining whether you want to use the budgetary ledger for budget postings or for commitment postings.
- 2. Click on *Create Step* to create a new step for your derivation strategy.
- 3. In order to create a derivation rule, select the source and target fields and maintain the field values. If you want to use G/L offset accounts, select the corresponding target field for this.
- 4. Save your entries.

Note

If you are posting budget returns, the posting lines in the budgetary ledger will have a reversed order. The reason for this is that when you make a debit posting, the credit side of the account is reduced. When you make a credit posting, the debit side of the account is reduced.

You can test your derivation rules by clicking on the *Test* button. In the popup, enter the source values and click on *Derive*. The results will be displayed if Customizing has been properly carried out. If not, you will receive an error message.

Clicking on the *Display Trace* button enables you to follow the derivation process step by step, searching for possible incorrect Customizing settings.

36.2.7.3.4 Select Fields for Update of FI General Ledger

Use

In this IMG activity, you select the fields in the budgetary ledger (BL) that enable you to store FM account assignment elements, such as the commitment item, fund, or funds center, in the General Ledger of Financial Accounting (FI).

Note
If you have activated an FI Special Ledger that is to be updated by a BL posting, you can write these account assignment elements to the FI Special Ledger (FI-SL) for reporting purposes.

Furthermore, storing account assignments in the FI-SL requires the creation of further lines in the budgetary ledger. For example, if you need to store the funds center in SL and you post a document using two different funds centers, the result in BL will be a document with two pairs of lines, each of them showing one funds center. However, if the document you are post ing contains only **one** funds center, the BL document will consolidate the lines of the document and show only one pair of lines in the BL document.

Also note that Customizing settings can in some cases affect the BL postings. For example, if you have the funds center transferred to the BL document, the lines in FM with different funds centers cannot be put into one line in the FI document, even if the BL settings in Customizing are defined this way.

For technical reasons, the commitment item in a BL document is displayed in the field "Payment Reference" of table BSEG.

Requirements

Since for budgeting processes the budgetary ledger only works together with the Budget Control System, you must have previously installed it.

Standard settings

SAP does not deliver any default settings.

Activities

- 1. Via New Entries, create a new entry for your FM area.
- 2. Put your cursor on the FM area and double-click on Select Fields on the left side of the screen.
- 3. Select new Data Dictionary fields via *New Entries*.
- 4. Save your entries.

Example

An example would be the situation in Portugal, where it is mandatory for a public organization to display the FM account assignments in combination with the BL postings.

36.2.7.4 Settings for Spanish Budgetary Ledger

36.2.7.4.1 Prerequisites for Maintaining Spanish Budgetary Ledger

Use

Note

The IMG activities falling under this node need to be carried out for the Spanish Budgetary Ledger **after** you have maintained the IMG activities for the General Budgetary Ledger.

Access the four General Budgetary Ledger activities in the IMG node immediately above this one and maintain them accordingly.

36.2.7.4.2 Define Predecessors for Combined Documents

Use

For reporting purposes, some customers may need to create so-called predecessor documents accompanying their earmarked funds, purchase requisitions, purchase orders and invoices. In this way, a funds commitment can be preceded by a funds pre-commitment and possibly by a reservation. It is also possible to create combined documents for purchasing documents.

Manual posting of these individual documents in the chain is unnecessary and time-consuming, so customers must be able to post the principal document and have a "virtual" chain of predecessors generated automatically in the background and written to the budgetary ledger. Since these documents are used only in reporting, it is not necessary to actually post the predecessor documents.

In this IMG activity, you select the combination of principal documents and predecessors to be used for defining combined documents.

Requirements

The Budgetary Ledger must be configured in order to use the combined document functionality.

Note

You may also need to customize the following:

- Document types in Financial Accounting (SAP FI).
- Combined documents for purchasing documents such as purchase requisitions or purchase orders, for which you can also customize the document types.
- Funds Management document types.

Standard settings

SAP does not deliver any default settings.

Activities

If you want to create your own combined documents, make new entries in this table. Note that the system will issue an error message if the combination you are using is not permitted.

36.2.7.4.3 Exclude Accounts from Automatic Offset/Deletion Procedure

Use

In this IMG activity, you can specify the G/L accounts that are to be excluded during the automatic offset and deletion procedure.

By creating entries in this IMG activity, you can exclude specific G/L accounts in user-defined number ranges from the summarization process, where they offset each other or "balance each other out". The result is that these G/L offset accounts are not deleted and can be displayed in the corresponding BL documents.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Enter the names of the G/L accounts that you would like to exclude from automatic offset and deletion and specify whether this is valid only for budget postings, only for actuals postings, or for both budget and actuals postings.
- 2. Save your entries.

Example

Since this customizing has been developed to work in sync with combined documents, this example assumes that a funds precommitment has been created, and that the specific G/L account for the funds reservation (G/L account 31) is to be excluded from automatic deletion.

Note

The logic of combined documents simultaneously creates and reduces the predecessors of the posting document. Furthermore, posting key 40 means "debit" and 50 means "credit".

| Transaction | G/L Offset Account | G/L Account | |
|---------------|--------------------|-------------|--|
| Reservation | 30 | 31 | |
| Precommitment | 30 | 4 | |

The intermediate result, transparent for the user, is:

| Postin | g Key | G/L Account | Amount | Description |
|---------------|-------|-------------|--------|-------------------------------|
| 40 | 30 | | 100 | Reduces the budget |
| 50 | 31 | | - 100 | Creates a funds reservation |
| 40 | 31 | | 100 | Reduces the funds reservation |
| 50 | 30 | | - 100 | Increases the budget |
| 40 | 30 | | 100 | Reduces the budget |
| 50 | 4 | | - 100 | Creates a funds precommitment |

Since now the G/L account 31 has been added to the customizing table, in order to have it excluded from automatic deletion, the sorted final result will be the following. Note that only G/L account 30 has been balanced and deleted:

| Posting | g Key | G/L Account | Amount | Description |
|---------|-------|-------------|--------|------------------------------|
| 40 | 30 | | 100 | Reduces the budget |
| 50 | 31 | | - 100 | Creates a funds reservation |
| 40 | 31 | | 100 | Reduce the funds reservation |
| 50 | 4 | | - 100 | Create a funds precommitment |

36.2.7.4.4 Substitute BL Document Type

Use

In this IMG activity, you can replace the budgetary ledger document type.

You can replace the BL document type for different document categories, such as budgets, earmarked funds and financial accounting documents. For example, you can change the BL document type for reporting reasons, in order to easily identify the BL data originating from specific posting documents.

Standard settings

SAP does not deliver any standard settings.

Activities

Make the necessary settings and save your entries.

36.2.7.5 Transfer of FM Totals Records to Budgetary Ledger 36.2.7.5.1 Information on Transfer of FM Totals Records to Budgetary

Ledger

Use

A requirement of Fund Accounting is that financial transactions, such as creating a new budget or commitment items, or the posting of earmarked funds and invoices, are entered as total values in the budgetary ledger.

The transfer to the budgetary ledger can happen in real-time or be planned in periodically. For more information, see the information on the transfer in real-time, in the IMG of Funds Management, under Information on the Budgetary Ledger. Under this organizational activity you will find all the necessary activities for the periodical transfer of Funds Management information to the budgetary ledger.

Requirements

Budget data must be available in both the Budget Control System and in the corresponding components of Funds Management. All BAdI implementations for BAdI: integration functions for the posting of FM

in the FI general ledger (BADI_FM_FM2AC) must be deactivated. This confirms the conversion of predecessor program Post Commitment in the Budgetary Ledger (RFFMTOBL).

Standard settings

SAP does not deliver any standard settings.

Activities

Execute the IMG activities in the order they appear. The program Post Budget or Commitment/Actual Totals in FI (RFFMTTTOBL) carries out the transfer based on these definitions.

36.2.7.5.2 Activate Transfer

Use

In this IMG activity, you activate the transfer to the budgetary ledger by FM area, budget

category, and value types.

For value types, the separation takes place in accordance with your definitions for budget or commitment/actual postings.

The activation of the transfer of specific FM data segments is the first step when selecting the FM totals information that should be updated in the budgetary ledger. In IMG activity Define Derivation Strategy for transfer and BL Accounts, you can then define the transfer of this information more exactly by defining exclusion rules.

Requirements

As the budgetary ledger for budgeting transactions only works together with the Budget Control System, you must have first installed it.

Standard settings

SAP does not provide any standard settings for this.

Activities

- 1. Choose *New Entries* and enter the FM area and budget category for the transfer to the budgetary ledger. Save your entries.
- 2. Select the item that you have defined and activate the transfer of the budget by double-clicking on the corresponding option.
- 3. Define which budget value types you want to post, and then activate the budgetary ledger by setting the corresponding indicator. Save your entries.

4. Select the item that you have defined and activate the commitment/actual posting by doubleclicking on the corresponding option. Save your entries.

36.2.7.5.3 Define Derivation Strategy for Transfer and BL Accounts

Use

In this IMG activity you use the derivation tool for creating derivation rules to enhance the account assignment objects in accordance with Fund Accounting requirements and to define the G/L accounts for budgetary ledger postings. The derivation tool requests separate derivation definitions for budget and commitment actual data records.

Note

The program *Post Budget or Commitment/Actual Totals in Fl* (RFFMTTOBL) calls the budget or commitment/actual data records in the order they appear in the derivation tool. The two derivation strategies are called in two successive steps for each commitment/actual data record.

- In the first step, the functions for the enhancement of account assignment objects are available, but you can also decide to skip this data record.
- In the second step, the G/L accounts are defined for the transfer.

The derivation for defining the G/L accounts allows the definition of postings on more than two G/L accounts by addressing an extra derivation requirement for the same data record. A maximum of ten derivation requirements are possible for one data record. This provides several budgeting categories for each step of a business process.

Requirements

As the budgetary ledger only works together with the Budget Control System, you must have first installed it.

Standard settings

SAP does not provide any standard settings.

Activities

- 1. Choose a strategy environment that defines whether you want to use the budgetary ledger for budget postings or commitment postings and whether you want to define rules for the enhancement of Fund Accounting account assignment objects or G/L accounts in the budgetary ledger.
- 2. Create a new step for your derivation strategy.
- 3. To create a derivation rule, choose the source and target fields and maintain the field values.
- 4. Save your entries.

36.2.7.5.4 Define Details for FI Update

Use

In this IMG activity, you choose the account assignment objects for FI updates in the budgetary ledger and the document details for postings in the budgetary ledger. The account assignment objects of FM area and fund are compulsory. All other details on the account assignment elements can be entered as required.

The concept of the budgetary ledger ensures that the totaling of all BL postings are cleared against each other. You require at least one G/L account and one offsetting account for this transaction for which the budget or commitment/actual records can be defined. In addition to this offsetting account, the following details are required:

- Fund details

Additional account assignment objects, such as business area; you can define the funds center or functional area in this IMG activity.

- The documents of the budgetary ledger should only be posted in the budgetary ledger and the corresponding reorting ledger.
- Other FI components, such as CO and FM should be excluded as information recipients of the budgetary ledger.

Requirements

As the budgetary ledger only works together with the Budget Control System, you must have installed this first.

Standard settings

SAP does not provide any standard settings.

Activities

- 1. Create a new entry for your FM area and define the document type of the budgetary ledger for it.
- 2. Position your cursor on the FM area and double-click on the account assignment objects that should be posted on the left-hand side of the screen.
- 3. Define the fields that are linked to the account assignment objects.
- 4. Save your entries.

36.2.7.6 Closing Operations

36.2.7.6.1 Define Settings for Year-end Balance for BL Accounts

Use

In this IMG activity, you define the BL accounts and posting details to be used during year-end balancing of the budgetary ledger accounts.

In the posting details, you can choose whether you want to use the sum of debits, the sum of credits or the balance of an account as the posting amount. If you use the account balance, the system will not distinguish between credit and debit balances. Therefore, you must know whether to expect a debit or a credit balance in order to properly balance the account.

Note

You must know the numbers of your BL accounts to be used during year-end balancing in order to carry out this IMG activity.

Standard settings

SAP does not deliver any default settings.

Activities

In order to define a posting group, carry out the following steps:

- 1. Define a posting group and enter a description for it.
- 2. Click on the node Settings per Fiscal Year and Company Code, and then on New Entries.
- 3. Enter the fiscal year and company code, as well as the document type and the debit/credit posting keys.
- 4. Click on the node *Posting Details* and then on *New Entries*.
- 5. Enter the document counter number, the sequence number, the BL account numbers and other posting details.
- 6. Save your entry.

36.2.7.6.2 Carry Forward Budget/Actual to Budgetary Ledger

Use

Each posting of the budgetary ledger (BL) is generally executed together with the corresponding FM posting. The carryforward process in Funds Management, however, does not trigger FM postings.

In the Spanish budgetary ledger scenario, you can use report RFFMTTTOBL to post the necessary amounts to the BL accounts in summarized form. In order to do so, you have to customize which FM lines should be used and which accounts are to be used for posting.

Activities

Access the IMG node under Fund Accounting called *Transfer to Budgetary Ledger* and proceed as follows:

- 1. Read the overview information on transferring data to the Budgetary Ledger.
- 2. Make settings in the following IMG activities:
- Activate Transfer
- Define Derivation Strategy for BL Accounts
- Define Details for FI Update

For further information, see the report documentation of Report RFFMTTTOBL.

Example

The example contains one document chain as follows:

- a funds reservation for 100\$
- a funds precommitment for 80\$
- a funds commitment for 30\$

The document amounts are posted to the budgetary ledger as follows:

- The document of 100\$ is posted from the budget account to the funds reservation account.
- The document amount of 80\$ is posted from the funds reservation account to the funds precommitment account.
- The document amount of 30\$ is posted from the funds precommitment account to the funds commitment account.

The open amounts are now carried forward to the subsequent year with the following results:

- the funds reservation with an open amount of 20\$
- the funds precommitment with an open amount of 50\$
- the funds commitment with an open amount of 30\$

These amounts are represented by lines using the amount type 0350. Note that the consumed amounts (amount type 0351), which are created during the carryforward of chains, are not necessary here.

This financial transaction must now be represented in the BL accounts for the current year.

The derivation strategy needs to be customized in such a form that the results are parallel to the previous year:

- The open amount of 20\$ should be posted from the budget account to the funds reservation account.
- The open amount of 50\$ should be posted in the same way, and additionally from the funds reservation account to the funds precommitment account.

- Finally, the open amount of 30\$ should be posted in the same way and additionally from the funds precommitment account to the funds commitment account.

This means that a total of 100\$ will be posted from the budget account to the reservation account.

36.2.8 Closing Operations

In the following steps, you make the system settings which are required for the closing operations at the end of a fiscal year in Funds Management and control these in different ways.

You can carry out the following closing operations:

- Commitment Carryforwards
- Budget Carryforwards
- Fund Balance Carryforward

The carryforward of commitments to the new fiscal year is always dependent on the selected update profile.

For instance, it is specified in the update profile, whether a carryforward is even possible at all and, if so, for which value types.

In the following steps, you can enter settings which meet the special requirements of carrying forward budget and carrying forward commitments, such as for particular value types (purchase orders, funds commitments, invoices).

For carrying forward budget, you can, for example, control that a part of non-consumed residual budget are carried forward to the new year or that residual budgets are carried forward to different Funds Management Account Assignments and this way the budget becomes available to different responsibility areas or functional areas in the new year.

36.2.8.1 Enter Default Settings

In this Customizing (IMG) activity, you define per FM area which closing operations can be carried out at the fiscal year change:

- Carrying forward commitments

Note

- In the following IMG activities, you can enter detailed settings for carrying forward commitments for individual value types and fiscal years which override these default settings.
- If you do not enter any other settings, the commitments are carried forward 1:1 when you start the programs in the application menu, depending on the valid update profile used. The total amount from an FM Account Assignment is carried forward to the same FM account assignment in the new fiscal year.
- If you do not enter any default settings or any detailed settings, nothing is carried forward to the new fiscal year when you start the program.

Activities

Choose the closing operations which are to be carried out at the fiscal year change for each

FM area.

Further notes

You can find more information on closing operations in the SAP Library under SAP Enterprise Central Component -> Accounting > Public Sector Management -> Funds Management -> Closing Operations.

36.2.8.2 Commitment Closing Operations

You can carry forward commitments which were posted in the current year but which will not be reduced until the following year, to the new fiscal year.

In the following steps, you can enter system settings which also meet the different requirements for carrying forward particular value types (such as purchase orders, invoices).

36.2.8.2.1 Create Number Range for Fiscal Year Change Document

Use

In this step, you create a number range interval for fiscal year change documents for each FM area.

Fiscal year change documents are created for Funds Management documents that are carried forward to a new fiscal year using program Closing Operations: Carryforward of Open Items, or whose carryforward was reset again using program Closing Operations: Reset Carryforward of Open Items (RFFMCCFR).

Enter the following for each number range interval:

- Number range key
- Number interval from which the document numbers are selected.
- Type of number assignment (internal or external) The numbers are always assigned internally for fiscal year change documents.

Activities

Create a number range and save your entries.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.2.8.2.2 Define Basic Settings for Commitment Carryforward

Use

In this IMG activity you can define the following basic settings for the commitment carryforward:

- Permit Account Assignment Selection

You can specify that the user can determine the target account assignment when they carry forward commitment online (Program RFFMCCF1).

If you want to permit the account assignment selection, you must create a derivation step with step type "derivation rule" in your derivation strategy for the commitment carryforward which can be assigned to several receiver account assignments in the rule entries of the sender account assignment. When carrying forward commitment Online, the user can display a list of the assigned receiver account assignments and select an account assignment for each line item to be carried forward in column *Account Assignment Selection*.

However, please note that an account assignment selection is not possible when carrying forward down payments (Program RFFMCCF_DP). It is therefore necessary to ensure that only one receiver account assignment can be derived for value type 61 (down payments) in the derivation strategy when carrying forward commitment.

- Activate Commitment Carryforward with Document Chains

This way you can define whether the commitment carryforward should be executed after the standard procedure (program RFFMCCF1) or with document chains (program RFFMCCF1_CHAIN).

For a commitment carryforward with document chains, the previous and subsequent document item are also carried forward with each commitment document item provided that the documents of the corresponding value type can be carried forward.

- Activate Approval Procedure

You can specify that the commitment carryforward should run a one-level or a two-level approval procedure.

If you activate the one-level approval procedure, you can request the open items to be carried forward with program Closing Operations: Carry Forward Open Items. (RFFMCCF1) The selected documents are grouped together under a lot number and are locked for new selection. You then carry out the carryforward for each lot number using program Approve Open Items (RFFMCCF_APPROVE) which requires special authorization.

If you activate the two-level approval procedure, the open items are registered for the carryforward as with the one-level approval procedure using program RFFMCCF1. The actual carryforward takes place in two steps by executing the program RFFMCCF_APPROVE twice:

- In the first step you approve the carryforward for the open items that can be carried forward.
- In the second step, you define whether only commitment or commitment budget should also be carried forward.

Requirements

Prerequisite for the two-level approval procedure is that the budget control system (BCS) is active. For more information, see 'Activating BCS', under Activate Global Functions for Budget Control System (BCS)".

Standard settings

In the standard system, the commitment carryforward does not support an account assignment selection for the receiver FM account assignment. If your derivation strategy is not defined accordingly, the system issues an error message.

In the standard system, the document items of a document chain are carried forward independently from each other.

No approval procedure is used in the standard system.

Example

Examples of the commitment carryforward with document chains can be found in the program documentation (RFFMCCF1_CHAIN).

Further notes

For more information on defining the derivation strategy, see Define Derivation Strategy for Reassignment.

36.2.8.2.3 Make Specific Settings for Standard Commitment Carryforward

Use

In this Customizing activity, you can define specific settings for commitment carryforward, if you have selected *Standard* and not *With Document Chain* for your FM areas in the basic settings for commitment carryforward.

You can activate or deactivate the automatic zero-amount carryforward for FI documents and for commitment documents by choosing one of the following options:

- Allow zero-amount carryforward

This is the default system option. The system automatically carries forward commitments if the following prerequisites are met:

- The document item to be carried forward has no open amount.
- The basic settings for commitment carryforward have been defined as *Standard* and not as *With Document Chain* for the FM area.
- The FM update profile has been configured to use PBET posting logic for the processed FM value type.
- The FM account assignment of the document item will not be changed by a reassignment rule.
- Disable zero-amount carryforward

The system does not automatically carry forward commitments even if the above conditions are met. If it is necessary to carry forward a document item manually, the system displays an error message.

Requirements

This Customizing activity is only relevant for standard commitment carryforward and not for commitment carryforward for FM areas for which the *With Document Chain* option is selected.

Activities

Define the settings for your FM areas and save the entries.

36.2.8.2.4 Make Specific Settings for Commitment Carryforward with Document Chains

Use

In this Customizing activity, you can define specific settings for commitment carryforward if you have selected *With Document Chain* and not *Standard* for your Funds Management (FM) areas in the basic settings for commitment carryforward.

You can activate or deactivate the generation of additional lines with amount types 0351 and 0352 in the FM table FMIOI. The additional lines are used for reporting and budgetary ledger (BL) integration in specific customer scenarios. The default setting is to generate additional lines. If you change this setting, use report RFFMCCF_REBUILD_0351_0352 to delete unused lines or generate missing lines.

Activities

Define the settings for your FM areas, and save the entries.

36.2.8.2.5 Make Settings for Parallel Processing

Use

In this step, you can distribute the processing of the following programs for year-end closing operations to several dialog processes, in order to reduce the overall runtime of program:

- Closing operations: Carryforward of open items (RFFMCCF1)
- Closing operations: Reverse carryforward of open items (RFFMCCFR)
- Closing operations: Carryforward general requests (RFFMCCF0)
- Closing operations: Close open items (RFFMCCLS)

Activities

Enter the number of processes for an FM area as well as the RFC Server group.

36.2.8.2.6 Enter Settings for Commitment Carryforward Payment Budget

In this step, you specify per FM area, fiscal year and value type (such as purchase orders or invoices), whether carrying forward commitments for the payment budget to the new fiscal year is basically allowed or not.

The settings made here override any default settings which already exist.

Note

If carrying forward particular value types is not allowed according to the update profile, an entry which allows the carry forward for this value type is not possible.

Example

You have defined in the default settings that commitments carried forward are basically allowed. The update profile permits the carry forward for all value types.

You can prohibit the carrying forward of particular value types (such as purchase orders) to the new year by not setting the *Carryforward allowed* flag for the corresponding value types (such as "51").

Activities

Make the required settings.

36.2.8.2.7 Enter Settings for Commitment Carryforward Commitment Budget

In this step, you define per FM area, fiscal year and value type (such as funds reservations or funds commitments), whether carrying forward commitments for the commitment budget to the new fiscal year is basically allowed or not.

The settings made here override any default settings which already exist.

Note

If carrying forward particular value types is not allowed according to the update profile, an entry which allows the carryforward for this value type is not possible.

Example

You have defined in the default settings that commitments carried forward are basically allowed. The update profile permits the carry forward for all value types.

You can prohibit the carrying forward of particular value types (such as funds reservations) to the new year by not setting the "Carry forward allowed" flag for the corresponding value types (such as "65").

Activities Make the

required settings.

36.2.8.2.8 Business Add-Ins (BAdIs) 36.2.8.2.8.1 BAdI: Individual Carryforward Rules for Commtmt Carryforward

Use

With this Business Add-In (BADI) you can include document-dependent carryforward rules with closing operations in Funds Management when carrying forward the budget with program *Closing Operations: Carry Forward Open Items* RFFMCCF1. You can also set the customer dimension for FM actual data and commitment data (field USERDIM). The user can use field *Customer-Specific Field* (USERDIM) (user dimension) as they wish, it is not supported by SAP. It is a key field in the update tables in Funds Management.

In the standard delivery, on the one hand you can restrict the quantity of document items that can be carried forward depending on their value type by deactivating the commitment carryforward for the value types to be excluded in Customizing. Moreover, you can also exclude individual FM account assignments from the commitment carryforward by outsorting the corresponding carryforward rules with 0%.

On the other hand, in the standard delivery the carryforward parameters that were assigned to the respective value type in Customizing take effect for all documents of a value type with the

commitment carryforward.

Through document-dependent carryforward rules you can do the following:

1. Restrict the **quantity of the document items that can be carried forward** (filter). Program RFFMCCF1 then selects only those document items for the carryforward that correspond to these document-dependent rules.

2. Assign document-dependent carryforward parameters .

Depending on the respective carryforward parameter, the carryforward rules take effect when the respective receiver FM account assignment is assigned.

Requirements

You have created carryforward rules in the Customizing of Funds Management Government under Assign Strategy for Reassignment to FM Area for your FM area and have defined carryforward rules for all FM account assignments that have been posted to.

Standard settings

In the standard, the Business-Add-In is not active.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

- If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:
- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Notes

Documentation on BADI method FILTER_OPEN_ITEMS

Documentation on BADI method CFRULE_OVERRULE

Documentation on BADI method USERDIM_CHANGE

36.2.8.2.8.2 BAdI: Setting the Statistics Indicator for Commitment Carryforward

Use

In the standard, you can define that postings in other components that should not consume budget should only be updated statistically in Funds Management; for example you can override the definitions in your update profile for each value type for which Value types relevant to the budget or are only updated statistically or flag commitment items in the master record as statistical.

With this Business Add-In (BADI) you can set the statistical indicator for data records generated with the commitment carryforward separately for the data record in the sender year (amount type *Carryforward previous year (commitment)* and the data record in the receiver year (amount type *Carryforward following year (commitment)*.

Note the following restrictions:

In commitment documents (except for invoices) you can set the statistical indicator for the sender year only as a consistent update of the statistical indicator is not possible for commitment documents at the moment (except for invoices) if it is assigned through the commitment carryforward in the receiver year.

For invoices, you are only allowed to set the statistical indicator for the receiver year if the statistical indicator has also been set in the sender year. If an implementation of BAdI 'FM_CCF_SET_STATISTIC' provides the statistical indicator for only the receiver year, the system automatically assigns it for the sender year also.

Requirements

In the Customizing of Funds Management Government

- a valid update profile is assigned to the FM area
- the commitment carryforward in Funds Management is active
- the commitment carryforward is allowed for the FM area

Standard settings

In the standard, the Business-Add-In is active provided that you use update profile 000400 (CB with target fiscal years e.g. German local authorities) Default coding is carried out automatically and has the following effect:

- The commitment carryforward of invoices that are only updated in the payment budget always occurs statistically. The budget assigned once remains tied to the sender year, the generated record is not relevant to the budget in the receiver year.

- The commitment carryforward with change from the commitment budget to payment budget is only statistical on the sender side. This means the assigned budget in the commitment budget remains tied . In the payment budget, the budget is assigned again.

The Business Add-In is filter-dependent. Create the implementation for your update profile.

Activities

Create an implementation of the Business Add-In for your update profile, provided that update profile 000400 is not assigned to your FM area. Do the following for this:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Notes Documentation on BADI method STATISTIC_FLAG_SET

36.2.8.2.8.3 BAdI: Filter for Closing Open Items for Fiscal Year Change

Use

With this Business Add-In you can include your own rules with the closing operations in Funds Management when closing open commitment, through which the quantity of document items that can be closed automatically is restricted even further. The program *Closing Operations: Closing Open Items* (RFFMCCLS) then only offers the document items to be closed that correspond to these rules.

Requirements

In the Customizing of *Funds Management Government* a valid update profile was assigned to the FM area and the commitment update in Funds Management is active.

Standard settings

In the standard, the Business Add-In is active, provided that you use update profile 000600 (budgetary ledger e.g. US Government). The default coding is carried out automatically and has the following effect:

When you execute program RFFMCCLS, the rules consulted for closing commitment are those that you defined in the Customizing of *Funds Management Government*, in step "Define Rules for Closing Commitment ". If a rule is defined for the fund type and the status of the fund, to which the document item is assigned, the affected document item can be closed by using program RFFMCCLS.

The Business Add-In is filter-dependent. Create the implementation for your update profile.

Activities

Create an implementation of the Business Add-In for your update profile provided that update profile 000600 is not assigned to your FM area. You do this as follows:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen.

Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.

9. Choose Activate

The code you stored in the method will be run when the application program is executed.

Notes

Documentation of BADI method CHECK_CLOSEOUT_RULES

36.2.8.2.8.4 BAdI: Control of Reassignment

Use

You use this Business Add-In (BAdI) to control the program run *Reassign Open Commitment* (RFFMCCOVR) with closing operations in Funds management for the multi-year

budget. This involves you defining which value types can be excluded from the reassignment.

Requirements

You have activated the Multi-Year Budget .

Standard settings

The BAdI is not active in the standard system. No implementation of this BAdIs is delivered either.

In the standard system, the following value types are allowed for the reassignment:

| 50 | Purchase requisitions |
|----|-----------------------|
| 51 | Purchase orders |
| 60 | Parked documents |
| 65 | Funds commitment |
| 81 | Funds reservation |
| 82 | Funds precommitment |
| 83 | Forecast of revenues |
| | |

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*. The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Notes

Documentation on BAdI Method DEFINE_VALUE_TYPES

36.2.8.2.8.5 BAdI: User Manipulations in Document Chain Carryforward

Use

You can use this Business Add-In (BAdI) to alter how document chains are carried forward in Funds Management.

The BAdI uses interface IF_EX_FMCCF_CHAIN_GEN and supports the following methods:

- END_OF_CHAIN

Enables document chains to be interrupted at any document. The system carries forward the document chain up until that particular document. Once you have carried forward a document chain incompletely in this way, you need to do the same for any subsequent changes in fiscal year. Otherwise, the system issues an error message that you cannot override.

- I_VREF*... These fields form the unique reference to the predecessor document of the current document.

- I_RLDNR The ledger currently being edited.
- I_GJAHR The current fiscal year.
- E_END_OF_CHAIN = 'X'
 The end of the chain has been reached.
- CROSS_LEDGER_CHAIN Enables document chains to be selected across all ledgers.
- R_ALLOW_CROSS_LEDGER = 'X' Activates the function enabling document chains to be selected across all ledgers.

Requirements

You use document chain carryforward for the change in fiscal year in Funds Management.

Example

You can use this BAdI to divide up document chains, for example. The point where you make the division forms the new root level of the new document chain.

36.2.8.3 Closing Operations for Budget Control System (BCS)

36.2.8.3.1 Prepare Budget Carryforward for Commitment for BCS

The settings of this section are only significant if you use the Budget Control System (BCS) as the operative budgeting tool in Funds Management.

In accordance with your settings for the commitment carryforward and the carryforward parameters used, a corresponding budget change in the previous or next year can be connected automatically to the carryforward of open items. If such a budget carryforward takes place, a corresponding budget entry document is generated.

Details on generating a budget entry document:

- Deriving the budget address

The Budget addresses of the budget entry document are derived from the Posting addresses of the commitment document carried forward from the old fiscal year or to the following year, according to the Derivation strategy of the budget structure used.

- Activity in budget entry document

Selection of the activity of a budget entry document depends on which settings you have set for the commitment carryforward. Important here are the settings of the statistics indicator that you have defined in the IMG activity BAdI: Set the Statistics Indicator for the Commitment Carryforward.

a) **No** Statistics indicator is set:

The budget change takes effect in the previous year and the following year. An entry document is generated with the activity *Carry Forward* which includes a sender line (*Carry Forward* - *Sender*) and receiver line *Carry Forward Receiver*).

- b) Statistics indicator is set for the following year: The budget change only affects the previous year. An entry document is generated for the previous year with the *Return* activity.
- c) Statistics indicator is set for the previous year: The budget change only affects the following year - the budget of the previous year remains the same. An entry document for the following year is generated with the *Entry* activity.

Whereas you execute the settings mentioned above in other Customizing sections of Funds Management, in this section you can define further settings for the budget carryforward in BCS, such as the following:

- In IMG activity Activate Budget Carryforward for Commitment, you can choose for which value types (for each fiscal year and budget category) the budget carryforward should be activated or deactivated.
- In IMG activity Define Budget Entry Documents for Commitment Carryforward, you define the standard settings for the entry documents to be generated for each FM area/fiscal year. These are the settings for document types, budget type, and posting periods.
- You can override the standard settings for budget entry documents by using the Business Add-In Enhance Budget Documents for Commitment Carryforward to suit your own requirements.

36.2.8.3.2 Activate Budget Carryforward for Commitment

Use

In this IMG activity, you define for which value type and budget category the carryforward of budget for commitment should be activated or deactivated for each FM area/fiscal year. You can define the settings for individual value types or for all value types that are used in the field *value type*.

Note:

If you do not make an entry for a value type per FM area/fiscal year and budget category, this value type is not supported for the budget carryforward for commitment and is therefore deactivated.

The commitment and the corresponding budget is carried forward automatically in accordance with the settings defined.

Requirements

In this activity, value types are only included if:

- They have a transfer in the update profile used.
- The carryforward of budget for commitment is set in addition to the carryforward of commitment in the IMG activity Enter Default Settings

- A commitment carryforward is allowed in the IMG activity Enter Settings for Commitment Carryforward Payment Budget.
- A commitment carryforward is allowed in the IMG activity Enter Settings for Commitment Carryforward Commitment Budget.

Activities

- 1. You maintain the IMG activity by entering the corresponding value type and budget category for your FM area and fiscal year.
- 2. If you want to forbid the carryforward of commitment budget for an FM area/fiscal year, set the indicator for the automatic budget posting (ABB) to *Not active*.
- 3. Save your entries.

36.2.8.3.3 Define Budget Entry Documents for Commitment Carryforward

Use

By default, the budget carryforward for commitment is logged in a budget entry document with both a sender and receiver line. For the sender line of the transaction, *Carryover - Sender* (COSD) is chosen, and for the receiver line of the transaction, *Carryover - Receiver* (CORV) is chosen. If you have set the statistic indicator for the previous year or next year, an entry document is generated with either the *Return* indicator or *Entry*.

For more information on the transactions used in accordance with the statistics indicator, see Prepare Budget Carryforward for Commitment BCS.

In this IMG activity, you define the standard settings for the budget entry documents to be created for each FM area/fiscal year. You can define the following settings in for the document header and for the sender and receiver line:

- In the document header, you can define which Document type the entry documents should have. Likewise, you can define a document header text.
- In the settings for sender and receiver line, you make your selection of the respective Budget type. For both the sender and receiver line, you can define a document line text.
- For the receiver document line, you can define a particular posting period or a Distribution key.

The settings for Document type or budget types can be used to display the budget documents generated in Reporting or define special Budget consistency checks for the budget carryover of commitment.

To undo open carryforward items (FMJ3), you assign a reversal reason to the document type.

Requirements

- You have created the entry document type or budget type in the Customizing of Funds Management under BCS budgeting.
- You have assigned the transactions budget types to be used to the transactions Carryover Sender (COSN) and Carryover - Receiver (CORV) in the IMG activity Assign Budget Types to Transactions.

Standard settings No default

settings are delivered.

36.2.8.3.4 Set Up Automatic Budget Postings After Fiscal Year Change

Use

In this IMG activity, you define the settings for budget recovery after the fiscal year change.

Document changes to carried forward commitment documents (such as setting the completed indicator or reducing the amount) could cause commitment budget to be released in the new year and be consumed by new commitments if these settings are not defined.

These settings ensure that the commitment budget carried forward is automatically posted when document changes relevant to budget consumption occur. The system then automatically generates budget documents in the background.

Requirements

- You are using the Budget Control Syste (BCS) as the operating budget tool.
- The Budget Carryforward for Commitment is active.
- The carryforward level is used for commitment documents and invoices.
 The required Customizing settings should be defined in the implementation guide (IMG) of Funds
 Management, under Actual and Commitment Update/Integration -> General Settings -> Make
 Other Settings.

Standard settings

The budget carried forward is released with corresponding document changes in the standard system and can also be consumed by documents from the new fiscal year.

Activities

Define the following settings:

- Activate the automatic budget postings (ABP) for budget recovery for your FM area and the new fiscal year.
- Define the document header attributes for the budget documents to be generated.

- Create a derivation strategy for the derivation of document line attributes of budget documents, maintain the derivation steps and assign the derivation strategy to the FM area and fiscal year.

To create a suitable **derivation strategy**, you must fill the target fields of the derivation strategy in accordance with the source fields:

- Determine whether the respective transaction (target field **BUDGET_RELEVANT**) is relevant for the generation of automatic budget documents.
- Define whether a sender line (target field **SENDER_DATA**) should be generated, in other words, whether the budget document has the structure of a transfer posting.
- Define the budget type for receiver and, if necessary, sender lines (target fields **RBUDTYPE** and **SBUDTYPE**) and fill the target fields for the budget account assignments.

To be able to **define a derivation strategy**, you can choose the relevant source fields from the input help. You can use the following step types to fill the target fields:

- Derivation rules
- Table Access
- Assignment
- Clear
- Function modules

If you only want to repost part of the budget made available from the transaction, you must fill target field *Percentage*. If you want to generate more than one or pair of sender and receiver document lines, you must differentiate the relevant document line attrributes using the source fields NUMBER.

36.2.8.3.5 Business Add-Ins for Closing Operations for Budget Control System (BCS)

36.2.8.3.5.1 BAdI: Enhance Budget Entry Documents for Commitment Carryforward

Title

Business Add-In: Enhance Budget Carryforward for Commitment

Use

Using this Business Add-In, you can enhance the budget entry documents of the budget carried forward automatically generated during the commitment carryforward. You use the BAdI method CHANGE_DOC for this.

You can make the following enhancements in the entry documents:

- Fill fields in document header
- Fill fields in sender document line
- Fill field in receiver document line
- Change carryforward budget amount in FM area currency
- Change carryforward budget amount in transaction currency

Standard settings

SAP does not deliver any implementations of this BAdI. This BAdI is therefore not active in the standard system.

Activities

Carry out the following steps to implement the BAdI:

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Further notes

Documentation on BAdI Method CHANGE_DOCUMENT

36.2.8.3.5.2 BAdI: Document Budget Carryforward for Approval Procedure

Use

This Business Add-In (BAdI) is used in Funds Management in the component *Closing Operations* (PSM-FM-CL).

You can use this BAdI to document the carryforward of budget to commitment in the commitment line items with active two-level approval procedure.

For items that were approved in the second step, the field Carryforward Level (FMIOI-CFLEV or FMIFIIT-CFLEV) is flagged with the value U.

Requirements

The two-level approval procedure is active in the basic settings for the commitment carryforward. For more information, see Define Basic Settings for Commitment Carryforward.

The BAdI FM_UPDATE_CFLEV (numerical values for the carryforward level) should not be active.

Standard settings

The Business Add-In is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen.

Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:

8. Choose Activate.

When the application program is executed, the system carries out the code in the method you wrote.

See also:

Methods MARK_BUDGET_APPROVAL

36.2.8.4 Closing Operations for Fund Balance Carryforward

In the following, you enter the system settings which are required for carrying out a fund balance carried forward. The fund balance carried forward gives you a period-related overview of the fund balances.

36.2.8.4.1 Define Carryforward Item Category

If you work with funds and have allotted budget across fiscal years, the fund balance carried forward allows a period-specific overview of the fund balances in Funds Management.

In this IMG activity, you specify the carryforward commitment item category for the balance carried forward and subsequently assign this to the carryforward commitment items.

- If you have defined these settings for the balance carryforward (under *Prerequisites*), the balances of all commitment items which have the same carryforward item category are cumulated and carried forward to the carryforward commitment item assigned to the carryforward commitment item category in the new year.
- If you do not define these settings, the balances are not carried forward (error message "no carry forward item category is entered in the commitment item ..") unless multi-year budget execution is activated in the FM area. If this is the case, the balances are carried forward to the new year without a change of account assignment.

The carryforward commitment item category is used to cumulate the balances of the actual values of previous year's commitment items to one or several carryforward commitment items in the following year. You can define several carryforward commitment item categories, which gives you a summary of commitment items according to certain logical aspects.

Dependencies

If multi-year budget execution is activated in IMG activity Activate Multi-Year Budget Execution, the fund balance carryforward is used to enable a fiscal year overview of open items in addition to the balance overview. In multi-year budget execution in the standard system, the carryforward is executed

without summarization using commitment items. Therefore, you do not have to make any settings in this IMG activity.

If you want to summarize with active multi-year budget execution (for instance, for the value types under which actuals are updated in Funds Management) and want to use the settings defined in this IMG activity, you have to assign the strategy environment FBCF to your FM area and fiscal year under the activity *Balance Carryforward Funds*. You do this in IMG activity Assign Strategy for Reassignment to FM Area.

Requirements

The carryforward commitment item assigned to a commitment item category must be created within master data maintenance in the FM area and fiscal year.

Activities

- 1. Enter the carryforward commitment item categories for each FM area.
- 2. Choose *Carryforward Item Category Commitment Items* and assign the carryforward commitment items to the carryforward item category for a respective fiscal year (fiscal year to which the balances are to be carried forward). The entry is valid until new requirements result in a new entry.
- 3. Then define the defined carryforward item categories in the master record of the commitment items that can be posted directly.

Further notes

Only those funds with the indicator **Balance Update** set in their master record will be carried forward in the balance carryforward.

36.2.8.4.2 Define Activities for Balance Carryforward

In this step, you create customer-defined transactions for the balance carryforward for an FM area.

You must only define customer-defined transactions if you want to use additional transactions with a special program logic in addition to the balance carryforward transaction delivered by SAP.

You determine a special program logic in enhancement SAPFMVTR.

Activities

- 1. Specify your customer-defined transaction for an FM area. The name of the transaction must always begin with "VT".
- 2. Save your entry.

Further notes

For more information, see the program documentation for SAPFMVTR.

36.2.9 Information System

In the following steps, you maintain the parameters for the Funds Management information system.

36.2.9.1 Define +/- Signs for Information System

In this step you define the +/- sign with which revenue and expenditure items are displayed in the information system.

Standard settings

Expenditures are displayed as positive and revenues are displayed as negative in the reports.

Activities

If you want to display expenditures as negative and revenues as positive, you must select the field in the table in the "Define +/- signs for information system" step.

Further notes

The setting applies to all clients. You therefore only have to select ONE field.

36.2.9.2 Deactivate/Activate Delta Update for Business Information Warehouse Use

In this step, you can deactivate the delta update for Business Information Warehouse (BW) for the following DataSources.

0PU_IS_PS_11 Budget in Funds Management (transaction data)

0PU_IS_PS_31 Commitment line items in Funds Management (transaction data)

0PU_IS_PS_32 FI line items in Funds Management (transaction data)

0PU_IS_PS_33 CO line items in Funds Management (transaction data)

0PU_IS_PS_41 Budget totals records for Budget Control System (BCS)

0PU_IS_PS_42 Budget line items for BCS

0PU_IS_PS_43 Budget entry documents for BCS

0PU_IS_PS_44 Assigned funds BCS (totals records)

0PU_IS_PS_45 Revenues Increasing the Budget BCS (totals records)

You can activate the delta update again at any time. Please note that if you do this, you must initialize the delta process again in the BW system.

36.2.9.3 Maintain BW Extraction of FM Account Assignments

Use

In this IMG activity, you can activate the field FMAA (FM account assignment) for BW extraction. The field FMAA is included in the extraction structures of the following DataSources:

- 0PU_IS_PS_31 0PU_IS_PS_32 0PU_IS_PS_33 0PU_IS_PS_41 0PU_IS_PS_42 -
 - 0PU_IS_PS_43 0PU_IS_PS_44 0PU_IS_PS_45

After activation, the field FMAA is filled during Full and Delta Upload.

You can also make settings for the display of the hierarchy catalog for DataSource 0PU_FMAA_HIER. You can specify whether the hierarchy catalog should:

- Display only the assignments of posting addresses to budget addresses
- Display the assignments of budget addresses to availability control objects
- Display the assignments of posting addresses to budget addresses and to availability control objects
- Display the hierarchy of budget addresses of a multi-level budget structure
- Display the assignments of posting addresses to budget addresses of a multi-level budget structure
- Display the assignments of revenue budget addresses to RIB objects (aggregation objects for Revenues Increasing the Budget)
- Display the assignments of revenue posting addresses to revenue budget addresses and to RIB objects

Standard settings

The field FMAA is not active by default.

36.2.9.4 Drilldown Reports

The steps which follow tell you how to create drilldown reports for analyzing the actual data in Funds Management.

36.2.9.4.1 Form

The steps which follow tell you how to:

- Create, change, and display forms
- Transport forms
- Import forms from client 000
- Reorganize forms

36.2.9.4.1.1 Create Form

In this step, you can define the forms which you want to use for your drilldown reports in Funds Management. You can assign a form to several reports.

Forms describe the basic content and structure of lists. Think of them as half-finished reports, which you complete when you define the report itself.

Requirements

If you want to include variables in your form, you must define these first. For more information, go to the Funds Management implementation guide and read the chapter "Maintain global variables". The standard R/3 System contains various variables.

Standard settings

The standard system contains forms which you can use as a model when creating your own forms.

The name range provided by SAP for the technical name of the forms supplied is 0FMFXXXX. You must not use this range for your own forms.

Activities

Create your own forms. You can copy the forms contained in the standard system and use them as a model.

Further notes

For detailed information and examples on how to create forms, refer to the general drilldown reporting manual or the "Information System" section in the "Funds Management" and "Funds Management Government" document.

You can generate a transport request for further transport of the forms you defined to a target system. For more information, read the step "Transport Form".

36.2.9.4.1.2 Change Form

In this step, you can change the forms you want to use in your Funds Management drilldown reports.

Forms describe the basic content and structure of lists. Think of them as half-finished reports, which you complete when you define the report itself.

Requirements

If you want to include variables in your form, you must define these first. For more information, go to the Funds Management implementation guide and read the chapter "Maintain global variables". The standard R/3 System contains various variables.

Standard settings

Do **not** change the forms supplied in the standard system.

Activities

Change the existing forms. You can copy the forms delivered with the system and change them to meet your requirements.

Further notes

- For detailed information on editing forms, refer to the general drilldown reporting manual or the "Information System" section in the "Funds Management" and "Funds Management Government" documents.
- You can generate a transport request to transport the forms you have defined to a target system. For more information, read the step "Transport report".
- When changing a form, you must ensure that it could be used in various reports. The change you enter is then made in all reports.

36.2.9.4.1.3 Display Form

In this step, you can display the setup for the forms which you want to use for the drilldown reports in Funds Management.

Standard settings

The standard system contains forms.

Activities

Display the forms.

36.2.9.4.1.4 Transport Form

In this step, you transport forms from one SAP System to another.

For more information on transporting reports and forms, go to the Funds Management implementation guide and read the chapter "Transport report".

36.2.9.4.1.5 Reorganize Form

In this step, you can use the selection screen to specify a number of forms, and delete them later from an overview list.

The form type is available as an additional selection criterion.

Note

Only the forms which are no longer in use in reports are reorganized here. The system checks this automatically during the deletion process, by means of a where-used list. The corresponding reports can be accessed and checked directly.

Activities

Reorganize your forms.

36.2.9.4.1.6 Import Form from Client 000

In this step, you import forms from the source client (such as client 000) to the client where you want to work.

See also step Import reports from client 000.

Activities

- The first selection criterion you should enter is the report type. That is, you should specify whether you want to transport the forms for Funds Management or Cash Budget Management.
- Import the forms from the source client.

36.2.9.4.2 Report

The steps which follow tell you how to:

- create, change, and display reports
- transport reports from one SAP System to another
- import reports from client 000 to the client you are working in
- reorganize or delete reports
- reorganize or delete report data
36.2.9.4.2.1 Create Report

In this step, you can define your own reports for evaluating the data in Funds Management.

Requirements

You must first have defined forms for your reports. Forms describe the form and content of a list. You can regard a form as a half-finished report which you then complete in report definition. For more information on creating forms, go to the Funds Management implementation guide and read "Create form".

Standard settings

The standard system contains reports which you can use as a model when creating your own reports.

The name range provided by SAP for the technical name of the reports supplied is 0FMBXXXX. You must not use this range for your own reports.

Activities

Create your own reports. You can copy the reports contained in the standard system and use them as a model.

Further notes

For detailed information and examples on how to create reports, refer to the general drilldown reporting manual or the "Information System" section in the "Funds Management" and "Funds Management Government" documents.

You can generate a transport request for further transport of the reports you defined to a target system. For more information, read the step "Transport report".

36.2.9.4.2.2 Change Report

In this step, you can change the predefined drilldown reports to evaluate the data in Funds Management as you wish.

Standard settings

Do not change the standard reports delivered with the system.

Activities

Change the existing reports.

You can copy the reports delivered with the system and change them to meet your requirements.

Further notes

For detailed information on editing reports, refer to the general drilldown reporting manual or the "Information System" section in the "Funds Management" and "Funds Management Government" documents.

You can generate a transport request to transport the reports you have defined to a target system. For more information, read the step "Transport report".

36.2.9.4.2.3 Display Report

In this step, you can display the setup of the drilldown reports available to you for evaluating the data in Funds Management.

Standard settings

The standard system contains reports.

Activities

Display the reports.

36.2.9.4.2.4 Transport Report

In this step, you put together a transport request, designed to transport the reports you have defined to a target system.

Requirements

The target and source systems must have the same put level.

Recommendation

The transport request is based on the current settings. For this reason, you should not create any new drilldown objects (reports, forms, key figures) while the transaction is running, nor should you enter any more settings. In the SAP transport system, a considerable time may elapse between the transport request's being put together (defining what is to be transported) and the actual export (when the data is extracted). If you enter further settings in the drilldown between these two points in time, the system does partly include the changed objects, but no new objects are included in the transport request. For this reason, we recommend that you do not enter any new settings during this period.

If you change any forms, you must regenerate the reports to which you have assigned the forms in the source system, then transport them again to the target system.

As it is not possible to test the transport request automatically when you must it together - that is, to determine which of the drilldown objects to be transport may already exist in the target system - drilldown objects created in the target system may be overwritten when you import from the source system. To avoid situations where important data is unintentionally overwritten, we recommend that you set up one source system only, from which data can be sent to one or more target systems.

Activities

- Stipulate the report type (Funds Management or Cash Budget Management). Note that reports with report type *Hierarchy of FM account assignments* or *Hierarchies of FM account assignment elements*. must be imported separately.
- Specify a transport request.
- Choose whether you want to run the request in background processing.
- Select the objects you want to tranport.
- Choose the dependent object classes.
- Use the transport system to carry out the transport request.

Further notes

For technical reasons, reports whose names contain special characters cannot be transported. To get around this problem, you must create a new report with no special characters in the name, using the old report as reference.

36.2.9.4.2.5 Reorganize Report

In this step, you can use the selection screen to specify a number of defined reports and delete them later from an overview list.

Example:

Before the production startup, you can delete all the test reports by an author.

Activities

Reorganize your reports.

36.2.9.4.2.6 Import Report from Client 000

In this step you import reports from the source client (usually client 000) to the client where you want to work.

To be able to use the standard structure reports in the present client, you must import them from the source client.

Activities

- 1. Import the reports from the source client.
- 2. Select the reports you require.
- 3. Choose "Transport" to import the reports online or choose "Background transport" to import them in background processing.

36.2.9.4.2.7 Reorganize Report Data

In this step, you can use the selection screen to specify a quantity of stored report data and delete it later from an overview list.

As selection-specific characteristic values you can currently choose fiscal year, period and period/year, that is you have the option of deleting obsolete data. This way you can prevent your memory table from overflowing.

Example

You have created and saved report data from a report which compares the commitment and actual data with your annual budget for the years 1993, 1994 and 1995 for FM areas F1, F2 and F3. You can now, for example, delete the report data for FM areas F1, F2 and F3 for the year 1993 by specifying the report name.

Activities

Reorganize your report data.

36.2.9.4.3 Maintain Global Variables

In this step, you define variables for drilldown reporting in Funds Management.

Variables are used to add flexibility to the forms, which represent row and column structures, as well as reports. They are parameters which you specify when defining or running a report. The fields you need to fill at that stage appear in a dialog box.

Standard setup

Global variables for the following characteristic values are delivered in the standard system:

- FM area
- Fiscal year
- Period
- Fund
- Funds center
- Commitment item
- Budget version

Activities

You define new variables by entering variable types and names. With the variable type, you are specifying how you want to use the variable in future:

1. As a variable for a characteristic value

2. As a variable for a text, or

3. As a variable for a formula.

When you press Enter, the system inserts the fields which need to be filled.

Further notes

For more information, read the general drilldown reporting manual.

36.2.9.4.4 Translate

In this step, you can translate the forms and reports you have defined in one language into another language.

Activities

Enter the following on the initial screen:

- 1. Original language
- 2. Target language
- 3. Translation object
- 4. Search limits.

Choose "Execute" to trigger a search for all the texts which need to be translated. Depending on the search limits you specify, the system searches either for the texts from the selected report only, or for the report texts and those from all the forms assigned to this report.

The search process may take some time, as the system may have to search for texts in all the reports.

On the next screen, the system displays a list of the object types found. They are flagged as follows:

- 1. Untranslated none of the objects in this class is translated
- 2. Partly translated some of the objects in this class are translated
- 3. Translated all objects in this class are translated The translated object types are also

highlighted.

On this screen, you select the object classes you want to process further. Use the **Object list** to branch to the display showing the individual objects.

The object list shows all the objects from the object class you selected. The display has four columns, showing:

- 1. Object class for the object
- 2. Object name
- 3. Source text (20 characters)

4. Translation (20 characters)

The "Translation" field for untranslated objects is empty. Translated objects are highlighted.

Now select the objects you want to process. If you select translated objects for processing, you can change the translation.

Choose the type of processing. Two types are available:

- 1. Translation: With this, you can translate the relevant texts in a short text editor.
- 2. Fast translation: The system tries to find the text requiring translation in the SAP proposal database. If no translation is found there, the source text is copied into the target language. Fast translation only functions for objects which have not yet been translated.

Further notes

Only the reports and forms you defined are offered for translation. If texts normally translated by SAP are missing from the target language, you can only translate these by incorporating the relevant language into the system or by using the SAP translation tool. To do the latter, choose *Tools -> ABAP/4 Workbench -> Utilities -> Translation -> Short/long texts*.

36.2.9.5 Business Add-Ins (BAdIs)

36.2.9.5.1 BAdI: Change List Header of Lists of SAP List Viewer (ALV) Grid

Control

Use

With this Business Add-In, you can modify the screen of the header information in the list that is issued from reports and programs of *Funds Management* with the SAP List Viewer (ALV) Grid Control as follows:

- Add logo in the list header
- Change background screen (Wallpaper)

Requirements

Screen objects for the logo and back ground screen must be stored in the Business Document Service (BDS).

Standard settings

The Business Add-In not active in the standard.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Notes

Documentation of the BAdI method CHANGE_BACKGROUND

Documentation of the BAdI method ADD_TEXT_AND_PICTURE

36.2.9.5.2 BAdI: Enhance Document Journal

Use

Using this Business Add-In (BAdI), you can enhance the document journal with the following

functions:

- Import additional data and display in the ALV list
- Delete lines of the ALV list
- Carry out additional authorization checks

- Issue messages

Requirements

If you want to display additional fields in the ALV list, you have to enter it in the customer include in the structure IFMREPGAX first.

Standard settings

The BAdI is not active in the standard system.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Also see:

- Method: Check or change line item fields before list output
- Method: Check or change expanded line item table

- The inactive implementation FM_EF_HIST_REP_SPAIN contains special functions for Public Sector Spain.

36.2.9.5.3 BAdI: Activate Authorizations on FI Accounts

Use

Using this Business Add-In (BAdI), you can enhance the authorization check for the reports document journal and request journal with the following authorization objects:

- F_BKPF_BES Accounting document: account authorization for subledger accounts
- F_BKPF_BED Accounting document: account authorization for customers
- F_BKPF_BEK Accounting document: account authorization for vendors

Standard settings

The checks are delivered using the implementation FMRP_ACCOUNT_AUTH. The activity '03' (*Display*) is used for calling them from the reports.

The BAdI is not active in the standard system.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.

- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Also see:

Method: FI-Check Account Authorization

36.2.9.6 Maintain Information for Headers and Footer for KSA Reports/Forms

36.2.10 Workflow

The SAP Business Workflow incorporates technologies and tools for the automated control and processing of cross-application process flows.

Funds Management uses the workflow with clearly defined Standard tasks

- in the Earmarked funds and funds transfers
- in the requests
- in the budget parking
 Note: If you belong to the customer circle of the German local authorities, you cannot implement the workflow for the budget parking.

You carry out the required settings for the workflow in the Customizing workflow and in the following steps. In the Customizing workflow, you have to carry out the following steps:

- 1. Maintain your enterprise-specific organizational plan.
- 2. Link the standard tasks delivered to the permitted processors.
- 3. If desired, activate existing event-user-couplings between triggering events and and work flow tasks which use budget.
- 4. Name a technical person responsible for every workflow sample delivered.

36.2.10.1 Workflow Variant

In the following steps, you define workflow variants for requests and assign these to the company codes and document types.

36.2.10.1.1 Create Workflow Variant for Requests

You define workflow variants in this step. In a workflow variant, you define whether a document release for requests is active and at which amount approval of a request is necessary. In addition, you define how many levels the approval process runs through. You can, for example, depict "four eyes" or "six eyes" principle.

Activities

Define one or more work flow variants accordingly for your requests.

Further notes

See section "Role Definition Requests" for more information about request workflow.

Additional information concerning workflow can be found in the SAP Business Workflow documentation.

Take note:

Since release 4.62, it is possible for requests to be flagged as relevant for workflow independently from the Customizing settings made here. SAP provides process 00107030 and reference function module SAMPLE_PROCESS_00107030 in order to allow you to change the workflow indicator. The enhancement of the workflow function for requests is based on the business transaction events technique. For more information, see Business Transaction Event

36.2.10.1.2 Assign Company Code to Workflow Variant for Requests

You assign the workflow variants to your company codes and document type in this step. If a company code is not assigned a workflow variant, no processing is possible for this company code in the workflow.

Activities

Assign a workflow variant to the company codes and document types for which a workflow approval is to be required.

36.2.10.2 Role Definition

In the following steps, you define the role definition for the following processes:

- Earmarked funds and transfers
- Requests
- Budget parking

Note: If you belong to the customer circle of German local authorities, you cannot implement the workflow for budget parking.

In role definition, you define rules, according to which the appropriate employees can be determined in the Role resolution.

You need the roles definition if, for instance, you want to define that certain documents are to be processed (approve, reject, change) by different employees, depending on the amount or the Funds Management account assignment (FM account assignment).

36.2.10.2.1 Stipulate Document Classes

You create document classes in this step. In a further step, you assign the system-defined document categories to document classes.

A document class can group together several document categories. Role definition for these document categories will take place together.

You need different document classes if you want to have different role definitions apply for individual document categories.

Example

If a different role definition is to apply for a funds reservation than for a funds commitment, then you need two different document classes.

Standard settings

For each process - earmarked funds, requests and parked budget - SAP provides a document class as an example.

Activities

You can use the document classes provided.

If - as described above for individual document categories of Earmarked funds - a role definition of your own is to be valid, or if, for example, the processing of requests and funds commitments are to be grouped together dependent on the amount, you must create the document classes accordingly.

Create the document classes according to your needs.

36.2.10.2.2 Assigned Document Category to Document Class

You assign the document classes to the document categories defined by the system in this step.

Standard settings

SAP provides a document class assignment to a document category as an example for the document categories for Earmarked funds and "Requests" and the document category "Budget".

Activities

You can use assignments as provided in the standard.

If, however, different role definitions are to apply for individual document categories for earmarked funds or requests, you must assign a different document class for each document category.

Assign a document class to all document categories which you are using.

36.2.10.2.3 Define FM Account Assignment Groups

You define FM account assignment groups for an FM area and fiscal year in this step. The account assignment elements commitment item, funds center and fund are grouped together in this way.

You need these groups for role definition in a another step. There, by defining a FM account assignment group, you determine which employee - dependent on the account assignment - is allowed to process a document (for example approve or reject).

Activities

Define the FM account assignment groups according to your requirements. Maskings with the character + and * are allowed.

36.2.10.2.4 Define FM Amount Groups

You define amount groups for an FM area in this step. This groups amount intervals together.

You require these groups for role definition in another step. There, by defining an amount group, you determine which employee is allowed to process a document dependent on the amount (for example, approve or reject).

Activities

Define the amount groups for a each FM area.

To define a lower limit of zero, leave the *From amount* field blank.

To define an upper limit as "Indefinite", leave the *To amount* field blank.

36.2.10.2.5 Define FM Role Definition

In this step, you define the actual role definition.

You define the processor of a work item: per workflow level, document class, activity, FM area, fiscal year, FM account assignment group, and amount group.

The processor identification consists of:

- Object type You can use the objects: organizational unit, job, and position as object types.
- Processor ID
 You can use the existing organizational units, jobs, and positions as a processor ID.

Requirements

You must have already defined document classes, account assignment groups, and amount groups according to your needs. For more information, see *Define Document Classes, Define FM Account Assignment Groups* and *Define Amount Groups* in this node of the implementation guide.

Activities

- 1. Enter a document class, activity category, FM area and fiscal year for each Workflow level.
- 2. Enter an FM account assignment group, amount group, object type and processor ID. The processor ID must be defined in the Human Resources component.

Further notes

For more information on the use of roles for earmarked funds, requests, and parked budget, see the following sections:

- Role Definition for Earmarked Funds and Funds Transfers
- Role Definition for Requests
- Role Definition for Parked Budget

36.2.10.2.6 Role Definition for Earmarked Funds and Funds Transfers

Role definition is used for earmarked funds and funds transfer in workflow template WS50000016 for standard task TS50000006 "Decide on joint document approval" (TS80500064).

To activate the workflow template you must make the following entry in the event type linkage table:

Object typeFMREEventCREATEDReceiver typeWS50000016Receiver callfunction moduleReceiver functionSWW_WI_CREATE_VIA_EVENTCheck functionDestinationLinkage activatedX

To make these entries, choose the following in the SAP menu *Tools ->ABAP Workbench -> Development -> Workflow -> Administration -> Event Manager -> Type Linkages* (transaction SWETYPV).

In addition, you must assign the following standard tasks in the organizational structure:

- TS80500064 -

TS5000008

To define the settings:

- 1. In the SAP menu, choose Tools -> ABAP Workbench -> Development -> Workflow -> Definition Tools -> Tasks/Task Groups -> Display (transaction PFTC_DIS) and enter a standard task.
- 2. Choose Additional Data -> Processing Assignment -> Maintain and assign the standard task to the processor types relevant for you.

Control Parameter Workflow Template

The workflow template has two control parameters that you can define as initial values:

MaxWFLevel Number of workflow levels template setting : "1"
 The levels determine the sequential order of the approval. The next higher level is reached if an approval has been given for the previous level.
 If a rejection occurs at a level, the document must be changed accordingly. The current level is reset to 1. All approval levels must be gone through again.

- DefineRole Type of role definition Template setting: " " space, no role definition You can enter the following values:

"1" Data of first document line is evalutated

- "X" Data of all document lines is evaluated
- Value ' '

If a role definition is not performed, the document data is not evaluated. All users assigned to task TS80500064 can be processors of the work item.

- Value "1"

Only the **first document line** of the earmarked funds document is evaluated. All amount groups are determined in which the amount of the document line lies. Because of the FM account assignment (combination of commitment item, funds center and fund) in the document line, all FM account assignments are determined that have this combination. In addition, the necessary parameters are determined as follows: Workflow level: from Workflow; in template: 1 Document class: from Document header: Document category Activity type : from Workflow; in template: 01 = approve FM area : from Document header: FM area Fiscal year : from Document header: Document date

The role definition table is read with the key fields above. All selected entries are used for role definition.

• Value "X" All document lines are evaluated.

The number of different processor groups are determined for the individual document lines. A parallel processing branch is dynamically generated for each group in the workflow, whereby the assignment of the document lines to the groups remains. Each group must approve the lines for which they are responsible. This means that a document is only approved at each level if each group (a user of each group) has approved it. **Example:** Document with 3 lines. 2 different processor groups are determined. 2 parallel processing branches are generated.

The document must therefore receive 2-fold approval before the current level is approved.

36.2.10.2.7 Role Definition for Requests

The role definition for requests is used in the workflow template WS80500027 for the standard task *Decision: Document Release* (TS80500065).

Workflow template

To activate the workflow template you must make the following entry in the event type linkage

| table: |
|--------|
| Oh |

| Object type | FMPSO |
|--------------------------|-------------------------|
| Event | CREATED |
| Receiver type | WS80500027 |
| Receiver call | function module |
| Receiver function module | SWW_WI_CREATE_VIA_EVENT |
| Check function | |
| Destination | |
| Linkage activated | Х |
| | CAD Toole ADAD Markhama |

To define these entries, choose the following in the SAP menu: Tools -> ABAP Workbench -> Development -> Workflow -> Administration -> Event Manager -> Type Linkages (transaction SWETY)

You must also assign the following standard tasks in the organizational structure:

- 80500066 change request -

80500065 release request To

define these settings:

- 1. Choose the following in the SAP menu Tools -> ABAP Workbench -> Development -> Definition Tools -> Tasks/Task Groups -> Display (transaction PFTC_DIS) and enter a standard task.
- 2. Choose Additional Data -> Processor Assignment -> Maintain and assign the standard task to the processor types relevant for you.

Role definition

All G/L account lines of all documents that are grouped together in the request are used for role definition.

Example: The request consists of 2 documents each having 3 G/L account lines. 4 different processor groups are determined 4 parallel processing branches are generated. The request must also receive a 4-fold approval before it can be approved at its current level.

Number of workflow approval levels

The control parameters of workflow template *MaxWFLevel* determine the number of workflow approval levels.

The levels determine the sequential order of the approval. The next higher level is reached if an approval has been given for the previous level.

If a rejection occurs at a level, the request must be changed accordingly. The current level is reset to 1. All approval levels must be gone through again.

You define the number of approval levels necessary for a certain request (document type) in step "Create workflow variant for requests".

Dependency of FI parked workflow

A request is comprised of parked FI documents, as long as the request has not yet been posted.

If parked FI documents belong to a request which must be approved in the request workflow, these FI documents cannot also be relevant for the FI workflow at the same time. You must bear this dependency in mind if you want to implement both workflows in parallel.

Take note:

As of release 4.62, it is possible to flag requests as relevant for workflow independently from the Customizing settings made here. SAP provides process 00107030 and reference function module SAMPLE_PROCESS_00107030 in order that you can change the workflow indicator. The enhancement of the workflow function for requests is based on the business transaction event technique. For more information on this topic, see Business Transaction Events.

36.2.10.2.8 Role Definition for Parked Budget

Role definition for parked budget is used in workflow template WS50000014 for the following standard tasks:

- TS50000037 Approve parked document
- TS50000041 Check parked document
- TS50000042 Reset parked document
- TS50000043 Copy parked document

To activate the workflow template you must make the following entry in the event type linkage table:

| Object type | FMBU |
|--|-------------------------|
| Event | CREATED |
| Receiver type | WS50000014 |
| Receiver call | function module |
| Receiver function module Check function | SWW_WI_CREATE_VIA_EVENT |
| Destination | |

Linkage Enabled

To make these entries, choose the following in the SAP menu Tools -> ABAP Workbench -> Development -> Workflow -> -> Administration -> Event Manager -> Type Linkages (transaction SWETYPV).

Х

In addition, you must assign the following standard tasks in the organizational structure:

- 80500075 50000041 50000042
- 5000043

To define the settings, carry out the following steps: Choose the following in the SAP menu Tools -> ABAP Workbench -> Development -> Workflow -> Definition Tools -> Tasks/Task Groups -> Display (transaction PFTC_DIS) and enter a standard task.

1. Choose Additional Data -> Processor Assignment -> Maintain/> and the assign the processor types relevant for you to the standard task.

Standard settings

SAP delivers two workflow levels for parked budget in the standard system. Note that you must define two approval levels when using the standard.

If you just use the standard as a template and copy it, you can increase or decrease the number of approval levels if you change the condition in step 000006 of the copy created by the workflow template WS50000012.

Role Definition

All documents lines of an entry document are used for role definition.

The processor groups are determined from the lines of the document and a processing branch is determined for each processor group.

Example:

The entry document contains 3 lines.

Two different processor groups are determined.

Two parallel processing branches are generated

The entry document must be approved twice before it is approved on its current level.

If the document in an approval level is rejected by a user of a processing group, the whole document is rejected and the approval procedure is terminated. The employee who wants to enter the budget is informed about the rejection by the workflow and can create a new document using the rejected document as a template.

Note that an entry document that is in an approval procedure cannot be processed in Funds Management with the budgeting transactions for parked documents. A document like this cannot be posted or reversed.

36.2.10.2.9 Role Definition: Preposted Budget in FM Budgeting

Use

The following two workflow templates are available in the budget control system for a budget application, that is, posting budget provisionally:

- WS12300025
- WS12300026

If you activate one of these workflow templates, the following approval procedure is started when a budget entry document is posted provisionally:

Control of Approval Procedure using Entry Document Type

You can control the approval procedure of the workflow using the entry document type. You can then define whether a document type is activated for the workflow or not in the IMG activity Define Entry Document Type. In this way, you can define whether provisionally posted budget should be processed further with workflow when you are entering budget documents.

Process

The user determined by the role definition receives the provisionally posted budget for approval. If this budget application is accepted, the document is posted. The person who sent the application is informed about the approval via e-mail. This procedure is the same in both workflow templates.

If the application is rejected, the procedure is different in the two workflow templates. In Workflow template WS12300025, the applicant is only informed about the rejection via e-mail in workflow template WS12300026; the applicant is asked to restart the provisional posting of the budget document in their inbox. The rejected document can be used as a template for this.

You activate the workflow template in the workflow builder (transaction SWDD). Enter the workflow template, choose *Enter* and then *Basic Data*. Choose the tab page *Version-Independent (task)* and check that the following entries are there:

| Object category | BO | | |
|--|---------------------|--|--|
| Object type | BUS0050 | | |
| Event | PREPOSTEDDOCCREATED | | |
| The data flow for event and workflow must be defined in the following way: | | | |
| Event | Workflow | | |
| & EVT OBJECT& | &BUS0050& | | |

&_EVT_CREATOR& &_WF_INITIATOR&

Make this entries yourself if necessary and activate the workflow template by selecting the column *active*. The workflow template is active if a green traffic light appears in the column.

Role definition for provisional posting of budget in the budget control system is used in the workflow templates for the following standard tasks:

12300025 decision on provisionally posted budget

The role definition only restricts the possible processors of a standard task. To use the workflow you therefore have to assign the possible processors to the standard tasks of the workflow tempate that require the dialog with a user. For the workflow template WS12300025 you have to maintain the processor assignment for the standard task TS12300025 and the standard tasks TS12300025 and TS12300027 for workflow template WS12300026.

Procede as follows:

- 1. From SAP Easy Access choose Tools -> ABAP Workbench -> Development -> Workflow -> Definition Tools -> Tasks/Task Groups -> Display (transaction PFTC_DIS).
- 2. Enter the appropriate standard task and select *Display*.
- 3. Select *Additional Data -> Processor Assignment -> Maintain* and assign the relevant processor to the standard task.

Standard Settings

SAP delivers two approval levels in the standard system for the provisional posting of budget entry documents. Note that you must define two approval levels when using the standard in role definition. If no processor is found for a budget application via role definition, the workflow item has the status incorrect.

If you only use the standard as a template and copy it, you can increase or decrease the number of approval levels by changing the initial value of the work flow container element **l_counter_max**. Note that is you increase the number of steps, you have to maintain the role definition as well.

Role Definition

The role 12300004 only includes entries in the role definition for the document class BCSBU, document type 910 and the activity 01 (approve).

In the role definition, you can decide which processor is responsible for the approval using the account assignment in the posting and the amount. Before you carry out the actual role definition, create account assignment groups and amount groups. Then in the role determination assign a fiscal year and the activity 01 (approve) for your FM area and organizational units, jobs and positions for the different amount and account assignment groups. You can assign these elements to users in the organizational structure.

All line items of an entry document are used for role definition. Only users that are determined in each line item of a document using role definition receive the budget application in their inbox.

Requirements

You activated an entry document type for the approval procedure by setting the indicator workflow for the document type.

Example

An entry document has two lines

User A and user B are determined as possible processors for the first line item. User A and user C are determined as possible processors for the second line item

- a) Role definition standard delivery: Only user A receives the budget application in the inbox.
- b) Modified role definition: Users A, B and C receive the budget application in their inbox.

If the document is rejected by one of the possible users in an approval level, the document is rejected and the approval procedure is terminated. The employee who posted the rejected budget provisionally is informed about the rejection by the workflow. This happens the in workflow template 12300025 via e-mail. In workflow template 12300026, the user can create a new document using the rejected document. Otherwise the templates are identical.

Note that a budget entry document that is in an approval procedure cannot be processed in the budgeting workbench. Documents like these cannot be posted or reversed.

36.2.10.2.10 Role Definition: Approval Procedure for Commitment Carryforward

The role definition for the approval procedure is used for the commitment carryforward in workflow template WS12300144 for standard task *Approval for Commitment Carryforward* (TS12300121) and in workflow template WS123000156 for the standard task *Approval for Commitment Carryforward with Budget* (TS12300135).

Note that you must define whether the approval procedure is executed on one-level or on two-levels in the IMG of *Funds Management Government* under *Closing Operations -> Commitment Closing Operations -> "Define Basic Settings for Commitment Carryforward"*.

Workflow Template

To activate the workflow template, you must make the following entry in the table for event type linkage:

| FINICULUI |
|-------------------------|
| CCF_SELECTED |
| WS12300155 |
| Function module |
| SWW_WI_CREATE_VIA_EVENT |
| |
| |
| X |
| F |

To make these entries, on the screen SAP Easy Access, choose Tools -> ABAP Workbench -> Development -> SAP Business Workflow -> Administration -> Event Manager -> Type Linkages (Transaction SWETYPV).

In addition to this, you must maintain the processor assignment for the following standard tasks:

- 12300121 Approve commitment carryforward
- 12300135 Approve Commitment Carryforward with Budget (only for two-level approval procedure)

To define this setting, proceed as follows: From the SAP Easy Access screen, choose Tools -> ABAP Workbench -> Development -> Workflow -> Definition Tools -> Tasks/Tasks Groups -> Display (Transaction PFTC_DIS) and enter a standard task.

Choose Additional Data -> Processor Assignment -> Maintain and assign the processor types you require to the standard task.

Role Definition

If you want to control the processor determination for each FM area and fiscal year, you must define the role definition for the document class FMCCF delivered in IMG activity *Define FM Role Definition*. Here you must enter the jobs, organizational units or positions (object type) for the different FM areas and fiscal years. The only users to get a work item in their inbox are those whose jobs, organizational units or positions were defined in the role definition.

The following **prerequisites** apply for these settings:

- The users are assigned to the jobs, organizational units or positions in the organizational structure.
- In IMG activity *Define FM Account Assignment Groups*, an account assignment group that covers all account assignment elements (*) is created for the FM area and fiscal year.
- An amount group in which no amounts are specified is created for the FM area and fiscal year in IMG activity *Define FM Amount Groups*.

The entries for the account assignment and amount group are therefore necessary because an account assignment group and amount group must also be entered in IMG activity *Define Role Definition* in addition to the assignment of the object type, although the processor determination for the commitment carryforward cannot be controlled by different FM account assignments or amounts.

If your organization requires a differentiated control for processor determination for each FM area and fiscal year, you do not need to define any settings for the role definition. However, you must set the indicator *Cancel Rule Resolution Without Result* for the rule for role definition with fiscal year change (12300041). To do this, on the SAP Easy Access screen, choose Tools -> ABAP Workbench - > Development -> SAP Business Workflow ->

Definition Tools -> Rules for Processor Assignment -> Change (transaction PFAC_CHG). All users assigned to the standard task then get a work item in their inbox.

36.2.10.2.11 Country-Specific Settings

36.2.10.3 Stipulate Reasons for Decision

In this step, you define decision reasons for approving or rejecting earmarked funds/funds transfers.

You need decision reasons if you want explain (in detail) the approval or rejection of a document in your inbox.

In addition to this, you can also enter a long text.

The last reason is stored in the document and change documents are written.

For each decision reason, you can specify if it is 'final' or not. If you select a reason for your approval/rejection that is not marked as final, the document retains its current status. Only when you choose a 'final' reason does it mean that the approval or rejection actually comes into effect. You can control the selection of approval reasons that are available for each person by means

of an authorization.

Activities

Specify decision reasons.

Further notes

When approving or rejectiong earmarked funds/funds transfers, you must only state a decision reason if you have maintained decision reasons.

If you have not maintained decision reasons, the screen for approving/ rejecting the document does not appear.

36.3 Grants Management

36.3.1 Grantee Management

36.3.1.1 Global Settings

36.3.1.1.1 Maintaining Grant Ledgers

Special Purpose Ledger 90 is delivered as the Grants Management (GM) ledger. This ledger collects all postings relevant to grant accounting. Budget, commitments, actual values and totals are all stored in this ledger, based on the sponsor's perspective.

You need to assign this ledger to the grantee's company code(s) and perform other customizing actions. You do this under the chapter: Special Ledger Customizing .

There are five screens for maintaining Special Purpose Ledgers:

- Master data

On this screen you specify basic information for the ledger. The GM ledger is delivered with predefined settings. You should only change them if needed.

- Assign Company Code

You have to assign a company code or global company to your (local or global) ledger in order for it to be posted to.

- Assign activity

In addition to activities assigned in ledger master data, you can also assign activities to a given company code/ledger or global company/ ledger combination so that you can post to your ledger. You can assign entire groups of activities (for example, all activities from FI) under "activity groups."

The activity groups for direct posting of actual data for Financial Accounting (FI), Human Resources (HR), Materials Management (MM), and Sales and Distribution (SD) should be selected for GM. Assign a field movement to each activity and/or group.

- Field movement

A field movement determines which variable fields are to be transferred from a posting to your ledger and which fields in your ledger are receiver fields. For GM, field movement 90GM should be used.

Requirements

If you want to assign a global company to a GM ledger, you must first create this global company in the FI-SL system in the "Maintain Global Companies" activity or in the FI-LC system.

Actions

- 1. Maintain the ledger master data.
 - This is where you define which currencies or quantities your ledger will carry. You can also define which activities can be assigned to the ledger independent of the company code or global company. For the GM ledger values are predelivered.
- 2. Assign one or more SAP company codes (for local ledgers) or one or more global companies (for global ledgers) to your GM ledger.
- 3. Assign one or more activities to each ledger/company code or ledger/global company combination.
- 4. Maintain the field movement.
- 5. Maintain the selection criteria for posting data to your ledger.

36.3.1.1.2 Set Grant as Not Relevant for Grants Management

Use

Some parts of the SAP system require specification of a grant, even if no other functions are performed in relation to it.

Use this step to define a dummy grant to serve this purpose.

Requirements

- Grants are active as an account assignment element.
- The system setup does not allow BLANK as a value for the "grant" account assignment element.

Activities

Enter the following for the dummy grant:

- A name

```
This is used to identify the grant in reports. - A
```

longer description

36.3.1.1.3 Maintain Company Code Settings

Use

Use this step to enter settings to be applicable throughout Grants Management (GM) for this company code.

Requirements

You need to have:

- Created the company code
- Installed, activated, and configured Funds Management (FM) if required and created the relevant budget there

Activities

For the company code(s) where you want to use GM, specify

- Valid-from Date This is the official start date of the award or grant.
- Grantee Active Check this to activate GM for the company code.
- FM Integration Check this to activate GM-FM integration.
- Whether the payment budget or commitment budget is to be used

36.3.1.1.4 Maintain Update Settings

Use

In this step, you stipulate how the system is to update values relating to Grants Management (GM).

Requirements

You need to have created the G/L accounts, chart of accounts, and value types you want to use.

Activities

To enter your settings, choose New Entries and enter the following:

- Chart of accounts
- G/L account or range of accounts for which you want to enter settings
- Value type

The system uses the accounts you specified above when updating the value type you enter here.

Value types can be assigned to financial transactions; commitment value types (such as purchase requisition or purchase order) are defaulted automatically by the system. For example, if a consumption G/L account is used for both financial transactions (vendor invoices) and for purchase orders, the value type defined in this table should be the one to be used in the financial transaction.

- In the "Derive" column, specify whether the split processor should derive the grant, fund, sponsored program, and sponsored class, or whether they should be derived directly in GM. If you choose the latter option, the GM derivation tool is used.
- Whether resulting postings should be real or statistical.

It is possible to except Controlling (CO) postings from this setup and enter settings specifically for CO. To do this, choose **Controlling-Specific Settings** in the Dialog Structure and enter the required CO details.

36.3.1.1.5 Maintain GM Value Types

Use

Use this step to stipulate which value types are relevant for which functions in Grants Management (GM).

Requirements

You need to have created the value types in question.

Activities

- 1. Stipulate whether each value type is to handle obligations, actual data, or payments.
- 2. Specify the relevance of each of your value types for the following:
 - Billing
 - Master data
 - Financial Accounting (FI)

- Controlling (CO

36.3.1.1.6 Change Message Control for Grants Management

Use

You may want certain messages to behave differently for particular users in Grants Management (GM) than for others. For example, you might want a senior figure in your organization to receive a message as a warning while everyone else receives it as an error. If so, use this step to make the necessary specifications.

Activities

- 1. When you choose the step, a dialog box appears, inviting you to enter the message area you want to process. Enter GMCUSTOM.
- 2. The subsequent change view shows the messages in the class for which such changes have already been made, if any. Choose **New Entries** to add to these.
- 3. In each case, the Standard column shows how the message behaves in the system as a whole. You can specify the following, separately for online and/or batch:
- W(arning)
- E(rror)
- -

This means the message is inactive.

- Enter the user name of the user to whom this stipulation is to apply. Generic entries are possible.

36.3.1.1.7 Use Special Periods

Use

In this Customizing activity, you can allow Grantee Management postings in special periods.

Requirements

You have done the following:

- Created the company code
- Assigned a fiscal year variant to the company code
- Installed, activated, and configured Funds Management (FM) if required

Activities

For the company code(s) for which you want to use special periods, select the Use Special Periods indicator.

This indicator applies to the following areas:

- Financial Accounting (FI)
- Resource-related Billing

Examples

Example 1

The fiscal year variant defined for the grant is the same as the variant for the company code.

You use a company code based on fiscal year variant K4 and post a financial invoice document on posting date 31.12.2014 with posting period 013.

If you are using special periods, the related Grantee Management document is posted in posting period 013. If you are not using special periods, the related Grantee Management document is posted in posting period 012.

You run resource-related billing for the corresponding grant, which includes the option to bill in the same posting period as the invoice (013) or in a different posting period.

Example 2

The fiscal year variant for the grant is different than the variant of the company code.

You use a company code based on fiscal year variant K4 and post a financial invoice document on posting date 31.12.2014 with posting period 014 and on a grant defined with fiscal year variant K1 where special period 014 is not allowed.

The financial document cannot be posted.

36.3.1.1.8 Business Add-Ins for Global Settings

36.3.1.1.8.1 BAdI: Grants Management Coding Block Authority Check

Use this enhancement to perform authorization checks at time of posting. The checks are Grants Management-oriented.

Use the following objects:

- Authority for Grant
- Authority for Class
- Authority for Program
- Function Modules within GMAU can be helpful.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface

name> ~ <Name of method> and endmethod.

- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate

The code you stored in the method will be run when the application program is executed.

36.3.1.1.8.2 BAdI: Grants Management Authority Check

Use this step to configure the Business Add-In (BAdI) that enhances the authorization check carried out in Grants Management (GM).

Standard settings

The BAdI enables additional authorization checks on the following:

- Grant
- Budget
- Sponsored class
- Sponsored program

Activities

Specify an implementation name. When you press Enter, the system invites you to enter a long text, describing the implementation.

When you subsquently execute the BAdI, you can add any or all of the additional authorization checks to your installation.

36.3.1.1.8.3 BAdI: Grants Management: Override Updating Attributes

In some business cases, the standard customizing settings are not enough. This BAdI allows you to override customizing settings when updating transactions in Grants Management (GM). The parameters that can be changed in this BAdI are:

- CH_IS_RELEVANT: Responsible for determining who derives the grant and other GM dimensions
- Return Value "X" indicates that the grant and other GM dimensions should be derived from the rules specified in the Grants Management Assignments.
- Return Value " " indicates that the GM dimensions will be obtained through the splitting mechanism of the split processor.
- CH_STATS: Responsible for indicating whether a line is a statistical or a real posting
- Return Value "R": Real Posting
- Return Value "S": Statistical Posting

Recommendation

Only use this BAdI when you need one GL account to behave differently depending on a business scenario.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.1.8.4 BAdI: Currency Exchange

Use

Use these enhancements when you need to calculate the currency conversion in a different way than provided by SAP.

Use the following methods:

- Currency conversion for budget
- Currency conversion for actuals/commitments
- Currency conversion for FI
- Currency conversion for revaluation report

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.3.1.2 Master Data

36.3.1.2.1 General Settings

36.3.1.2.1.1 Maintain Grant Responsibilities

Use

Use this activity to define the responsibility types you want to use in your Grants Management (GM) application. You can associate workflow functions with those responsibilities.

The defined responsibility types are available within the different GM Master Data and can be used to assign a responsibility type to the grant defaulted from the sponsor or sponsored program.

A typical responsibility type would be the principal investigator.

Requirements

Since you are using the responsibility types within a workflow, the workflow objects must be set up first.

Activities

- 1. In the initial overview, choose New Entries and enter an ID and a descriptive text for the new responsibility type.
- 2. Having saved the new responsibility type, select it and choose "WF Details for Grant" in the dialog structure. (WF stands for "Workflow".)
- 3. In the resulting overview, define the workflow actions required for this responsibility type.
- 4. You can also define workflow actions for the GM budgeting process.

36.3.1.2.1.2 Maintain Award Types

Use

Use this activity to define award types. You can then assign the award types to a grant and use them in grant reporting.

Activities

You can use the initial overview to create new award types and change existing ones. To create new award types, choose New Entries and enter an ID and a descriptive text for each award type desired.

36.3.1.2.1.3 Maintain Legislative District Codes

Use

Use this step to define legislative district codes (LDCs). LDCs can be assigned to grants and used as reporting attributes.

Activities

You can use the initial overview to create new LDCs and change existing ones. To create LDCs, choose New Entries and enter an ID and a descriptive text for each LDC desired.

36.3.1.2.1.4 Maintain Payment Rules

Use

Use this step to define Grants Management payment rules. You can then assign the rules to outgoing grants to describe the payment process used.

Activities

You can use the initial overview to create new payment rules and change existing ones. To create rules, choose New Entries and enter an ID and a descriptive text for each rule you create.

36.3.1.2.1.5 Maintain Letters of Credit

Use

In some cases, sponsor's funds are received in the form of a letter of credit. If this is so in your case, use this view to enter the number and text of the letter(s) of credit.

Activities

In the maintenance view, switch to change mode and choose New Entries. Then enter the relevant data for your letter(s)s of credit.

36.3.1.2.1.6 Maintain CFDA Codes

Use

Use this step to enter and change the codes for the Catalog of Federal Domestic Assistance (CFDA) in your GM-GTE installation.

Activities

To enter a new CFDA code, choose **New Entries** and enter the code and text for each code you want to include.

You can also change entries already made by accessing them in change mode.

36.3.1.2.2 Sponsor

36.3.1.2.2.1 Account Group Assignment

Use this step to tell the system how the role of sponsor is to be integrated with customer handling.

Activities

Make the following entries:

- Business partner grouping
- Customer account group
- If you want the two groups to use the same number assignment, check the **Same no.** box for your new entry. See the field documentation for this box for details on restrictions.

36.3.1.2.2.2 Business Partner Integration with Records Management

Use this step to integrate Grants Management (GM) with Records Management (RM).

Requirements

You have defined the business partner categories and partner types you need.

Activities

1. Make the following entries:

- Business Partner category

You can group business partners together by assigning them to the same categories. -

Partner type

- If you want to activate integration with RM now, check the Activate Records box.
- 2. To add detail, choose Integration Details in the dialog structure and enter the following:
 - Process That is, grant or sponsor.
 - Sequence

In cases where several parameter values are useful to one grant type or business partner, you need to number the parameters sequentially. Use this field to enter the sequential numbers.

- RM class

For example, record, element, or element detail.

- Value

36.3.1.2.3 Sponsored Class

36.3.1.2.3.1 Maintain Class Authorization Groups

Use this step to create authorization groups. By assigning groups to sponsored programs, sponsored classes, and grants, you can segregate users who may need access to different parts of the master data.

Activities

Enter an identifier for the new group and a longer description.

36.3.1.2.3.2 Maintain Text ID for Sponsored Class

Use

Use this step to determine the types of text you can maintain in the sponsored class master data.

Standard settings

We deliver object GMSO_CLASS as standard.

Activities

To add a new text ID, choose New Entries and specify the following:

- Object GMSO_CLASS
- A four-character alphanumeric ID
- A descriptive text of up 30 characters

36.3.1.2.4 Sponsored Program

36.3.1.2.4.1 Maintain Program Authorization Groups

Use this step to create authorization groups. By assigning groups to sponsored programs, sponsored classes, and grants, you can segregate users who may need access to different parts of the master data.

Activities

Enter an identifier for the new group and a longer description.

36.3.1.2.4.2 Maintain Text ID for Sponsored Program

Use

Use this step to determine the types of text you can maintain in the sponsored program master data.

Standard settings

We deliver object GMSO_PROG as standard.

Activities

To add a new text ID, choose New Entries and specify the following:

- Object GMSO_PROG
- A four-character alphanumeric ID
- A descriptive text of up 30 characters

36.3.1.2.5 Grant

36.3.1.2.5.1 Extending the Master Data Through the BDT

Use

SAP Business Partner is designed to allow enhancements, because screen structure and screen sequences are defined in control tables. Program logic can be installed by using defined interfaces.

You can enhance the business partner by way of attributes, new tables and BP roles. You also have the option of enhancing the field checks delivered by SAP.

You can find further information about these enhancement options in the Developers' Manual for the **Business Data Toolset** (see *Application Help -> SAP Business Partner (SAP BP) -> Business Data Toolset*).

It is possible to make use of the Business Partner feature in Grants Management. Customizing additional to that detailed in the Grants Management Implementation Guide is required.

Activities

The additional functions are offered in an area menu. Type GRANT_CUSTOMIZE in the transaction box to access the menu.

36.3.1.2.5.2 Maintain Grant Number Ranges

Use

Use this step to enter the number range intervals you require for grant master data in Grants Management (GM).

Activities

- 1. In the Grant in Grants Management Module screen, choose Change Intervals.
- 2. Choose **Insert Interval** and enter the following for a new interval:
 - ID number
 - "From" number
 - "To" number
 - Whether number assignment from this range is to be internal (the system assigns the number) or external (you assign the number manually)
 - As GM processing progresses, you can check the status of your number ranges here. The "Current Number" column shows how much of a number range has been used.

36.3.1.2.5.3 Maintain Grant Types

Use

You must assign a grant type to each grant you create in the SAP System. In this step, you configure the grant type(s) you want to use for this purpose.

Requirements

You need first to create a status profile.

Activities

- 1. To create a grant type, choose **New Entries** and enter the following:
 - Two-character identifier
 - Descriptive text
 - Whether you want to use internal and/or external number assignment for this grant type If you choose internal number assignment, you also need to specify a number range.
 - Status profile
 - Enable or disable posting control
 - Field group control You can apply lifecycle status control alone, or with user-defined statuses, or select "None".
 - Whether you want to use user status management
- 2. With these basic entries made, you then need to specify details:
 - Lifecycle

To use this function, you need to create and maintain a status network. You must also specify which status is to be the initial status. Check the **Workflow** indicator if you want the Workflow scenario to be active for a particular configuration.

- FM Budget Integration Specify whether budget integration with FM is required and, if so, whether the budget is to originate from FM or GM.
- Set budget type defaults For each process (such as budget entry or a return) in an FM area, enter a budget type.
- Grant type integration with Records Management (RM) For each grant type where you activate integration, you need to enter controlling details, such as the process (grant or sponsor), RM class, sequential numbers for the processes, and the value.
- Default Reporting Records

Use this section to define what tasks, if any, you want to use as defaults in reporting for grants of a particular grant type. In each case, stipulate a task type, task name, and GM reporting rule and class. Remember to activate this set of defaults by checking the Default indicator.

- Budget Layout Use this option to link budget layouts with budget versions in a particular grant type.

36.3.1.2.5.4 GM Grant Control: Field Group for Authorizations

It is possible to group fields together for authorization purposes. Use this step to specify such groups in Grants Management (GM).

Standard settings

We deliver the groups you can enter here, as standard.

Activities

Choose **New Entries** and enter the ID for the group you want to add. When you save, the system displays the longer description for the group.

Further notes

Authorization to a group allows access to **all** the fields in the group for users with the appropriate authorization. Only allow access to those you know need it for the whole group.

36.3.1.2.5.5 Maintain Grant Authorization Types

Use

Authorization types control which business partners users are allowed to maintain.

Activities

You need to enter an identifier and description of your authorization type. Check the relevant box to activate the type.

You can also specify one or two screen fields determining maintenance authorization.

36.3.1.2.5.6 Maintain Grant Authorization Groups

Use this step to create authorization groups. By assigning groups to sponsored programs, sponsored classes, and grants, you can segregate users who may need access to different parts of the master data.

Activities

Enter an identifier for the new group and a longer description.

36.3.1.2.5.7 Maintain Grant Relationships

Example

You can create relationships between grants and business partners or between grants and other grants. For example, you could create a relationship between grants and business partners called "subcontractor". This relation would then be available in the relationship section of the grant master.

Standard settings

While there is no preconfigured relationship, we deliver standard settings for the time constraint and cardinalities (see below) from which you can make your selection.

Activities

In the overview, choose New Entries, then enter the following:

- In the **Relationship** section:

Enter a three-character identifier. The first character must be either "Y" or "Z".

- In the GM Relationships Maintenance section:
- Description
- Description of up to 30 characters
- Additional description of up to 40 characters, describing the relationship as viewed from the grant
- Additional description of up to 40 characters, describing the relationship as viewed from the business partner
- In the **Semantic Checks** section:

- Is the relationship one-way only? If so, check the appropriate box.
- Select the applicable time constraint
- Use one or both cardinalities to indicate whether the relationship is one-to-one, one-to-many, or both.
- In the **Business Partner Details** section: Enter the relevant role and check the appropriate box to indicate whether the business partner is an organization, a person, or a group.

Further notes

For a fuller description of Business Partner functions, including relationships, see the Business Partner IMG documentation under *Logistics - General*.

36.3.1.2.5.8 Workflow Settings for Grant Master Data

36.3.1.2.5.8.1 Workflow Settings for Grant Master Data

Use

Use this step to activate the following Workflow settings in Grants Management (GM) master

data processing:

- Notification of change of status
- Change of status approval

Standard settings

We deliver the system with the processes deactivated.

Activities

- 1. In the **Task Customizing Overview**, you see the task requiring processing. Choose *Activate event linkage* in the Event Linkage column.
- 2. In the event triggering screen, open the point **GM MD Change Grant Master Status** and click the *Activate* switches next to the status(es) you required. You may activate all of them or just a desired selection.

After you save, grant master records can pass through all the statuses you have activated.

3. Open the point **GM Grant Mtr Change of Status Approval** and activate Grant Request for Approval.

If you have already activated the change of status approval or the statuses, and need to deactivate some or all of them, the procedure is the same, except that deactivation switches appear in the event triggering screen instead of the activation switch described above.

36.3.1.2.6 Fund

36.3.1.2.6.1 Maintain GM Fund Type for FM Fund Type

Use

In this step, you create and maintain the fund types you need for your Grants Management (GM) processing.

Activities

To create a new fund type, choose New Entries and specify the following:

- FM area Enter one you are using for GM processing.
- Six-character alphanumeric identifier for the new fund type
- Descriptive text for the new fund type
- Whether the fund type is internal, external, or auxiliary

36.3.1.2.7 Assignments

36.3.1.2.7.1 Maintain Grants Management Assignment Derivation Rules

In this step, you define one or more strategies for determining how certain attributes can be used to derive Grants Management (GM) objects.

You can use account assignment derivation to automatically determine the values of GM account assignments from other account assignments, as longas there is a logical dependency between them.

The account assignment derivation consists of a sequence of derivation steps - known as the **derivation strategy**. It is used to sequentially derive the values for GM account assignments from other account assignments.

Each derivation step describes how a number of target fields adopt the values from a number of target fields.

There are a number of different **Derivation Step Types** that can be used to represent different kinds of logical dependency between source and target fields, as follows:

- Derivation Rule
- Table Access
- Assignment
- Initialization
- Enhancement
- Function Module
- FMDT_CONVERSION_EXIT_ALPHA_OUT Use this function to convert alphanumeric fields to output format.
- FMDT_READ_MD_ACCOUNT_COMPANY Use this function to retrieve the G/L Account Master Data.
- FMDT_READ_MD_ASSET Use this function to retrieve the Asset Master Data.
- FMDT_READ_MD_CMMT_ITEM Use this function to retrieve the Commitment Item Master Data.
- FMDT_READ_MD_COST_CENTER Use this function to retrieve the Cost Center Master Data.
- FMDT_READ_MD_FUND Use this function to retrieve the Fund Master Data.
- FMDT_READ_MD_FUNDS_CTR Use this function to retrieve the Funds Center Master Data.
- FMDT_READ_MD_ORDER Use this function to retrieve the Order Master Data.
- FMDT_READ_MD_ORDER_OPERATION Use this function to retrieve the Operation Order Master Data.
- FMDT_READ_MD_ORDER_SD_HEADER Use this function to retrieve the SD Order header information.
- FMDT_READ_MD_ORDER_SD_ITEM Use this function to retrieve the SD Order line item information.
- FMDT_READ_MD_WBS_ELEMENT Use this function to retrieve the WBS Element Master Data.
- FMDT_READ_ORDER_NP_FROM_FMZUOB Use this function to retrieve the Network header assignment to FM.

- FMDT_READ_ORDER_NV_FROM_FMZUOB
 Use this function to retrieve the Network Activity assignment to FM.
- FMDT_READ_ORDER_PM_FROM_FMZUOB Use this function to retrieve the PM Order assignment to FM.
- FMDT_READ_ORDER_SD_FROM_FMZUOB Use this function to retrieve the SD Order assignment to FM.

Standard settings

We deliver a standard strategy called **SAP**:

- The strategy is blank if you are using this tool for the first time.
- If you are migrating from an earlier release you had installed, the strategy contains the rules you defined in the release from which you are migrating.

You must assign a company code to each strategy. Each company code can only be assigned to one strategy.

Activities

- 1. To create a new strategy, choose **New Entries** in the "Strategy Environments" overview and enter an identifier and descriptive text for your strategy.
- 2. Having saved your new entry, return to the full list.
- 3. To assign a company code to a strategy, select it and choose **Company Code Assignment** in the dialog structure.
- 4. In the resulting overview, choose **New Entries** and enter the company code(s) you want to assign to this strategy.
- 5. To enter derivation rules for your new strategy, select it in the "Strategy Environments" overview and choose **Maintain Strategy**.
- 6. In the next overview, choose Maintain Step.
- 7. Select **Derivation rule** in the popup, then enter the following:
- Source fields and target fields
- If the derivation is to be subject to any conditions, specify these on the Conditions tab.
- Some attributes can be applied to the derivation too for example, you can have the system issue an error message if derivation is not possible, or you can enter a starting validity date. Make these specifications on the Attributes tab.

36.3.1.2.7.2 Business Add-Ins for Assignments

36.3.1.2.7.2.1 BAdI: GM Derivation Tool

Use

SAP provides methods that enable further customize the behavior of the Grants Management (GM) derivation tool. You must create an implementation using the following predefined methods:

- CHECK_DRULE_BEFORE_SAVE
- CHECK_DRULE_ENTRY
- GET_STRATEGY
- STEP_ACTIVITY_CHECK
- STEP_CHECK_ON_ENTER
- STEP_CHECK_ON_EXIT
- SET_DISPLAY_MODE
- STEP_DRULE_ACTIVITY_CHECK
- SET_STRATEGY_BUTTONS
- Derive

Standard settings

We do not deliver any standard settings.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the *Short text for implementation* field.
- 3. From the tab index, choose *Interface*. The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.

- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

(1) You use the method CHECK_DRULE_BEFORE_SAVE to prevent users from deleting assignments.

*---- Check if table is initial

DESCRIBE TABLE I_TAB_DELETED_ENTRIES lines sy-tfill.

IF NOT sy-tfill is initial.

* Raise MESSAGE not allowed to delete entries e_reject =

'X".

ENDIF.

(2) You use the method CHECK_DRULE_BEFORE_SAVE to check specific rule IDs.

CASE i_stepid

WHEN 'AAA'.

* Specific Check for Step ID 'AAA' WHEN OTHERS. ENDCASE.

36.3.1.2.8 Revaluation

36.3.1.2.8.1 Default FM Settings for GM Revaluation

Use

The Grants Management (GM) budgeting facility includes a feature for revaluing amounts in other currencies where, for example, the sponsor's currency is different than the one your organization uses.

Use this step to enter the settings you want to enter as defaults for this process.

Requirements

You need to have created the funds center, funded program, and other objects you need. You cannot create them here.

Activities

Choose **New Entries** and enter the following:

- Grant type
- FM area
- Funds center
- Commitment item
- Functional area
- Funded program

When you save your entries, the grant type text appears in the Description field.

The system applies these defaults for this grant type when you do not make other, specific entries in the revaluation program.

36.3.1.2.8.2 Business Add-Ins for GM Revaluation 36.3.1.2.8.2.1 BAdI: Enhancement for GM Revaluation: Display Exchange Rate

Use this step to enable the BAdi which permits users to enter conversion factors in the Grants Management (GM) revaluation program.

Activities

- 1. When you choose the step, the dialog box **Business Add-Ins: All Implementations for Definition BADI_GM_REV_CFA** appears. You can either opt to edit one of the existing ones or create a new one. If you choose the latter, the system invites you to enter a name for it.
- 2. In the processing screen, enter or change the long name for the implementation and specify whether the implementation is by ABAP coding or by formula.
- 3. After you save your specifications here, the GM revaluation program includes two fields where users of this implementation can enter exchange rate factors.

36.3.1.2.8.2.2 BAdI: Allow Value Type Specification in Revaluation

Use

Use this Business Add-In (BAdI) to allow users to specify the value types to be revalued in the revaluation run.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.2.9 Business Add-Ins for GM Master Data

36.3.1.2.9.1 BAdI: Business Add-In for Sponsored Objects

Use

The purpose of this enhancement is to provide access to data before (PBO) and after (PAI) the screens of the sponsored class master and sponsored program master are called. Here you can enter default values for any of the values on the screens.

The transactions that play a role here are: Sponsored Program Master Data and Sponsored Class Master Data.

If you need to add more fields, you can make use of subscreens, and add an include to the structure for sponsored program GMSPPROGRAM or Sponsored Class GMSPCLASS.

Example

CL_EXM_IM_GM_SPONSOREDOBJ

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate

The code you stored in the method will be run when the application program is executed.

Further notes

Subscreens for additional fields are called from subscreens SAPLGMSO 0130 and 0230.

36.3.1.2.9.2 BAdI: Grant Master BAPIs

Note: The settings affected here are exclusively reserved for the use of Grants Management

Title

Business Add-In: Customer Enhancement for Grant Master BAPIs

Use

With this Business Add-In (BAdI), you can define customer enhancements related to the business object Grant (BUS0035).

It can only be implemented for Grant Master BAPIs.

The methods of this BAdI are called during the processing of the business object methods.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore in the standard release the BAdI is not active.

Activities

If you want to handle customer-specific fields for entry documents, you must first define the corresponding customer include (CI_GMGR).

To implement this BAdI, apply the following steps:

- 1. After you call up the IMG activity, a dialog box appears, where you can enter a name for the implementation.
- 2. If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:
- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 4. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 6. Save your entries, and assign the implementation to a development class.

- 7. Place the cursor on the method, and double-click to enter method processing.
- 8. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 9. Save and implement your code. Return to the *Edit Implementation* screen.
- 10. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 11. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

Activate your BAdI implementation.

Requirements

Recommendation

Only use character-like fields in the structure.

Further notes

36.3.1.2.9.3 BAdI: Grant Number Modifications for External Assignment

Use

You can use this BAdI to override the number assignment settings made elsewhere relating to grant master data. It is called when you create a grant.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the *Short text for implementation* field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

You want to use grant numbers that begin with a user-defined prefix and end with a year. The prefix is dependent on grant type and sponsor. Since this is not possible with number ranges in normal internal and external assignment, you can use this BAdI to configure the system as necessary.

36.3.1.2.9.4 BAdI: Override Copied Data from Reference Grant

Use

When you create a grant as a copy of an existing grant, most, but not all data is transferred to the target grant. The following source grant data is not copied to the target grant:

- Grant type
- Sales order
- Grant status
- Modification and creation date
- Workflow status
- Application log data
- Records Management linkage

The new grant gets the current date as creation date and source grant number as the copy_source. If this is inadequate for your purposes, you can use this BAdI to modify the defaults.

The importing parameters I_SOURCE_XXX represent all of the data contained in the source grant. The changing parameters C_TARGET_XXX represent all the data that has been proposed for the target grant. If you do nothing in the BAdI, you will retain the default behavior. Any changes to the changing parameters will be displayed in the newly created grant. Keep in mind that it is possible that some data will be changed again due to sponsor defaults.

Requirements

You are using Grants Management (GM) and want to create grants by copying from a reference grant. However, you want to modify the default copy behavior.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.

- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.2.9.5 BAdI: Map Grant Master Data to Sales Order

Use

When a grant is changed to status "Award" or created as an award, a sales order is created simultaneously, provided a non-manual billing rule is maintained in the grant.

The implementation of this Business Add-In (BAdI)I makes it possible to map grant master data to the sales order.

The import parameter I_GMGR_FIELDS represent the data contained in the grant master table GMGR, including the Customer Include.

The export parameter E_EXTENSIONIN is the extension table for BAPIs and should be filled with the sales order data that reflects the grant master data.

The export parameter E_RETURN is the error messages table for BAPIs and should be filled with any error messages that arise within the implementation of the BAdI.

Requirements

You are using Grants Management (GM) and want to create grants relevant for billing. However, you want to map some grant master data to sales order data.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.2.9.6 BAdI: Extended Check for Object Mapper

Use

This Business Add-In (BAdI) enables you to specify additional validations of entered posting object mappings. The default is to check against budget and posting activity and disallow mappings in which individual postings overlap with mapped postings. With this BAdI, you can to alter the default as well as add additional verifications.

Requirements

You use passthrough funding and want to enhance (or reduce) the verifications on mapped Grants Management (GM) combinations.

Standard settings

Activate the additional checks for a certain checking view. The system contains a Master Data,

Budget and Billing checking view for additional checks. The Posting Object Mapper is classified under the Master Data view. Enable the additional checks in BAdI method DO_CHECK. The actual checks are placed in the RUN_MORE_CHECKS method.

Activities

Create implementations to both methods as described below. The additional checks can be enabled with method DO_CHECK; method RUN_MORE_CHECKS then contains the coding for the additional verifications.

Form CHECK_TO_GRANT in function module GM_OM_CHECK_MAPPED_OBJECTS provides a coding reference for additional checks.

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.3 Budgeting and Availability Control

36.3.1.3.1 Budgeting

36.3.1.3.1.1 Maintain Number Range Interval for Entry Documents

Use this step to maintain number ranges for Grants Management (GM) budgeting.

Activities

- 1. Specify GMBU_DOCNR as the object and choose Maintain.
- 2. In the resulting screen, choose Number ranges, then Intervals.
- 3. Make any additions or changes you require.

36.3.1.3.1.2 Maintain Number Range Interval for Budget Change Documents

Note

The settings entered here are reserved exclusively for the use of the budgeting tool in Grants Management (GM).

Use

In this IMG activity, you define the number range interval of budget change documents in GM.

Change documents are always generated, when changes are made to the totals records for existing budget values. Change documents provide a complete history of the changes made to budget values.

Requirements

- Use Number range **01** for GM budget change documents. Enter **01** and not **1** as the number range.
- Only internal number allocations are valid. You must <u>not</u> set the *Ext* (external number allocation) indicator.

Activities

- 1. Define number range **01** and the number interval.
- 2. Save your entry.

Further notes

You transport number range objects as follows:

Choose Interval -> Transport in the accounting document Number Range screen.

All intervals for the selected number range object are deleted in the target system first. After the import, only the intervals you export are present. The number statuses are imported with their values at the time of export.

Dependent tables are not transported or converted.

36.3.1.3.1.3 GM Budget Transaction Settings

Use

In this Customizing activity, you customize how your budgeting transactions in Grants Management (GM) behave.

Activities

Proceed as follows:

- 1. In the initial view, choose *New Entries* and make the following entries in *General Settings*:
 - The user name to which these settings are to apply
 - Initial GM Document If this is selected, the user gets the last document used as a default when he or she accesses the budgeting transaction. If this is left blank, that user gets an initial (that is, blank) document.
 - Preload Held

If this flag is set, the user sees a list of the held documents he or she has already created when accessing the budgeting transaction. The number of records so listed is specified in the *Number of Records* field (see below).

- Preload Posted

If this flag is set, the user sees a list of the posted documents he or she has already created when accessing the budgeting transaction. The number of records so listed is specified in the *Number of Records* field (see below).

- Dimension Filter

The dimension filter is used to show only relevant objects for the user, normally because is working with a large number of objects. If the flag is set, the filter is automatically loaded every time the transaction is called. If the flag is off, no objects are loaded and the user should use toolbar buttoms to load this filter.

- Allow Changes This flag should be switched on when a specific user is allowed to change the GM Budgeting Workbench settings for his or her user.
- Number of Records Enter a number here to define how many posted or held documents are preloaded when the user enters the budgeting transaction.
- 2. Save your entries.
- 3. It is possible to keep two or more sets of budget settings in parallel. To do this, choose *Version Settings* in the Dialog Structure.
- 4. In the resulting overview, choose *New Entries* and make the following entries:

- User name
- Budget version
- 5. Set each of the flags below as required:
 - Load GM object
 - Load FM object
 - Load Object Mapper Show Hierarchy Tab
 - Show cost sharing (CS)
 - Show indirect costs (IDC)
 - Show Object Mapper
 - Amount Type

Use this field to select whether the amounts shown should be net amounts or totals.

6. Save your entries and repeat the process for as many different versions as desired.

36.3.1.3.1.4 Configure GM Budget Document Types

In this Customizing activity, you can create and configure budget document types in Grants Management (GM). The configuration includes integrating the document types with Funds Management (FM) and Records Management (RM).

Requirements

You have done the following:

- Created a number range to apply to the new document type
- Created document types in FM so you can integrate with FM

Activities

- 1. To create a document type, choose *New Entries*, and enter the following:
 - Two-character ID in the GM Doc Type field
 - Budget phase for which this document type is to be used
 - Funding, which shows from where the money for this document type will come
 - Budget status of released or unreleased

- Financing object type of grant, fund, or other
- If the budget for this document type will require approval, select the *Budget Approval* checkbox.
- Description of the document type up to 40 characters
- If the budget for this document type is integrated with FM, enter the FM document type of the corresponding FM documents in the *Document Type* field.
- If you do not allow a negative budget for this document type, select the *Nonnegative Budget* checkbox.
- 2. To integrate this document type with RM, choose *Grant Type Interface to Records Mgmt* under the *Budget Integration to Records Managements* area of the dialog structure, and enter the following:
 - Sequence number
 - RM class
 - RM element name
 - Value

36.3.1.3.1.5 Assign Budget Phase to Version

Budget versions are a means of keeping several different "snapshots" of your budget in the system. Use this step to maintain any budget versions you require.

Standard settings

We deliver the budget phases as standard.

Activities

Choose New Entries and enter the following:

- Budget version
- Budget phase to which you want to apply the budget version, such as the budget for the grant award.

36.3.1.3.1.6 Configure GM Time Splitting Rules

Use

Use this step to define rules governing the time split required when your budgeting periods do not exactly coincide with periods used by the sponsor or with the calendar year.

Activities

- 1. Choose **New Entries** and make the following entries:
 - An ID for the new rule
 - A text of up to 60 characters, describing the rule in more detail
 - The scenario to which the rule is to apply That is, only to released budget or to both released and unreleased budget
- 2. With these basic entries made, you need to add some detail. Choose **Splitting Rule Elements** in the dialog structure and make the following entries for a selected rule:
 - The budget phase to which it applies
 - Budget status to which it applies
 - Split by
 - If you want to manual splitting to be allowed for a particular combination in the above entries, check the appropriate box.

36.3.1.3.1.7 Tools

36.3.1.3.1.7.1 Delete Budget Documents

Use

In this step, you start the program for deleting budget documents in Grants Management.

You can use this program in the following situations:

- If you are still in the test phase and want to delete your test data before the production startup.
- If you have transferred budget for a future year to the production system using batch input and you want to delete the existing budget data for the current year.

Standard settings

SAP does not deliver any standard settings.

Activities

- 1. Specify the scope of data you want to delete.
- 2. Specify whether you first want to create a test run in order to get an overview of the data that will be deleted in the current selection.
- 3. Run the report.

36.3.1.3.1.8 Business Add-Ins for GM Budgeting

36.3.1.3.1.8.1 BAdI: Budget Document Consistency Checks

Use

Use this step to implement the enhancement for non-standard budget document validations to be carried out before you post a budget document in Grantee Management (GM-GTE). The sample code for this BAdI illustrates how you can include messages in the standard log of the budget workbench. If an error then occurs, an appropriate message describes the problem.

The parameters of the BAdI method are as follows:

- I_F_HEADER: Importing parameter with data of the header document
- I_T_LINES: Importing parameter with GM-GTE detail data
- I_T_FYD_LINES: Importing parameter with Funds Management (FM) detail data if there is any (if FM integration is active in the award phase)
- I_REF_LOG:Changing parameter to append messages to the budget workbench log
- This BAdI is designed to code any number of validations that will be executed sequentially, allowing you to structure a series of validations.

Import parameters are "read only" so that the implementations do not change any value.

Activities

After you call up the IMG activity, a dialog box appears:

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.

- 3. Click on BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click on entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.3.1.3.1.8.2 BADi: Budget Transfer to Funds Management

This method allows you to perform checks or changes to the transfer of the lines in the Grants Management (GM) budget into the distribution to Funds Management (FM) budget. The interface receives the original GM lines and the result of the standard transfer/distribution to FM.

Read-only access to the header of the new document in FM, as well as the application log in

GM, is also provided.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the *Short text for implementation* field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.

- 5. Place the cursor on the method, and double-click to enter method processing.
- Enter the code for the implementation between the statements method <Interface name> ~
 <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.3.1.8.3 BAdI: Allow Grant Planning in Funds Management

Use

Use this enhancement whenever you need to plan on grants within Funds Management. This planning activity is only allowed for versions that are not operative and therefore not for grants that have been awarded. The awarded budget for a grant will always remain in Grants Management (GM) and later on, if the integration exists, will be transferred automatically to Funds Management. GM owns all the rules for every given grant.

If you try to copy plan budget in BCS into and productive version, the grant information will not be transferred.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.

The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.3.1.8.4 BAdI: Budget Document BAPI

Note:

The settings affected here are exclusively reserved for the use of Grants Management.

Title

Business Add-In: Customer Enhancement for Entry Document

Use

With this Business Add-In you can define customer enhancements related to the business object BudgetEntryDocGM (BUS0036).

It can only be implemented for Grants Management budgeting.

The methods of this BAdI are called during the processing of the business object methods.

Standard settings

SAP does not deliver any implementations of this BAdI. Therefore, in the standard release, the BAdI is not active.

Activities

If you want to handle customer specific fields for entry documents, you should first define the corresponding customer include (CI_GMBDGTHEADER).

Now implement this BAdI applying the following steps:

After you call up the Customizing activity, a dialog box appears, where you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.

2. Enter a short text for the implementation in the *Short text for implementation* field.

- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at alater time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

Activate your BAdI implementation.

Requirements

Recommendation

Only use character-like fields in the structure.

Further notes

Documentation for method CREATE_IN Documentation for method CREATE_OUT Documentation for method GETDETAIL_IN Documentation for method GETDETAIL_OUT

Documentation for method GETLIST_IN

Documentation for method GETLIST_OUT

Documentation for method REVERSE_IN

Documentation for method REVERSE_OUT

36.3.1.3.1.8.5 BAdI: Creation of Accounting Documents

Use

This Business Add-In (BAdI) is used in the *Grantee Managment* (GM-GTE) component. You can use this BAdI to automatically post accounting documents while you are posting awarded contributions using the following transactions and/or Business Application Programming Interfaces (BAPIs):

- To post a GM budget document, you can use the following:
- GM CREATE BUDGET
- GM_BDGT_COPY
- BAPI_0036_CREATE
- To post a previosly parked GM budget document, you can use GM MODIFY BUDGET.
- To post a GM budget document with status *Released*, you can use GM BDGT RELEASE.
- To reverse a GM budget document, you can use GM_MODIFY_BUDGET or BAPI_0036_REVERSE.

To automatically post accounting documents, you must implement the POST method for this BAdI.

The calling program uses the result as follows:

- If you are using GM_CREATE_BUDGET, GM_MODIFY_BUDGET, GM_BDGT_RELEASE or GM BDGT COPY, the following is true:
- If the posting of the accounting document fails, the GM budget document is not posted and the error from the BAdI is displayed in the application log of the calling program (ROLLBACK WORK is executed by the calling program).
- If the posting of the accounting document does not fail, the GM budget document is posted with the accounting documents (COMMIT WORK is executed by the calling program).
- If you are using BAPI_0036_CREATE or BAPI_0036_REVERSE, the messages in the application log are moved to the RETURN interface table. The customer program does or does not post the GM document with the accounting documents (using BAPI_TRANSACTION_COMMIT or BAPI_TRANSACTION_ROLLBACK).

If you posted your accounting documents with the following reference fields, you can display the accounting documents related to a GM budget document from the budgeting workbench transactions by choosing *Environment* > *Related Document*.

- AWTYP = GMBD

- AWREF = Concatenation of GM budget document number and company code

To check your accounting documents without postings, you can use BAdI: Budget Document Consistency Checks.

Requirements

- GM and funds management (FM) budget documents were checked successfully.
- You are creating one of the following GM budget documents:
- GM budget document with a *Posted* or *Preposted Posted* document state and *Released* budget status
- GM budget reversal document with a *Posted* or *Preposted Posted* document state and *Released* budget status

Standard settings

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

Activities

Implement this BAdI in the POST method by doing the following:

- 1. Map the following information to the interface fields to be given to the BAPI or function module that you use to post your accounting documents. The information related to the GM budget document is available in the method interface:
 - I_F_DOCID GM budget document number
 - I_F_HEADER Header fields of the GM budget document
 - I_T_LINES GM line item fields of the GM budget document
 - I_T_FYD_LINES FM line item fields of the GM budget document
 - I_F_FM_OBJECTS FM interface objects
 - I_F_GMGR Attribute fields of the incoming grant
 - I_REF_LOG Instance of the application log of the GM budgeting workbench

- 2. To save the link between the GM budget document and the accounting documents, map the reference fields of your accounting documents in the following way:
 - AWTYP = GMBD
 - AWREF = Concatenation of GM budget document number and company code
- 3. Call the BAPI or function module used to create your accounting documents. Do not perform the COMMIT inside this BAPI or function module.
- 4. Use the result in the following way:
 - If the posting of the accounting documents fails, display the error messages in the application log I REF LOG and raise the exception EX POSTING FAILED.
 - If the posting of the accounting documents does not fail, you can display an information message containing the accounting document numbers in the application log I_REF_LOG.

36.3.1.3.2 Availability Control

36.3.1.3.2.1 Prepare Activation of Availability Control

Availability Control in Grants Management Budgeting

The active availability control (AVC) works on the summarization and saving of all the overall consumable budget (= **Budget for Consumption**) and amounts already consumed (= **Budget Consumption**) in ledgers.

In the IMG activity Check Standard Customizing of Availability Control, you ensure that all necessary standard Customizing settings that SAP delivers and those you require for the IMG activities of AVC are available.

In the IMG activity Define Filter Settings for Consumable Budget, you determine which budget values of Grants Management (GM) budgeting are relevant for AVC.

In the IMG activity Define Account Assignment Derivation of Availability Control Objects, you define to which GM account assignment of the ledger (=Control Object) a posting activity is summarized. In principle, therefore, it is possible for the values of GM account assignment elements to be set to initial in the control object or to use different values for the GM account assignment elements in the control object than in the budget entry posting or in the budget usage posting.

Tolerance Profiles allow you to group together availability tolerance limits for different Activity Groups. You must assign a tolerance profile to the AVC ledger and to your company code for each organizational fiscal year. Specific assignments are also possible - for example, for particular GM account assignments in the AVC ledger - using a derivation strategy for finding an alternative tolerance profile.

Before you can update values and carry out availability checks in a ledger, you have to activate the ledger in the IMG activity Maintain Activation Status for GM Availability Control Ledger. To do this, you have different Activation Statuses at your disposal.

Recommendation

Enter the Customizing settings for AVC in the same order as the individual IMG activities appear in the IMG structure.

See also

For more information, see GM-GTE Customizing: Availability Control in SAP Library for SAP ERP under SAP ERP Central Component -> Accounting -> Public Sector Management -> Grants Management -> Grantee Management -> Customizing Grantee Management -> GM-GTE Customizing: Basic Settings and Global Settings -> GM-GTE Customizing: Budgeting and Availability Control.

36.3.1.3.2.2 Check Standard Customizing of Availability Control

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you check whether the standard Customizing delivered by SAP required for activating availability control exists in the current client.

Any missing settings can be transferred from client 000 if required.

Note

Missing Customizing settings are not automatically transferred to a transport request. Therefore, it is recommended that you also execute this IMG activity in your target system or in your target client.

36.3.1.3.2.3 Activity Groups

36.3.1.3.2.3.1 Edit Activity Groups

In this IMG activity you can display the activity groups delivered by SAP and create your own activity groups. The entries you make here apply only to budgeting in Grants Management (GM).

Recommendation

Avoid changing or deleting the activity groups delivered by SAP.

Activities

- 1. Select *New Entries* and define the key and name of the activity groups.
- 2. Save your entries.

36.3.1.3.2.3.2 Edit Derivation Strategy for Activity Groups

Use

In this Customizing activity you can adjust the strategy for the activity groups derivation delivered by SAP.

The activity groups are derived from different parameters, for example from the CO Activity or the GM Value Type of a document item.

Note that the settings you enter here only apply for budget usage posting in Grants Management (GM), but not for budget entry postings in GM.

The derivation strategy comprises steps that use one of the following derivation methods:

- Assignment

In the assignment step, you can assign a certain value to the activity group.

- Derivation rule

In the derivation rule step, you assign certain values as input parameters (source fields) to an activity group as target field.

All derivation steps defined here can be linked to conditions that must be met in order that the derivation step can be executed.

Example

You wish to derive certain activity groups directly from the CO activity. To do this you create a derivation rule step with source field *CO Activity* and target field *Activity Group*. Then maintain derivation rules for all relevant CO activities.

36.3.1.3.2.4 Edit Tolerance Profiles

Use

You define the tolerance profile for the availability control (AVC) in this IMG activity.

In a tolerance profile you group together the tolerance limits for the different activity groups. You can define one or more tolerance limits for each activity group by specifying different usage rates. You also
define the check sequence of the different tolerance limits. Assign a message type to each of these defined check events. The message can be an error message, a warning, or an information message.

Event control

You can assign an availability control event to each check point which is triggered if you post your document despite the tolerance limit being exceeded. At the moment, you can only send mails from SAP office for this.

Deactivating individual check events

You can exclude individual check events from the active availability control by setting the *Inactive* indicator.

Procedure for searching for matching entries

The active availability control proceeds as follows when searching for matching entries:

- a) Determines the tolerance profile to be used
- b) Derives the activity group
- c) Determines all matching entries (check events with their tolerance limits) of the tolerance profile
- d) Checks the tolerance limit in inverted sequence of the check events, so starting with

the highest percentage tolerance limit

- e) Determines the action (message type and, if necessary, event) when the first of these tolerance limits is exceeded
- f) Suppresses the action found, if the *lnactive* indicator is set for the entry

Note

Note that all percentage tolerance limits for each activity group must be entered in sequence (increasing order).

Example

The tolerance limits of the availability control for actual postings (activity group 40) could, for example, be defined in a tolerance profile such as this:

| Activity group | | Sequence | <u>Usage rate %</u> | Message Type |
|----------------|----|-----------------|---------------------|---------------|
| 40 | 01 | | 70 | Information |
| 40 | 02 | | 85 | Warning |
| 40 | 03 | | 100 | Error Message |

Standard settings

If no matching entry is found for a tolerance profile, the checks are carried out according to the following standard setting:

- Message type: Error message
- Consumption rate: **0%**

- Check active

36.3.1.3.2.5 Settings for Availability Control Ledger

36.3.1.3.2.5.1 Create User-Defined Ledger for Availability Control

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you define new (user-defined) availability control (AVC) ledgers by using an existing ledger as a template or reference ledger. Either the ledger **9K** SAP delivers or another ledger you have already defined can serve as copy template or reference ledger.

You define from which fiscal year the reference ledger settings should be copied for this copy process. You create the validity with a *From Fiscal Year*.

To check whether the Customizing settings of the reference ledger are complete or which settings you still have to define in order to use the reference ledger in your company code, choose *Check Reference Ledger Customizing*.

The following settings and assignments are copied from the reference ledger:

- AVC filter settings for budget values
- Assignment of the strategy for account assignment derivation for control objects
- Assignment of the default tolerance profile
- Assignment of the strategy for overriding the default tolerance profile
- Activation status of the ledger

The new ledger and the settings are automatically copied to the following IMG activities:

- Define Filter Settings for Consumable Budget
- Assign Attributes for GM Availability Control Ledger
- Maintain Activation Status for GM Availability Control Ledger Note that the activity status of a newly created AVC ledger is *Ledger not active*.

You can now change the generated settings in these IMG activities.

Note:

Copying an AVC ledger is only supported within a company code.

The key and the description of your new ledger are entered with the copy process. The key cannot be changed later, but you can adjust the description of the new ledger in the IMG activity Adjust Ledger for User-Specific Availability Control.

Standard settings

SAP delivers the ledger 9K for use with GM availability control.

This ledger is ready for use in GM AVC - for normal business operations there is no need to create your own AVC ledger for GM.

Activities

If you really need your own AVC ledger, for example to establish parallel AVC checks, to supplement the standard AVC checks in ledger 9K, proceed as follows:

- 1. Create a new AVC ledger by copying an existing reference ledger as a template. If the reference values copied from the reference ledger are not valid for your new ledger, you can change the Customizing definitions of your new ledger in the IMG activities of section *Settings for Availability Control Ledger*.
- 2. Activate the new AVC ledger by setting the appropriate Activation Status in the IMG activity Maintain Activation Status for GM Availability Control Ledger.
- Reconstruct availability control in the new AVC ledger using the program Re-Initialize Availability Control Ledgers (GM) (transaction code GMAVCREINIT).
 You start the reconstruction of availability control from the GM Grantee menu: Choose Budgeting -> Tools -> Availability Control -> Reconstruct.

36.3.1.3.2.5.2 Adjust Ledger for User-Specific Availability Control

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you can change the description of all GM availability control ledgers.

By default, availability control (AVC) is set up in such a way as to check budget consumption from actual/commitment data (data source 0 or **data source for defining consumed amounts**) against budget values entered in Grants Management (GM) (data source 1 or **data source for defining the consumable budget**).

In this activity, you can define a different user-specific AVC by defining the check as **budget against budget**. To do this, choose the entry **GMBP** as data source 0 for your user-specific AVC ledger, instead of the default value **GMUP** for data source 0 (or data source for defining consumed amounts).

This kind of AVC can be used, for example, if you want to specify a 'frame budget' entered as budget values for data source 1, which should not be exceeded by normal budget allocations entered as budget values for data source 0.

Notes:

If you want to define such a user-specific AVC in your organization, note the following:

- For such checks, you must use user-specific AVC ledgers and not the ledger 9K delivered by SAP.
- You must also specify budget filter settings in the activity Define Budget Values as Consumed Amounts for each ledger using the entry **GMBP** as data source 0.

36.3.1.3.2.5.3 Define Filter Settings for Consumable Budget

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you determine the consumable budget, or in other words, you stipulate, which budget values entered in GM define the consumable budget against which availability control (AVC) checks budget usages (= commitment or actual values).

You can set filter values for the following attributes:

- Version
- WF-STATUS combination

With the WF-STATUS combination, you define whether only posted budget or also preposted budget is included in AVC. If you want to permit preposted budget for AVC, the following security principle (or 'principle of maximum prudence') applies: preposted budget is only included by AVC, if it decreases the consumable budget.

Example

You want to define the budget of version 002 from a given fiscal year as consumable budget.

Enter the value 002 for the version and a fiscal year (From Fiscal Year) in this IMG activity.

Note that the settings defined here apply to all fiscal years beginning with this 'from fiscal year', if you do not make any other entries for future fiscal years.

Standard settings

SAP does not provide any default settings.

Activities

- 1. Enter your Control Ledger and the From Fiscal Year.
- 2. Enter the Budget Version and choose whether AVC should also include preposted budget values.
- 3. Save your entries.

36.3.1.3.2.5.4 Define Budget Values as Consumed Amounts

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you define which budget values should be considered as 'consumed amounts' for availability control (AVC).

Note that this IMG activity is only relevant for AVC ledgers, which use budget values as data source 0. Such user-defined AVC ledgers can be used for specific budget consistency checks, permitting to check **budget values** against the consumable budget, instead of checking budget usages against the consumable budget.

An AVC ledger checking ' **budget against budget**' must be configured in the following IMG activities:

- Create User-Defined Ledger for Availability Control and
- Adjust Ledger for User-Specific Availability Control, where you must select the value **GMBP** as data source 0.

In addition to maintaining filter settings for the consumable budget in the IMG activity Define Filter Settings for Consumable Budget, you must also specify filter settings here for such user-defined AVC ledgers, which define how budget values are recognized as 'consumed amounts'.

You can set filter values for the following budget attributes:

- Version
- WF-STATUS combination

With the WF-STATUS combination, you define whether only posted budget or also preposted budget is included in AVC. If you want to permit preposted budget for AVC, the following security principle (or 'principle of maximum prudence') applies: preposted budget is only included by AVC, if it increases the 'consumed amount'.

Example

You want to define the budget of version 001 from a given fiscal year as 'consumed amount'.

Enter the value 001 for the version and a fiscal year (From Fiscal Year) in this IMG activity.

Note that the settings defined here apply to all fiscal years beginning with this 'from fiscal year', if you do not make any other entries for future fiscal years.

Standard settings

SAP does not provide any default settings.

Activities

- 1. Enter your Control Ledger and the From Fiscal Year.
- 2. Enter the *Budget Version* and choose whether AVC should also include preposted budget values.
- 3. Save your entries.

36.3.1.3.2.5.5 Define Account Assignment Derivation of Availability Control Objects

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you define a strategy for deriving Grants Management (GM) account assignments for GM availability control.

Each GM account assignment, where you create budget or to which you post a budget usage, is assigned an account assignment in the availability control ledger. In this IMG activity, you define the logic on how the account assignments of the availability control ledger (or the control objects) should be derived from the GM account assignments, where you create budget or where you post a budget usage.

The derivation strategy consists of a sequence of steps that uses one of the following derivation methods:

- Initialization

In the initialization step, you can set individual GM account assignment elements of the control object to the blank value (SPACE).

- Assignment

In the assignment step, you can assign constant values to the account assignment elements of the control object, or you can determine whether the value of individual GM account assignment elements should be copied partially or in full to the account assignment elements of the control object.

- Derivation rule

In the derivation rule step, you can define a table of source and target fields to directly determine the account assignment elements of the control objects. After defining the derivation rule table, you must enter table entries with different values for the source and target fields, thus defining the desired values of the target fields for each combination of entered values of source fields.

- Table lookup

In the table lookup step, you can access individual records from database tables.

- Function module

In the function module step, you can execute a function module to carry out specific assignments, for example after reading the Grant master data.

All derivation steps defined here can be linked to conditions, which must be met in order that the derivation step can be executed.

Example

You want to summarize the consumable budget in the availability control ledger in the following way when entering budget values:

| Budget Account Assign | <u>Control Objects</u> | | | | | | | |
|--|------------------------|------------------|--|--|--|--|--|--|
| Fund/Spons.Prog./Spons.Class/Validity no. Fund/Spons.Prog./Spons.Class/Validity no. | | | | | | | | |
| FND1/SP1/SC1/VN1 | -> | FND1/SP1/SC1/VN1 | | | | | | |
| FND1/SP2/SC2/VN2 | -> | FND1/SP1/SC2/VN1 | | | | | | |
| FND1/SP3/SC3/VN3 | -> | FND1/SP1/SC3/VN1 | | | | | | |

A possible derivation strategy in this case consists of four assignment steps, which copy the value of the fund and of the sponsored class in full to the relevant account assignment elements in the control object, and which assign a constant value to the sponsored program and the budget validity number of the control object.

Standard settings

SAP provides an empty strategy 9KSAP000, which you can enhance according to your requirements.

Note

If you do not have to carry out a summarization of budget and posting values in one of your availability control ledgers, that is, if all control objects in this ledger match the GM account assignments, where you create budget or post a budget usage, then you can either leave the derivation strategy empty, or leave the field Strategy for Deriving Control Objects empty in the IMG activity Assign Attributes for GM Availability Control Ledger.

Activities

- 1. Edit the strategy **9KSAP000** and add your derivation steps.
- Save your strategy.
 Changed strategies are not automatically written to a transport request. You must add them to a transport request manually.

36.3.1.3.2.5.6 Maintain Derivation Strategy for Overriding the Standard Tolerance Profile

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this IMG activity, you define a strategy to override the standard tolerance profile.

Availability control normally uses the standard tolerance profile, that you have assigned in the IMG activity Assign Attributes for GM Availability Control Ledger, for checks, unless you specify a derivation strategy, which overrides this standard tolerance profile.

You define tolerance profiles in the IMG activity Edit Tolerance Profiles.

The derivation strategy consists of a sequence of steps that uses one of the following derivation methods:

- Initialization

In the initialization step, you can set the tolerance profile to the initial (or blank) value.

- Assignment

In the assignment step, you can assign a constant value to any target field (for example, the tolerance profile), or you can determine whether the value of a source field should be copied partially or in full to a target field.

- Derivation rule

In the derivation rule step, you can define a table of source and target fields to directly determine the value of some target fields (for example, of the tolerance profile). After defining the derivation rule table, you must enter table entries with different values for the source and target fields, thus defining the desired values of the target fields for each combination of entered values of source fields.

- Table lookup

In the table lookup step, you can access individual records from database tables.

- Function module

In the function module step, you can execute a function module to carry out specific assignments, for example after reading some master data.

All derivation steps defined here can be linked to conditions, which must be met in order that the derivation step can be executed.

Standard settings

SAP provides an empty strategy 9KSAP000, which you can enhance according to your requirements.

Activities

- 1. Edit the strategy **9KSAP000** and add your derivation steps.
- 2. Save your strategy.

Changed strategies are not automatically written to a transport request. You must add them to a transport request manually.

36.3.1.3.2.5.7 Assign Attributes for GM Availability Control Ledger

Note:

The settings affected here are exclusively reserved for the use of Grants Management (GM).

Use

In this Customizing activity, you assign a standard tolerance profile and various derivation strategies to the availability control ledgers you are using in Grants Management (GM).

You can override the standard tolerance profile defined in this activity by specifying a derivation strategy for searching for an alternative tolerance profile.

The other derivation strategy determines the GM account assignments in the AVC ledger (= control objects) from the GM account assignments of your budget usage postings or budget entry postings.

You make your assignments per fiscal year. Note that the settings are effective from the fiscal year you entered as *From Fiscal Year* onwards.

Example

You want to maintain attributes for ledger **9K**, fiscal year **2010** and all following fiscal years. To do this, make the following entry:

9K | 2010 | ...

You want to change the settings for ledger **9K**, effective from fiscal year **2015** onwards. To do this, add the following new entry:

9K | 2015 | ...

Activities

- 1. Maintain entries for all the availability control ledgers you want to use and specify the standard tolerance profile.
- 2. If required, specify the strategy for deriving the control objects or the derivation strategy for overriding the standard tolerance profile.
- 3. Save your entries.

36.3.1.3.2.5.8 Define Checking Horizon

36.3.1.3.2.5.8.1 Assign Standard Value for Checking Horizon

Use

In this IMG activity, you define how the checking horizon is selected for availability checks in a specified control ledger.

You can choose between the following values for the field Selection of Checking Horizon:

- **" " - Annual Period**: The default value *Annual Period* is used for checks in this control ledger, which means that availability control will normally aggregate data over all periods of a fiscal year and thus perform checks on annual values.

- **"O" - Overall Period**: The default value *Overall Period* is used for checks in the selected control ledger, which means that availability control will normally aggregate data over all periods of all fiscal years and therefore perform checks on overall values.

You can overwrite the default values in the IMG activity Define Special Assignments for Checking Horizon.

Standard settings

"O" (overall) is the default value for the *Selection of Checking Horizon* field, if you do not specify any value for a control ledger.

Activities

- 1. Select your company code.
- 2. Enter values for all relevant control ledgers.
- 3. Save your entries.

36.3.1.3.2.5.8.2 Define Special Assignments for Checking Horizon

Use

In this IMG activity, you can define specific assignments for the checking horizon by implementing a derivation strategy. This specific assignment overwrites the standard value of the checking horizon selected in the activity Assign Standard Value for Checking Horizon.

Notes

The derivation strategy consists of a sequence of steps that uses one of the following derivation methods:

- Initialization

In the initialization step, you can set an individual target field to the initial (or blank) value.

- Assignment

In the assignment step, you can assign a constant value to any target field, or you can determine whether the value of a source field should be copied partially or in full to a target field.

- Derivation rule

In the derivation rule step, you can define a table of source and target fields to directly determine the value of some target fields. After defining the derivation rule table, you must enter table entries with different values for the source and target fields, thus defining the desired values of the target fields for each combination of entered values of source fields.

- Table lookup

In the table lookup step, you can access individual records from database tables.

- Function module

In the function module step, you can execute a function module to carry out specific assignments, for example after reading master data.

All derivation steps defined here can be linked to conditions, which must be met in order that the derivation step can be executed.

Example

You have selected the checking horizon Overall Period as default value for control ledger 9K in the IMG activity Assign Standard Value for Checking Horizon. But for availability checks on control objects with certain values of the account assignment element Grant, you can overwrite this default value and use the checking horizon Annual period for checks with control ledger

9K.

Create a derivation step of step type Derivation rule, select Definition and choose as source field the field *RGRANT_NBR* and as target field the field *CHECKHORIZON*.

Then select *Condition* and enter it as the condition for this derivation rule:

| | Name of column | <u>Value</u> |
|----|---|----------------|
| | Field | ALDNR |
| | Op. | = |
| | Value | 9K |
| fi | ter saving this new derivation sten, maintain rule entries for all desi | red grant valu |

After saving this new derivation step, maintain rule entries for all desired grant values.

Standard settings

SAP does not provide any standard implementation of the derivation strategy.

Activities

- 1. Implement your derivation strategy.
- 2. Save your strategy.

Changed strategies are not automatically written to a transport request. You must add them to a transport request manually.

36.3.1.3.2.6 Maintain Activation Status for GM Availability Control Ledger

Use

Before you can use active availability control (AVC) in Grants Management (GM), you must activate your availability control ledger from a specific fiscal year.

In this Customizing activity, you can select one of the following activation statuses:

Ledger not active _

Neither budget usages nor budget values are written to the availability control ledger; no checks are performed.

- Active without availability checks Values are written to the availability control ledger, but no checks are performed.
- Active with usual check logic
 If you make this setting, credits are always permitted and never trigger an availability control error message. Instead of an error message, a warning message is issued.
- Active with soft check logic Similar to the previous activation status, credits are always allowed by availability control. In this case, if the available amount is not reduced by any posting events, the system stops all AVC messages.
- Active with strict check logic for document chains
- Values are posted to the availability control ledger and availability checks are performed. With the exception of documents within a document chain, the *usual check logic* described above is applied. However, for documents referencing another document that has already consumed budget, *strict check logic* is applied. This means that such documents are checked again, even if they do not consume more budget than already consumed by the referenced document.
- Active with strict check logic Values are posted to the availability control ledger and availability checks are always performed without any message type conversion. This also implies that the system may prevent documents from being posted, even if they increase the available amount on a control object.

Activities

- 1. Choose a fiscal year (*From Year*) and an activation status for an availability control ledger you want to use.
- 2. Save your entry.

36.3.1.3.3 Revenues Increasing the Budget

36.3.1.3.3.1 Define Derivation Strategy for GM RIB Objects

Use

Use this step to define the account assignment derivation for RIB objects used for revenues increasing the budget (RIB) in Grants Management (GM).

GM RIB objects serve two basic functions:

- Aggregation of revenues and, if applicable, of revenue budget.
 Posted revenues are assigned to a GM RIB object using the derivation strategy defined in this IMG activity. If you define RIB rules using relative limits (or thresholds), you have to enter revenue budget values for the posting/budget dimensions assigned to an RIB object, aggregating the revenue budget from several posting/budget addresses.
- Assignment of RIB rules

Each rule for revenues increasing the budget must be assigned to a RIB object (= a particular revenues posting/budget address). In a rule, you specify the amount available for a budget increase, the relevant type of revenues, and the receiving expenditures budget dimensions.

Notes

The derivation strategy for RIB objects consists of a sequence of derivation steps that are executed in the given order and which use one of the following step types:

- Initialization

In derivation steps of step type *Initialization* you can set the value of any target field to its initial value (usually = SPACE).

- Assignment

In steps of step type *Assignment*, you can assign the value of any source field or a constant value to some target field.

- Derivation rule

In derivation steps of step type *Derivation rule*, you can set up database tables, where you can enter combinations of values of source fields corresponding to certain combinations of target fields.

- Table lookup

In steps of step type *Table lookup*, you can access single individual records of database tables.

- Function module

In steps of type *Function module*, you can call a specific function module, for instance, for reading master data attributes of account assignment elements, or for searching for account assignment elements in master data hierarchies.

All derivation steps defined here can be linked to conditions which must be met in order for the derivation step to be executed.

Standard settings

We do not deliver any standard implementation for the derivation strategy for GM RIB objects.

Activities

- 1. If required, edit the derivation strategy by adding appropriate derivation steps.
- 2. Save your strategy.
- 3. Test or transport your strategy using the appropriate buttons or menu functions.

Further notes

- The value of each account assignment element of the GM RIB object is identical with the value of the posting address, provided there is no step in the derivation strategy that changes the value of this target field.

36.3.1.3.3.2 Maintain Calculation Rule for GM RIB

Use

Use this step to maintain the calculation formulas to be used for defining rules for revenues increasing the budget (RIB) in Grants Management (GM).

With a calculation formula, you can define:

- The percentage of collected revenues that will be relevant for a budget increase (usually = 100%)
- A lower limit for revenues with budget-increasing effect
- An upper limit for revenues with budget-increasing effect

You have the option to work without lower or upper limits. If you decide to set up a lower or upper limit, then you have to choose the type limit (for instance, absolute value or relative percentage) and enter a value for it.

If you do not work with limits or if you only set up limits using absolute values, it is not necessary to enter revenue budget. Revenue budget values are only needed to calculate limits which are defined by relative percentages.

Standard settings

SAP only delivers the standard formula **1000** as template.

Activities

- 1. Create your own calculation formulas using the grant currency.
- 2. Save your calculation formulas.

Example

You set up the following calculation formula:

- Relevant percentage of revenues: 50% -

Lower limit: absolute value =

\$1,000

- Upper limit: relative percentage = 200%

The current revenue budget amount may be \$1,500, which means that the upper limit will be equal to \$3,000.

If you have collected revenues of \$1,800, then this will not be sufficient for a budget increase, because only 50% of the revenues - that is, \$900 - enter the calculation.

If the collected amount of revenues is \$4,000, then \$2,000 will become relevant. Since this amount exceeds the lower limit of \$1,000, the amount of \$1,000 (out of \$2,000) has a budget increasing effect and may be distributed to some expenditure budget address.

If no surplus budget address is used, then revenues up to 6,000 may have budget increasing effect, because of the upper limit given by the current revenue budget of 1,500, multiplied by a factor of 2, as defined by the upper limit. Therefore the maximum budget increase will be 2,000 (= upper limit - lower limit), which is reached with collected revenues of 6,000.

Further notes

- Each calculation formula must be assigned to a currency. This currency must be identical to the grant currency for which calculation formula is to be used.
- Usually, only the revenues between the lower and upper limit will have a budget-increasing effect. You may, however, set up rules RIB that use surplus budget addresses. If you do, you must set the indicator Use Surplus Amount?. This indicator refers to revenues that exceed the upper limit as defined in the calculation formula, and will then increase the budget of the assigned surplus budget address.
- Revenues below the lower limit or residual revenues from calculation formulas with percentages < 100% have no budget-increasing effect.

36.3.1.3.3.3 Maintain Derivation Strategy for Rule Generation

Use

Use this step to maintain the derivation strategy for proposing values for automatic generation of rules for revenues increasing the budget ("RIB rules").

This derivation strategy allows for assigning values relevant to the definition of RIB rules. You must assign the following values to a given RIB object, in this way defining the source fields:

- Activation status
- Filter profile Calculation formula
- Indicator Use surplus amount?
- Receiving expenditures budget address (fixed percentage = 100%)
- Surplus budget address (fixed percentage = 100%), if the indicator Use surplus amount? is set

Notes

The derivation strategy for the generation of RIB rules consists of a sequence of derivation steps that are executed in the given order and which use one of the following step types:

- Initialization

In derivation steps of step type *Initialization* you can set the value of any target field to its initial value (usually = SPACE).

- Assignment

In steps of step type *Assignment*, you can assign the value of any source field or a constant value to a target field.

- Derivation rule

In derivation steps of step type *Derivation rule*, you can set up database tables, where you may enter combinations of values of source fields that should correspond to certain combinations of target fields.

- Table lookup

In steps of step type Table lookup, you can access single individual records of database tables.

All derivation steps defined here can be linked to conditions that must be met in order that the derivation step can be executed.

Requirements

You have performed both the other steps in the IMG for GM RIB.

Standard settings

We do not deliver any standard implementation of the derivation strategy.

Recommendation

If you want to generate rules for revenues increasing the budget using the program Generate RIB Rules (transaction **GMRBGENMD**), you must implement this derivation strategy.

Activities

- 1. Edit the derivation strategy by adding appropriate derivation steps.
- 2. Save your strategy.
- 3. Test or transport your strategy using the appropriate buttons or menu functions.

Further notes

- For further details on the automatic generation of RIB rules, refer to the documentation of the program Generate RIB Rules.
- Only a single receiving expenditures budget address (with fixed percentage = 100%) can be assigned with this derivation strategy. If you want to maintain multiple receivers, you can add them manually in the transaction *Process Single RIB Rule* (transaction code **GMRBRULE**).
- If you do not specify derivation steps for the account assignment elements of the receiving expenditures budget address, all the values of these account assignment elements will be identical to the values of the RIB object. Since the RIB object, however, is a revenues budget address, this will cause an error message. Therefore, you must in any case specify the value of the account assignment element *sponsored class*.
- A surplus budget address can only be assigned if the indicator *Use Surplus Amount* is set. In addition, the surplus budget address must be different from the receiving expenditures budget address.

36.3.1.3.4 Workflow Settings

36.3.1.3.4.1 Budget Workflow Settings

Use

Use this step to activate the Workflow settings required for the simple approval process in Grants Management (GM) budgeting.

Standard settings

We deliver the system with the process deactivated.

Activities

- 1. In the **Task Customizing Overview**, you see the task requiring processing. Choose *Activate event linkage* in the Event Linkage column.
- 2. In the event triggering screen, open the point **GM Simple Approval Process** and click the *Activate* switch.

Simple approval is now active in GM budgeting. The effect of this is that the workflow between proposed budget and posted budget is enabled.

If you have already activated the simple approval process and need to deactivate it, the procedure is the same, except that a deactivation switch appears in the event triggering screen instead of the activation switch described in step 2 above.

36.3.1.4 Indirect Costs

36.3.1.4.1 Configure Indirect Cost Rules

Use this step to configure the rules governing how indirect cost (IDC) processing for your grants is to behave.

Activities

1. In the overview screen, enter a number and a text of up to 30 characters describing your IDC rule.

2. To add detail, choose **Rule Elements** in the dialog structure and add the value types that are to be subject to the rule.

36.3.1.4.2 Chart of Account Settings for GM Indirect Costs

Use this step to enter the chart of accounts settings required for indirect cost (IDC) processing

in Grants Management (GM).

Requirements

You must first have created the chart of accounts you want to use for IDC processing.

Activities

Choose **New Entries** and enter the following:

- Chart of accounts
- Grant type

In the Chart of Account Settings section, specify the individual accounts to be used for specific purposes:

- Cost reimbursement account
- Indirect cost recovery (IDCR) class
- Expense account
- Indirect cost expense (IDCE) class
- Cash clearing account

36.3.1.4.3 Business Add-Ins for GM Indirect Costs 36.3.1.4.3.1 BAdI: Assign Alternative Cost Object and Check IDC Relevance

Use

In this step, you can execute Business Add-In BADI_GM_IDCPOST to further enhance the way the indirect cost calculation for Grants Management (GM) is executed.

Standard settings

If you do not use this BAdI, the system defaults from the grant customizing. The following methods are available for enhancement purposes:

- CHECK_IDC_RELEVANT: Check if record is IDC relevant.
- FILL_CO_OBJECTS: Fill alternative CO objects.
- FILL_FM_OBJECTS: Fill alternative FM objects.
- CLEAR_IRRELEVANT_FIELDS: Clear irrelevant fields for the IDC calculation.
- FILL_CALC_CO_OBJECTS: Replace CO and FM objects in calculated IDC lines.
- CLEAR_CALC_CO_OBJECTS: Clear CO and FM objects in calculated IDC lines.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.5 Cost Sharing

36.3.1.5.1 Configure Cost Sharing Rules

Where a grantor requires that you, as grantee, must bear some of the costs of a project, use this step to configure the necessary rules.

Standard settings

We deliver the following cost sharing bases as standard. These are:

- Total Direct Costs Additive External funded amount * Cost sharing rate
- Total Grant Costs Additive Awarded cost * Cost sharing rate
- Total Direct Costs Subtractive (Grant cost - Overhead) * Cost sharing rate
- Total Grant Costs Subtractive Grant cost * Cost sharing rate

Activities

Choose **New Entries** and enter a rule number and text. Choose which of the supported bases is to apply to the new rule.

36.3.1.6 Billing

36.3.1.6.1 Configure GM Billing Rules

Use

Use this step to configure billing rules governing how billing is to behave in your Grants Management (GM) installation.

Standard settings

We supply the following rules as standard:

- 1 = Resource-related billing (RRB) payments
- 2 = RRB commitments

- 3 = RRB liabilities
- 5 = Milestone billing
- 6 = Periodic billing
- 7 = Manual billing
- 11 = RRB with billing plan

Activities

Enter any or all of the above rules in the overview. Apart from rule 7, if you want to permit manual billing in grant types using a billing type, check the Manual Billing box for the relevant rule.

Some of the rules require additional configuration:

Resource-Related Billing

RRB requires value types assigned to the rule. Select your RRB rule, choose Value Type Assignment for RRB, and enter the desired value type(s).

For a fuller description of RRB, see the SD documentation.

Manual Billing

Where you have stipulated that manual billing is permitted for a rule, select the rule, choose Manual Billing Details in the dialog structure, and specify which document type(s) may be billed manually.

Other

Specify the SD objects of billing rules by selecting this option in the dialog structure and stipulating the SD document type, document item category, and material for the rule.

36.3.1.6.2 Business Add-Ins for GM Billing

36.3.1.6.2.1 BAdI: Fill Alternative CO Objects

Use

If you have chosen resource-related billing (RRB) as your billing option, you have specified an object in Controlling (CO) as your source data. This object is a cost center, WBS element, or internal order.

You can use this Business Add-In (BAdI) to override the entry made there. You can either specify another object of the same kind (say, cost center 2 instead of cost center 1) or a different type of object (say, a WBS element instead of an internal order).

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.7 Actual and Commitment Update

36.3.1.7.1 Tools

36.3.1.7.1.1 Reconciliation of Purchase Requisitions in GM

Use

In this step, you can reconcile the commitment data in Grants Management (GM) for the purchase requisitions from Materials Management (MM).

Activities

- 1. Specify a company code. This is required. The other document selection criteria, such as purchase requisitions or plants, are optional.
- 2. Start the reconciliation in test mode.
- 3. If the resulting list shows that there are errors, choose message log to display more detailed information.
- 4. You can then do one of the following:
 - Correct the defective documents, then run the program again in live mode.
 - Run the program now for the documents that are correct, then run it again later when you have corrected the defective ones.

36.3.1.7.1.2 Reconciliation of Purchase Orders in GM

Use

In this step, you can reconcile the commitment data in Grants Management (GM) for the purchase orders from Materials Management (MM).

Activities

- 1. Specify a company code. This is required. The other document selection criteria, such as purchasing documents, are optional.
- 2. Start the reconciliation in test mode.
- 3. If the resulting list shows that there are errors, choose message log to display more detailed information.
- 4. You can then do one of the following:
 - Correct the defective documents, then run the program again in live mode.
 - Run the program now for the documents that are correct, then run it again later when you have corrected the defective ones.

36.3.1.7.1.3 Reconciliation of Earmarked Funds in GM

Use

In this step, you can reconcile the commitment data in Grants Management (GM) for the earmarked funds from Funds Management (FM).

Activities

- 1. Specify a company code. This is required. The other selection criteria, such as earmarked funds, are optional.
- 2. Start the reconciliation in test mode.
- 3. If the resulting list shows that there are errors, choose message log to display more detailed information.
- 4. You can then do one of the following:
 - Correct the defective documents, then run the program again in live mode.
 - Run the program now for the documents that are correct, then run it again later when you have corrected the defective ones.

36.3.1.7.1.4 Reconciliation of Controlling Documents in GM

Use

In this step, you can reconcile the Controlling (CO) documents in Grants Management (GM).

Activities

- 1. Specify a company code. This is required. The other selection criteria, such as specific documents or fiscal years, are optional.
- 2. Start the reconciliation in test mode.
- 3. If the resulting list shows that there are errors, choose message log to display more detailed information.
- 4. You can then do one of the following:
 - Correct the defective documents, then run the program again in live mode.
 - Run the program now for the documents that are correct, then run it again later when you have corrected the defective ones.

36.3.1.7.1.5 Reconciliation of FI Parked Documents in GM

Use

In this step, you can reconcile the commitment data in Grants Management (GM) for parked documents from Financial Accounting (FI).

Activities

- 1. Specify a company code. This is required. The other selection criteria are optional.
- 2. Start the reconciliation in test mode.
- 3. If the resulting list shows that there are errors, choose message log to display more detailed information.
- 4. You can then do one of the following:
 - Correct the defective documents, then run the program again in live mode.
 - Run the program now for the documents that are correct, then run it again later when you have corrected the defective ones.

36.3.1.7.1.6 Delete GM Actual Line Items

Use

Use this step to delete existing data in GM that came from FI if desired. You must do this if the data is defective.

If you want to transfer FI documents to the GM ledger, you must run this step first.

Activities

- 1. Specify the company code(s) and grant fiscal year. The other criteria are optional.
- 2. Execute the program. The system confirms when the program has run.

36.3.1.7.1.7 Transfer FI Documents to GM Ledger

Use

In this step, you can transfer FI data to Grants Management (GM).

Requirements

You will be running this program because there is something wrong with the data recorded in GM from FI. Before doing so, you need to delete this defective data.

If you have just installed GM, this deletion is not necessary.

Activities

- 1. Enter the company code(s) and grantee fiscal year(s). The other selection criteria, such as purchase requisitions or plants, are optional.
- 2. Start the program in test mode.
- 3. If the resulting list is in order, you can run the program again in productive mode.

36.3.1.7.1.8 Transfer MM Documents to GM Ledger

Use

In this step, you can transfer MM data to Grants Management (GM).

Requirements

You will be running this program because there is something wrong with the data recorded in GM from MM. Before doing so, you need to delete this defective data.

If you have just installed GM, this deletion is not necessary.

Activities

- 1. Enter the company code(s) and grantee fiscal year(s). The other selection criteria, such as purchase requisitions or plants, are optional.
- 2. Start the program in test mode.
- 3. If the resulting list is in order, you can run the program again in productive mode.

36.3.1.7.2 Business Add-Ins for GM Update

36.3.1.7.2.1 BAdI: Check GM Update Logic

Use

You can use this BAdI to enhance the check logic in the Grants Management (GM) updating process. You can strengthen grant posting controls, check the entire check logic, or opt to skip the standard check logic altogether.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate
 - The code you stored in the method will be run when the application program is executed.

36.3.1.7.2.2 BAdI: Check Posting Authorization

Use this enhancement to perform authorization checks at time of posting. The checks are Grants Management-oriented.

Use the following objects:

- Authority for Grant
- Authority for Class
- Authority for Program
- Function Modules within GMAU can be helpful.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the *Short text for implementation* field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.8 Integration

36.3.1.8.1 Activate Integration with Position Budgeting and Control

If there is a business need to integrate Position and Budget Control (PBC) with Grants Management (GM), activate this flag. This setting ensures that the time slices defined for a grant in GM coincide with the first day of the fiscal period that PBC uses to create the commitments to encumber budget for HR costs.

Example

If a time slice begins on the 15th day of a given month and the fiscal period begins on the 5th day of the same month, the time slice is recalculated to begin on the 5th day instead of the 15th dat as originally planned. This is a requirement for the integration to work.

Activities

For a given company code and date, maintain the Position and Budget Control flag.

36.3.1.8.2 Business Add-Ins for Integration

36.3.1.8.2.1 BAdI: Integration with Records Management

This BAdI is used generically for the Grants - Records Management integration process.

Method set_visibility is used to determine certain authorization roles for a given record element.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*. The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.9 Reporting

36.3.1.9.1 Report Tracking/Monitoring

36.3.1.9.1.1 Maintain Report Classes

Use

You use this step to create report classes for report tracking. Report classes identify the type of report that will be used in report tracking; they are user-defined.

Standard settings

We do not deliver any standard settings.

Activities

In the overview, choose New Entries and enter the following:

- An alphanumeric identifier for your report class
- An additional description of up to 30 characters

36.3.1.9.1.2 Maintain Schedule Rules

Use

Use this step to enter schedule rules for report tracking in Grants Management (GM).

Activities

In the overview, choose New Entries and specify the following"

- An identifier for the new rule
- A text of up to 40 characters describing the new rule in more detail
- The periodic property of the rule

This governs how often the rule is applied. The options are:

- Single occurrence
- Daily
- Weekly
- Monthly
- Annually
- Start date for the rule. The options are:
- Grant valid from date
- Grant valid to date
- System date
- User-defined date
 If you choose this option, you must use the Business Add-In (BAdI) Define Date for GM
 Report Tracking to determine the relevant date.

36.3.1.9.1.3 Maintain Report Rules

Use

Use this step to maintain the report rule(s) you will need to enter in your grant master data.

Activities

At this time, you can only use the report rules to duplicate the schedule rules. However, you must enter do this since you need to enter the report rules in your grant master data.

Future releases will enhance this development.

36.3.1.9.1.4 Business Add-Ins for GM Report Tracking

36.3.1.9.1.4.1 BAdI: Define Date for GM Report Tracking

Use

If have selected user-defined start and/or end dates in the schedule rule for report tracking, you use this BAdI to determine the relevant date(s).

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.

- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose Activate The code you stored in the method will be run when the application program is executed.

36.3.1.9.2 Reporting Business Add-Ins

36.3.1.9.2.1 BAdI: Enhancement Functions for GM Reporting

Use

The SAP BAdI definition is used to enhance the master data index programs in Grants Management. You can add more fields in the associated DDic structure of the report and populate those fields in the BAdI exits.

BAdI exit out of the master data index programs.

Method: GM_EXTEND_GMRXXX

changing <> C_T_FIELDCAT type SLIS_T_FIELDCAT = c_t_fieldcat <> C_T_GMRXXX type $GMRXXX = G_T_XXX$

Raise:

OTHERS = 1

Standard settings

A sample implementation is delivered as part of this SAP BAdI.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the Implementation field, and choose Create.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.1.10 Archiving

36.3.1.10.1 Define Residence Time

Use

Use this step to define the residence time for Grants Management for Grantee (GM-GTE) archiving.

The residence time allows you to block records against archiving. You define a number of days for this block; this definition is absolute and does not allow archiving of data earlier, unless you change the period using the archiving exit.

The checking logic for residence time is such that archiving is disabled if the residence time is not defined. The residence time is checked against the most detailed definition, so where the grant type and archiving object are specified, these are the criteria that need to be met.

You cannot enter a negative number of days; entering space or zero disables the check so that all records can be archived.

Activities

- 1. In the maintenance view, choose **New Entries** and choose the grant type and associated GM archiving object.
- 2. Specify the residence time in number of days. This can be zero if you want to disable the check.
- 3. Save your entries.

36.3.1.10.2 Business Add-Ins for GM-GTE Archiving

36.3.1.10.2.1 BAdI: Archiving Exit for GM Archiving Programs

Use

The GM archiving exit (Enhancement Spot: GM_ARCHIVE_BADIS) enables you to enhance the archiving feature for possible additional requirements. It allows you to:

Activate dynamic selections to define additional selection criteria and include those in the regular
 data selection or use them in special selection definitions Define additional archiving checks to include or exclude archiving objects.

Standard settings

We deliver some sample implementations.

Activities

To activate the business add-in, you must create an active implementation.

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The encoder for exercise BAdI implementations is now displayed.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.3.2 Grantor Management

36.3.2.1 Master Data

36.3.2.1.1 Maintain Grantor Derivation Strategies

Use

Use this step to enter the derivation strategies you need for Grants Management for Grantor.

Activities

Proceed as follows:

- 1. In the first overview, choose *New Entries* and enter an identifier and descriptive long text for each strategy required.
- 2. Having saved your new entry, select it and choose *Company Code Assignments* in the dialog structure.
- 3. In the resulting overview, enter the company code(s) and strategies you want to assign to each other.
- 4. Save your entries.

36.3.2.1.2 Business Add-Ins for Grantor Management Master Data

36.3.2.1.2.1 BAdI: Grantor Management Derivation Enhancement

Use

You can use this Business Add-In (BAdI) to supplement the derivation of GTR account assignments with the derivation tool. You do this by creating and programming a derivation step of derivation type *Enhancement* in the derivation strategy. For this you should implement the method CUSTOMER_EXIT.

Standard settings

The BAdI is not active in the standard system.

Activities

To create an implementation for the BAdI, please follow these steps:
- 1. Open IMG activity (BAdI: Grantor Management Derivation Enhancement) and create a new Enhancement Implementation:
 - Enhancement Implementation:
 - Enh. Impl: <Name of your enhancement implemenation>
 - ShText: <Short description>
 - Composite: <Name of your composite> (If none exists already, you should create one.)
- 2. Create the implementation <Implementation Name> for the BAdI definition BADI_CUSTOMER_EXIT.
- 3. Open the BAdI Tab and activate the Implementation.
- 4. Expand the tree on the left side and double-click the 'Class' entry.
- 5. Create a new class.
- 6. Implement the interface method IF_EX_CUSTOMER_EXIT~CUSTOMER_EXIT.
- 7. Save and activate the class and go back.
- 8. Save and activate the enhancement implementation.

Now your BAdI Implementation is active and ready.

Keep in mind that only one active implementation is allowed for this BAdI.

36.3.2.1.2.2 BAdI: Funded Program Wrapper

Use

This BAdI can be used to realize customer enhancements for the Funded Program Wrapper.

- The following method can be implemented:
- PSM_MEASURE_REPL_IN
 - The Method is called right after you enter the PSM_MESASURE_REPLICATE function module. At this point you can, for example, do additional validation checks.

Standard settings

We deliver a default implementation for this BAdI. Within this implementation, when the IM_FMMEASURE-SHORT_DESC field is not filled, the first 20 characters of the IM_FMMEASURE-DESCRIPTION are mapped to the IM_FMMEASURE-SHORT_DESC.

Activities

To create an implementation for the BAdI, follow these steps:

1. Open IMG activity (BAdI: Funded Program Wrapper) and create a new Enhancement Implementation:

- Enhancement Implementation:
- Enh. Impl: <Name of your enhancement implemenation>
- ShText: <Short description>
- Composite: <Name of your composite> (If none exists already, you should create one.)
- 2. Create the implementation <Implementation Name> for the BAdI definition BADI_PSM_MEASURE_REPL.
- 3. Open the BAdI Tab and activate the Implementation.
- 4. Expand the tree on the left side and dubble-click the 'Class' entry.
- 5. Create a new class
- 6. Implement the interface method PSM_MEASURE_REPL_IN.
- 7. Save and activate the class and go back.
- 8. Save and activate the enhancement implementation.

Now your BAdI-Implementation is active and ready. The default implementation is now inactive.

Keep in mind that several implementations can be used for this BAdI (Multi. Usability). So if you use several active implementations, all of them are called.

36.3.2.2 Integration with Public Sector Collections and Disbursements (PSCD)

36.3.2.2.1 Integration Scenarios

Use

Use this step to make the settings for the Grantor Management (GM-GTR) integration scenario.

Requirements

You must first:

- 1. Define a company code group
- 2. Assign the company code to a company code group

Activities

Make the required customizing settings in the following activities:

1. Maintain Data for Integration Scenarios

Note: Only the Grantor Integration scenario and its variants AGREEMNT and APPLICAT are relevant for your needs in GM-GTR. Do not make any new entries and do not delete the existing ones. 2. Create Year-Dependent Earmarked Funds

36.4 Functions for US Federal Government

36.4.1 General Settings

36.4.1.1 Activate Federal Government Functions

Use

Use this step to activate or deactivate the Federal Government functionality for your installation. Certain functions, such as the link between payment method supplements and the Agency Location Code/Payment Office, are only available if you carry out this step.

Activities

In the maintenance screen, check or uncheck the *USFG ISPS active* box. Remember to save the new setting before exiting the screen.

36.4.1.2 Maintain SGL Account Master Table

Use

Use this step to maintain the Standard General Ledger (SGL) accounts for your installation. You must:

- Maintain the first view (SGL Account Overview) for your whole Federal Government installation
- Maintain the views for SGL Attributes and Allowable Values for your FACTS II edits to work correctly. The settings entered here ensure that valid combinations of SGL account and attribute value are used.

This does not apply to the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS).

Standard settings

Each of the attributes has a set of default values associated with it. In some cases, the attributes limit the values that may be used with particular SGL accounts. The rules for this are stipulated by the US Treasury. This does not apply to GTAS.

Activities

Proceed as follows:

- In the SGL Account Overview, choose New Entries and specify the SGL account whose data you
 want to maintain. You can also enter a text of up 80 characters, describing the account. We strongly
 recommend that you do enter such a text.
 Only this first step applies to GTAS; the following steps are not relevant for GTAS.
- 2. Save your new entry, then select it and choose *SGL Attributes* in the dialog structure.
- 3. In the SGL Attribute Overview, choose **New Entries** and specify the attribute(s) you want to use. You do this using the pulldown lists supplied.
- 4. Save your entries, then select one of them and choose *Allowable Values* in the dialog structure.
- 5. In the Allowable Values Overview, choose **New Entries** and specify the value(s) to be allowed for this attribute.

36.4.1.3 Maintain Derivations for SGL Attributes

In this Customizing activity, you maintain the rules used to derive attributes for the US federal government ledger.

The standard general ledger (SGL) attributes derivation consists of a sequence of derivation steps known as the derivation strategy. It is used to derive field values based on the values of other fields in the system, such as several attributes reported to the United States Department of the Treasury through the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS).

You can store these fields in the federal special ledger at the time a document is posted. This is the posting derivation.

You can override the stored values for reporting purposes at the time of GTAS bulk file creation, SAP Business Information Warehouse extraction, or report execution. This is the reporting derivation or secondary derivation.

Each derivation step describes how a number of target fields can be filled from a number of source fields.

You can use the following derivation step types to represent different logical dependencies

between source and target fields:

- Derivation Rule
- Table Lookup

- Assignment
- Initialization
- Enhancement
- Function Module

Standard settings

You can put the FMFG_DERIVE_INTERM_FMFUSE function module for the attribute derivations into a derivation step to get information from an application of funds master record.

Activities

You can create, change, and delete steps and change their order.

Create Steps

- 1. Select the step after which you want to add a new step.
- 2. Choose the *Create Step* icon. 3.

Select the derivation step

type.

- 4. Enter a step description.
- 5. Enter source and target fields and their characteristics.
 - For source fields, you can specify if you want to allow initial values. If you select the checkbox, the source field value can be empty when you are defining the rules.
 - For target fields, you can specify field characteristics for overwriting values.
 - For both source and target fields, you can define whether the entire field contents or only part of the field contents is included in the derivation.
- 6. If the derivation step should only be performed according to specific conditions (for example, only for specific account assignment values), enter them on the *Condition* tab. The derivation step is only executed when all conditions for the fields are met.
- 7. Define step characteristics on the *Attributes* tab (for example, if an error message should be issued when no target value can be determined).

- 8. If you are using the *Derivation Rule* derivation step type, you can do the following:
 - Choose the *Rule Values* icon to specify which values should be entered in the target fields based on the values in the source fields.
 - Enter additional specifications on the *Attributes* tab.
 - For example, you can allow the entry of a validity date for a step to make it time-dependent. For the posting derivation, the system checks the posting date of a document against this validity date. If the posting date is before the validity date, the step is skipped. The document posting date is not available for the reporting derivation since it uses totals data and not line items as the source. However, you can use the fiscal year field as a source field for both the posting and reporting derivations. For example, you can create a condition using the fiscal year that is executed for fiscal years 2013 and later to accommodate new GTAS rules which are different from FACTS rules.

Change or Delete Steps

If you want to change a step, you can use the same options for creating a step.

To delete a step, select it and choose the *Delete Step* icon.

Change Step Sequence

- 1. Select the step you want to move.
- 2. Position your cursor below the target position.
- 3. Choose the *Move* icon.

Further notes

Master Data Check

When you enter values, the system does not check the existing master data. When the posting is made, the check occurs.

Test Derivation Strategy

You can use the *Test* function to check your derivation strategy. In test mode, you can do the following:

- To test which values are derived, enter the source fields that should be checked and choose *Derive*.
- To determine which rules were used in the derivation, choose *Display Log*.
- To delete the selection screen, choose *Clear*.
- To test the account assignment derivation during posting, choose *Trace*.
 If this function is active, the check screen appears before the update. On this screen, you can check all values. To execute the update, you must close the check screen by choosing *Exit*.
 You can only activate this function if you have authorization.

Transport

You can use the *Transport* function to generate a transport request and transport your derivation strategy to other clients.

36.4.1.4 Define Trading Partner Exceptions

Use

Federal agencies are required to monitor customers by type - for example, federal and nonfederal. The trading partners concept is used to satisfy this requirement

In this step, which is additional to normal trading partner configuration, you can maintain exceptions for nonfederal trading partners - that is, partners which are generally regarded as federal, but which your agency needs to treat as nonfederal.

Requirements

You must already have created the trading partner(s) you want to enter. You cannot create them here.

Activities

- 1. In the maintenance view, choose New Entries and enter the six-character company ID of the trading partner you want to include.
- 2. Specify which customer type applies in each case, choosing from the following:
 - Blank
 - Foreign/sovereign government
 - State and local government
 - Commercial customer
 - Consumer customer
 - This selection is needed for the receivables report.
- Save your entries.
 When you do this, the name of the company appears in the relevant field.

36.4.1.5 Select Reports and Fields for Derivation

Use

In this Customizing activity, you select the reports that call the derivation process defined in the implementation of the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS) method (ADD_GTAS_ATTRIBUTES) of the Business Add-In (BAdI) *Reporting Attributes* (FMFG_RPTA_EXIT). You select the reports from a predefined list. You also select which fields within the reports will be derived.

You can also define reporting levels for the GTAS trial balance report.

Activities

To define reporting levels, do the following:

- 1. Create an entry for report RFFMFG_TRIAL_BALANCE_LEVEL.
- 2. In the source field selection, specify the attribute fields for the level on which you want to report. Values in attribute fields that are not source fields are cleared, and the amounts are combined with other reporting lines that contain the same attributes.

36.4.1.6 BAdI: Reporting Attributes

Use

This Business Add-In (BAdI) is used in the *Functions for U.S. Federal Government* (PSM-FG) component for the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS). The ADD_GTAS_ATTRIBUTES method is the only method used to define the GTAS derivation process. The fallback class CL_FMFG_FB_IMP_GTAS executes the derivation rules defined in transaction FMUSFG1 (*GTAS Attribute Derivation at Time of Reporting*). This BAdI works with the Customizing activity *Select Reports and Fields for Derivation*.

Performance-related optimizations may require you to replace the use of the derivation tool with a more streamlined option. In this case, we recommend a coded solution.

Standard settings

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

Activities

If you previously implemented this BAdI, you must copy the code from the fallback class CL_FMFG_FB_IMP_GTAS, method ADD_GTAS_ATTRIBUTES to your existing implementation. This code executes the derivation of Federal Government fields, which is the execution of the

rules defined by transaction FMUSFG1.

If you do not already have an implementation of this BAdI, the fallback class will be executed.

If you want to have your own implementation of this BAdI to customize the code of the derivation process (for example, to use your own code to define the rules instead of using the derivation tool), do the following:

- On the *Create Enhancement Implementation* screen, which appears after you call the Customizing activity, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite enhancement implementation exists, create a new one by choosing the *Create Composite Implementation* button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Select the *BAdl* tab, and choose the *Create BAdl* button.
- 4. In the dialog box, enter the BAdI definition, BAdI implementation, and implementation class and description, and choose *Enter*.
- 5. In the left panel on the next screen, expand the implementation node and double-click *Class*.
- 6. To enter method processing, double-click the method.
- 7. Enter the code for the implementation between the method IF_EX_FMFG_RPTA_EXIT~ADD_GTAS_ATTRIBUTES and endmethod statements. The sample implementation is automatically copied.
- 8. Save and activate all objects.

36.4.1.7 US Federal Government Fields

36.4.1.7.1 Maintain US Federal Government Field Values

Use

In this Customizing activity, you can define the field values for United States Federal Government fields and their field value text. Fields are represented by their data element.

Requirements

You completed an implementation like the one described in the business add-in (BAdI) BAdI: Definition of US Federal Government Fields.

36.4.1.7.2 BAdI: Definition of US Federal Government Fields

Use

This Business Add-In (BAdI) is used in the Functions for *U.S. Federal Government* (PSM-FG) component. You can use this BAdI to define the United States Federal Government field list for which you want to provide field values and field value texts. Fields are identified by their data element. Fields with the same data element contain the same field values.

You can use this BAdI to provide F4 functions on the fields and field value checks for data entry screens. If field values are not defined for a field, the check is not performed.

You can provide hardcoded field values in your own BAdI implementation or by using a Customizing table that contains the field values.

Requirements

You assigned the FMFG_USFIELD_F4 search help in the data dictionary to the corresponding field in the structure. You can access the data dictionary using transaction SE11. We deliver the FMFGUSKONTKEY DATA structure with this assignment.

Standard settings

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

Activities

If you want to use your own implementation, complete the following steps:

- In the dialog box, enter the enhancement implementation, short text, and composite enhancement implementation.
 If no composite exists, create a new one by choosing *Create*.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Select the BAdl tab and choose Create BAdl.
- 4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, and press *Enter*.
- 5. On the next screen, expand the implementation node and double-click *Class*.
- 6. With your cursor on the method, double-click to enter method processing.
- 7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements. The sample implementation is copied automatically.
- 8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the *Enhancement Spot Element Definitions* tab in the *Implementation Example Classes* section.

The following example implementation is available:

CL_FMFG_USFLDVAL_EXIT_EXM
 If no implementation exists, this example is used.
 The example contains comments which should help you to build your own implementation. It
 differentiates between fields in which the field values are programmatically provided (for example,

fields containing year values) and fields in which the values are maintained in Customizing. The checking function allows blank values as valid entries and does not validate fields for which field values are not defined.

36.4.2 Automatic Budget Postings

36.4.2.1 Maintain Parameters for Automatic Budget Postings

Use

In this activity, you activate or deactivate Automatic Budget Postings (ABP).

Requirements

You have:

- Customized and activated the Budget Control System (BCS).
- Performed the following activities:
- Define Budget Entry Document Header Defaults Maintain Derivation Strategy

Activities

- 1. Choose *New Entries* and mark the checkbox for your FM area.
- 2. Save your entry.

36.4.2.2 Define Budget Entry Document Header Defaults

Use

In this IMG activity, you define default values for the budget entry document header created by the Automatic Budget Postings feature.

Requirements

You have customized and activated the Budget Control System (BCS).

Standard settings

We do not provide any default settings.

Activities

- 1. Choose New Entries and assign default values to the following header fields for your FM area:
 - Process
 - Version
 - Budget Entry Document Type
- 2. Save your entry.

36.4.2.3 Maintain Derivation Strategy for Automatic Budget Postings

Use

With this IMG activity, you can establish a derivation strategy that triggers the generation of budget entry documents in the Budget Control System (BCS). The derivation strategy is called for each Funds Management (FM) commitment document or FM line item processed by the Federal Government solution.

To establish a proper derivation strategy, you need to:

- Determine whether or not the transaction is relevant for automatic budget postings (ABP)
- Determine whether or not a sender line will be created in the budget entry document
- Enter the budget type and account assignment fields by assigning target values

To define derivation steps, you can choose relevant source fields from the list provided. You can create several types of steps: a derivation rule, a table lookup, an assignment, an initialization and a function module. When assigning target fields, you determine which values will be used to create budget entry document line items.

Requirements

You have customized and activated the Budget Control System (BCS).

Activities

See the example below.

Example

- 1. You want to create a derivation step that will trigger the generation of a budget entry document during the posting of a Forecast of Revenue for an SD order. In othis way the transaction is made relevant for automatic budget postings:
 - a) Select Create Step and choose *Derivation Rule*.
 - b) Add a short description such as "Make Forecast of Revenue for SD order relevant" in the *Text for Step* edit box.
 - c) As source fields, select *CO Business Transaction* and *Value Type*.
 - d) As target field, select Automatic Budget Posting Relevancy Indicator.
 - e) Go to Maintain rule values and select *Forecast of Revenue* as Value type, *SDOR* as CO Business Transaction and *Yes* as Indicator
 - f) Save your derivation step.
- 2. You want to create a derivation step that will trigger the creation of a sender line item in the budget entry document:
 - a) Select *Create Step* and choose Assgmt.
 - b) Add a short description such as "Trigger sender line creation" in the *Text for Step* edit box.
 - c) As target field, select Automatic Budget Posting Sender Data Indicator.
 - d) As Constant, select Yes.
 - e) Save your derivation step.
 Alternatively, you can simply populate one of the sender account assignment fields. ABP will recognize that a sender line item should be generated.
- 3. You want to populate the Fund Center of the budget entry document receiver line item:
 - a) Select *Create Step* and choose *Assgmnt*.
 - b) Add a short description such as "Sender Fund Center" in the *Text forStep* edit box.
 - c) As source field, select *Fund Center*.
 - d) As target field, select *Sender Fund Center*.
 - e) Save your derivation step.

Standard settings

SAP does not provide any default settings.

36.4.2.4 Business Add-Ins for Automatic Budget Postings

36.4.2.4.1 BAdI: Override Default Budget Entry Document Header Values

Use

With this Business Add-In (BAdI), you can override default document header values for the following Automatic Budget Postings application :

- US Federal Government
- Budget Recovery
- Personal Cost Savings

Requirements

- You have customized and activated the Budget Control System (BCS).
- You have performed the following Customizing activities:
- Define Budget Entry Document Header Defaults
- Maintain Derivation Strategy

Standard settings

We do not deliver any implementation of this BAdI. This means that the BAdI is not active in the standard release.

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.4.3 Payment Processing

36.4.3.1 Prompt Payment Act

36.4.3.1.1 Activate Prompt Payment Act

Use

Use this step to activate or deactivate the Prompt Payment Act (PPA) for your company code.

Activities

- The overview shows a list of all the company codes set up in your system. To activate the PPA feature for your company code(s), check the relevant "Active" box(es).
- If the PPA feature is already active in a company code and you want to deactivate it, uncheck the "Active" box next to the company code.

36.4.3.1.2 Define Account for Penalty Interest

In this step, you can create an account number for penalty interest to be paid. When clearing open items, the program posts the calculated penalty interest to this account. The program also accesses this account during the profit and lost adjustment.

Activities

Enter an account from the chart of accounts you are using.

36.4.3.1.3 Enter Treasury Processing Time

Use

Use this step to enter the number of days it takes the US Treasury to process payments once your agency has run the automatic payment program. You do this for each company code and payment method.

Activities

Enter the relevant number of days for each company code and payment method your agency uses.

36.4.3.1.4 Define Interest Rates and CVFR

This step allows you to determine the percentage of the penalty interest rate. Penalty interest must be paid on overdue invoices that are subject to the Prompt Payment Act. The penalty interest rates are timedependent. The program calculates penalty interest with **one** interest rate. This rate is the one that is valid on the first day of the penalty interest period.

Activities

In the "Define Penalty Interest Rate and CVFR" overview, choose New Entries and specify the following:

- Date from which the rate entered is to apply
- Rate type This is the penalty interest rate or the current value of funds rate (CVFR).
- The percentage rate for the calculation of the penalty interest or the CVFR currently in force.

36.4.3.1.5 Maintain Minimum and Maximum Penalty Amounts

This step allows you to define a minimum and a maximum amount for the penalty charges for each company code. The program derives the currency for these amounts from the defined company code. If a company's payment of an invoice which is subject to the Prompt Payment Act is late, resulting in penalty charges, the percentage of the penalty interest to be paid is determined by the settings you have made in this step: Only penalty interests lying within the given interval must be paid.

If the calculated penalty charges are less than the minimum amount, the "Prompt Payment Act" program sets the penalty interest to zero.

Standard settings

SAP does not provide any standard settings.

Activities

Define the minimum and maximum amounts for penalty interests.

Further notes

Further information on the calculation of penalty charges is available in the SAP Library under *Financials -> Public Sector Management -> US Federal Government -> Prompt Payment Act.*

36.4.3.1.6 Create Penalty Interest Reason Codes

This step allows you to create penalty interest reason codes. You can assign these reason codes to invoices paid late which are subject to the Prompt Payment Act. You perform this assignment after the invoice has been paid.

Standard settings

SAP does not provide any standard settings.

Activities

Create the required penalty interest reason codes.

36.4.3.1.7 Maintain Rules for Invoice Line Item Handling

In this step, you define how the individual line items in invoices are to be handled.

Standard settings

We do not deliver any standard settings.

Activities

For each company code you use, stipulate, either separately for each vendor or for all the vendors in the company code, which of the following should apply to invoices from vendors maintained in that company code:

- "Pay at the earliest"

The invoice is paid in full as of the date of the item requiring payment earliest. When you select this option, you must also enter an amount in the "Amount in local currency" field in the same line. The amount entered acts as the maximum permitted invoice amount when this method is used, but is ignored if Accelerated Pay applies to a particular invoice.

- "Automatically split" Each item is paid at the date it becomes due.
- "Manually split"

Example

You are billed for milk and widgets from the same vendor. The Prompt Payment Act requires that milk be paid for within seven days of the baseline date. The vendors own payment terms are net within 30 days.

With invoice splitting active for this vendor in this company code, the system then processes the items for payment separately. The milk is paid for within seven days and the widgets after that but within thirty days.

Note: If you had chosen the "Pay at the earliest" option, both the milk and the widgets would have been paid for within seven days.

36.4.3.1.8 Assign Payment Term to Material Group

Use this step to assign payment terms to material groups and define a Prompt Payment Act (PPA) baseline date to them.

Requirements

You have already created the material groups and payment term keys you want to link in this step.

Activities

Choose **New Entries** and enter the following:

- Material group
- Payment term key for the group
- Whether the goods receipt date or invoice receipt date is to act as the PPA baseline date for the group

36.4.3.1.9 Business Add-Ins for Prompt Payment Act

36.4.3.1.9.1 BAdI: Further Invoice Processing Configuration

Use

You can use the business add-in (PPA_CUST_BADI) to further set up your system behavior during invoice processing (creating and/or parking invoice documents).

Requirements

- The business add-in is not active in the standard system.
- The PPA indicator must be active for company code.

Standard settings

To activate the business add-in, you must create an active implementation.

Activities

This BAdI is delivered with three methods.

MESSAGE_HANDLING - Allows user to change the severity, message and application area for messages issued:

- 'Invoice &1 still contains improper reason code '
- 'Invoice &1 does not contain a reference number'.
- 'Invoice &1 already exists with reference number &2'

UPDATE_PUSHBUTTON_TEXT - Update Pushbutton Text on Subscreen. The pushbutton text on either Accounts Payable or Accounts Receivable can be changed to meet customer requirements. Text delivered as 'Requried Information on Invoice' for Accounts Payable invoices and 'Status of Account Receivables' on Account Receivable Invoices.

CHECK_DOCUMENT_TYPE - Check document type

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.3.1.10 Invoice Classification

36.4.3.1.10.1 Maintain Reason Codes for Invoices

Use

Use this step to tell the system how invoices should be classified. You do this by means of reason codes per document type.

Requirements

- You need to have created the document types for which you want to enter reason codes here.
- The company code must be active for Prompt Payment Act processing.

Standard settings

We do not deliver any reasons as standard.

Activities

Enter the following:

- The document type for which you want to specify reason codes
- A two-character ID for the reason code
- A text of up to 50 characters, describing the reason in detail

36.4.3.1.10.2 Business Add-Ins for Invoice Classification

36.4.3.1.10.2.1 BAdI: Additional Processing of Improper Invoice Panel

Use

You can use this BAdI to change the messaging on the invoice classification panel. You can add your own messages, message classes, and application area.

You can also use it to change how entries appear on the invoice classification panel. For example, we deliver the panel with all reason codes unselected. You could change this so that the panel appears with all the reason codes selected.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.3.1.11 Fast Pay and Accelerated Pay

36.4.3.1.11.1 Maintain Material Groups for Fast Pay

Use this step to designate which material groups are to be used in Fast Pay (FP) processing.

Requirements

You must first create the desired material groups in Materials Management (MM).

Activities

Choose New Entries and specify the desired material groups.

36.4.3.1.11.2 Maintain Payment Amounts for Fast Pay/Accelerated Pay

Fast Pay (FP) and Accelerated Pay are subject to maximum amount restrictions. You use this step to enter these per company code.

Activities

Choose New Entries and enter the FP maximum amount for your company code(s).

Further notes

When you save your entries, the system displays the name and currency applying to the newly entered company code settings.

36.4.3.1.11.3 Maintain Payment Terms for Fast Pay/Accelerated Pay

Use

In this Customizing activity, you stipulate the payment terms you want to apply to your processing in fast pay and accelerated pay.

For related information, see the Customizing activity Maintain Payment Terms for Late Accelerated Payments.

Requirements

You have created the terms you want to use in Accounts Receivable and Accounts Payable in Financial Accounting (FI).

Activities

Specify fast pay and/or accelerated pay, and enter the payment terms you want to apply to each. When you save, the system displays the explanation for the payment terms, which you maintained in FI.

36.4.3.1.11.4 Maintain Payment Terms for Late Accelerated Payments

Use

In this Customizing activity, you stipulate payment terms that should be used when an accelerated payment is late. When accelerated payment applies to an invoice and you want to calculate penalty interest for late payments, the system calculates the due date using the net days of the payment term that corresponds to the accelerated payment term in the configuration table.

If accelerated pay applies to an invoice and the payment term is not specified in the configuration table, you receive an error message when you try to post the invoice.

If an accelerated payment term is entered in the Customizing activity Maintain Payment Terms for Fast Pay/Accelerated Pay, this Customizing activity (Maintain Payment Terms for Late Accelerated Payments) is not used. In this case, if accelerated pay applies to an invoice and the payment term is not specified in the configuration table, the due date, which is used to calculate penalty interest for late payments, is calculated based on a 30-day payment term.

If no accelerated payment term exists in either Customizing activity, accelerated pay is not used, regardless of the invoice amount.

Requirements

You have already created the payment terms that you want to use in the Accounts Receivable and Accounts Payable in Financial Accounting (FI) Customizing activities.

Activities

- 1. For the payment type, choose *Accelerated Pay*.
- 2. In the original payment term column, maintain the payment terms that you use on your invoices. Also, maintain the corresponding accelerated payment term.

When you save, the system displays the description of the accelerated payment terms, which you entered in FI. The system requires a one-to-one relationship between the original payment term and the accelerated payment term because the system uses the accelerated payment term to get the original payment term for Prompt Payment Act (PPA) calculations.

36.4.3.1.11.5 Business Add-Ins for Accelerated Pay

36.4.3.1.11.5.1 BAdI: Accelerated Pay Message Handling

Use

Use this BAdI to change how delivered messages behave in the Prompt Payment Act. We deliver the messages as warnings (W). You can change them to any of the other categories available (example: error (E)).

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.3.2 Treasury Confirmation

36.4.3.2.1 Maintain DIT and FBT Accounts

In this step, you specify which accounts you want to act as your disbursements-in-transit (DIT) and fund balances with Treasury (FBT) accounts.

Activities

Enter the desired company codes and G/L accounts, specifying, in each case, whether it is to act as the DIT account or the FBT account.

36.4.3.2.2 Maintain Payment/Disbursing Offices

In this step, you maintain the payment office for your agency.

Activities

Choose **New Entries** and enter the relevant payment office(s) and description.

36.4.3.2.3 Maintain Agency Location Codes

Use

In this step, you maintain the Agency Location Code (ALC) for your agency, as specified by the U.S. Federal Treasury.

Activities

Choose New Entries and enter the relevant ALC and description.

36.4.3.2.4 Maintain Payment Method Supplements

In this activity you define payment method supplements.

Requirements

You specified that you wish to use payment method supplements in the activity Set Up All Company Codes for Payment Transactions.

Activities

Choose *New Entries* and enter the following:

- An ID for your new payment supplement

- A descriptive text of up to 30 characters

36.4.3.2.5 Assign ALC and Payment Office to Payment Method Supplement

Activities

In this step, you assign the payment office and ALC for your agency to the payment method supplement.

The effect of this is that when you enter, for example, a vendor invoice and use the F4 input help on the payment method supplement field, the payment office and ALC information you enter here is included in the display.

Further notes

Payment method supplements are defined in the Accounts Receivable and Accounts Payable IMG and you cannot create new payment method supplements here. You can only select an existing payment method supplement and assign ALC and payment office to it.

36.4.3.2.6 Assign RFC Payment Type to Payment Method

Activities

In this step, you assign a payment type and a payment application (the reason the payment is being made) to a payment method. Note the file format column, which determines the format of the file - for example, CTX - sent to the Treasury containing the details of the payment to be made by the Treasury on behalf of your agency.

36.4.3.2.7 Assign RFC File ID

In this step, you define how the system is to combine payment types and methods for your agency.

For each payment method you need, specify the following:

- Payment application for example, vendor or salary
- File ID
- Agency ID

Activities

36.4.3.2.8 Maintain Regional Financial Center Derivation

The U.S Treasury has regional financial centers (RFCs) all over the country. They receive DME files from agencies on whose behalf they are to make payments.

Most agencies send their DME files to the RFC closest to them. However, some payments must be handled by a particular RFC.

Activities

In this step, you tell the print program where your DME files have to be sent. You do this, per company code, by assigning the ALC and payment office to the relevant RFC.

36.4.3.3 Payment Statistical Sampling

36.4.3.3.1 Activate/Deactivate Payment Statistical Sampling

Use

Use this step to turn Payment Statistical Sampling on or off. You do this per company code.

In the activation screen, choose **New Entries** and enter the company code and name. To activate PSS for the company code, check the **Statis. Sampling Act.** box.

Alternatively, to deactivate PSS for a company code where it is already active, call up the list of company codes and uncheck the activation box.

36.4.3.3.2 Define Payment Statistical Sampling Rules

Use

Activities

Before you can use Payment Statistical Sampling (PSS), you use this step to govern how you want it to work.

Activities

Action the step and choose **New Entries**. In the resulting view, enter the following:

- Company code
- Fiscal year
- Document type such as RE for invoice receipts
- Minimum Audit Amount Documents with a value less than the amount you enter here are not subject to verification.
- Frequency
 - This is the number of documents from which one will be selected for verification. The counter later shows the number of times the settings you entered have been used.

36.4.3.3.3 PSS: Clerk/Supervisor

Use

Use this step to specify which clerks and supervisors are to handle Payment Statistical Sampling in your system.

Activities

In the maintenance screen, enter the following for your company code:

- Clerk 1
- Clerk 2

This clerk may process documents assigned to clerk 1 if, for some reason, clerk 1 cannot process them

- Supervisor 1 This supervisor is responsible for verifying the documents initially processed by clerk 1 or 2.
- Supervisor 2
 This supervisor may verify documents assigned to supervisor 1 if, for some reason, supervisor 1 cannot process them
- Supervisor 3

This supervisor may verify documents assigned to supervisor 1 if, for some reason, neither supervisor 1 nor supervisor 2 can do so.

36.4.3.3.4 Business Add-Ins for Payment Statistical Sampling

36.4.3.3.4.1 BAdI: Invoice Batching

Use

This is a user exit that enables you to customize your own batching process.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.

The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- Enter the code for the implementation between the statements method <Interface name> ~
 <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.3.3.4.2 BAdI: Certification

Use

This a user exit that enables you to:

- Override the clerk/supervisor relationships defined in customizing
- Rewrite the selection rules defined in customizing

Activities

INCLUDE BADI_ACTIVITY OBJECT DOKU ID TX

36.4.3.4 Treasury Offset

36.4.3.4.1 BAdI: Treasury Offset

Use

You can use the business add-in (RFFMFG_TREA_OFFSET) to further process the following functions:

- Method GET_DATE_FIELD Define date used in ageing calculation. The delivered default code sets the baseline date as the default date used for the ageing calculation.
- Methods CONTROL_RECORD, DEBT_INFO, and INDIVIDUAL_DEBTOR_INFO allow users to further define the Treasury Offset File Format. The methods correspond to the sections of the Agency File Format 'Control Record', 'Debt Information' and 'Individual Debtor Information'. They have been set up in this manner to ease the creation of an implementation for the end-user in putting agency's data in correct format. The delivered default code fills the Treasury Offset File Format to JFMIP requirmenets. We recommend that you use the default code as a template for implementation.
- Requirements

Standard settings

The business add-in is not active in the standard system.

Activities

To activate the business add-in, you must create an active implementation.

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.3.5 Intragovernmental Payments and Collections (IPAC)

36.4.3.5.1 Maintain Payment/Disbursing Offices

In this step, you maintain the payment office for your agency.

Activities

Choose **New Entries** and enter the relevant payment office(s) and description.

36.4.3.5.2 Maintain Agency Location Codes

Use

In this step, you maintain the Agency Location Code (ALC) for your agency, as specified by the U.S. Federal Treasury.

Activities

Choose New Entries and enter the relevant ALC and description.

36.4.3.5.3 Assign ALC and Payment Office to Payment Method Supplement

Activities

In this step, you assign the payment office and ALC for your agency to the payment method supplement.

The effect of this is that when you enter, for example, a vendor invoice and use the F4 input help on the payment method supplement field, the payment office and ALC information you enter here is included in the display.

Further notes

Payment method supplements are defined in the Accounts Receivable and Accounts Payable IMG and you cannot create new payment method supplements here. You can only select an existing payment method supplement and assign ALC and payment office to it.

36.4.3.5.4 Maintain Fiscal Station Number

Use

Agency Location Codes (ALCs) can be subdivided into Fiscal Station Numbers (FSNs). Use this step to make the necessary entries.

Activities

In the "Change View 'US Federal Fiscal Station Number' Overview" screen, choose **New Entries** and enter the following:

- The ALC you want to subdivide using FSNs
- An ID number for the FSN
- A text of up to 30 characters, describing the FSN

36.4.3.5.5 Maintain IPAC Document Reference Number

Use

Use this step to maintain number ranges for the IPAC reference documents. You do this per company code.

36.4.3.5.6 Prepare Automatic Posting for IPAC

Use

In this step, you specify the disbursements-in-transit (DIT) and fund balances with Treasury (FBT) accounts used in the automatic IPAC postings for your company code.

Activities

Choose **New Entries** and specify the following:

- Company code
- Transaction ID. The options are:
- IPAC Collection
- IPAC Payment
- IPAC Collection Confirmation
- IPAC Payment Confirmation
- IPACed Collection
- IPACed Payment
- G/L Account
- Document Type
- Posting Key
- DIT or FBT

36.4.3.5.7 Maintain DIT and FBT Accounts

In this step, you specify which accounts you want to act as your disbursements-in-transit (DIT) and fund balances with Treasury (FBT) accounts.

Activities

Enter the desired company codes and G/L accounts, specifying, in each case, whether it is to act as the DIT account or the FBT account.

36.4.3.5.8 IPACed Auto Doc Creation - Account Assignment Derivation

Use

Use this step to enter the information required to enable unmatched IPACed records to derive account assignments so an invoice and payment can be posted automatically.

When the IPACed program does not find a match to an invoice, an invoice and payment are automatically created and account assignment values for the invoice are derived from this derivation tool, using the sources and targets you enter here. The general ledger (G/L) account and document type for the payment document are taken from the step Prepare Automatic Posting for IPAC.

Activities

Enter the source and target fields you require for your derivation.

Note

You also need to configure the document type for the invoice in the step IPACed Auto Doc Creation: Document Type for Invoice.

36.4.3.5.9 Activate IPACed Automatic Invoice Generation

Use

Use this step to activate and configure IPACed automatic invoice configuration. You do this per company code or country template.

Activities

In the maintenance view, specifiy, for each relevant company code and/or country template, whether automatic invoice generation is active for vendor invoices, customer invoices, or both.

36.4.3.5.10 IPACed Automatic Document Creation: Default Fields for Invoice

Use

Use this step to enter the document type and payment method supplement required for automatic invoice creation when an unmatched IPACed record is found.
When the IPACed program does not find a match to an invoice, an invoice and payment are automatically created and for the invoice, the document type and payment method supplement are derived from this configuration table. You can configure a document type and payment method supplement per year; however, the year within this configuration table is the "From" year, meaning that a year entered here can remain valid for future years.

For the subsequent payment document, which is created automatically and clears the invoice, the document type, and general ledger (G/L) account are taken from the configuration called *Prepare Automatic Posting for IPAC*.

Requirements

Make the required settings in Prepare Automatic Posting for IPAC.

Activities

Enter the derivation criteria you require.

36.4.3.5.11 Maintain Payment Method for Zero Amount Transactions

Use

Use this step to define payment methods for transactions where the money amount is zero.

Requirements

A payment term for zero amount payments is defined and assigned to payment medium format IPAC_FG_ZERO.

Activities

Choose New Entries and enter the relevant payment methods.

36.4.3.5.12 Business Add-Ins for IPAC

36.4.3.5.12.1 BAdl: Override IPAC Standard Code

Use

This is a user exit, enabling you to enter your own code that overrides the standard code delivered by SAP.

Standard settings

A sample implementation exists. Use SE19 and look at class CL_EXM_IM_BADI_IPAC.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*. The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

You might apply this feature to change the input source for the incoming or outgoing IPAC interface file.

36.4.4 Closing Operations

36.4.4.1 Preclosing (BCS/New Budgetary Ledger)

36.4.4.1.1 Collected Fields Year-End

Use

Use this step to specify, per company code, which data fields are collected for the purpose of year-end closing.

Activities

- 1. In the Overview, choose **New Entries**.
- 2. Enter a company code and check the boxes next to the objects whose data you want to include in year-end processing for that company code.
- 3. Save your entries.

36.4.4.1.2 Year-End Closing Rules

Use

In this step, you define the rules that will govern both preclosing and closing. The procedure described below applies in both cases.

Activities

Proceed as follows:

- 1. Specify a company code and the fiscal year for which you want to define rules.
- 2. In the resulting overview, choose either **Preclosing** or **Closing** in the dialog structure.
- 3. Choose New Entries and stipulate the following:
 - Fund Type to which the new rule is to apply. '*' applies to all fund types.
 - Status to which the new rule is to apply.
 - From Sender Account That is, the first account in the range of sender accounts for the preclosing/closing postings.
 - To Sender Account That is, the last account in the range of sender accounts for the preclosing/closing postings.
 - To Sender Account The last account in the range of sender accounts.

- Closing postings are normally made in the form of budget transfers. If you need a budget return or supplement instead, check the appropriate box.

36.4.4.1.3 Year-End Account Assignment Derivation

Use

Use this step to define the derivations to be used in year-end account assignments.

Activities

The procedure used is the same as for the standard derivation tool.

36.4.4.1.4 Specify Document Types for Year-End Closing

Use

Use this activity to specify document types used in year-end processing.

During year-end processing, postings might be required that violate the rules for source and posting type set up in BL account classification. For document types specified here, these rules are not checked and no error is issued.

Note

The checks are bypassed not only for year-end postings, but for all postings done with the specified document types.

Activities

Specify the document types for which you want to bypass the source and posting type checks.

36.4.4.1.5 Canceled Funds

36.4.4.1.5.1 Year-End Account Assignment Derivation

Use

In this IMG activity, you define the account assignment derivation for reassigning Funds Management account assignments (FM account assignments) Closing Operations for fiscal year change and mid-year reassignments in Funds Management (FM).

With the account assignment derivation, the values of the new FM account assignment are determined automatically from previous account assignments. Several target account assignments can be determined for some closing operations; this allows amounts to be split over several target account assignments and partial amounts to be included. You can also use other objects as source fields for the derivation, provided that a logical dependency exists between them and the target account assignments.

The account assignment derivation consists of a sequence of derivation steps - the derivation strategy - through which the values from FM account assignments are derived from other account assignments.

Each derivation step describes how a number of target fields can be filled by a number of source fields.

There are different derivation step types, which map the different logical dependencies between source and target fields:

- Derivation rule
- Table access
- Move
- Clear
- Enhancement More information can be found in section "Prerequisites".
- Function call

You cannot define your own function calls. However, you can include the derivation steps (function calls) defined by SAP in your own derivation strategy.

You can also use different derivation strategies for the different closing operations, by assigning a strategy to an FM area, fiscal year, and a particular closing operation in Assignment to FM area, Year and Closing Acitvity.

The individual closing operations are represented by one program or transaction. When they are executed, the derivation strategy assigned to the FM area is automatically included.

The following is a list of all programs and transactions that include reassignments defined in the derivation strategy for Canceled Funds. Note that some programs can only be executed when the corresponding global functions have been activated in Customizing. The list contains the relevant programs for each closing operation and global function under the respective heading

| Heading |
|---------|
| |

US Federal Government

US Federal Government

- Preclosing Activities for Canceling Fund (Receivables)
- Transfer Balance from Canceled Fund: Accounts Receivable (FMFG_CANCELED_AR)

Standard settings

If you do not define a derivation strategy for this closing operation for the fiscal year change, the program does not process any documents.

- Preclosing Activities for Canceling Fund (Payables)
- Transfer Balance from Canceled Fund: Fl Accounts Payable (FMFG_CANCELED_AP)
- Transfer Balance from Canceled Fund: MM Accounts Payable (FMFG_CANCELED_AP_MM)

Dependencies

The fund cannot be derived for the operation "Preclosing Activities for Canceling Fund (Payables)". This means that, if the fund (NEW_FUND, receiver fund) is specified as a target field in a derivation step of step of type "derivation rule", and the value of the receiver fund is different than the value of the sender fund, the system issues a "hard" error message. This is because the Future Funded Expense Posting has to be done in the original fund (sender fund).

For the closing operation of Preclosing Activities for Canceling Fund (Receivables), the fund must be derived. This means that, if the fund (NEW_FUND, receiver fund) is not specified as a target field in a derivation step of step type **derivation rule** or if the value of the receiver fund is the same as the value of the sender fund, the system issues a "hard" error message. This is because the open receivable balances must be transferred to a different fund (miscellaneous receipts fund).

- Preclosing Activities for Canceling Fund (Payables) You can use the following source fields to derive the target fields:
- SOURCE_COMMIT_ITEM Sender commitment item
- SOURCE_FUNDS_CENTER Sender funds center
- SOURCE_FUNCTION_AREA Sender functional area
- SOURCE_MEASURE Sender funded program

The following target fields are available: (Select Field attribute Overwrite with New Value as these fields can be prepopulated.)

- TARGET_FUNCTION_AREA Target functional area
- TARGET_COMMIT_ITEM Target commitment item (FM fiscal year change)
- TARGET_FUNDS_CENTER Target funds center
- TARGET_FUNCTION_AREA Target functional area (FM fiscal year change)
- Preclosing Activities for Canceling Fund (Receivables)
- You can use the following source fields to derive the target fields:
- SOURCE_FUND Sender Fund
- SOURCE_COMMIT_ITEM Sender commitment item

- SOURCE_FUNDS_CENTER Sender funds center
- SOURCE_FUNCTION_AREA Sender functional area
- SOURCE_MEASURE Sender funded program

The following target fields are available:

(Select Field attributes Overwrite with New Value as these fields can be pre populated.)

- TARGET_FUND Target fund
- TARGET_FUNCTION_AREA Target functional area
- TARGET_COMMIT_ITEM Target commitment item (FM fiscal year change)
- TARGET_FUNDS_CENTER Target funds center
- TARGET_FUNCTION_AREA Target functional area (FM fiscal year change)
- Subsequent Postings for Canceling Fund (Payables) CFAS You can use the following source fields to derive the target fields:
- SOURCE_FUND Sender fund
- SOURCE_COMMIT_ITEM Sender commitment item
- SOURCE_FUNDS_CENTER Sender funds center
- SOURCE_FUNCTION_AREA Sender functional area
- SOURCE_MEASURE Sender funded program

The following target fields are available: (Select Field attributes Overwrite with New Value as these fields can be pre populated.)

- SOURCE_FUND Sender Fund
- TARGET_FUNCTION_AREA Target functional area
- TARGET_COMMIT_ITEM Target commitment item (FM fiscal year change)
- TARGET_FUNDS_CENTER Target funds center
- TARGET_FUNCTION_AREA Target functional area (FM fiscal year change)

36.4.4.1.5.2 Subsequent Process Account Assignment Derivation

Use

In this IMG activity, you define the account assignment derivation for </> (FM account assignments) for fiscal year change and mid-year reassignments in Funds Management (FM).

With the account assignment derivation, the values of the new FM account assignment are determined automatically from previous account assignments. Several target account assignments can be determined for some closing operations; this allows amounts to be split over several target account assignments and partial amounts to be included. You can also use other objects as source fields for the derivation, provided that a logical dependency exists between them and the target account assignments.

The account assignment derivation consists of a sequence of derivation steps - the **derivation strategy** - through which the values from FM account assignments are derived from other account assignments.

Each derivation step describes how a number of target fields can be filled by a number of source fields.

There are different **derivation step types**, which map the different logical dependencies between source and target fields:

- Derivation rule
- Table access
- Move
- Clear
- Enhancement
- Function call

You cannot define your own function calls. However, you can include the derivation steps (function calls) defined by SAP in your own derivation strategy.

The following Function Module includes reassignments defined in the derivation strategy.

| Global Function | Heading |
|-----------------|---------|
|-----------------|---------|

US Federal Government US Federal Government

- Subsequent Postings for Canceling Fund (Payables)
- Follow-on FI Postings (Function Module: FM_ADD_LINES_CANCELED_FUND)

Dependencies

For the closing operation of Subsequent Postings for Canceling Fund (Payables), the fund must be derived. This means that, if the fund (NEW_FUND, receiver fund) is not specified as a target field in a derivation step of step type **derivation rule** or if the value of the receiver fund is the same as the value of the sender fund, the system issues a "hard" error message.

- Subsequent Postings for Canceling Fund (Payables) You can use the following source fields to derive the target fields:
- SOURCE_FUND Sender fund

- SOURCE_COMMIT_ITEM Sender commitment item
- SOURCE_FUND Sender fund
- SOURCE_FUNDS_CENTER Sender funds center
- SOURCE_FUNCTION_AREA Sender functional area
- SOURCE_MEASURE Sender funded program

The following target fields are available: (Select Field attributes Overwrite with New Value as these fields can be pre populated.)

- TARGET_FUND Target fund
- TARGET_FUNCTION_AREA Target functional area
- TARGET_COMMIT_ITEM Target commitment item (FM fiscal year change)
- TARGET_FUNDS_CENTER Target funds center
- TARGET_FUNCTION_AREA Target functional area (FM fiscal year change)

36.4.4.1.5.3 Business Add-Ins for Canceled Funds 36.4.4.1.5.3.1 BAdI: Accounts Payable - Modify Document Type and Header

Text for New Docs

Use

You can use this step to implement the Business Add-In BADI_CANCELED_FUNDAP, which replaces the original values for document types and header texts when a new accounts payable document is being posted.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.

- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.4.1.5.3.2 BAdI: Accts Receivable - Modify Document Type and Header Text for New Docs

Use

You can use this step to implement the Business Add-In BADI_CANCELED_FUNDAR, which replaces the original values for document types and header texts when a new accounts receivable document is being posted.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.

The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface

name> ~ <Name of method> and endmethod.

- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.4.1.6 Business Add-Ins for Preclosing

36.4.4.1.6.1 BAdI: Modify Output Columns for Unfilled Orders Program

Use

The purpose of this enhancement is to be able to modify the sales order quantity and add an obligation correction amount to the Close out Unfilled Orders Program (Year-End Closing Operation). These fields are transferred before the BAPI BAPI_SALESORDER_CHANGE is called.

The transaction that plays a role here is:

Close Out Unfilled Orders

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

1. In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name

was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

36.4.4.2 Preclosing (Former Budgeting)

36.4.4.2.1 Define Rules for Closing Commitments

Requirements

You are using the Federal Government solution and want to close out outstanding obligations in a fiscal year.

Activities

The rules are based on FM area, fiscal year, fund type, obligation value types, and fund status. When transaction FMMC is run to complete obligation documents, only documents that meet the selection criteria and fall under these defined rules will be picked for processing.

Further notes

A document meets the criteria of a defined FM closeout rule if the:

- FM area matches
- Fiscal year matches
- Document's fund is in defined the fund type
- Value type matches
- Document's fund status matches in the following fiscal year

36.4.4.2.2 Define Rules for Budget Rollup with Fund

In this step, you can prepare the residual budget carryforward to the new fiscal year, as part of your fiscal year change work.

You prepare a set of rules, where you specify one or more FM account assignments per FM area, fund type, and fund status. You can first repost the transferable residual budget to these assignments using the budget rollout program (BPCLOSE). You can then carry out the fiscal year change work, based on this new structure.

Requirements

The sender and receiver budget subtypes must have been created using the step Create Budget Subtype.

Activities

Create the rules you require.

If you want to adopt the value from an account assignment (such as the function area) from the sender, enter "*".

36.4.4.2.3 Define Rules for Budget Rollup with Fund Type

In this step, you can prepare the residual budget carryforward to the new fiscal year, as part of your fiscal year change work.

You prepare a set of rules, where you specify one or more FM account assignments per FM area, fund type, and status. You can first repost the transferable residual budget to these assignments using the budget rollout program (BPCLOSE). You can then carry out the fiscal year change work, based on this new structure.

Requirements

The sender and receiver budget subtypes must have been created using the step Create Budget Subtype.

Activities

Create the rules you require.

If you want to adopt the value from an account assignment (such as the function area) from the sender, enter "*".

36.4.4.2.4 Define Rules for Closing Residual Accounts

Requirements

You are using IS-PS and want to pre-close residual balances from the federal ledger

Activities

Assign Dummy Cost Center

First, set up a "Dummy" cost center to act as a cost collector for postings that involve P&L accounts with cost elements. When the preclosing process runs, all postings that have to impact the CO Module do so using this configurable cost center.

Set General Rules for Preclosing

The preclosing process reads the residual balances from the Federal ledger accounts configured in this table. After this process, the system applies a mapping rule to generate the preclosing posting.

Basically, this table maps from a given source [sending elements] to a given target [receiving elements].

These rules are set up per company and from a given fiscal year. They involve a sending fund type, fund, fund center, commitment item, and functional area. In addition, the status of the fund is important; you can have a rule for expired, canceled, and uUnexpired funds.

You can use a generic indicator '*' to mark "ALL VALUES" of a given field. In addition, you can mask the sending accounts. Example: 5* --> All accounts starting with 5 are retrieved and mapped.

36.4.5 Ledgers

36.4.5.1 Former Budgetary Ledger

36.4.5.1.1 Define Document Types

In this step you define the document types that you want to use for budget postings in the component Funds Management Government.

If you define different document types, you can classify Funds Management budget entry documents.

Activities

Define the document types that you require.

36.4.5.1.2 Define Posting Key

In this step, you define the debit/credit posting key for the postings in the Budgetary Ledger (BL).

Standard settings

In the standard, the key "40" is set for debit postings and the key "50" is set for credit postings.

Activities

Only change the posting key for the BL if you use a differing posting key logic for your FM area.

36.4.5.1.3 Define Account Determination for US Government

Use

In this step, you define the account derivations between Funds Management (FM) and Budgetary Ledger (BL)

The settings you can execute here are reconciled on the functional requirements of the US Federal Government.

You define the G/L account derivations of the BL in the following customizing tables:

- US Federal Government BL Budgeting

Here, you define the BL accounts for budget postings. Use this if you are still using the old budgeting processor. We recommend you make your entries as specific as possible.

- **Budget Control System (BCS)** Here, you define the BL accounts for budget postings if you are using the new BCS feature. However, we recommend you make your entries as specific as possible.
- **Revenues/Statistical Postings & OI/Actual Resources** Here you define the BL accounts for revenues postings and statistical postings. **Note** that the *DP with PO* field is now obsolete. You cannot check this box when creating new entries. OSS note 623050 gives detailed information on this.
- **Open Items/Actuals for Budget Status** Here, you define the BL accounts for expenditure postings and open items

Requirements

You must ensure that BL documents have no effect on availability control in Funds Management (FM). To this end, the following prerequisites must be fulfilled for BL accounts:

- The commitment item assigned to the BL G/L account has financial transaction "50" (clearing).
- The BL G/L account is not a cost element.

Activities

- 1. Select one of the Customizing tables, by double clicking the table in the dialog structure. By default, Customizing table *US Federal Government BL Budgeting* is displayed.
- 2. Select *New Entries*.
- 3. Make the necessary entries and enter the BL G/L account in the G/L account field.
- 4. Save the entry.

36.4.5.2 Budgetary Ledger

36.4.5.2.1 Basic Settings

36.4.5.2.1.1 Activate Budgetary Ledger Variant

Use

Use this step to make the settings required to activate the Budgetary Ledger (BL) in your installation.

Activities

Proceed as follows:

- 1. In the Basic Settings for the Budgetary Ledger Overview, choose New Entries.
- 2. In the next screen, use the dropdown to choose the applicable BL variant and the document type.
- 3. Save your entries. This enables the specified document type for processing in the relevant budgetary ledger.

36.4.5.2.1.2 BL Account Classification

Use

In this step, you enter classification data relating to your chart of accounts. This includes the following:

- Specifying whether budget and/or actual postings are allowed for ranges of accounts
- Stipulating whether postings to accounts in specified ranges are made through the budgetary ledger (BL)

- Entering Standard General Ledger (SGL) account classifications for ranges of accounts

Requirements

You have maintained and activated at least one chart of accounts.

Standard settings

We do not deliver any standard settings.

Activities

- 1. Having actioned the step, specify a chart of accounts.
- 2. In the *Budget/Actuals Allowed for Budgetary Accounts* overview, choose **New Entries** and enter the ranges of accounts you need to process. In the case of each range, specify whether budget and/or actual postings are allowed.
- 3. Click **Budgetary Ledger/Other postings allowed** in the dialog structure.
- 4. In the resulting overview, select the range you want to process and choose the applicable BL account classification option.
- 5. Click SGL Classification Propr. Accounts in the dialog structure.
- 6. In the resulting overview, choose the appropriate account classification for each of the ranges displayed.
- 7. Save your entries before leaving the transaction.

36.4.5.2.1.3 Define Posting Key

In this step, you define the debit/credit posting key for the postings in the Budgetary Ledger (BL).

Standard settings

In the standard, the key "40" is set for debit postings and the key "50" is set for credit postings.

Activities

Only change the posting key for the BL if you use a differing posting key logic for your FM area.

36.4.5.2.1.4 Maintain Budget Type Attributes

Use

Use this step to maintain the budgetary ledger (BL) account for each of your fund type/budget type combinations. This account is then derived in all your budget postings to the combination.

Standard settings

We do not deliver any standard settings

Activities

In the *Change View: "Budget Type Attributes for Budgetary Ledger": Overview* screen, choose **New Entries** and specify the following:

- Fund Type
- Budget Type
- BL Account
- If you assign more than one budget type to the same account within a fund type, check the **Year-End** box for one of them. The entry so marked is then used to determine the budget type from the receiver account in year-end processing.

36.4.5.2.1.5 Assign Fields for Zero Balance Check

Use

In this step, you assign fields to special ledgers for which you want to check zero balancing in the documents created by the budgetary ledger. You can only assign fields which are marked for "zero balancing" in the split method assigned to the ledger.

Requirements

To use this functionality you must set the flag "no splitting" in the customizing step "Activate Budgetary Ledger Variant". If you do not, documents created by the budgetary ledger are processed by the split processor in the same way as other FI documents. In this case, zero balancing is ensured with postings to the zero-balancing clearing account.

Activities

In the split ledgers overview, select the ledger you want to process and choose *BL Documents: Assign Zero Balance Fields* in the Dialog Structure. Then specify the fields to which you want to apply the zero balancing process.

36.4.5.2.2 Account Derivation

36.4.5.2.2.1 Definition of BL Areas

Use

Use this step to make the settings required for derivation of budgetary ledger (BL) areas.

Requirements

The BL must be active.

Standard settings

We deliver a number of standard BL areas, as follows:

- Budgetary Ledger Actuals
- Budgetary Accounts Budgeting
- Expended Appropriations Actuals
- Expended Appropriations Budgeting
- Miscellaneous Receipts Actuals

You can either tailor these standard areas to suit your requirements or create wholly new ones of your own.

Activities

To maintain BL areas, proceed as follows:

- 1. Either select one of the standard strategies or choose **New Entries** and enter an identifier and name for a strategy of your own.
- 2. Consider checking the **Offset Account Required** indicator for the strategy. If you do not, posting documents relating to the strategy must be balanced or the system will not accept them.
- 3. Check the **Protect** indicator if you want derivations in this ledger to be blocked against unauthorized modifications.
- 4. Use the **Function Name** field to specify the function for processing when the account derivation test feature is called. Enter a screen number also.
- 5. With these settings made, select your strategy and choose *Account Derivation Source Fields* in the dialog structure.
- 6. Enter the source table and field names to be used in the derivation strategy.
- 7. Finally, choose **Document Type** in the dialog structure and specify the document type to be created for this BL area.

36.4.5.2.2.2 Federal Extension Derivation Access

Use

Use this step to access the budgetary ledger (BL) account derivations. You need to maintain one derivation strategy for each BL area.

Requirements

The BL is active.

Activities

The procedure used is the same as for the standard derivation tool

Note, however, that the derivation for the BL area budget is generated automatically; you cannot change it

36.4.5.2.2.3 Business Add-Ins for BL Account Derivation

36.4.5.2.2.3.1 BAdI: Enhancements US Federal BL Account Derivations

36.4.5.2.3 Adjustments

36.4.5.2.3.1 Document Types for Adjustments

Use

Use this step to define the accounting document types needed to force the system to post documents as adjustments in the budgetary ledger (BL).

Adjustments can be upward (budget is consumed) or downward (budget is returned). Requirements

The document types must already exist in the system. You cannot create them here.

Activities

In the view, enter the identifiers for the document types you want the system to post as adjustments in the BL.

36.4.5.2.3.2 Maintain User Names for Adjustment Types

Use

Use this step to specify the users to whom the entries made in the step Document Types for Adjustments can be applied.

Requirements

The users must already exist in the system. You cannot create them here.

Activities

Select **New Entries** and enter the relevant users.

36.4.6 Reporting

36.4.6.1 GTAS

36.4.6.1.1 Specify GTAS Account Balances

Use

In this Customizing activity, you specify which balances should be provided to the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS).

Activities

1. Enter the company code. The system displays all general ledger (G/L) accounts defined for that company code.

- 2. For each G/L account, specify one of the following balance types based on the GTAS instructions from the Treasury:
 - Beginning balances
 - Ending balances
 - Both beginning and ending balances
 - Do not include

If the balance type for a G/L account is blank, that account will not be included in the GTAS bulk file.

36.4.6.1.2 Year of Budget Authority

36.4.6.1.2.1 Configure YBA

Use

Year of Budget Authority (YBA) uses the attribute, YEAR_BDGT_AUTH. This field is part of FACTS II.

YBA is a classification for no year fund postings to a defined set of G/L accounts (for example, 4802-Prepaid/Advances; 4902-Delivered/Paid). Postings are classified using the prior year's budget with the attribute YEAR_BDGT_AUTH_9 containing the value, BAL, or the current year's budget containing the value, NEW.

YBA functionality creates the budget values using RFFMFG_YBA_BDGT and consumes this budget within RFFMFG_YBA_UPD. The following are mandatory to use these programs:

- Define G/L Accounts
- BAdI: Define No Year Fund
- BAdI: Define Starting Budget
- BAdI: Define FIFO/LIFO Consumption
- BAdI: Define Customer Dimension (optional)

RFFMFG_YBA_BDGT creates the available budget and stores those figures in table FMFG_YBA_AVC. As an integration point, it includes the exit to define the starting budget. This exit can be used to select exiting budget entries within BCS. You can enter the budget amounts manually.

The classification for the YBA is provided with program RFFMFG_YBA_UPD. This program updates the 95/97 ledger line items and totals with the classification. The program looks at all postings of the fiscal year or the postings to be processed, which apply for YBA. It provides two levels of results about the process.

Requirements

You have classified FG postings for the Year of Budget Authority and displayed them within FACTS II reports.

Standard settings

We deliver the example, CL_FMFG_YBA_EXIT_SAMPLE_DEF, which includes the definitions of no year funds with a cancellation date of more than 50 years, a default FIFO for the consumption, and the available BCS budget as starting budget for the Year of Budget Authority.

36.4.6.1.2.2 Define G/L Accounts

Use

You use this Customizing activity to define the G/L accounts applicable for the Year of Budget Authority (YBA). You can enter an individual G/L account as well as a range. You associate the G/L accounts to the company code.

Standard settings

You provide the G/L accounts to the following SGL accounts:

- 4802 Prepaid/Advances
- 4882 Upward Adj to Adv
- 4902 Delivered-Paid
- 4982 Upward Adj to Del-Paid
- 4908 Authority Outlayed

36.4.6.1.2.3 Business Add-Ins for YBA

36.4.6.1.2.3.1 BAdI: Define No Year Fund

Use

You use this BAdI to define the no year fund. No year funds are a list of funds within the budget period. This information is necessary for all YBA functions.

Standard settings

We deliver the example, CL_FMFG_YBA_EXIT_SAMPLE_DEF, which includes the definitions of no year funds with a cancellation date of more than 50 years.

Activities

You use the default delivered definition. If this is not sufficient, you can create and activate

your own implementation based on the provided logic.

36.4.6.1.2.3.2 BAdI: Define Starting Budget

Use

You use this BAdI to enable a flexible adoption if the budget values for the Year of Budget Authority exist within the system.

Standard settings

We deliver the example, CL_FMFG_YBA_EXIT_SAMPLE_DEF, which specifies how budget values from BCS are used to provide the starting budget for YBA. The delivered implementation collects the budget entries to all expenditure items in the processing year posted to budget version 0 by fund and additional YBA dimensions.

Note: You use the (Re)initialization flag in the budget entry program to access the starting budget.

Activities

You use the default delivered definition. If this is not sufficient, you can create and activate your own implementation based on the provided logic.

36.4.6.1.2.3.3 BAdI: Define FIFO/LIFO Consumption

Use

You use this BAdI to define how the budget is consumed. This BAdI enables flexibility in defining FIFO/LIFO based on the posting, which is classified for YBA. (FIFO defines consuming prior year's budget first; LIFO defines consuming current year budget first.) Additionally, this BAdI enables external posting classification by specifying the YBA value. In this case, the posting is exempt from consuming budget.

Standard settings

We deliver the example, CL_FMFG_YBA_EXIT_SAMPLE_DEF, which includes the default to consume based on FIFO.

Activities

You use the default delivered definition. If this is not sufficient, you can create and activate your own implementation based on the provided logic.

36.4.6.1.2.3.4 BAdI: Define Customer Dimension

Use

You use this BAdI to define the customer dimension. The customer dimension enables the customer to specify a granular level for consuming the budget and provide more control for the YBA.

The customer dimension can be defined from available FM account assignment elements. The definition is built to enable the customer dimension to be implemented as a 1:1 definition of an FM accounting element and as a combination of FM accounting elements. The customer dimension can contain the index to the combination, enabling the output-related methods to display each combination.

Standard settings

The BAdI is not active in the standard system.

Activities

To activate the BAdI, you must create an active implementation. You use the example delivered in class CL_FMFG_YBA_EXIT_SAMPLE_DEF and focus on the implementation related to interface IF_FMFG_YBA_EXIT_CDIM_DEFINE. This interface requires the customer dimension definition to specify all possible values of customer dimensions, the field header for the customer dimension, and displayable value for output functions. The functionality enables the customer dimension to be implemented as index or address field representing a combination of the source fields. The FM account assignment elements are source fields for the customer dimension definition.

36.4.6.2 SF-132 and SF-133

36.4.6.2.1 Define Report Layouts for SF-132 and SF-133

Use

Use this step to define the layout(s) you want to use when running SF-132 (Apportionment and Reapportionment Schedule) and SF-133 (Report on Budget Execution and Budgetary Resources).

Standard settings

SAP delivers a standard setup for each of the reports. You can use these or create your own.

Activities

To create your own layout, proceed as follows:

- 1. In the Report Layout Overview, switch to change mode and choose New Entries.
- 2. Specify the following:
- A reporting layout ID
- A program ID, identifying whether this layout applies to SF-132 or SF-133
- A descriptive text
- 3. Save your entries, then select that line and choose *Report Layout Definition* in the Dialog Structure.
- 4. In the Report Layout Definition overview, define what you want displayed in the relevant report by specifying the following:
- Report Layout ID This is either one of the standard ones or one you defined in the first screen.
- A sequence number for each field; this governs the order in which the fields appear when you run the report.
- Reporting line number
- Parameter set
 - The options here are C1 or C2. They have the following effect:
 - SF-132

C1: Entries so marked appear in the "Budgetary Resources" section the report. C2: Entries so marked appear in the "Application of Budgetary Resources" section of the report. **SF-133**

C1: Entries so marked can appear in any section of the report.

- A descriptive text
- 5. When you have finished, save your entries.

36.4.6.3 SF-224

36.4.6.3.1 Maintain Treasury Subclasses

Use

Use this step to enter the Treasury subclasses you need for your SF224 report.

Activities

Choose **New Entries** and enter the codes Treasury has authorized your agency to use. If desired, you can enter descriptions for them also.

Further notes

The following is a listing of current Treasury Subclasses:

- 41 Cashier
- 46 Obligations of Closed Accounts
- 62 Amortized Discount on Treasury Securities
- 67 Purchase of FHLB and FLB Securities
- 69 Purchase of Participation Certificates Sales Fund
- 72 Unamortized Discounts
- 75 Unrealized Discount on Treasury Securities
- 76 Earnings on Treasury Securities
- 77 Sale of FHLB and FLB Securities
- 79 Sale of Participation Certificates Sales Fund
- 80 Investment (Purchase) in Participation Certificates
- 81 Investment (Purchase) in Non-Guaranteed Govt Agcy Sec
- 82 Repayment of Borrowing from FFB
- 85 Repayment of Borrowing from U.S. Treasury
- 86 Actual Borrowings against Borrowing Authority
- 87 Redemption of Non-Guaranteed Govt Agcy Securities in Mkt
- 88 Investment (Purchase) in U.S. Public Debt Securities
- 89 Invst (Purchase) in Guaranteed Govt Agcy Securities in Mkt
- 90 Redemption (Sales) of Participation Certificates
- 91 Redemption (Sales) of Non-Guaranteed Govt Agcy Securities
- 92 Borrowing from FFB
- 95 Borrowing from U.S. Treasury

- 96 Sales of Guar Govt Agency Sec in Mkt Par Domestic Postal Ord
- 97 Sale of Non-Guaranteed Govt Agcy Securities in Market
- 98 Redemption (Sale) of U.S. Public Debt Securities
- 99 Redemption (Sale) of Guaranteed Govt Agcy Securities in Mkt

36.4.6.3.2 Assign FI Document Type, Account and Fund to Treasury Subclass Code

Use

In this IMG activity, you assign a Treasury Fund Symbol Subclass Code (Treasury Subclass Code) to an FI Document Type, Account and Fund permutation. In other words, you define how a grouping of FI Document Type, Account and Fund represents a Treasury Fund Symbol Subclass for SF-224 reporting purposes. The definition is used to segregate amounts from special transactions, such as investments, from other amounts. These amounts need to be aggregated and displayed as separate lines in section I.

Requirements

There are approximately 27 Treasury Subclass Codes. Since agencies need to request permission from Treasury to use specific codes, customizing table FMUSFG_TS is delivered empty. You have to customize this table before you can assign a subclass code to a Type/Account/Fund grouping. The content of table FMUSFG_TS is expected to remain static after initial customizing.

Standard settings

We do not provide any default settings.

Activities

- 1. Choose *New Entries* and assign a Treasury Subclass Code to an FI Document Type, Account and Fund grouping.
- 2. Save your entry.

Further notes

The following is a listing of current Treasury Subclasses:

- 41 Cashier
- 46 Obligations of Closed Accounts
- 62 Amortized Discount on Treasury Securities

- 67 Purchase of FHLB and FLB Securities
- 69 Purchase of Participation Certificates Sales Fund
- 72 Unamortized Discounts
- 75 Unrealized Discount on Treasury Securities
- 76 Earnings on Treasury Securities
- 77 Sale of FHLB and FLB Securities
- 79 Sale of Participation Certificates Sales Fund
- 80 Investment (Purchase) in Participation Certificates
- 81 Investment (Purchase) in Non-Guaranteed Govt Agcy Sec
- 82 Repayment of Borrowing from FFB
- 85 Repayment of Borrowing from U.S. Treasury
- 86 Actual Borrowings against Borrowing Authority
- 87 Redemption of Non-Guaranteed Govt Agcy Securities in Mkt
- 88 Investment (Purchase) in U.S. Public Debt Securities
- 89 Invst (Purchase) in Guaranteed Govt Agcy Securities in Mkt 90 Redemption (Sales) of Participation Certificates
- 91 Redemption (Sales) of Non-Guaranteed Govt Agcy Securities
- 92 Borrowing from FFB
- 95 Borrowing from U.S. Treasury
- 96 Sales of Guar Govt Agency Sec in Mkt Par Domestic Postal Ord
- 97 Sale of Non-Guaranteed Govt Agcy Securities in Market
- 98 Redemption (Sale) of U.S. Public Debt Securities
- 99 Redemption (Sale) of Guaranteed Govt Agcy Securities in Mkt

36.4.6.3.3 Maintain Derivation Strategy for SF-224

Use

In this IMG activity, you derive a Treasury Symbol Suffix (Treasury Subnumber) using available source fields. For partial 224 processing, you determine a target system value and determine whether line items qualify as reclassifications by setting the Reclassification flag. You can create several types of steps:

- Derivation rule
- Table lookup
- Assignment

- Initialization
- Function module

The definition of subnumbers is used to segregate amounts from special transactions, such as investments, from other amounts. These amounts need to be aggregated and displayed as separate lines in section I of the report.

Requirements

Standard settings

We do not provide any default settings.

Activities

See the example below.

Example

You want to create a derivation step to populate the Treasury Symbol Suffix:

- 1. Select *Create Step* and choose *Derivation Rule*.
- 2. Add a short description, such as "Rule for the Treasury Symbol Suffix" in the *Text for Step* edit box.
- 3. As source fields, select *FI-SL Document Type* and *Fund*.
- 4. As target field, select *Treasury Subclass Suffix*.
- 5. Go to *Maintain rule values* and select *Customer Payment* as FI-SL document type and 7060917 as Fund and 41 as Treasury Subclass Code
- 6. Save your derivation step.
 - Further notes

Consult note 916086 if you wish to derive the Treasury Fund Symbol Subclass Code instead of using the current IMG activity Assign FI Document Type, Account and Fund to Treasury Subclass Code.

36.4.6.3.4 Maintain Agency Location Code

Use

Use this step to maintain the Agency Location Code (ALC) for your agency, as specified by the US Federal Treasury. For partial 224 processing, you assign a Business Activity Type and a Report Category to an internal ALC, using a From date.

Requirements

Standard settings

Activities

- 1. In the maintenance view, choose **New Entries** and enter the relevant ALC, description, and internal ALC indicator.
- 2. To assign a Business Activity Type and Report Category to an internal ALC, select an ALC in the list and double click Assign. of Business Activity Type and Reporter Category in the Dialog Structure.
- 3. Choose **New Entries** and enter the following:
 - From date
 - Business Activity Type
 - Report Category
- 4. Save your entries.

36.4.6.4 Treasury Report on Receivables and Debt Collection Activities

36.4.6.4.1 Define TROR Groups

Use

You use this customizing activity to define TROR groups. You set up the following groups:

- Reason Code
- Document Type
- G/L Account

Requirements

Ensure FI reason codes for A/R overpayment/underpayment are maintained in *Public Sector* Management -> Functions for US Federal Government -> Reporting -> Treasury Report on Receivables and Debt Collection Activities -> Define Reason Codes.

Activities

To create group definitions, proceed as follows:

- Create Reason Code
- 1. Select TROR Reason Code Group Definitions from the dialog structure.
- 2. Enter a code group ID and description. Click Save.
- 3. Select the group ID and select *TROR Reason Code Group Details* from the dialog structure. You can enter a single value reason code or reason code ranges.
- 4. Enter individual reason codes or ranges and click Save.
- Create Document Type
- 1. Select *TROR Document Type Group Definitions* from the dialog structure.
- 2. Enter a document type group ID and description. Click Save.
- 3. Select the group ID and select *TROR Document Type Group Details* from the dialog structure. You can enter a single value document type or document type ranges.
- 4. Enter individual document types or ranges and click Save.
- Create G/L Account
- 1. Select TROR G/L Account Group Definitions from the dialog structure.
- 2. Enter a G/L account group ID and description. Click Save.
- 3. Select the group ID and select *TROR G/L Account Group Details* from the dialog structure. You can enter a single value account or account group ranges.
- 4. Enter individual accounts or ranges and click *Save*.

36.4.6.4.2 Configure TROR Report Versions and Line Definitions

Use

You use this customizing activity to define TROR line configuration. The TROR report categorizes open receivables and displays details of the receivable in the relevant lines on the report per the Treasury format. You set up the configuration for every line on the report.

Requirements

Ensure FI reason codes for A/R overpayment/underpayment are maintained in *Public Sector* Management -> Functions for US Federal Government -> Reporting -> Treasury Report on Receivables and Debt Collection Activities -> Define Reason Codes.

Ensure Define TROR Groups is maintained if you are using groups in the line configuration.

Standard settings

A standard template with report version STANDARD is available for use and reference.

Activities

To create line definitions, proceed as follows:

- 1. *TROR Report Version* is the report layout. Standard report layout has been defined under *STANDARD*, which complies with the Treasury standard report. SAP delivers the *STANDARD* report version. It is possible to create copies of the standard for your own report layout for internal management purposes.
- 2. *TROR Report Lines*: Click *STANDARD* and click on *TROR Report Lines* on the dialog structure on the left. You must be able to see all the lines of the TROR layout. It consists of the following:
 - *Line ID* identifies a line in the report layout.
 - Description is displayed for each line on the report.
 - Order Number indicates the order in which lines appear in the report.
 - *Level* specifies if a line is a header line, a title line, or a subline. This affects the indentation on the report. You can choose one of the values from the dropdown list as follows:
 - Part (I, II,...) title line without amounts
 - Section (A, B,...) title line without amounts
 - Numbered (1, 2,...) line with amounts
 - Subsection ((A), (B),...) line with amounts
 - You can use the lines defined in *STANDARD* layout or create additional lines. However, the calculation for populating additional lines must be coded in BAD1_FMFG_TROR_CALC, which contains the following methods:
 - GET FI DOCUMENTS contains FI document selection
 - FILL LINES reads line configuration and builds document lists for each line
- 3. *TROR Line Definitions*: You specify the details of configuration required for calculating entries for a specific line. You must enter the following details for each of the lines:
- *G/L Account Group ID* or *Single G/L Account, Document Type Group ID* or *Single Document Type, Reason Code Group ID* or *Single Reason Code Group* - You must create multiple definitions for each of the report lines.
- Create line configuration for each of the lines and save the entries.

36.4.6.4.3 Business Add-Ins for TROR

36.4.6.4.3.1 BAdI: Customize TROR Data Selection and Line Calculations

Use

You use the Treasury Report on Receivables and Data Collection Activities (TROR) to extract, manipulate, and display data on accounts receivable for the agency on a fiscal year-to-date basis. The output must be prepared using report format and line definitions specified by the Treasury's Financial Management Service (FMS).

- BADI_FMFG_TROR_CALC enables users to customize specific business scenarios by creating a custom implementation and contains the following methods:
- GET FI DOCUMENTS, which handles FI document selection
- FILL_LINES, which reads TROR line configuration and assemble document lists, totals, and counts for each line in accordance with the specified line configuration
- GET_CUSTOMER_TYPES, which contains logic for customer type determination
- GET ACCOUNT ASSIGNMENTS, which contains account assignment fields from ledger 95

Default BAdI implementation FMFG TROR CALC IMP is delivered.

Requirements

Customer types must be maintained in the Implementation Guide (IMG). Choose Public Sector Management -> Functions for the US Federal Government -> General Settings -> Define Trading Partner Exceptions.

Report layout and line definitions must be defined in the IMG. Choose *Public Sector* Management -> Functions for the US Federal Government -> Reporting -> Treasury Report on Receivables and Data Collection Activities -> Configure TROR Report Versions and Line Definitions.

Group definitions must be defined in the IMG. Choose Public Sector Management -> Functions for the US Federal Government -> Reporting -> Treasury Report on Receivables and Data Collection Activities -> Define TROR Groups.

FI reason codes must be maintained in the IMG. Choose Public Sector Management -> Functions for the US Federal Government -> Reporting ->Treasury Report on Receivables and Data Collection Activities -> Define Reason Codes.

Activities

After you call up the activity, a dialog box appears.

1. In the dialog box, enter a name for the enhancement implementation, **Short Text and Composite Enhancement Implementation**. If no Composite exists, create a new one by choosing *Create*.

- 2. Save your entries and assign the implementation to a development class.
- 3. Click the *BAdl* tab page and choose *Create BAdl*.
- 4. In the dialog box, enter the required data then choose *Enter*.
- 5. On the left navigation, expand *Implementation* and double-click *Class*.
- 6. Double-click to on the method to enter method processing.
- Enter the code for the implementation between the statements method <Interface name>~<Name of method> and end method.
 Note: Sample implementation is copied automatically.
- 8. Save and activate all objects.

36.4.6.5 Define Report Layouts

36.4.6.5.1 Define Report Layouts

Use

The report layout feature allows you to define the layout of a report in conjunction with a report processing those definitions. This function is generic and provides a look similar to the reporting crosswalks containing the Federal Government reporting definitions.

This functionality is used to define reports like the SF-132 (Apportionment and Reapportionment Schedule), SF-133 (Report on Budget Execution and Budgetary Resources).and Statement of Net Cost. Those reports have specific requirements that do not allow use of the Report Writer/Report Painter as the preferred reporting tool.

In cases where the requirements are similar, you can use the report layout function to define your own reports.

This IMG contains the customizing view for defining the reporting layouts as well as a tool program for supporting functions. The tool program contains additional information.

Standard settings

Standard settings can be found within the delivered definitions.

36.4.6.5.2 Customize Report Layout

Use

Use these steps to define the layout(s) you want to use when executing the reports to which you link the layouts.

Requirements

Have an individual program available using the report layout(s)

Standard settings

We deliver layout definitions containing standard settings. If the delivered layouts do not appear, use the report layout tool to copy them from client 000.

Activities

To create your own layout, proceed as follows:

- 1. In the Report Layout Overview, switch to change mode and choose *New Entries*.
- 2. Specify the following:
 - A reporting layout ID
 - A program ID, identifying that this layout applies to a individual program
 - A descriptive text
- 3. Save your entries, then select that line and choose *Report Layout Definition* in the Dialog Structure.
- 4. In the Report Layout Definition overview, define what you want displayed in the relevant report by specifying the following:
 - Report Layout ID
 - This is either one of the standard ones or one you defined in the first screen.
 - A sequence number for each field; this governs the order in which the fields appear when you run the report.
 - Reporting line number
 - Parameter set

The options here are what the receiving program supports. In the delivered programs, the parameter set for the header or text line is AL. The parameter sets to specify the characteristics are C1 or C2. The parameter sets define which values the parameter fields (up to 15) contain. The parameter sets DL, D1 or D2 provide information to the parameter field definitions.

- A descriptive text
- 5. When you have finished, save your entries
36.4.6.5.3 Report Layout Tool

Use

The report layout tool program provides basic functions for working with report layouts. The following basic functions are available:

- Copy from client.
- Export the report layout. Import the report layout.
- Renumber the report layout.

In addition, the tool provides a formatted display on the defined report layout as well as supporting documentation for the use of report layouts.

36.4.6.6 Additional Reporting Attributes

36.4.6.6.1 Configure Additional Reporting Attributes

Use

Federal Government reports can be categorized as either created using the Report Writer/Report Painter reporting tool, or as stand-alone reports. Stand-alone reports use either the selection screen for flexible report definitions or the report layout function. Either report generally reports on data from the Federal Government ledgers (95/96/97). The additional reporting attributes feature allows extension of the reportable fields beyond what can be found in the Federal Government ledger tables using the information provided within the additional reporting attributes.

The additional reporting attributes are defined in structure FMFGRPTA. They are populated at runtime by means of a derivation call.

The derivation source is the information based on the Federal Government total tables. This information can be used to define the additional reporting attributes. Business Add-IN (BAdI) exits allow you to tailor or streamline the function.

The additional reporting attributes can be used for data filtering or you can include them in the reporting output. They are available as a full report characteristic within the Federal Government Report Writer/ Report Painter. The drilldown process is supported for these additional attributes (program RFFMFG_FMUSFGA).

This feature can also be used for customer-specific reporting enhancements.

Requirements

You have reporting requirements where, for example, you have to categorize reporting data based on the fund (earmarked funds/all other funds).

Standard settings

We deliver the following additional reporting attributes:

- FUNDINYEAR: This attribute eliminates the year-specific fund selections. If funds are not to be elected to one particular fiscal year, this attribute should be defined as 'N'.
- FUNDEARMARKED: This attribute defines the associated fund as earmarked.

The BAdI definition comes delivered with an example class using the derivation tool to define the additional reporting attributes. The example class can be used for a BAdI implementation.

Activities

Maintain the derivation to populate the receiver fields used.

Example

BAdi: Use of Reporting Attributes (SIMG_PSMFG_RPTA_EXIT)

36.4.6.6.2 Maintain Derivation for Additional Reporting Attributes

Use

In this activity, you use the derivation tool to create derivation rules that define the additional reporting attributes based on the sender data fields. Federal Government total table detail is provided as sender data. Receiver fields are the additional reporting attributes specified in structure FMFGRPTA.

Requirements

Use the standard delivered example class in the Business Add-In (BAdI) as the implementation to derive additional reporting attributes.

Standard settings

We do not provide any standard settings.

Activities

- 1. Create a new step for your derivation strategy.
- 2. To create a derivation rule, choose the source and target fields and maintain the field values.
- 3. Save your entries.

Example

Specify the following as standard derivation steps:

For FUNDEARMARKED: Define all your earmarked funds with 'Y'.

36.4.6.3 Business Add-Ins for Additional Reporting Attributes

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36.4.6.6.3.1 BAdI: Use of Reporting Attributes

Use

We deliver an example class within this Business Add-In (BAdI). Using this class within the BAdI implementation allows you to define the ADDIN function and associates the receiver fields with it. The call to the derivation tool is defaulted to specify the additional reporting attributes.

The definition of the main element, the ADDIN parameter, can be associated with a function that uses the additional reporting attributes or a specific report using it. We have defined a set of locations upfront which use the additional reporting attributes and them to be enhanced by customer own locations.

Performance-related optimizations can require you to replace retrieval of additional reporting attributes using the derivation tool with a more streamlined option. In this case, a coded solution to define the additional reporting attributes is recommended.

Activities

After you call up the activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click the BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.4.7 Integration

36.4.7.1 General Settings

36.4.7.1.1 Business Add-Ins for US Federal Government Fields Dialog

36.4.7.1.1.1 BAdI: Functions for US Federal Government Fields Dialog

Use

This Business Add-In (BAdI) is used in the *Functions for U.S. Federal Government* (PSM-FG) component. You can use this BAdI to prefill field values in the US Federal Government fields. You can specify display options (display only, mandatory, or hidden) for each field that appears in the *US Federal Government Fields* dialog box. You can also adjust the field checks in the dialog or on a document level.

Standard settings

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

Activities

If you want to use your own implementation, complete the following steps:

- In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation.
 If no composite exists, create a new one by choosing *Create*.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Select the BAdl tab and choose Create BAdl.
- 4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class and description, and press *Enter*.
- 5. On the next screen, expand the implementation node and double-click *Class*.
- 6. With your cursor on the method, double-click to enter method processing.
- 7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements. The sample implementation is copied automatically.
- 8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the *Enhancement Spot Element Definitions* tab in the *Implementation Example Classes* section.

The following example implementation is available:

FMFG_USKONTUI_EXIT_IMPL and class CL_FMFG_USKONTUI_EXIT_IMPL
 You can add to this example implementation, or you can create your own implementation to replace it. The implementation contains comments to help you build your own implementation. The delivered implementation includes the check for entering trading partner fields for a federal trading partner. For more information, see Customizing activity Define Trading Partner Exceptions. The exit suggests that changes to all US Federal Government fields can be influenced by a customer implementation. Trading partner fields are controlled in standard delivered code, which limits changes to the trading partner fields when you are posting an actual document that references a

predecessor document or when you are changing a document that is referenced by another document. You can provide stronger control using a customer implementation within this exit. When creating a document that references a predecessor document, the field values default from the predecessor document.

Individual field value checks include the checks provided inBAdI: Definition of US Federal Government Field Values.

36.4.7.1.1.2 BAdI: Customer Subscreen in US Federal Govt Fields Dialog

Use

This Business Add-In (BAdI) is used in the *Functions for U.S. Federal Government* (PSM-FG) component. You can use this BAdI to add customer fields to the US Federal Government Fields dialog.

Requirements

You already added your fields to the database by creating an append structure to the FMFGUSKONTKEY_DATA structure, which is included in the FMFGUSKONTKEY key table, and defining the customer fields in the append structure. Each field is defined by its own data element. When the data structure of FMFGUSKONTKEY changes, you may need to create a new version using the RFFMFG_USKONTKEY_CONV program.

You included the FMFG_USFIELD_F4 search help.

You already created the screen program and included the customer fields by doing the following:

- 1. Copy the delivered FMFG_USKONTUI_SUB1_EXM function group.
- 2. Add the new field into dynpro 8100 and reference the FMFGUSKONTKEY_DATA structure.
- 3. Uncomment the CHECK_FIELD_8100 module and the CHECK_FIELD_8100 subroutine.

Standard settings

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

Activities

If you want to add your own dialog, complete the following steps:

- In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation.
 If no composite exists, create a new one by choosing *Create*.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Select the BAdI tab and choose Create BAdI.

- 4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class and description, then press *Enter*.
- 5. On the next screen, expand the implementation node and double click *Class*.
- 6. With your cursor on the method, double click to enter method processing.
- 7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements. The sample implementation is copied automatically.
- 8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the *Enhancement Spot Element Definitions* tab in the *Implementation Example Classes* section.

The following example implementations are available:

CL_FMFG_USKONTUI_SUB1_EX_EXM
 You can use this example class for your BAdI implementation. You must define the screen and screen program in the implementation.

36.4.7.2 Principle of Prudence

36.4.7.2.1 Define Derivation Strategy for Principle of Prudence

Use

Use this step to define the derivation strategy you need to apply the principle of prudence in your installation.

If you set the flag for postponing a funds return to "P", document processing can be customized so that parked documents, such as credit memos, do not impact the budget. Only posted documents impact the budget.

If you set the flag for postponing a funds return to "C", document processing can be customized so that documents only impact the budget at point of collection. This requires the system to delay the update to Funds Management (FM) until the document is collected or offset against another document. This option is only available for documents with a purchase order reference or without an obligation reference. For documents referencing an earmarked fund or sales order the setting is ignored.

Standard settings

As a minimum, the following fields are available for use in determining whether the credit memo update to FM is delayed:

- Fund
- Fund Type
- Trading Partner
- Document Type

Activities

You can create, change, and delete steps and also change their order.

Create Step

1. Choose Create Step.

If you want to add a new step to the derivation strategy, select the step before which you want to insert the new step and choose Create Step.

- 2. Choose the derivation step type that you want from those offered to you.
- 3. Enter a text and source and target field for the derivation step. For the source and target fields, you can determine Field characteristics.
- Source Field

You can determine that initial values are permitted. This means that a derivation is carried out if the source field is not filled.

- Target Field

For the target field you can determine that: The new value is not copied if a value from a previous derivation step already exists. The new value is copied even if the new value is blank (space)

The new value is copied when the new value is filled. **Note:** If you use this setting you can determine, for example, that the derived value cannot be overwritten manually.

- Source Fields and Target Fields

In addition to the derivation step type "Derivation Rule", you can determine that either the entire field contents, or only a part of the field contents is included.

- 4. If the derivation step should only be performed according to specific conditions, for example, only for specific account assignment values, enter this on the Condition tabpage. The derivation step is only executed when all conditions for the fields are fulfilled.
- 5. Define Step Characteristics on the Characteristics tabpage, for example, if an error message should be issued, if no target value can be determined.
 - An error message should be issued if the derivation step is not successfully derived. Otherwise the strategy will not be continued.
 - The execution of the strategy should be terminated if a suitable value is found in the derivation step. Otherwise the strategy is completed.

Note: If you are using derivation step type "Derivation Rule", you can make the following additional entries: Assignment Derivation.

You can make additional specifications on the Characteristics tab; for example, you can allow the entry of a validity date for a step and therefore make it time-dependent.

- 6. When you have saved the new entry, go back to the complete list.
- 7. To assign a company code to a strategy, select the strategy and choose company code assignment in the dialog window.
- 8. Choose new entries in the overview that follows and enter the company code you want to assign to the strategy.

Change/Delete Step

- When making a change, you have all the options described under "Create Step".
- To delete an entry, select the relevant step and choose Delete.

Change Step Sequence

- 1. Select the step you want to move.
- 2. Position the cursor below the target position.
- 3. Choose Move.

36.4.7.3 Asset Management

36.4.7.3.1 Accountable Property

36.4.7.3.1.1 General Settings for Accountable Properties

Use

In this IMG activity, you enter general settings applying to accountable property processing.

Activities

Make the following entries:

- Company code
 - When you save, the company code name and currency are automatically entered in the relevant fields.
- Date from which these settings are to be applied.
- Low and high value

-

Only qualifying property whose value lies between the limits you enter here is treated as accountable property.

- Sensitive property

Property that does not fall within the limits imposed by the low and high values may nonetheless be treated as accountable property. To do this, designate it "sensitive" property. The field documentation tells you how to do this and what you need to consider.

36.4.7.3.1.2 Transaction Types

Use

In this step, you assign transaction types to your company code(s) for use with accountable property processing.

Requirements

You have created the transaction types in Materials Management (MM).

Standard settings

SAP does not deliver any standard settings.

Activities

Assign both a transaction type and a negative transaction type to your company code. The negative transaction type is used for corrective postings when, for example, the amount in the final invoice is less than the amount in the purchase order referenced by the invoice.

Further notes

36.4.7.3.1.3 Account Assignment Categories

Use

In this IMG activity, you stipulate how your combinations of account assignment categories and item categories are to be handled in accountable property processing.

Requirements

You must first have defined the account assignment and item category combinations in Materials Management (MM).

-

Activities

For each account assignment + item category combination, select one of the following:

- Accountable Property

Combinations so selected are treated as accountable property, subject to the selections made in other IMG steps.

Leased Item The lower value specified for accountable properties is applied to these combinations, but the higher value is not.

36.4.7.3.1.4 Movement Types

Use

In this IMG activity, you stipulate whether movement types defined in Materials Management (MM) can be included in accountable property creation.

Requirements

You must first have created the movement types in MM.

Activities

For each movement type, select either "Goods Accepted" or "Goods Rejected", but not both.

Movement types marked "Goods Accepted" are included in accountable property creation, subject to the other IMG settings you enter.

36.4.7.3.1.5 Business Add-Ins for Accountable Property 36.4.7.3.1.5.1 BAdI: Allow Further Logic in Determining Accountable

Property

Use

This BAdI allows the analysis of data accumulated by the accountable property program. Using the data accumulated by the program, the determination of whether or not this item is accountable property can be controlled.

The field NOW_ACC contains "X" if the program considers the item to be accountable property. The program attempts to create assets for, and post values to, this item.

This BAdI exists to allow customer manipulation of the fields of the parameter ASSET_LINE, primarily the field NOW_ACC.

Overwrite the contents of this field if necessary: if this item should be accountable property, make sure the field has an "X". If it should not be accountable property, make sure the field is empty.

Requirements

You must have the accountable property program, with all of its configuration, properly prepared for execution.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.

The screen for creating BAdI implementations is now displayed.

- 2. Enter a short text for the implementation in the Short text for implementation field.
- 3. From the tab index, choose *Interface*.

The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.

- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
- 9. Choose *Activate* The code you stored in the method will be run when the application program is executed.

Example

See the sample code for a detailed example.

36.4.7.3.1.5.2 BAdI: Change Values to be Transmitted to the Asset Record

Use

This BAdI allows you to change the values to be passed to the asset master record.

Method: CHANGE_VALUES

Requirements

You must be using the Accountable Property program. In the program logic, many fields are calculated and MM Purchasing information is passed to the BAPI which creates the Asset Master. If you want to change any of the data that will be passed to the asset master, you change it here.

Standard settings

One asset or subasset will be created for each item. You can identify which purchasing data the asset represents by the importing fields PO number, PO item number, and account assignment.

You can then change the data in the "changing" tables below, and these updates will be passed back to the Accountable Property program for asset creation or posting.

| PO_NUMBER | Importing |
|--------------------|-----------|
| PO_ITEM | Importing |
| ACCOUNT_ASSIGNMENT | Importing |
| GEN_DATA | Changing |
| GEN_DATAX | Changing |
| ACQUIS_DATA | Changing |
| POSTING_DATA | Changing |
| REAL_ESTATE | Changing |
| REAL_ESTATEX | Changing |
| POST_DATA | Changing |
| POST_DATAX | Changing |
| TIME_DEP_DATA | Changing |
| TIME_DEP_DATAX | Changing |

Example

You want to assign a unique inventory number for each asset created:

*---- If a field that is required is empty, pass it the value you would

*---- like it to have, here we create a inventory number for the

*---- asset master record

IF gen_data-invent_no IS INITIAL.

*---- Execute customer function to get next inventory number

call function 'ZZ_GET_INVENTNO' importing

invent_no = new_inventno. gen_data-invent_no =

new_inventno. gen_datax-invent_no = 'X'. ENDIF.

Method MESSAGE_EXCEPTION

The method MESSAGE_EXCEPTION allows you to suppress the error messages proposed by the program where required fields are not filled. This can be used where it is known that the required field will be populated later by the BAdI.

In some circumstances, you may want to add required fields to the asset after the program has executed. To suppress errors in posting to assets that are incomplete, perform FI-AA customizing which will allow message AAPO 184 to be displayed as a warning, and not an error. Although it is not recommended, assets can be created in an incomplete state and updated later, after asset record creation and acquisition posting.

The typing for the local table which you assign to the table parameter REQ_FIELD should be similar to the example in the sample implementation.

Activities

After calling up the IMG activity, a dialog box appears, in which you can enter a name for the implementation.

If you have already made other implementations for this BAdI, another dialog box appears, in which the existing implementations are displayed. In this case, choose *Create*, and proceed as follows:

- In the dialog box, enter a name for the BAdI implementation in the *Implementation* field, and choose *Create*.
 - The screen for creating BAdI implementations is now displayed.
- 2. Enter a short text for the implementation in the Short text for implementation field.
- From the tab index, choose *Interface*.
 The *Name of implemented class* field is already filled on the tab page, as a class name was automatically assigned to the implementation when you named it.
- 4. Save your entries, and assign the implementation to a development class.
- 5. Place the cursor on the method, and double-click to enter method processing.
- 6. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod.
- 7. Save and implement your code. Return to the *Edit Implementation* screen.
- 8. Save the entries on the *Edit Implementation* screen. Note: You can also create an implementation, and then activate it at a later time. In such a case, end the processing stage at this point.
 - Choose *Activate* The code you stored in the method will be run when the application program is executed.

9.

36.4.7.4 Materials Management

36.4.7.4.1 Document-to-Document Tolerances

Use

Use this step to set up the tolerances between purchase requisitions and purchase orders in the Federal Government solution.

Activities

- 1. In the tolerance key folder, create a tolerance key and a descriptive text.
- 2. To add detail, choose **Tolerance Key Values** in the dialog structure and enter absolute and/or percentage tolerance values for either the value-based check or percentage check or both. **You must add an entry in this folder for each currency you expect to use**.
- 3. The system needs to know with which document type each new key is associated. To do this, choose **Document Type Association** in the dialog structure and enter your new key next to the relevant document type. Once you have assigned a key to a document type, the tolerances become active in your system. With these tolerances active, you receive a message if your purchase order does not reference a purchase requisition. You also receive a message if you attempt to enter a purchase order in a currency that has not been configured.

To turn off tolerances in your system, delete the associated tolerance keys from all document types.

Note

There is also some message configuration work to do. To do it, go to the Funds Management Government IMG and choose **Basic Settings -> Change Message Control**.

The messages you need to configure are numbers 059, 060, 061, 064, and 069 in message class FICUSTOM. For each user involved in the process, you need to specify whether the system should issue an information message (I), warning (W), or error (E).

36.4.7.5 Sales and Distribution

36.4.7.5.1 Reimbursable Orders

36.4.7.5.1.1 Define Reimbursable Orders

Use

Use this step to define Sales and Distribution (SD) orders relating to reimbursable agreements. A reimbursable agreement is a contract between a Federal government agency and another entity, which may also be a Federal agency, whereby the delivering agency supplies goods or services to the other entity, whom it may then bill for the costs.

Requirements

You need to have created the SD objects you want to specify (see below).

Standard settings

We do not deliver any standard settings.

Activities

Choose New Entries and specify the following SD objects:

- Sales organization
- Distribution channel
- Division
- Sales document type

Having made these entries, hit Enter. The system then fills the **Description** columns with the appropriate texts. Remember to save your entries.

36.4.7.5.1.2 Automatic Down Payments

Use

Use this step to activate or deactivate the automatic down payment function for sales document types.

Requirements

You must first have defined the sales document types you want to process here.

Activities

- 1. To enter document types for automatic down payment postings, choose *New Entries* and proceed as follows:
 - The sales document type
 - Check the automatic down payment box for the document type
- 2. When you have finished, save your entries.

36.4.7.5.1.3 Year-End Closing

Use

In this step, you make the settings necessary for year-end processing of reimbursable orders. As with purchase orders, sales orders (SOs) should be monitored throughout the year, especially at year-end, and updated based on obligations, expenses, billings, and so on. Based on the stage of the internal fund and the SO ending date, the SO is reduced or has excess values transferred to new lines. To accommodate the overall reduction and/or the transfer to new lines, the document type for clearing the prior down payment and the document type for transferring the down payment to the new line(s) must be identified.

Requirements

You must first have created the sales document types you want to process here. To do this, access Customizing and choose Sales and Distribution -> Sales -> Sales Documents -> Sales Document Header -> Define Sales Document Types.

Standard settings

We do not deliver any standard settings.

Activities

In the maintenance view, choose New Entries and enter the following:

- Sales document type(s) for processing
- FI document type(s) for clearing the down payment
- FI document type(s) for transferring the down payment to the new line(s)

The FI down payment and clearing document types are used only if the automatic down payment function for the sales document type is deactivated. Read Automatic Down Payments for more information on this feature.

36.4.7.6 Central Contractor Registration

36.4.7.6.1 Activate CCR Vendor Feature

Use

Use this step to activate the Central Contractor Registration (CCR) feature in your installation. When activated, the SAP CCR feature supports an interface with the CCR for creating and maintaining CCR vendors in the system and enables users to block postings to CCR vendors whose registration status has expired.

The CCR is the primary vendor database for the U.S. Federal Government. It collects, validates, stores and disseminates data in support of agency acquisition missions. Both current and potential government vendors are required to register in CCR in order to be awarded contracts by the government. Vendors must update or renew their registration annually to maintain an active status.

Activities

To activate CCR, check the CCR Active box in the maintenance view.

36.4.7.6.2 Maintain Vendor Master Display Fields for CCR

Use

When the Central Contractor Registration (CCR) is run, the fields it updates should be displayed in the vendor master change screen, but should **not** be open for maintenance there.

If you are using the CCR interface to maintain your vendor master records, you should consider which fields you would like users to be able to change manually through the vendor master record change screen.

If you do not use this configuration option, vendor master data that is loaded through CCR can be changed manually. As a result, vendor master data, such as payment information, gets of synch with what is maintained in the CCR database.

This configuration option allows you to set certain fields as display only so that they can only be changed through the CCR maintenance process.

Activities

In the maintenance view, choose *New Entries* and add those fields you want displayed in the vendor master change transaction. The fields so entered cannot be maintained in the vendor master change screen.

36.4.7.6.3 Business Add-Ins for CCR

36.4.7.6.3.1 BAdI: Move CCR Data to IDoc Segment Fields

Use

In this step, you run Run Business Add-In (BAdI) FMFG_CCRVNDORMIGRATE, which maps the CCR fields to the corresponding vendor master fields. Sample code is available.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- 7. Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

36.4.7.6.3.2 BAdI: Customizing CCR Expired Vendor Messaging

Use

Implement enhancement point FMFG_CCR_MESSAGE_CUST enables you to to overwrite hard coded default message types when handling messaging during CCR vendor status validation. These default message types are hard-coded in enhancement FM_DOCUMENT_VALIDATION implementation.

If FMFG_CCR_MESSAGE_CUST is implemented, these default message types can be overwritten with custom message types which can be set based on a transaction type, user ID, and so on. It is also possible to add new validations and custom messages - for example, that a given vendor expires in one week.

Note that values set up in this implementation are overwritten, when applicable, by messages configured in table T100C if the configured messages have a lower severity level. For example, an error (type "E") is overwritten by a warning (type "W"), but the reverse would not be the case. If no corresponding entries exist in table T100C, the custom message types are the ones used.

Activities

After you call up the IMG activity, a dialog box appears.

- 1. In the dialog box, enter a name for the enhancement implementation, Short Text and Composite Enhancement Implementation. If no Composite exists, create a new one by choosing Create button.
- 2. Save your entries, and assign the implementation to a development class.
- 3. Click on BAdI tab and choose the Create BAdI button.
- 4. In the dialog box, enter BAdI Definition, BAdI Implementation, Implementation Class and description, then press Enter.
- 5. In the left panel on the next screen, expand implementation node and double-click on entry Class.
- 6. Place the cursor on the method, and double-click to enter method processing.
- 7. Enter the code for the implementation between the statements method <Interface name> ~ <Name of method> and endmethod. Note that sample implementation is copied automatically.
- 8. Save and activate all the objects.

36.4.7.7 Internal Data Transfer

36.4.7.7.1 Payment-Related

36.4.7.7.1.1 Payment Lines Correction

Use

Use this step to configure payment lines correction in the Budgetary Ledger

Activities

In the selection screen, make the entries you require and proceed as described in the documentation for the program.

36.5 Fund Accounting

36.5.1 General Ledger Accounting (New)

36.5.1.1 Implement New General Ledger Accounting

Use

The following describes which settings you have to define to fulfill the requirements of GASB 34/35 or of Fund Accounting based on general ledger accounting with the table group FMGLFLEX intended for this. Some of the requirements are:

- Balance sheet for each fund
- Profit and loss statement for each functional area
- Budget/actual comparison

Requirements

- The Global Functions for Funds Management (PSM-FM) are active.
- The New General Ledger Accounting is active.
- You have a new installation or are introducing the New General Ledger Accounting through migration and are using a migration plan from type with document splitting: Classic General Ledger Accounting in General Ledger (new) or from SL with Document Splitting in General Ledger (new).

Activities

Define the following settings:

- Define your leading and, if necessary, another ledger based on totals record table FMGLFLEXT.
- Assign scenario PSM_FAC (Fund Accounting) to your leading ledger (and other ledgers if necessary). If you use Grants Management and a balance sheet is necessary for each grant, assign scenario PSM_GM (Grants Management) as well.
- Define the fund, business area and if necessary grant as document splitting characteristics for general ledger accounting. Select these fields as required-entry fields. If you want to use the online payment update in Funds Management, define additional fields commitment item, FI document number and payment document number as document splitting characteristics.
- Define the functional area as a document splitting characteristic for Controlling.

Define other document splitting characteristics for. You have to assign one to your requirements in accordance with the corresponding Assign Document Splitting Method. If you plan to use document splitting rules different to the standard ones, we recommend that you copy the corresponding document splitting method to a customer-specific customer namespace.

36.5.1.2 Activate Fnctnl Area as Doc. Splitting Characteristic for Gen. Ledger Acctg

Use

In this IMG activity, you can activate the functional area as a financial statement characteristic for new General Ledger Accounting.

The activation applies across all clients and is irreversible!

Note that this activation causes you to lose the original meaning of the functional area as a Controlling characteristic and prevents you from using the functional area as a Controlling characteristic.

Requirements

For it to be possible to activate the functional area as a general ledger characteristic, the following conditions need to be met:

- The function area must not already be specified as a Controlling split characteristic in any client.
- Document splitting must not yet be activated in new General Ledger Accounting.
- Cost of sales accounting must not be activated in any of your company codes.

36.5.1.3 Cash-Basis Accounting and Cash Flow Reporting 36.5.1.3.1 Distinction Between Cash-Basis Accounting and Cash Flow

Reporting

Use

Distinction Between Cash-Basis Accounting and Cash Flow Reporting

Cash-Basis Accounting

This solution provides a cash ledger for cash-basis accounting. Cash-basis accounting is a recognized standard of the IFAC (International Federation of Accountants) and can be used to fulfill the cash ledger requirements of the IPSAS (International Public Sector Accounting Standards).

For cash-basis accounting with this solution, a leading accrual ledger is always a requirement. All SAP integration points post to the leading accrual ledger in accordance with the principles of the accrual basis of accounting. The information for the cash ledger is derived from the leading accrual ledger.

The cash ledger is indispensable for organizations that are obliged by law to execute on their expenditures and revenues at the time of payment. At the time of cash flow, the cash ledger makes sure that the revenues and expenditures are posted against the correct cash accounts. If necessary, clearing postings are added to achieve zero balances for all balancing entities. As a rule, cash and P&L accounts are the only accounts to which postings are made in Cash-Basis Accounting.

If you also want a full balancing cash ledger in addition to a leading accrual ledger, use the Cash-Basis Accounting solution.

You can use the reconciliation analysis report (program RFMFGRCN_RP1) to reconcile the data from the accrual ledger and the cash ledger. Both ledgers are only reconciled on the cash accounts and there is no automatic tool for adjustment postings if differences occur. However, it is possible to adjust the cash ledger manually.

Data Volume:

An additional ledger is introduced into the new General Ledger Accounting when using Cash-Basis Accounting. This cash ledger increases the data volume in the new General Ledger Accounting. Based on average experiences, it can be expected that the volume in the cash ledger can be disregarded in comparison to the volume in the leading accrual ledger. The cash ledger is also used only for very specialized and small operative purposes, so the data volume here does not influence the operations in the leading accrual ledger.

Cash Flow Reporting

Cash flow reporting in this solution is based on an accrual ledger, it is not an additional (cash) ledger. Cash Flow Reporting gives readers information on the origin of funds that occurred during the accounting period, on the application of funds, and the cash balance on the date in question. It is used by customers who do not legally require a cash ledger, but want to display capital flow separately by source account (for example, expenditure, revenue, tax, balance). The reporting procedure can also be executed with a combination of cash clearing accounts and source accounts.

If you only want to execute cash flow reporting based on an accrual ledger, and do not require a separate cash ledger, use the Cash Flow Reporting solution. If you also want to report on balance accounts (such as balance, assets, tax), use the Cash Flow Reporting solution as this is not possible with the Cash-Basis Accounting solution.

More information on Data Volume:

The data volume in the (leading) accrual ledger is larger when an additional splitting criterion is introduced into the new General Ledger Accounting.

General Information about Both Solutions:

- It is not possible to use Cash Flow Reporting and Cash-Basis Accounting simultaneously. Both solutions work with the same field (*revenue/expense account*), but they can use/derive this field differently. Cash Flow Reporting, for example, can fill the new account field (such as tax account) which cannot be posted in Cash-Basis Accounting.
- It is not possible to switch from Cash Flow Reporting to Cash-Basis Accounting or vice versa. At the moment SAP does not plan to provide migration tools to switch between the two solutions.
- Cash Flow Reporting and Cash-Basis Accounting work completely independently of Funds Management. You do not need to implement Funds Management if you want to use either of these solutions.
- General Ledger Accounting (new) is a prerequisite of both solutions (Cash Flow Reporting and Cash-Basis Accounting). The general document splitting mechanism is used and it is not possible to decouple the configuration for the source account field from other dimensions of the new General Ledger Accounting.

36.5.1.3.2 Cash-Basis Accounting

36.5.1.3.2.1 Define Payment-Based General Ledger

Use

In this activity, you define the ledgers that you want to use as cash ledgers in general ledger accounting. Note the following when you create a cash ledger:

- The leading ledger cannot be defined as a cash ledger.
- All cash ledgers must be assigned to the same totals table.
- Ledger groups for cash ledgers can only contain cash ledgers.
- In the case of cross-company codes, all company codes must be assigned to the same cash ledgers or the same ledger group.

Requirements

You have configured the ledgers in general ledger accounting on the basis of a totals table. We recommend that you use the standard totals table PSGLFLEXT with the general ledger scenario PSM_CL. Alternatively, you can also use the standard totals table FMGLFLEXT. In this case, to update the cash transactions in the cash ledger for expense and revenue, you must include your own fields ZZRE_ACCOUNT and ZZRE_BUKRS in table FMGLFLEXT and assign them to the relevant ledger.

Activities

Create your ledgers in general ledger accounting and set the indicator *Cash Ledger* for the ledgers you want to use as cash ledgers.

36.5.1.3.2.2 Classify Payment-Relevant G/L Accounts

Use

Every business transaction entered is analyzed during the update to the general ledger. During

the update, the system determines whether each document is relevant to the cash ledger using the general ledgers as a reference.

The general ledger account must be classified as cash relevant so that the system can identify the documents relevant for the cash ledger and handle the line items appropriately. In this IMG activity, you can enter all the accounts that the system should interpret as cash relevant.

Requirements

Only enter G/L accounts that are relevant for cash flow. You can check whether a G/L account is relevant for cash flow in the master record.

Activities

Enter your accounts or account intervals.

36.5.1.3.2.3 Define Assignment Between Balance Sheet Accts and Profit and Loss Accounts

Use

Only expense or revenue-related financial transactions can be updated in cash ledgers. To guarantee this, cash ledger documents are only updated to expense and revenue accounts. If a posting in an FI document is made to a balance sheet account instead (for example, if part of the postings are in Materials Management or Asset Accounting), you can derive the expense or revenue account from the balance sheet account. In this activity you define the assignment between the balance sheet accounts and the expense or revenue accounts.

Activities

Enter the balance sheet accounts and assign them to the appropriate expense or revenue accounts. Do not use G/L accounts relevant to cash flow as balance sheet accounts.

36.5.1.3.2.4 Edit Constant for Nonassigned Processes

Use

In this activity you define a standard account for the expenditure or revenue account in the cash ledger. The system uses the standard account for processes not assigned. This is the case if the correct G/L account is not available (for example, if payments are not assigned) when the posting is made.

Example

In the case of a customer cash receipt on a house bank account, it is not immediately clear which invoices should be paid by this cash receipt.

1. In order to update the information on the available funds in the cash general ledger in as timely a manner as possible, a checking account posting is performed against the cash receipt. As no other information exists, postings must be made on a standard revenue account in the cash general ledger. *Invoice basis (from receivables and payables view)*

| Revenue |
|--------------------------|
| |
| Standard revenue account |
| |
| Revenue |
| Revenue |
| |

2. Then the cash receipt account is posted against the customer (with the clearing of the customer). The correct revenue account(s) can be determined from the cleared invoice for this. *Invoice basis*

| <u>Account</u> | Amount | Revenue |
|-----------------------------|--|--------------------|
| Cash receipt | 100 | 400000 |
| Customer | 100- | 400000 |
| As this is not a payment-re | elevant posting, no update takes place i | n the cash ledger. |

3. At the end both items are cleared against each other on the cash receipt account. As both items are assigned to different revenue accounts and a zero balance is required by definition for this account assignment, additional line items are generated on a clearing account defined in Customizing. These clearing lines set the document balance to zero for each revenue account. They reflect the adjustment of the payment information regarding the revenue on the current account. The clearing account is therefore replaced by the payment-relevant current account in the cash ledger. This account must be unique.

| Invoice basis Account | Amount | | Revenue |
|---------------------------------|----------------|------|--------------------------|
| Checking account (payr | ment-relevant) | 100 | Standard revenue account |
| Cash receipt | 100- | | 400000 |
| Clearing account | 100- | | Standard revenue account |
| Clearing account Cash Ledger | 100 | | 400000 |
| Account | Amount | | Revenue |
| Standard revenue accou | int 100 | | Standard revenue account |
| 400000 | 100- | | 400000 |
| Checking account (payr | nent-relevant) | 100- | Standard revenue account |

Checking account (payment-relevant)10040000036.5.1.3.2.5 Assign Standard G/L Account for HCM Processes

Use

In this activity, you define a G/L account for each company code that is used by default in the cash ledger or cash flow reporting as the expense/revenue account (RE_ACCOUNT) for HCM processes (including travel expenses). This change only affects document splitting and the new General Ledger Accounting. The entry document it is based on is **not** changed.

Requirements

The cash ledger or cash flow reporting is active.

Activities

Enter a G/L account for each company code that you want to use for updating HCM documents in the cash ledger or for active cash flow reporting.

36.5.1.3.2.6 Subsequent Implementation 36.5.1.3.2.6.1 Define Default Account for the Opening Balance in the Cash

Ledger

Use

In this activity you define a default account for the opening balance of the migration of the cash ledger.

36.5.1.3.2.6.2 Post Opening Balance in the Cash Ledger

Use

You can use this activity to create an opening balance for cash-relevant accounts in the cash ledger and thereby activate the update of the cash-relevant processes in this ledger.

Requirements

- You are using General Ledger Accounting (new) with active document splitting.
- You have configured and activated the cash ledger.
- You have blocked postings in the system.

Activities

- Enter the ledger group that contains the active cash ledger.
- If you set the *Test Run* indicator, the program creates the opening balances for the cash-relevant accounts, but does not save them in the database.
- If you set the *Reconstruct Opening Balance* indicator, the opening balances are determined again and then reconstructed. The balances already posted are then deleted.

Note

For more information, see the corresponding report documentation report documentation .

36.5.1.3.2.6.3 Display Opening Balance in the Cash Ledger

Use

In this activity you can display the opening balance of the cash-relevant accounts in the cash ledger.

Requirements

- You use the General Ledger Accounting (new) with active document splitting.
- You have configured and activated the cash ledger.

Activities

You can limit the selection of opening balances by specifying the affected company codes and cash-relevant accounts.

Note

For more information, see the corresponding report documentation.

36.5.1.3.2.6.4 Reset Migration of Cash Ledger

Use

In this activity you can reset the migration that you have performed with the subsequent implementation of the cash ledger. Note that the program cannot be executed in the production system.

Requirements

You are using General Ledger Accounting (new) with active document splitting.

Activities

- If you set the *Test Run* Indicator, the program determines the posted opening balances for the cash-relevant accounts, but does not save them in the database.
- If you set the *Deactivate Cash Ledger indicator*, the cash ledger is completely deactivated.
- Example

Note

For more information, see the corresponding report documentation

36.5.1.3.2.6.5 Business-Add-Ins for Subsequent Implementation of Cash Ledgers

36.5.1.3.2.6.5.1 BAdI: Derivation of Expense/Revenue Account

Use

You can use this Business Add-In (BAdI) to derive the missing expense/ revenue account or company code in which the account is created at runtime for documents before the activation of the cash ledger. The change only takes place in document splitting. The entry document it is based on is **not** changed.

The update of the subsequent cash-relevant processes in the cash ledger is possible through the derivation of the expense/revenue account.

Requirements

You have activated the cash ledger in general ledger accounting.

Activities

Implement method COMPLETE_ASSIGNMENT.

The following method parameters are available:

- Importing parameters (non-changeable)
- IS_ACCHD_EX: header of document to be posted IT_ACCIT_EX: Lines of the
 - document to be posted Changing parameter (changeable):
- CS_ACCIT_EXT: Line information for document splitting

The line item contained in parameter CS_ACCIT_EXT serves as the basis item for document splitting. This line item contains all the necessary information to derive the relevant expense/revenue account or company code:

- Company code
- Document number
- Fiscal year
- GL Account
- Document number of the clearing document (if clearing exists)
- Clearing date (if a clearing exists)

If it is not **not** possible to derive the corresponding expense or revenue account, you can also use a default account.

You must save the expense or revenue account determined in field CS_ACCIT_EXT-RE_ACCOUNT.

36.5.1.3.3 Cash Flow Reporting

36.5.1.3.3.1 Activate Cash Flow Reporting

Use

In this activity you activate cash flow reporting. You can use the following functions with this:

- Implementation and use of a new account assignment object *expense/revenue account* (RE_ACCOUNT) in General Ledger Accounting.
- Based on this: Reporting for cash transactions that are updated in the general ledger in accordance with their origin and balance.

Requirements

- You have activated the general ledger with document splitting and have configured it based on a totals table. If you use the totals tables FAGLFLEXT or FMGLFLEXT, you must enhance these tables with the field RE_ACCOUNT that is available as an extra field. If you use totals table PSGLFLEXT, field RE_ACCOUNT is contained in the table structure.
- The cash ledger is **not** active.

Activities

To be able to use the function in this system, you set the indicator Activate cash flow reporting

36.5.1.3.3.2 Assign Standard G/L Account

Use

When cash flow reporting is active, account assignment object RE_ACCOUNT is filled with the content of the general ledger account to be posted to. Exceptions to this are the reconciliation accounts and cash transaction accounts.

In this activity, you can define whether special processes for RE_ACCOUNT are only updated in aggregated form in the general ledger.

Requirements

Cash flow reporting is active.

Activities

Assign the general ledger accounts to be posted to to a predefined value.

36.5.1.3.3.3 Activate Tax Accounts Transfer

Use

In this activity you define that account assignment object RE_ACCOUNT is filled with the relevant tax account instead of the causing expense/revenue account with the update of the tax items in the general ledger.

Requirements

Cash flow reporting is active.

Activities

To be able to use the function in this system, you set the indicator *Transferring Tax Accounts is Active*.

36.5.1.3.3.4 Edit Constant for Nonassigned Processes

Use

In this activity you define a standard account for the expense and/or revenue account in the cash flow reporting. The system uses the standard account for nonassigned processes. This is the case when the required correct G/L account is not available at the time of posting, for example for nonassigned payments.

36.5.1.3.3.5 Assign Standard G/L Account for HCM Processes

Use

In this activity, you define a G/L account for each company code that is used by default in the cash ledger or cash flow reporting as the expense/revenue account (RE_ACCOUNT) for HCM processes (including travel expenses). This change only affects document splitting and the new General Ledger Accounting. The entry document it is based on is **not** changed.

Requirements

The cash ledger or cash flow reporting is active.

Activities

Enter a G/L account for each company code that you want to use for updating HCM documents in the cash ledger or for active cash flow reporting.

36.5.1.3.3.6 Business Add-Ins for Cash-Basis Accounting

36.5.1.3.3.6.1 BAdI: Derive Standard G/L Account

Use

If you use cash flow reporting, with this Business Add-In (BAdI) you can change the account assignment objects transferred to the interface at runtime. This change only affects document splitting and the new General Ledger Accounting. The entry document it is based on is **not** changed.

Requirements

You have activated the cash flow reporting in the new General Ledger Accounting.

Standard settings

The BAdI is not active in the standard. To use the BAdI, implement the method.

Activities

Implement the BAdI using method COMPLETE_CL_ASGMT.

After you have called the IMG activity, proceed as follows:

- Enter a name in the dialog box in the field *Implementation* for the implementation of the BAdI and choose *Copy*.
 If implementations were already created for the BAdI, a dialog box appears with the existing implementations. In this dialog box, choose *Create*.
- 2. Enter a *short text for the implementation* in the corresponding field.
- 3. Insert filter characteristics on the tab *Characteristics* if it is a filter-dependent BAdI.
- Choose the tab *Interface*.
 The *name of the implementing class* is generated by the system based on the name of your implementation. The name can be changed.
- 5. Save your entries and assign a package.
- 6. Place the cursor on a method. Call the class builder with a double click.
- 7. Enter the coding you want for the implementation between the statements method <Interface Name>~<Name method>. and endmethod.
- 8. Save and activate your coding and navigate back to the screen *Change Implementation*.
- Save on the screen Change Implementation.
 Note: You can first create a BAdI and then activate it later. In this case, finish processing now.
- Choose *Activate*.
 When you execute the application program, the coding you created will be run.

See also

Methods

Cash-Basis Accounting: Account Assignment Derivation (RE_ACCOUNT)

36.5.1.4 Balancing of CO-FI Real-Time Postings

36.5.1.4.1 Maintain Clearing Accounts for CO-FI Real-Time Postings

Use

CO actual postings that exceed the limits of balancing units of the general ledger (for example, fund or business area) act as an effective payment flow between fund or business area in fund-based accounting. If in general, you want payments in the general ledger to be updated in a special cash desk, payment fund, or business area, you can do this using the function described here for real-time postings of Controlling in the general ledger.

The update of real-time postings CO-FI is aligned using the original update of the reconciliation ledger in which each FI line item is offset by an offsetting entry in a fund/business area clearing account.

Requirements

- The Define Variants for Real-Time Integration is active and a corresponding document type is defined. The document splitting characteristic with balance zero (see below) are selected for the line item selection for the CO-FI real-time integration.
- The New General Ledger Accounting is active.
- The Document Splitting is active and a splitting method is assigned.
- The document type for the update documents of Controlling in Financial Accounting is classified by a suitable business transaction.

Standard settings

If you have (for example, in an earlier release) already configured the reconciliation ledger, the clearing account from the business area clearing account defined is proposed, but it can be overwritten.

Activities

Carry out the following activities:

- Create two clearing accounts for CO real-time postings:
- Clearing account 1 for the offsetting entry lines for the original line items
- Clearing account 2 for mapping to

- Maintain the account determination for the CO-FI reconciliation accounts by defining a clearing account for your chart of accounts for the specified account key *FCA* and **FCC** and the posting key for debit and credit posting items.
- Make sure that the clearing accounts for document distribution are classified and that a suitable yet different item category (for example, 01000 for balance sheet account 1, 80000, 'customer-specific item category' for clearing account 2) is defined.
- Make sure that the business transaction variant for the document type of CO-FI update documents are defined in such a way that both item categories are allowed for the clearing accounts.
- Make sure that for your splitting method for the document type of CO-FI update documents a splitting rule is configured in such a way that the item category of clearing account 2 is controlled by the processing category *0* (transfer of fixed value (no distribution) and a constant is defined. No distribution rule should be created for the item category of clearing account 1. This Constant must be assigned values for all document splitting characteristics of the general ledger with balance zero (balancing units).
- Activate the balancing of CO real-time postings in the general ledger and the implementation FM_COFI_POOLED_CASH of BAdI FAGL_COFI_ACDOC_MOD.

Example

Cost center C2 and fund F2 have a service in value of 100 EUR for cost center C1, fund F1. As compensation, a CO-actual posting of 100 EUR of cost center C1, fund F1 is entered for C2 / F" using primary cost type A. The corresponding G/L document has the following structure:

| <u>Account Fund</u> | | d <u>Debit/Credit Indicator</u> | | Amount | |
|---------------------|----|---------------------------------|-----|--------|--|
| A | F1 | D | 100 | | |
| А | F2 | С | 100 | | |

This posting has the connotation to a payment. A constant payment fund (PF) is updated in the general legder for payments with active balancing of CO real-time postings:

| C | Account | Fund | Partner Fund | Credit/Debit Indicate | or. | Amou | <u>nt</u> |
|---|-----------|------|--------------|-----------------------|-----|------|-----------|
| | A | F1 | F2 | D | 100 | | |
| | Clearing1 | F1 | | | F2 | С | 100 |
| | Clearing1 | F1 | PF | D | 100 | | |
| | Clearing2 | PF | F1 | D | 100 | | |
| | А | F2 | P1 | С | 100 | | |
| | Clearing1 | F2 | F1 | D | 100 | | |
| | Clearing1 | F2 | PF | С | 100 | | |
| | Clearing2 | PF | F2 ,CH | 100 | | | |

As the document breakdown is balanced in general according to combination of characteristic and partner, more lines are added in the general ledger view of the document:

| Account | Fund | Partner Fund | Debit/Credit Indicat | or <u>Amount</u> |
|-------------|-------|--------------|----------------------|------------------|
| A | F1 | F2 | D | 100 |
| Clearing1 | F1 | F2 | С | 100 |
| Clearing1 | F1 | PF | D | 100 |
| Clearing2 | PF | F1 | D | 100 |
| А | F2 | P1 | С | 100 |
| Clearing1 | F2 | F1 | С | 100 |
| Clearing2 | PF | F2 | С | 100 |
| Balance zer | ro F1 | PF | D | 100 |
| Balance zer | ro PF | F1 | С | 100 |
| Balance zer | ro F2 | PF | С | 100 |
| Balance zer | ro PF | F2 | D | 100 |

36.5.1.4.2 Activate Balancing of CO-FI Real-Time Postings

Use

In this step, you activate the balancing of CO-FI real-time postings in the general ledger.

Requirements

A clearing account for CO-FI real-time postings is maintained and all the requirements described in the IMG activity are fulfilled.

Standard settings

The implementation FM_COFI_POOLED_CASH of BAdI FAGL_COFI_ACDOC_MOD is not active in the Standard.

Activities

Activate the balancing of the CO real-time postings in the general ledger and implementation FM_COFI_POOLED_CASH of BAdI FAGL_COFI_ACDOC_MOD here. If you want to display the activation status of the implementation, use monitor report Check Balancing of CO Real-Time Postings.

If you do not want to activate the function in all systems, but just for some individual clients,

you must create your own enhancement implementation of the enhancement spot FAGL_COFI_ACDOC_MOD in the customer area with transaction *BAdl Builder: Initial Implementation Maintenance* (SE19). You can refer to the sample implementation for this and use CL_IM_FM_COFI_POOLED_CASH. Then create a corresponding filter value for the filter CLIENT.

36.5.1.4.3 Check Balancing of CO-FI Real-Time Postings

Use

In this IMG activity you can check the requirements for the active balancing of CO-FI real-time postings using a monitor. You can also branch to the corresponding IMG activities.

36.5.2 Asset Accounting

36.5.2.1 Integration with Asset Accounting

Use

You can enter asset transactions according to fund and functional area and create corresponding reports.

Requirements

- You activate the fields fund and functional area for Asset Accounting under the following IMG activity:

Activate Account Assignment Objects

In this configuration step, you can prevent changes being made to the fund and functional area in the asset master data by selecting the balance sheet checkbox. If you select the Ident checkbox, you can define that the fund and functional area are inherited from the asset master record and are not overwritten when postings are made to the asset.

You define the use of the fields fund and functional area for the company code, evaluation area, and asset transaction under the following IMG activity: Specify Account Assignment Types for Account Assignment Objects
 In the configuration step, you can define which company codes, valuation areas and asset

transactions can use the fields fund and functional area.

- You create the types of messages for the fields fund and functional area (no message, information message, error message, warning) under the following IMG activity: Process Error Table
- You configure the fields fund and functional area in the asset master record under the following IMG activity:
 Specify Required Entries for Asset Master Data
- You include the fields fund and functional area using the following IMG activity in the asset reports: Define Sort Variants for Asset Reports
Activities

When you activate and configure the fund and functional area integration, you can enter time-dependent values for the fund and functional area fields by calling the following transactions:

- Create Asset
- Create Subnumber

The values for the fields fund and functional area entered in these transactions are updated in Controlling, Financial Accounting, and Fund Management for all asset transactions with financial values including acquisitions, transfer postings, retirements, and depreciations. When assets are settled, the fund and functional area values that were posted in the settled Controlling and Project System transactions are used. Sort versions that are used in existing asset reports can include the fund and functional area fields.

36.5.3 Partial Payment for Each General Ledger Account Assignment

36.5.3.1 Partial Payment per G/L Account Assignments

Use

Usually, FI documents split amounts to the General Ledger (G/L) concerning of the enclosing split characteristics (G/L entities). The amount is spread over all the entities involved, according to the appearance on the line items. Up to now, splitting by selected entities is not possible

To use the option of paying FI documents by split characteristics, you need to activate the transaction Partial Payment by Split characteristic in the new G/L. Use this step to do this and make the necessary settings.

Activities

Make the general settings you require and activate the G/L entities you will need to use.

36.5.4 Trust Fund

36.5.4.1 Define Fund Types for Fiduciary Funds

Use

In this IMG activity, you can define an assignment of P&L accounts for balance sheet accounts for mapping fiduciary funds in the system. The system then makes sure that the fiduciary funds are updated in the general ledger independent of P&L. Each document line entered that is posted on a P&L account

and assigned to a fiduciary funds account is then offset through automatically generated document lines and supplemented with a posting line on balance sheet account assigned to the P&L account.

Requirements

In the Customizing of *Funds Management Government* you must create the corresponding fund types and assign the master records on the fiduciary funds in IMG activity Create FM Fund Types.

The P&L accounts must allow postings without tax (indicator *Postings Without Tax Allowed*) as the posting lines generated automatically do not contain any tax information.

Message 281 cannot be controlled as an error message in work area FI with the result that CO account assignments are permitted in the balance sheet account lines. You adjust the message accordingly in the Customizing of *Controlling* in IMG activity *Change Message Control*.

Activities

- 1. Define a derivation strategy for the G/L account derivation. Create derivation steps in the derivation strategy to ensure the following:
 - a) Each P&L account is assigned to a balance sheet account. Note: The balance sheet account should be assigned to a commitment item in the Account Assignment Derivation of Funds Management with Financial transaction 50 (not relevant for update).
 - b) Each P&L account is assigned to a statistical Commitment Item for the automatically generated offsetting entry.
- 2. Assign the fund type(s) for the fiduciary funds to the derivation strategy.
- 3. Define the posting key for the automatically generated lines.

36.5.4.2 BAdI: Enhance Derivation of G/L Accounts for Fiduciary Fund

Use

This Business Add-In is used in component *Fund Accounting*(PSM-FA)

You can use this BAdI to supplement the derivation of GL accounts fiduciary funds as follows:

- You can supplement derivation structure IFM_GLACC_DERIVE with more fields using enhancement structure CI_IFM_GLACC_DERIVE.

You can then fill these fields in accordance with coding block (COBL) information and evaluate them.

- You can create and program a derivation step in the derivation strategy of derivation type *Enhancement*.

Requirements

A derivation strategy for fiduciary funds must be created and assigned to the corresponding fund types.

For more information, see Define Fund Types for Fiduciary Funds.

Standard settings

The Business Add-In is not active in the standard system.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

- 1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
- 2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
- 3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
- 4. Save your entries and assign the Add-In to a package.
- 5. To edit a method, double-click its name.
- 6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
- Save and activate your code. Navigate back to the *Change Implementation* screen. Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
- 8. Choose *Activate*. When the application program is executed, the system carries out the code in the method you wrote.

Example

See also **Methods** Fill Additional Fields for Derivation Derivation Step as Enhancement

36.5.5 Transfer from FM Totals Records to General Ledger Accounting

36.5.5.1 Information on Transfer of FM Totals Records to General Ledger

Accounting

Use

A requirement of Fund Accounting is that financial transactions, such as creating commitment, are entered as totals values in general ledger accounting. You can use program Post Budget or Commitment/Actual Totals to FI (RFFMTTTOBL) to transfer the collected FM commitment information in Funds Management to the new general ledger accounting. This can happen weekly or monthly in a batach run.

You define the required settings in the following IMG activities to make this function available.

Requirements

Commitment data must be available in the component Funds Management.

Standard settings

SAP does not provide any standard settings for this.

Activities

Process the IMG activities in the order they appear. Program *Post Budget or Commitment/Actual Totals in Fl* (RFFMTTTOBL) executes the transfers based on these definitions.

36.5.5.2 Activate Transfer

Use

In this IMG activity, you activate the transfer to general ledger accounting according according to FM area, budget category and value type. The available value types are used for the posting of commitment items.

Standard settings

SAP does not provide any standard settings.

Activities

- 1. Choose *New Entries* and enter the FM area and the budget category for the transfer to general ledger accounting. Save your entries.
- 2. Select the item that you have defined and activate the data transfer by double-clicking on the corresponding option.
- 3. Define which commitment value types you want to transfer and activate them. Save your entries.

36.5.5.3 Define Derivation Strategy for Transfer and GL Accounts

Use

In this IMG activity, you use the derivation tool to create derivation rules in order to enhance the account assignment objects in accordance with the requirements of Fund Accounting and to define the G/L accounts in general ledger accounting. The derivation tool requires this information for the commitment data records.

Note

The program *Post Budget or Commitment/Actual Totals in Fl* (RFFMTTTOBL) calls the read commitment data sequentially. The two derivation strategies are called in two consecutive steps for each totals record.

- In the first step the functions for enhancing the account assignment objects are available; you can also decide to skip this totals record.
- In the second step the G/L accounts are defined.

Standard settings

SAP does not provide any standard settings.

Activities

- 1. Choose a strategy environment that defines whether you want to use the account assignment objects for the Fund Accounting postings or whether you want to define G/L accounts for general ledger accounting.
- 2. Choose *Create Step* to create a new step for your derivation strategy.
- 3. To create a derivation rule, choose the source and target fields and then maintain the field values.
- 4. Save your entries.

36.5.5.4 Define Details for FI Update

Use

In this IMG activity, you choose the account assignment objects for the update in general ledger accounting and the document details for the FI document posting. The account assignment objects FM area and fund are obligatory. You can specify more details on account assignment elements if necessary.

The concept of the budgetary ledger in general ledger accounting ensures that the totaling of all BL postings balance each other. You require at least one G/L account and one offsetting account for this process for which commitment records can be posted. In addition to this offsetting account, the following details on the postings are required:

- Fund details are required.

You can define additional account assignment objects such as business area, funds center, or functional area with this IMG activity.

- The FI documents can only be posted in general ledger accounting and the corresponding reporting ledger.
- Other FI modules, such as CO and FM, should be excluded as information recipients of this posting.

Requirements

The budgetary ledger for budgeting processes only works with the Budget Control System. You must have therefore already installed this.

Standard settings

SAP does not provide any standard settings.

Activities

- 1. Create a new entry for your FM area and define the FI document type for it.
- 2. Place your cursor on the FM area and double-click on the account assignment objects that you want to transfer to the left side of the screen.
- 3. Define the fields that are linked to the account assignment objects.
- 4. Save your entries.

36.6 Procurement for Public Sector

36.6.1 Activate Functions for Procurement for Public Sector

Use

In this activity, you activate the individual procurement functions of mySAP SRM for the public sector.

Standard settings

This function is not active by default in the standard system.

Activities

Maintain more functions if necessary and save your entries.

36.6.2 Guaranteed Minimum

36.6.2.1 Create Document Categories and Types

Use

In this activity you define the settings for funds reservation documents for the function of guaranteed minimum in the SRM system.

Standard settings

SAP does not deliver any default settings for this.

Activities

Define the following for each company code:

- 1. The reference document type for posting earmarked funds documents
- 2. The document categories to be used
- 3. The document types to be used
- 4. Save your entries.

36.6.3 Create Reason for Change

Use

In this activity, you can create specific messages that are used in the goods receipt and invoice receipt process.

Requirements

You must have created an application area and at least one reason code in table /SAPPSPRO/RCODE .

Activities

- 1. Create a message.
- 2. Enter a description.
- 3. Specify an application area.

- 4. Enter a message category.
- 5. Enter a message number.
- 6. Save your entries.

36.6.4 Activate Restricted Subcontracting

Use

In this activity, you activate the restricted subcontracting function for Government Procurement.

You can transfer and edit purchase requisition items of the *subcontracting* category to the SRM system for this. However, only limited functions are available.

Requirements

You can only set this indicator if you use *Government Procurement* as this function is only in the Add-on.

Standard settings

This function is not activated in the SAP standard system.

36.7 Debt Management

36.7.1 SAP Customer Relationship Management Integration

36.7.1.1 Configure Integration with SAP Customer Relationship Management

Use

In debt management, you configure the distributed landscape between SAP CRM and SAP ERP with the replication and communication settings and synchronizing certain Customizing settings. The UI runs in SAP CRM but the dunning process, creation of debt sets, as well as billing and accounting, run in SAP ERP.

Here's how you configure the distributed landscape between SAP CRM and SAP ERP:

1. SAP CRM and SAP ERP: Middleware replication

Configure the middleware replication between SAP CRM and SAP ERP, including the definition of logical systems and the configuration of the RFC destination to the partner system on both sites. You assign these subscriptions in the administration console:

- All business partners (BUPA MAIN)
- All business partner relationships (BUPA_REL)
- All business transactions (BUS_TRANS_MSG)
- 2. SAP CRM: Communication settings

Using the respective transactions, assign the RFC destination for synchronous method calls to the SAP ERP system and maintain the mapped system ERP_PSCD. Enter the required data in the *Logical System* and in the *Client* columns.

36.7.1.2 Maintain Item Categories

Use

In this Customizing activity, you maintain the item categories in the SAP ERP system, corresponding to the item categories in the SAP CRM system.

Requirements

You have maintained the item categories in SAP CRM.

Activities

You must create each entry so that it is identical to the key and description of the corresponding item category in SAP CRM.

36.7.1.3 Maintain Text IDs for Fees

Use

In this Customizing activity, you maintain the text IDs for the replication of fee texts, which are created in an enforcement action application in SAP CRM.

The fee texts from SAP CRM are replicated in the text object DMEA_FEE and the corresponding text keys are stored in the data base table FMCA_DM_TEXT. As an API use function module READ_TEXT for processing the texts.

For replication reasons, you must create and assign the **identical texts IDs** to the text object DMEA_FEE that are created in SAP CRM Customizing under *Industry-Specific Solutions -> Public* Sector -> Debt Management -> Enforcement Action -> Maintain Text IDs for

Fees.

Activities

Create and assign the text IDs to the text object ${\tt DMEA_FEE}.$

36.7.1.4 Asset Income Register

36.7.1.4.1 Define AET System Settings

Use

In this Customizing activity, you use the Application Enhancement Tool (AET) system settings to define the package to be used for the generated decision basis (DBA) modeling data in SAP ERP. You do not need to create UI components.

(You execute the generation of DBA modeling data using the program Replication Monitor for Decision Basis Modeling in the Customizing activity Replicate Decision Basis Modeling.)

Requirements

- The system client you choose to define the package supports cross-client maintenance.
- We strongly advice you to use your own DBA namespace for the generated AET enhancements to prevent conflicts with other components in which you are also using AET enhancements. You request your DBA namespace on SAP Service Marketplace at http://www.service.sap.com/namespaces (see also SAP Note 84282).

Activities

Enter the package name to be used for the generated AET enhancements for the current logical system. The system automatically uses this information to derive the generation namespace.

36.7.1.4.2 Replicate Decision Basis Modeling

Use

In this Customizing activity you replicate the decision basis (DBA) modeling data from the source system SAP CRM to the target system SAP ERP. You must replicate the DBA modeling data as part of the final closing activities once you have finalized or upgraded your DBA modeling in SAP CRM.

Activities

You execute the DBA modeling data replication using the program RPSSC00 DBA REPL MONITOR. For more information, see the program documentation.

36.7.1.4.3 Assign Item Categories to Decision Basis Models

Use

In this Customizing acitvity, you maintain the decision basis model assignments to the item categories in SAP ERP according to the assignments in the SAP CRM system.

Requirements

You have maintained the item categories in the Customizing activity Maintain Item Categories.

Activities

You must create the same assignments as those in the SAP CRM system (see SAP CRM Customizing Implementation Guide under *Customer Relationship Management -> Transactions -> Define Item Categories*, activity *Customizing Item*).

Note: The entries must be identical to the keys and descriptions for the corresponding item categories and decision basis models in SAP CRM.

36.7.2 Define Billing Documents for Fees

Use

In this Customizing activity, you define the settings for the creation of billing documents for enforcement actions and their corresponding fees.

You define the creation of billing documents by implementing a customer event for event P430. For more information, see the sample module documentation FMCA_DM_SAMPLE_P430.