Archiving Application Data (FI)

Release 4.6C
## Icons

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Archiving Application Data (FI)

See also:

BC Workflow Scenarios in Applications [Ext.]
Workflow Scenarios in Financial Accounting (FI)

For more information about workflow scenarios in Financial Accounting, see:

Parking a Document [Ext.]
Payment Release [Ext.]
Financial Calendar [Ext.]
Workflow Scenarios in Asset Accounting (FI-AA)

Mass Changes to Master Data (FI-AA Mass Changes to Master Data) [Page 9]
Mass Retirement (FI-AA Mass Retirement) [Page 17]
Processing Incomplete Assets (FI-AA Incomplete Assets) [Page 21]
Mass Changes to Master Data (FI-AA Mass Changes to Master Data)

**Use**

The Asset Accounting component provides a function for mass processing of freely definable changes to asset master data by means of workflow. The system carries out these changes automatically to a large extent.

This type of master data change for large numbers of assets might be necessary when one of the following applies:

- When there is a change to the cost center plan, you have to change the cost center assignment of all assets affected.
- As part of year-end closing, you have to change depreciation terms.
- Following the legacy data transfer, you have to make entries in certain asset master data fields that could not be copied from your legacy system.
- You made a change at the asset class level. Changes at this level affect only those assets that are created after the change was made. Therefore, you have to make this change in the already existing assets.

SAP Workflow enables you to tie these large-scale changes of sensitive master data into an organizational process. This process gives you greater control, as well as the opportunity for checks by various employees, since the process involves a number of people in your enterprise.

**Mass Change Using Workflow**

**Structure**

The mass change process includes three functions:

- Selecting the assets, and generating the appropriate worklist
Mass Changes to Master Data (FI-AA Mass Changes to Master Data)

- Checking the worklist and making any corrections
- Releasing the worklist (= execution of the mass change)
Technical Background (FI-AA Mass Changes to Master Data)

First, you have to select the assets that you want to change. You make this selection using any standard asset report. You then place the selected assets in a worklist (function Create worklist in the list display of the report). Note that you can only select assets from a single company code. The function Dynamic selections in the report selection screen allows you to further limit the selection. In addition to the standard reporting selection criteria, this function allows you to use all the fields of the general data part of the master record as selection criteria. Using these selection options, you can select the assets for the change according to your own specific requirements.

You can also add individual assets to the worklist from the asset master data transaction or the value display transaction by choosing the menu option Environment.

The report for creating a worklist only shows assets that have APC amounts. In order to select assets that have not been posted, you have to use the standard report for unposted assets (under Day-to-day activities).

You define the change rules using substitution. The change rules determine under which circumstances which master data field should receive which new contents. (Refer to FI-AA Asset Accounting [Ext.]) When you create a worklist, you have to enter a substitution rule. When the worklist is processed, all the assets in the worklist are changed according to the defined rules. The system documents the mass change to master data using change documents, just as it does for manual changes.

The worklist that is created opens a workflow. By means of the definition of the workflow, the system determines which employees should carry out the following steps:

- Manual checking and making any additions to the work list
- Releasing the worklist and posting the changes

The system automatically sends the worklist for processing to the specified employees. They receive the worklist in their R/3 Mailbox.
Preparation and Customizing (FI-AA Mass Changes to Master Data)

Use
You can represent the organizational plan of an enterprise in the R/3 System by entering organizational units, plan positions, and positions. This organizational plan is used for employee management in the Personnel Development (PD) component. The definition of the organizational plan also plays a significant role in controlling SAP Business Workflow. The system uses this organizational plan to determine the employee who is responsible for a particular workflow task. The workflow tasks are assigned to positions or to the organizational units to which they belong.

Features
You need to define Asset Accounting and its employees (system users) in the R/3 organizational plan. These definitions are required for carrying out the following functions in FI-AA:

- Making mass changes to master data
- Posting mass retirements
- Processing incomplete assets

Therefore, you should define asset accounting and its employees (system users) in the R/3 organizational plan. The tasks listed above are defined as model workflow tasks in the standard system. You do not have to make any further entries for the workflow definitions. In order to carry out these tasks, the only requirement is to assign the standard tasks below to the Asset Accounting organizational unit (which you have defined) or to a position or job belonging to it.

- Correct worklist
- Release worklist

For this purpose, there is also a corresponding activity in the Implementation Guide for Asset Accounting (Preparations for Production Startup → Authorizations). The following graphic shows an example of an organizational plan and the corresponding workflow assignments.
Definition of an Organizational Plan

It is also possible to assign a workflow task directly to an R/3 user (see the Asset Accounting Implementation Guide: Preparing for Production Startup). In this way, you can carry out the FI-AA workflow scenarios without having a defined PD organizational plan.

You have to define a substitution rule for mass changes, in addition to these organizational assignments. For more information, see Master Data in the Asset Accounting Implementation Guide. The procedure for defining a substitution rule is described there.

The following graphic shows the Customizing definition of a substitution rule. In all assets with cost center 4711, the cost center should be replaced by cost center 8936.
Substitution Rule

Please note that when you make a change to time-dependent data (such as the assignment to a cost center), you always have to enter the time interval (valid from/to date) in the substitution rule. When you enter a new valid from date in the substitution, the system automatically opens a new time interval. You can only change one time interval in each mass change. It is not possible to change data in several time intervals in parallel.

Also note that when you make changes to the depreciation terms, you also have to enter the depreciation area (AFABE) in the condition.

The following example shows a substitution rule for changing the cost center in the asset master record. The cost center should be changed for all assets in the asset class 1000 as of January 1, 1996 from QKI to 1, if QKI is the valid cost center after December 31, 1995:

Precondition:

<ANLA> $ANLKL = '00001000' and
<ANLZ> $KOSTL = 'QKI' and
<ANLZ> $BDATU > '19951231'

Substitution (when the condition is fulfilled):
Cost center: 1
Valid from: 01/01/96
Preparation and Customizing (FI-AA Mass Changes to Master Data)

Note that the *Valid to* date (BDATU) in the condition has to be entered in the year/month/day form.
Operation and Connection to Application Functionality (FI-AA Mass Changes to Master Data)

Operation and Connection to Application Functionality (FI-AA Mass Changes to Master Data)

Procedure

This is the procedure for carrying out a mass change:

1. Define a substitution rule for the mass change (Tools → Mass Change Rule)
   - Choose New entries. Then enter the company code, a number and a description for the substitution.
   - Choose Goto → Substitution. Choose Substitution → Create.
   - Define a substitution step (Add entry). In the resulting dialog box, you have to select the fields that should be changed in the substitution step.
   - Define the conditions for the substitution. Enter the values that you want the fields to adopt when the conditions are met. The system assists you in creating substitution rules with the function Flds in Bool. stmtnt. Refer to the F1 help for the syntax of the substitution conditions.

2. Select the assets that are to be changed. Either start any standard Asset Accounting report, or use the function Tools → Worklist → Generate. Start the report with the appropriate limitations. Please note that you can only enter one company code when making selections.

3. Select the function Create worklist in the list display. Choose the Change master data scenario.

4. In the next dialog box, select the substitution rule that you want to use for the mass change.

5. Add the assets to the worklist (Add to worklist). You can choose individual assets in the master data transaction or in the value display transaction.

6. Process the worklist in your mail inbox (Tools → Worklist → Edit):
   - Check the assets in the worklist that was created (Process). Delete individual asset lines from the worklist, if necessary.
   - Release the worklist (Release).

   It is also possible to split the correct worklist and release worklist steps between two different employees. You make this split by assigning the standard tasks separately to the two employees. If both standard tasks are assigned to one person, then the correct worklist intermediate step is omitted.

7. Check the results using the change document list (Information System → Reports on Asset Accounting → Preparations for Closing).
Mass Retirement (FI-AA Mass Retirement)

Use

When an enterprise sells a large block of fixed assets (for example, a plant or a building) it is necessary to post the individual retirement of each asset in asset accounting.

The number of individual fixed assets involved in such a sale can be extremely high. Therefore, the Asset Accounting (FI-AA) component makes it possible to handle this business transaction using mass posting. The total revenue that is received for block of assets that were sold can be distributed to the individual assets in three different ways:

- Proportional to the book value of the individual asset
- Proportional to the acquisition and production costs of the individual asset
- Using your own method, based on a customer enhancement project provided

   The name of the customer enhancement project is WFOB0001. For more information, see FI-AA Asset Accounting [Ext.].

Using Workflow here offers the advantage, as it does for mass changes to master data, that the mass retirement is integrated with your organizational processes, and as a result provides an opportunity for additional checks by other members of your enterprise.
Technical Background (FI-AA Mass Retirement)

The selection of fixed assets and the basic procedure for mass retirement is carried out using the same functions as a mass change to asset master data. You use a worklist and R/3 workflow procedures. For mass retirements, there are the standard workflow scenarios: Retirement with revenue and Retirement without revenue (scrapping). When you create a worklist, you have to make entries needed for posting the mass retirement (such as the posting date).

The graphic below shows the basic procedure for a mass retirement:

Mass Retirement

The system carries out the retirement posting as follows: It creates a CATT (Computer Aided Test Tool) run for the posting transactions involved. This run is started with the parameters of the worklist, and processed in the background. The system finds any assets for which errors occurred during their retirement. The system writes these assets to a new work list and sends them to the mailbox of the appropriate user. This person carries out subsequent processing of the worklist in the foreground, and corrects any errors.
Preparation and Customizing (FI-AA Mass Retirement)

Features

The model workflow tasks are already defined in the standard system for the scenario “mass retirement.” Just as for mass changes, you do not have to make any further entries for the Workflow definitions. However, you are still required to assign the standard tasks listed below to the “Asset Accounting” organizational unit that you defined, or to a position/job belonging to it, or to an R/3 user.

- Correct worklist
- Release worklist
Operation and Connection to Application Functionality (FI-AA Mass Retirement)

The procedure for mass retirement is essentially the same as the procedure for mass changes (refer to Operation and Connection to Application Functionality (FI-AA Mass Changes to Master Data) [Page 16]). However, when you create a worklist, you do not create a substitution rule. Instead you enter:

- Required dates
- Transaction type
- Revenue, and type of revenue distribution (proportional to book value/APC)
Processing Incomplete Assets (FI-AA Incomplete Assets)

Use

In the Asset Accounting (FI-AA) component, it is possible to define views that allow only limited access to asset master records. As a result, it can sometimes occur that incomplete assets are created. For example, an employee in the purchasing department has a purchasing view, and can create assets with the master data necessary for purchasing, but without other required asset master data (refer to FI-AA Asset Accounting [Ext.]).

Another possible reason for incomplete assets being created has to do with investment measures (refer to IM-Investment Management [Ext.]). The Investment Management (IM) component enables you to manage investment measures in the form of orders or projects. When you create this type of investment order or investment project, the system automatically creates an accompanying asset under construction. When creating this asset, the system uses the default values from an asset class that you have set up for this purpose. It is possible that these default values do not supply all the required master data, and the asset that is created is then incomplete.

The system forwards these incomplete assets, using Workflow procedures, to the R/3 Mailbox of the responsible asset accountant in the form of a worklist. The asset accountant can then add the master data necessary to complete the assets.
Technical Background (FI-AA Incomplete Assets)

There is an internal data field in the asset master record for the degree of completeness. The possible values for this field are:

- The asset is complete (all required fields are maintained).
- The asset is incomplete, but can be posted (all posting information is complete).
- The asset is incomplete and cannot be posted.

The system sets the degree of completeness field. As soon as an incomplete asset is created, the system automatically initiates the appropriate workflow.

If you do not want to use R/3 Workflow, you can get a list of incomplete assets using the standard report Day-to-day activity → Unposted assets (Asset Accounting menu: Information System). Choose the function Dynamic selections in the initial screen of the report, and use the degree of completeness of the asset (under maintenance information) as the selection criterion for the report.
Preparation and Customizing (FI-AA Incomplete Assets)

Features

The model workflow tasks are already defined in the standard system for the Process incomplete assets scenario. Just as for mass changes, you do not have to make any further entries for the workflow definitions. However, you are still required to assign the standard task Process incomplete assets to the “Asset Accounting” organizational unit that you defined, or to a position/job belonging to it, or to an R/3 user. In addition, you must activate the event linkage for the task Process incomplete assets. You do this in the same Customizing transaction that you use to make the organizational assignments (FI-AA Implementation Guide: Preparations for Production Startup → Authorizations).
Operation and Connection to Application Functionality (FI-AA Incomplete Assets)

The system creates the worklist automatically, as soon as an incomplete asset is created. The responsible user has to enter the missing information in the assets. You can call up the asset change transaction directly from the worklist in order to do this.
Workflow Customizing: FI-AA Notification when Cost Center Locked

Purpose

Using a cost center lock as an example, the following shows how SAP Business Workflow can be used to integrate Asset Accounting with other SAP components.

In this example, we set up a workflow that automatically informs the asset accountant when cost centers are locked. By doing so, we are able to avoid problems that occur when you try to post actual costs after a cost center has been locked.

By means of event linkage, a workflow is activated which is automatically started when there is a cost center change. The workflow is triggered when the Actual primary costs indicator is set in the Lock group box in the master data of the cost center, and the cost center is saved. The system creates a work item for the assets affected. The work item can then be processed by the responsible employee in his or her Business Workplace.

This employee then has several options:

- The employee contacts the cost center manager to check if the cost center is really intended to be locked. If the cost center manager removes the cost center lock, the asset accounting employee can ignore the list.

- Otherwise, the employee can correct the asset master records manually, directly from her workflow inbox.

- Or the employee defines substitution rules for a mass change, and performs an automatic mass change of the cost center in the asset master records.
Operation and Connection to Application Functionality (FI-AA Incomplete Assets)

Notification of Asset Accounting of Cost Center Change

**Customizing**

1. Assign the appropriate employees the following workflow tasks in Customizing for *Asset Accounting: Process asset (cost ctr lock, error WF), Change assets after cost center lock*.

2. For event linkage, choose *Preparing for Production Startup* → *Authorization Management* → *Assign Workflow Tasks* → *Basic Functions* → *Activate event linking* → *FI-AA cost center lock* → *Cost center Cost center changed*.

3. To activate event linking, choose 🌟 *Activate/deactivate*.

**Refer to:**

For more information about Workflow and the Business Workplace, see these topics in the SAP Library:

- [SAP Business Workflow (BC-BMT-WFM) [Ext.]](Ext)
- [SAP Business Workplace [Ext.]](Ext)
Triggering a Workflow from a Validation (FI-SL)

Definition

Using a validation you can check values and value intervals entered in the R/3 System. The system automatically checks a large proportion of the values against standard validation rules. Since some validation types cannot be standardized however, you can define your own validation transactions using the FI-SL system without having to change the standard system.

Once a validation has been created and activated, the values entered in the R/3 system are checked using a Boolean statement (Prerequisite). The input values to be checked are selected according to this prerequisite statement. If the prerequisite is not fulfilled, the values are valid and the transaction continues. If the prerequisite is fulfilled, the values are checked by a further Boolean statement (check statement). If the check statement is true, the values are valid and the transaction continues. If the check statement is false, the system issues a message defined by the user. The message type (error, warning, or information), determines whether the transaction continues.

You create a validation to prevent postings for the combination “Administration cost center 100/sales revenue account 400010”.

- **Prerequisites**
  - The account number is 400010.
  - If the prerequisite is fulfilled, the data is checked against the check statement.

- **Check statement**
  - The cost center is not 100.
  - The check statement is false if the posting is carried out for cost center 100.
  - The data is not posted and the system issues a message defined by the user.
  - This message informs you that you cannot post to the combination “Account 400010/Cost center 100”.

Use

If you make the appropriate settings when defining the validation and in Customizing, you can trigger a workflow from the validation to inform the user that the validation was not successful. In this case, a work item appears in the user’s integrated inbox. This work item can be processed directly from the inbox. When the work item has been processed, the validation message is issued. The user that receives the work item via workflow is thereby informed of the unsuccessful validation and can, if necessary, carry out further steps.
Technical Background (FI-SL)

Object Types
The interface between the R/3 functions and the Workflow System is implemented using object technology. The following information is primarily of a technical nature. You require this information if you are working on the system installation or want to perform your own modifications.

Object Type VALIDATION (Validation in the Special Purpose Ledger) [Page 29]

See also:
Object Types in SAP Business Workflow [Ext.]

Standard Tasks
In the same way as the single-step tasks provided by SAP, the standard tasks also portray business activities from an organizational point of view.

The standard tasks used here can also be used without modification in other workflow-scenarios.

Standard Task MsgDisplay (Display Validation Message) [Page 30]

See also:
Tasks and Task Groups [Ext.]
Object Type VALIDATION (Validation in the Special Purpose Ledger)

Definition

An object that informs the user via a mail message that a validation was not carried out successfully, meaning that the prerequisite was fulfilled but that the check statement was false.

You are carrying out fast entry postings via batch input in Financial Accounting (FI). As the data is being entered, the values are checked against user-defined validation rules. If the validation during document entry is not successful, the system does not issue a message since the data was entered by batch input. In this case you can use a workflow to ensure that the message triggered by the validation is displayed in the inbox of the user affected.

Structure

The following attributes, methods and events are defined as elements of the object type VALIDATION in the object repository:

- **Attributes:** The name of the validation and the activity number as well as information about the validation message (message ID, message number, and message type)

- **Method:** MessageDisplay

- **Event:** triggered.

  This event is then always created if a validation is not successful and the indicator Trigger workflow is set in the validation definition.

Location of the Object Type in the Object Repository

Financial Accounting → Special Purpose Ledger → Tools → Validation/Substitution/Rules
Standard Task MsgDisplay (Display Validation Message)

Definition
In this standard task, the system message triggered by the validation is displayed in the inbox of the appropriate user.

Structure
Standard task: 00407905
Abbreviation: MsgDisplay
Name: Display validation message

Object Method and Attributes
Object type: VALIDATION
Method: MessageDisplay
Attributes: Confirm end of processing

Agent Assignment
During the runtime, this standard task is addressed to the agent specified in Customizing. For more information see Performing Task-Specific Customizing [Page 32]

There is no role definition for this standard task. If you want to use role definitions to display the validation message in the inboxes of various groups of people, you have to create a workflow for this standard task.
Preparation and Customizing (FI-SL)

Features

Application-Specific Customizing

If you want to start a workflow from a validation, you must set the indicator *Trigger workflow* in the validation definition. The workflow is started if the prerequisite is fulfilled and the check statement is false. In this case, a mail is sent to the inbox of the recipient.

For more information, see the following activity in Customizing for Financial Accounting: *Special Purpose Ledger → Tools → Maintain Validation/Substitution/Rules → Maintain Validation [Ext.]*

Assign Agent and Activate Event Linkage

As well as general workflow customizing that ensures that the workflow system operates correctly, you also have to carry out special customizing activities for the validation workflow. You have to assign the standard task to its potential agents and activate the linkage between the triggering event and the receiver of the event.

See also:

Performing Task-Specific Customizing [Page 32]
Activating Event Linkage [Page 33]
Performing Task-Specific Customizing

In Business Workflow Customizing, you must assign standard task 00407905 (Display validation message) to its possible agents. This assignment establishes which users can display the validation message in their inbox. If this assignment is not carried out, the standard task cannot be performed.

Procedure

To assign the standard task to its possible agents, proceed as follows:


3. Assign standard task 00407905 (Display validation message) to the persons who are responsible for processing the validation message.

   Alternatively, you can classify the standard task as a General task. All users in the system are responsible for a general task. The standard task can therefore be processed by any user.
Activating Event Linkage

The event triggered (from object type VALIDATION) is the triggering event for standard task 00407905 (Display validation message) and is entered in the standard system in the event linkage table.

To start the standard task, linkage between the triggering event and the standard task (as the receiver of the event) must be activated in the IMG for Business Workflows.

Procedure

To activate event linkage, proceed as follows:


Workflow Scenarios in Travel Management (FI-TV)

Definition

The workflow included in the Travel Management application component supports the approval procedures for:

- Travel planning
- Travel request
- Reimbursement of expenses after a business trip

Use

The standard system includes the following workflow templates for Travel Management:

- Approve Travel Request [Page 35]
- Approve Travel Plan [Page 37]
- Approve Trip [Page 39]
Approve Travel Request

Process Flow

The approve travel request workflow describes the following process:

The trip data is recorded in the system by the employee.

The employee’s superior is responsible for approving the trip. The system uses the organizational plan to determine the superior automatically.

The superior can approve the trip, send it back to the employee for correction, or reject it.

If the superior approves the trip, the employee who submitted the request is informed of this approval in an automatically generated mail.

If corrections are necessary, the superior creates a message as a workflow attachment. The employee receives a work item with this attachment. When this work item is performed, the transaction for changing the trip is started.

If the travel request is rejected, the superior creates a message that is sent to the employee as a mail.

See also:

Graphic: Approve Travel Request [Page 36]
Graphic: Approve Travel Request

- Employee enters travel request.
- Change travel request.
- Travel request sent back for correction.
- Superior checks travel request.
- Travel request approved.
- Travel request rejected.
- Employee receives notification.
- Approved or rejected mail notification.
Approve Travel Plan

Process Flow

The Approve Travel Plan [Ext.] workflow describes the following process:

1. The travel planning data is recorded in the system by the employee.
2. The superior of the employee embarking on the business trip is responsible for approving the travel plan. The system uses the organizational plan to determine the superior automatically.
   - Approval: If the superior approves the travel plan, the employee embarking on the business trip is informed of this approval in an automatically generated mail. The posting record (PNR) [Ext.] with the reservation information included in the travel plan is written to a processing queue for the connected travel agent.
   - Correction: If corrections are necessary, the superior creates a message as a workflow attachment. The employee receives a work item with this attachment. When this work item is performed, the transaction for changing the travel plan is started.
   - Rejection: If the travel plan is rejected, the superior creates a message that is sent to the employee embarking on the business trip as a mail. The posting procedure for travel services included in the travel plan is canceled.
Graphic: Approve Travel Plan

- Enter travel plan
- Change travel plan
- Travel plan approved
- Travel plan rejected
- Travel plan sent back for correction
- Mail approved
- Mail rejected
- Automatic forwarding to travel agent for processing
- Automatic cancelation of travel plan
- Travel plan correct
Approve Trip

Process flow

The *approve trip* workflow describes the following process:

After completing a trip, the employee supplements the trip data in the system.

The expenses department checks the trip data to see if it is plausible and if it complies with the statutory or enterprise-specific trip provisions. Its consistency with original (or facsimile) receipts is also verified. The trip can be forwarded to the superior, or sent back to the employee for correction.

If corrections are necessary, an employee in the expenses department creates a message as a workflow attachment. The employee who entered the trip data receives a work item with this attachment. To change the trip, the employee can execute the appropriate transaction directly from the integrated inbox. When the trip is saved, the workflow is started again.

If the trip data is consistent, it is then checked by the superior. The superior can approve the trip, send it back to the employee for correction, or reject it.

If corrections are necessary, the superior creates a message as a workflow attachment. The employee receives a work item with this attachment, and can access the transaction to change the trip directly.

If the trip is rejected, the superior creates a message that is sent to the employee as a mail.

See also:

Graphic: Approve Trip [Page 40]
Graphic: Approve Trip

1. Employee enters trip facts.
2. Trip facts are sent back for correction.
3. Employee corrects trip facts.
4. Trip facts are checked by the expenses department.
5. If corrections are required, trip facts are sent back for correction.
6. If trip facts are consistent, reimbursement is approved.
7. If reimbursement is rejected, trip facts are rejected.
8. Employee receives notification of rejection or approval.
9. Superior approves or rejects reimbursement of expenses.
Technical Background (FI-TV)

Object Types Used

The interface between R/3 functions and workflow is made possible by object technology. The following information is of a technical nature. You require this information if you are interested in implementation details or want to perform your own enhancements.

- **Object Type BUS2089 (Employee Trip)** [Page 43]
- **Object Type SELFITEM (Work Item for Dialog Steps on Self)** [Page 44]

Standard Tasks

Standard tasks, which are supplied by SAP as single-step tasks, describe elementary business activities from an organizational perspective. In each case, a single-step task relates to one object method (that is, a technical link to R/3 functions). It is related to persons in the organization who could be its agents.

- **Standard Task TS20000118 (Approve Travel Request)** [Page 45]
- **Standard Task TS20000130 (Set Trip Status to Approved)** [Page 46]
- **Standard Task TS20000095 (Send Mail: Request Approved)** [Page 47]
- **Standard Task TS01000124 (Approve Travel Plan)** [Page 48]
- **Standard Task TS01000126 (Send Mail: Travel Plan Approved)** [Page 49]
- **Standard Task TS60300084 (Change Status of Travel Plan)** [Page 50]
- **Standard Task TS60300085 (Write PNR to Processing Queue)** [Page 51]
- **Standard Task TS01000129 (Change Travel Plan)** [Page 52]
- **Standard Task TS60300086 (Cancel Travel Plan)** [Page 53]
- **Standard Task TS20000124 (Approve Travel Plan)** [Page 54]
- **Standard Task TS20000139 (Enter and Send Short Message)** [Page 55]
- **Standard Task TS20000135 (Check Trip Facts)** [Page 56]
- **Standard Task TS20000131 (Approve Trip Facts)** [Page 57]

💡 **User Decisions**

Standard tasks TS01000124 (**Approve Travel Plan**), TS20000118 (**Approve Travel Request**), TS20000135 (**Check Trip**), and TS20000131 (**Approve Trip Facts**) are user decisions. Standard task TS00008267 (**Generic Decision Task**) was used as a template.

When these tasks are performed, the descriptive long text for the task is displayed. The long text contains text variables that are filled at runtime with the attribute values of object type BUS2089 (**Employee Trip**).
Technical Background (FI-TV)

See also:
Tasks and Task Groups [Ext.]

Roles
A role is used to determine the superior assigned to the employee embarking on the business trip.
Manager Role (Superior Of...) [Ext.]

See also:
Roles [Ext.]

Workflow Template
The actual process is implemented as a workflow template. Your R/3 System includes the following workflow templates:
Workflow Template WS20000050 (Approve Travel Request) [Page 58]
Workflow Template WS 01000087 (Approve Travel Plan) [Page 59]
Workflow Template WS20000040 (Approve Trip) [Page 60]
Object Type BUS2089 (Employee Trip)

In this scenario, the system uses a business application object of type **BUS2089 (Employee Trip)**, which means that an employee’s trip data is processed.

**Events**

When a trip is saved in the database, events of object type **BUS2089** are created depending on the status of the travel plan or travel expenses.

Event creation for the *Approve Travel Plan* workflow is implemented in the `FITP_TRIGGER_WORKFLOW` function module.

Event creation for the *Approve Travel Request* and *Approve Trip* workflows is implemented as `TRIGGER_WORKFLOW` in the `FITP_WORKFLOW` include.

In the case of batch input, event creation cannot be guaranteed.

**Position of the Object Type in the Business Object Repository:**

*Financial Accounting → Travel Management*
OT SELFITEM (Work Item for Dialog Steps on Self)

Mail dispatch has been technically implemented so that the long text of a single-step task is sent. This long text is entered in the definition of a single-step task.

This means that a send method must be available that operates on the work item itself, which represents the single-step task at runtime. The SELFITEM object type (work item for dialog steps on self) provides methods that operate “on itself”.

Position of the Object Type in the Business Object Repository:

Basis → Business Management → Workflow
Standard Task TS20000118 (Approve Travel Request)

When this standard task is performed, a travel request can be approved, sent back to the employee for correction, or rejected.

**Standard task:** TS20000118

**Abbreviation:** ApproveReq

**Name:** Approve Travel Request

**Referenced Object Method and Characteristics**

**Object type:** DECISION *(selection)*

**Method:** Process *(execute)*

**Characteristics:** none

**Maintain Agent Assignment**

At runtime, this standard task is addressed to the employee’s superior via *role resolution*.

When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task. For this reason, you must relate the standard *approve travel request* task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Standard Task TS20000130 (Set Trip Status to Approved)

In this standard task, the status of a travel request/completed trip is set to approved.

Standard task: TS20000130
Abbreviation: TripStatAppr
Name: Set Trip Status to Approved

Referenced Object Method and Characteristics
Object type: BUS2089 (EmployeeTrip)
Method: Approve
Characteristics: none

Maintain Agent Assignment
At runtime, this standard task is addressed to the employee’s superior via role resolution.

When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task. For this reason, you must relate the standard set trip status to approved task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Standard Task TS20000095 (Send Mail: Request Approved)

When this standard task is performed, the descriptive long text is sent to the employee.

**Standard task:** TS20000095

**Abbreviation:** MailReqAppr

**Name:** Send Mail: Request Approved

**Referenced Object Method and Characteristics**

**Object type:** SELFITEM  *work item for dialog steps on self*

**Method:** SendTaskDescription

**Characteristics:** none

**Maintain Agent Assignment**

You do not need to assign agents because the standard task runs in the background.
Standard Task TS01000124 (Approve Travel Plan)

When this standard task is performed, a travel plan can be approved, sent back to the employee who entered it for correction, or rejected.

**Standard task:** TS01000124

**Abbreviation:** ApprTripPlan

**Name:** Approve Travel Plan

**Referenced Object Method and Characteristics**

**Object type:** DECISION *(technical implementation of a user decision)*

**Method:** Process *(perform)*

**Characteristics:** none

**Maintain Agent Assignment**

At runtime, this standard task is addressed to the employee’s superior via role resolution [Ext.].

When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task [Ext.]. For this reason, you must relate the standard Approve Travel Plan task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Standard Task TS01000126 (Send Mail: Travel Plan Approved)

When this standard task is performed, the description of the task is sent to the employee.

**Standard task:** TS01000126

**Abbreviation:** MailPlanAppr

**Name:** Send Mail: Travel Plan Approved

**Referenced Object Method and Characteristics**

**Object type:** SELFITEM (work item for dialog steps on self)

**Method:** SendTaskDescription (send description of task)

**Characteristics:** none

**Maintain Agent Assignment**

You do not need to assign agents because the standard task runs in the background.
Standard Task TS60300084 (Change Status of Travel Plan)

This standard task changes the approval status of a travel plan.

Standard task: TS60300084

Abbreviation: TripStatAppr

Name: Change Status of Travel Plan

Referenced Object Method and Characteristics

Object type: BUS2089 (Employee Trip)

Method: ChangePlanStatus (Change Approval Status of Travel Plan)

Characteristics: none

Maintain Agent Assignment

At runtime, this standard task is addressed to the employee’s superior via role resolution [Ext.]. When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task [Ext.]. For this reason, you must relate the standard Change Approval Status of Travel Plan task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Standard Task TS60300085 (Write PNR to Processing Queue)

This standard task writes the posting record (PNR) [Ext.] that is assigned to the travel plan [Ext.] to a processing queue for the travel agent.

**Standard task**: TS60300085

**Abbreviation**: SetPlanStatu

**Name**: Write PNR to Processing Queue

**Referenced Object Method and Characteristics**

**Object type**: BUS2089  *(Employee Trip)*

**Method**: QueuePNR  *(Write PNR to Processing Queue)*

**Characteristics**: none

**Maintain Agent Assignment**

You do not need to assign agents because the standard task runs in the background.
Standard Task TS01000129 (Change Travel Plan)

When this standard task is performed, the transaction for changing the travel plan [Ext.] is called up.

**Standard task:** TS01000129  
**Abbreviation:** ChangePlan  
**Name:** Change Travel Plan

**Referenced Object Method and Characteristics**

**Object type:** BUS2089 (Employee Trip)  
**Method:** ChangePlan (Change Travel Plan (TP01))

**Characteristics:** Confirm End of Processing

**Maintain Agent Assignment**

At runtime, this standard task is executed by the person who entered the trip data. This could be any employee, so you must classify the single-step task [Ext.] as a general task in Customizing.
Standard Task TS60300086 (Cancel Travel Plan)

This standard task cancels all posting record (PNR) [Ext.] segments.

**Standard task:** TS60300086

**Abbreviation:** CancelPlan

**Name:** Cancel Travel Plan

**Referenced Object Method and Characteristics**

**Object type:** BUS2089 (Employee Trip)

**Method:** CancelPlan (Cancel Travel Plan)

**Characteristics:** none

**Maintain Agent Assignment**

At runtime, this standard task is addressed to the employee’s superior via role resolution [Ext.]. When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task [Ext.]. For this reason, you must relate the standard Cancel Travel Plan task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Standard Task TS20000189 (Change Trip)

Standard Task TS20000189 (Change Trip)
When this standard task is performed, the transaction for changing the trip is called up.

Standard task: TS20000189
Abbreviation: ChangeTrip
Name: Change Trip

Referenced Object Method and Characteristics
Object type: BUS2089 (EmployeeTrip)
Method: ChangeInteractive (change trip (interactive))
Characteristics: confirm end of processing

Maintain Agent Assignment
At runtime, this standard task is executed by the person who entered the trip data. This could be any employee, which means that this single-step task must be classified as a general task in Customizing.
Standard Task TS20000139 (Enter and Send Short Message)

When this standard task is performed, the transaction for entering and sending short messages is called up.

**Standard task:** TS20000139  
**Abbreviation:** SendText  
**Name:** Enter and Send Short Message

**Referenced Object Method and Characteristics**

**Object type:** SOFM *(office document)*  
**Method:** Compose *(create and send)*  
**Characteristics:** none

**Maintain Agent Assignment**

At runtime, this standard task is addressed to the employee’s superior via role resolution.

When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task. For this reason, you must relate the standard enter and send short message task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Standard Task TS20000135 (Check Trip Facts)

When this standard task is performed, the basic trip data is displayed. The trip can be released for approval, or sent back to the employee for correction.

**Standard task:** TS20000135

**Abbreviation:** CheckTrip

**Name:** Check Trip Facts

**Referenced Object Method and Characteristics**

- **Object type:** DECISION *(selection)*
- **Method:** Process *(execute)*
- **Characteristics:** *none*

**Maintain Agent Assignment**

When customizing this task, you must maintain agent responsibilities so that all employees in the expenses department are possible agents of this task.
Standard Task TS20000131 (Approve Trip Facts)

When this standard task is performed, the basic trip data is displayed. The trip facts can be approved, sent back for correction, or rejected.

Standard task: TS20000131
Abbreviation: ApproveTrip
Name: Approve Trip Facts

Referenced Object Method and Characteristics

Object type: DECISION (selection)
Method: Process (execute)
Characteristics: none

Maintain Agent Assignment

At runtime, this standard task is addressed to the employee’s superior via role resolution.

When customizing this task, you must keep the agent assignment so general that all superiors of any employee are possible agents of the single-step task. For this reason, you must relate the standard approve trip facts task to a job called “head of department” (or similar), and maintain the organizational plan so that the respective chief positions of each organizational unit are described by this job.
Template WS20000050 (Approve Travel Request)

If a trip is created in the system with the travel request entered/to be accounted status, a workflow is started based on the RequestAppr template.

**Workflow template:** WS20000050

**Abbreviation:** RequestAppr

**Name:** Approve Travel Request

**Triggering Event of Workflow Template**

The Requested event (travel request to be approved) of the BUS2089 object type (employee trip) is entered as the triggering event of the workflow template.

This “linkage” between the event and the workflow template to be started is deactivated in the standard system. If you want to start the workflow template, the linkage must be activated in Customizing for SAP Business Workflow.

**Workflow Container and Binding**

The most important information that must be available during workflow are the object reference to the trip to be processed (_Evt_Object), and the name of the person who entered the trip data (_Evt_Creator). This information is available as event parameters in the container for the triggering event, and must be transferred to the workflow container by “binding”.

The standard system includes the following binding definition between the triggering event and the workflow container:

<table>
<thead>
<tr>
<th>Workflow Container</th>
<th>Event Parameter Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>_WF_Initiator</td>
<td>_Evt_Creator</td>
</tr>
<tr>
<td>EmployeeTrip</td>
<td>_Evt_Object</td>
</tr>
</tbody>
</table>

In the standard system, the _WF_Initiator element is included in the workflow container. The EmployeeTrip element was also created in addition to the existing standard elements.
Workflow Template WS 01000087 (Approve Travel Plan)

If a new or changed travel plan is saved/posted, a workflow of the PlanApproval template is started.

Workflow template: WS01000087  
Abbreviation: PlanApproval  
Name: Approve Travel Plan

Triggering Event of Workflow Template

The PlanCreated event (Travel Plan Created) of the BUS2089 object type (Employee Trip) is entered as the triggering event of the workflow template.

This “linkage” between the event and the workflow template to be started is deactivated in the standard system. If you want to start the workflow template, the linkage must be activated in Customizing for SAP Business Workflow.

Workflow Container and Binding

The most important information that must be available during workflow are the object reference to the trip to be processed (_Evt_Object), and the name of the person who entered the trip data (_Evt_Creator). This information is available as event parameters in the container for the triggering event, and must be transferred to the workflow container by “binding”.

The standard system includes the following binding definition between the triggering event and the workflow container:

<table>
<thead>
<tr>
<th>Workflow Container</th>
<th>Event Parameter Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>_WF_Initiator</td>
<td>_Evt_Creator</td>
</tr>
<tr>
<td>EmployeeTrip</td>
<td>_Evt_Object</td>
</tr>
</tbody>
</table>

In the standard system, the _WF_Initiator element is included in the workflow container. The EmployeeTrip element was also created in addition to the existing standard elements.
Workflow Template WS20000040 (Approve Trip)

When a trip is created with the trip completed/to be accounted status, the approve trip workflow is started.

**Workflow template:** WS20000040

**Abbreviation:** TripApproval

**Name:** Approve Trip

**Triggering Event of Workflow Template**

The Created event (trip to be approved) of the BUS2089 object type (employee trip) is entered as the triggering event of the workflow template.

This “linkage” between the event and the workflow template to be started is deactivated in the standard system. If you want to start the workflow template, the linkage must be activated in Customizing for SAP Business Workflow.

**Workflow Container and Binding**

The most important information that must be available during workflow are the object reference to the trip to be processed (\_Evt\_Object), and the name of the person who entered the trip data (\_Evt\_Creator). This information is available as event parameters in the container for the triggering event, and must be transferred to the workflow container by “binding”.

The standard system includes the following binding definition between the triggering event and the workflow container:

<table>
<thead>
<tr>
<th>Workflow Container</th>
<th>Event Parameter Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>_WF_Initiator</td>
<td>&lt;= _Evt_Creator</td>
</tr>
<tr>
<td>EmployeeTrip</td>
<td>&lt;= _Evt_Object</td>
</tr>
</tbody>
</table>

In the standard system, the \_WF\_Initiator element is included in the workflow container. The EmployeeTrip element was also created in addition to the existing standard elements.
Preparation and Customizing (FI-TV)

Use

You can use the following workflow templates when defining your process.

<table>
<thead>
<tr>
<th>Name</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve Travel Request</td>
<td>WS 20000050</td>
</tr>
<tr>
<td>Approve Travel Plan</td>
<td>WS 01000087</td>
</tr>
<tr>
<td>Approve Trip</td>
<td>WS 20000040</td>
</tr>
</tbody>
</table>

In addition to general customizing for Travel Management and workflow, specific customizing steps are required for this workflow template.

- Relationship Between System User Name and Personnel Number [Page 62]
- Set Up the Organizational Plan [Page 63]
- Task-Specific Customizing [Page 64]
- Maintenance of Event Receiver Linkage [Page 65]
Relationship Between System User Name & Pers. No.

Use

To ensure that an employee can be identified in workflow, a system user name must be related to the personnel number created for him or her.

The simplest way to define this relationship is by using infotype 0105 Communication.

Activities

Maintain the Communication infotype (0105) for all of the employees who are possible agents for Travel Management workflows. The system includes subtype/communication type 0001 - system user name (SY-UNAME) for this purpose.

If you require further information, see the relevant sections in the Implementation Guide by choosing Personnel Management → Personnel Administration → Communication.
Defining the Organizational Plan

Use
All of the persons who use the Travel Management workflow must be identified in Customizing for SAP Business Workflow.

Activities
To define a suitable organizational plan for the scenario, access the Implementation Guide, choose Basis Components → Business Management → SAP Business Workflow, and perform the Edit organizational plan step.

Important: Define positions created for the superior as chief positions.
Task-Specific Customizing

Use

Possible agents must be specified for every standard task used in the Travel Management workflows. By doing this, you define the organizational assignment for processing.

Activities

Call up the Implementation Guide, choose Basis Components → Business Management → SAP Business Workflow, and perform the Perform Task-Specific Customizing step.

- If you use the Approve Travel Plan workflow:
  a. Choose Financial Accounting → Travel Management → Travel Planning → Assign Tasks to Agent.
  b. Assign agents for the following standard tasks:

<table>
<thead>
<tr>
<th>Task Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 01000124</td>
<td>Approve Travel Plan</td>
</tr>
<tr>
<td>TS 60300084</td>
<td>Change Status of Travel Plan</td>
</tr>
<tr>
<td>TS 01000129</td>
<td>Change Travel Plan</td>
</tr>
<tr>
<td>TS 60300086</td>
<td>Cancel Travel Plan</td>
</tr>
</tbody>
</table>

- If you use the Approve Travel Request and/or Approve Trip workflows:
  a. Choose Financial Accounting → Travel Management → Trip Costs → Assign Tasks to Agent.
  b. Assign agents for the following standard tasks:

<table>
<thead>
<tr>
<th>Task Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 20000118</td>
<td>Approve Travel Request</td>
</tr>
<tr>
<td>TS 20000130</td>
<td>Set Trip Status to Approved</td>
</tr>
<tr>
<td>TS 20000131</td>
<td>Approve Trip Facts</td>
</tr>
<tr>
<td>TS 20000135</td>
<td>Check Trip Facts</td>
</tr>
<tr>
<td>TS 20000139</td>
<td>Create and Send Text</td>
</tr>
<tr>
<td>TS 20000189</td>
<td>Change Trip</td>
</tr>
</tbody>
</table>
Maintenance of Event Receiver Linkage

Use
To ensure that the workflow templates for Travel Management are started, linkage between the triggering event and the workflow template as the receiver of the event must be activated in Customizing for SAP Business Workflow.

Activities
Call up the Implementation Guide, choose Basis Components → Business Management → SAP Business Workflow, and perform the Perform Task-Specific Customizing step.

- If you use the Approve Travel Plan workflow:
  Choose Financial Accounting → Travel Management → Trip Planning to access the application component, and activate event linkage for the Approve Travel Plan workflow template.

- If you use the Approve Travel Request and/or Approve Trip workflows:
  Choose Financial Accounting → Travel Management → Trip Costs to access the application component, and activate event linkage for the Approve Travel Request and/or Approve Trip workflow templates.

Alternatively, you can activate event receiver linkage by processing workflow templates WS01000087 (Approve Travel Plan), WS20000050 (Approve Travel Request), and WS20000040 (Approve Trip) directly.
Using and Linking to Application Functions (FI-TV)

Purpose

The Approve Travel Plan, Approve Travel Request, and Approve Trip workflows support the approval procedure in Travel Management.

Process Flow

Workflow is started by an event that is created when a trip is saved.

The Approve Travel Plan workflow is started each time a travel plan is saved/posted.

The Approve Travel Request workflow is started when a trip is saved with the travel request/to be accounted status.

The Approve Trip workflow is started when a trip is saved with the trip completed/to be accounted status.

Changing Trip Data Without Workflow

If trip data is changed (using a data entry transaction, for example) after workflow has been started, the workflow is canceled automatically when the trip is saved. If the trip has the appropriate status, a new workflow is started at the same time.

This means that data entry transactions can still be used to approve a travel plan, travel request, or completed trip when a workflow is active. You can also approve travel requests and completed trips using the approval program [Ext.] in Travel Management.