Integration with SAP Business Workflow

Release 4.6C
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Integration with SAP Business Workflow

This section of the documentation on the Organizational Management component contains information on the integration with the SAP Business Workflow component.
Integration with SAP Business Workflow

Purpose

The main purpose of SAP Business Workflow [Ext.] is to get the right task to the right agent (organizational unit, position, job or user) at the right time. This speeds up the completion of business processes. Organizational Management provides the framework for a routing structure that SAP Business Workflow uses for task assignment at runtime. By scrolling through the complex network of relationships in an organizational plan [Ext.], SAP Business Workflow is able to pinpoint exactly where tasks should be routed. This organizational plan provides you with

- a flexible model of your company on the system, which you can manipulate to reflect actual and proposed human resources scenarios
- a structure along which you can route your business processes

There are two possible cases:

- The Organizational Management component is used for human resources purposes in your enterprise. In this case, you use the organizational plan for human resources purposes as well as for workflow. As long as integration between Personnel Administration and Organizational Management is active, you can assign tasks to both users and employees. You can assign users to employees in the Communication (0105) [Ext.] infotype.

- The Organizational Management component is not used in your enterprise. In this case, you create only a small part of your organizational plan in order that all workflows may run. As there is no integration with Human Resources, you can only assign tasks to users.

To reduce the number of agents found, or to restrict the number of agents responsible, you can use Role Resolution [Page 8].

Prerequisites

In order for Workflow to distribute tasks across your organization, you must first create the necessary organizational plan structures in the system.

Process flow

1. Familiarise yourself with the task distribution relevant to workflow in your enterprise.

2. Create an organizational plan, or part of an organizational plan in Simple Maintenance in Expert mode or in the Organization and Staffing (Workflow) view.

   For more information on creating an organizational plan, see About Simple Maintenance [Ext.] (expert mode) or Organization and Staffing (Workflow) [Ext.].

3. So that you can use SAP Business Workflow, assign tasks to the organizational objects (organizational units, positions, persons and/or users). There are various Task types which allow you to do this.

   For more information on creating and editing tasks, see Tasks and Task Groups [Ext.].

4. Define roles as required.

   For more information, see Role Resolution [Page 8].

5. You can use the organizational plan you create in SAP Business Workflow.
For more information on working with SAP Business Workflow, see SAP Business Workflow [Ext.].
Role Resolution

Use
Role resolution enables you to restrict the number of possible agents for a work item. Role resolution determines which responsible agents have a property described by a role [Page 10]. This improves the ability of SAP Business Workflow [Ext.] to get the right task to the right person at the right time.

Integration
The tools used to define roles [Page 15] are part of the Organizational Management component. At runtime, the SAP Business Workflow component uses the roles defined here in conjunction with the organizational plan for role resolution to determine agents for work items. (Decision as to which tasks must be assigned to which agents)

Prerequisites
To facilitate role resolution, roles must be defined [Page 15].

Features
The system performs role resolution. It is first performed at runtime depending on and using information from the process currently running.

The example refers to the role "orders administrator for customer <customer> as of order amount <order amount>".

If customer "Miller Ltd." and order amount "$34,569.34" are determined for a specific order, the agents are determined at workflow runtime who are the "orders administrator for customer Miller Ltd. as of order amount $34,569.34".

The principle of role resolution is always the same:
- The contents of the role container are read.
- The “regulations” or “rules” resulting from the role type are applied to this data.
- The agents so determined are returned as the role resolution result to an internal table with the structure SWHACTOR. This table contains the agents as Organizational Management objects (user, person, position, job, organizational unit) in the required "mix".

The type of role determines how role resolution is performed exactly. You can determine the type of role when defining a role.
Role

Definition

Object used by the SAP Business Workflow component to determine possible agents for a work item.

Use

You use roles to specify an agent (or agents) for a task if the set of possible agents is too large, or not specific enough. By assigning work items to organizationally suitable employees, responsibilities and authorizations are managed efficiently, and bottlenecks are avoided.

You want to forward Mr. Smith’s notification of absence to his head of department. All heads of department at your enterprise are possible agents for a notification of absence. However, you do not want every head of department to receive Mr. Smith’s notification of absence. At runtime, the role used to determine a manager [Page 50] enables you to evaluate assignments (relationships) within an organizational plan. The system uses relationships to determine that Ms. Miller is Mr. Smith’s head of department. The task is forwarded to Ms. Miller.

Further examples:

Role to Determine Design Office [Page 43]
Role to Determine Organizational Unit of a User [Page 56]

The agent for a role does not have to be a user. All of the objects in the Organizational Management component can be agents for a role.

The workflow uses the values in the role container to select a subset of possible agents. Role resolution, which is performed at runtime to determine the agent for a workflow step, is therefore an intelligent, efficient, and flexible tool.

Roles as Default Roles for Defining Single-Step Tasks

When defining single-step tasks [Ext.], you can specify particular agents or recipients by their role in the following instances:

- Agent for task
- Recipient for completion
- Recipient for missed latest end
- Recipient for missed start
- Recipient for missed end

In this context, reference is made to default roles for a task. Specifying default roles for a single-step task is always optional. If default roles are specified, you may need to define binding from the task container to the role container.

Resolution is performed for default roles before the single-step task is executed. (If the single-step task is used as a step in a workflow definition, resolution is only performed for default roles if the workflow definition contains no other information with regard to responsibilities or recipients.)
As a general rule, a single-step task can only be executed by its possible agents (or a subset thereof) when it is processed.

Specifying a role restricts these agents to those you have selected. This method cannot be used to authorize new agents to execute a customer task/standard task.

**Roles in Workflow Definition**

When the following steps of a Workflow Definition [Ext.] are defined, the agents responsible and the recipients can be specified by their role:

- Activities
- Wait steps
- User decisions

These specifications only have local validity for the respective workflow definition, and they are optional.

(Specifying a role is just one of several methods that can be used to specify the agents responsible and the recipients. It is also possible to specify responsibility by using a suitable organizational object (job, position, organizational unit) or by using an expression [Ext.] with reference to the workflow container.)

**Structure**

There are various ways of defining roles. You can use the following:

- Function modules
  You use a function module to define standard roles if the agent for a task must be found according to extremely complex selection criteria. If you define roles using function modules, the system finds agents by executing the function. How data is obtained varies from function to function. You can use predefined functions, or create your own functions.

- Organizational data
  You use organizational data to define standard roles if your business processes are managed on the basis of your organization model. If you define roles using organizational data, role resolution traces the possible agents for a task by using the relationships between the task, the objects in Organizational Management, and the SAP organizational objects.

- Responsibilities
  You use responsibilities to define standard roles if you need more precise selection criteria to find agents, but do not want to use function modules. You can also use the organization model to find possible agents using jobs, positions, etc.

All three methods offer certain advantages. However, it is preferable to use responsibilities because you do not require ABAP coding, and can easily display and change agent assignments. You can define as many criteria for a role as required, even if you only want to use some of these criteria for the responsibilities.

Each role has a role container [Page 13] that includes the values on which role resolution is based.
Role

Roles are always defined across clients, and they are always connected to the transport system as cross-client transport objects. At this time, the definition of client-specific roles is not supported.

When saved, each role is assigned an 8-digit number by the system that is preceded by AC, which is used for identification purposes.
Role Container

Use
The role container contains a role’s parameters. Each role has just one role container. At runtime, the role parameters contain the current, context-specific information that forms the basis of role resolution. Therefore, the role parameters constitute “input” for role resolution.

The role parameters are provided with values from the workflow container via binding.

Features
Depending on the role resolution procedure, the role container includes the following information:

<table>
<thead>
<tr>
<th>Role resolution procedure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on responsibilities</td>
<td>The role container includes object references or field values (with names as required) that must be provided with values from the calling component via binding.</td>
</tr>
<tr>
<td>Including organizational data</td>
<td>The role container only includes the Org_Object_ID element. This element is defined with a reference to the SAP organizational object whose assigned agents must be determined. The role container is created automatically, and is not visible during role definition.</td>
</tr>
<tr>
<td>By executing a function module</td>
<td>The role container includes object references or field values as required (with names as required) that are read by the function module for role resolution and processed accordingly. Prior to role resolution, the container elements are provided with values from the task container via binding.</td>
</tr>
<tr>
<td>Based on evaluation paths</td>
<td>The role container includes the following elements:</td>
</tr>
<tr>
<td></td>
<td>• OType, data type reference OBJEC-OTYPE</td>
</tr>
<tr>
<td></td>
<td>Type of object in Organizational Management according to the first step in the evaluation path</td>
</tr>
<tr>
<td></td>
<td>• ObjID, data type reference OBJEC-REALO</td>
</tr>
<tr>
<td></td>
<td>Identification of organizational object.</td>
</tr>
<tr>
<td></td>
<td>• Org_Agent, data type reference WFSYST-AGENT</td>
</tr>
<tr>
<td></td>
<td>C14 field as combination of organizational object type and organizational object.</td>
</tr>
</tbody>
</table>

When defining the role, create either the first two elements, or the last element, as role parameters in the container.
Role Container

Activities
You maintain the role container on the Container tab page when maintaining the roles.
Role Definition

Use
You use this function if you want to define more roles in addition to the roles delivered by SAP.

Prerequisites
Before you start defining roles, you must start the workflow process.

1. Decide what you want the workflow to achieve, and break it down to the smallest meaningful units of work. These units of work become single-step tasks in your workflow.

2. Select the objects you require. To do so, create a business object or use one of the existing objects. You should be able to find an object that you can use in the Business Object Repository.

3. Each task accesses an object method. Make sure that the methods you require already exist.

4. Create the tasks, or use the existing tasks. Define the possible agents for the task in the task definition.

5. Group the tasks together in the workflow.

6. Assign agents to the work items in the workflow definition. They must be a subset of the possible agents for the task. If this is not the case, the work item is not executed.

You can do this manually, as a 1:1 assignment, or by using role resolution.

For more information, see SAP Business Workflow [Ext.].

Features
When defining a role, you determine

- Which information must be available so that role resolution can be performed when the workflow is executed.
  
  This information constitutes the role parameters. They are defined as elements of the role container.

- The rules or regulations in role resolution that are used to determine the appropriate employees.
  
  The role resolution procedure is determined by the role type.

The Responsibilities Role Type
When role resolution is performed, an assignment table is evaluated in which Organizational Management objects (jobs, positions, users, organizational units) are assigned to the various characteristics of the role parameters. This assignment table was explicitly created during role definition.

For more information, see Define Roles Using Responsibilities [Page 18].
Role Definition

The Organizational Data Role Type

When role resolution is performed, the system evaluates SAP organizational objects, such as materials controller, planner group, shipping point, or sales office, which are maintained in the master data of an application object.

This type of role resolution requires the use of a separate maintenance transaction independent of role definition to create assignments between the SAP organizational objects and the organizational objects in Organizational Management (jobs, positions, users, organizational units) with which they are related.

For more information, see Define Roles Using Organizational Data [Page 25].

The Function to be Executed Role Type

When role resolution is performed, a function module is accessed that then facilitates evaluations as required. A table that is maintained in Customizing is evaluated by the function module. The function module must adhere to a given interface, and is specified during role definition.

For more information, see Define Roles Using Function to be Executed [Page 44].

Role Resolution Based on Evaluation Paths

When role resolution is performed, the system uses information that is available in Organizational Management on the basis of relationships between individual objects that are maintained in an organizational plan.

This information can be used, for example, if you need to determine the head of an organizational unit, or the remaining members of the organizational unit, starting from the initiator of the workflow.

From a technical perspective, this role resolution is very similar to role resolution by executing a function module. The RH_GET_STRUCTURE function module must be used; an evaluation path is also specified.

For more information, see Role Resolution Using Evaluation Paths [Page 51].

Activities

If you want to use role resolution to restrict the number of possible agents for a work item in a workflow, you must:

1. Choose SAP menu → Tools → Business Workflow → Development → Definition tools → Standard roles to select the tools used to define roles
2. Decide how you want to find agents in the system, that is, using function modules, organizational data, or responsibilities
3. Create a container definition (not for the organizational data role type)
4. Binding is automatically suggested for the workflow. Confirm that the fields in the role container are compatible with the fields in the workflow container.

5. Start the workflow.

At runtime, role resolution provides you with a table containing a set of possible agents. These agents are determined at runtime using the values assigned to the role container elements.
Define Roles Using Responsibilities

Use
A responsibility is an organizational object in which you group criteria together that are required by the workflow at runtime to assign work items to possible agents. This type of criteria definition does not require Customizing settings or ABAP coding.

If you use responsibilities for role definition, you enjoy numerous advantages. You can

- Use criteria that you select as required
- Work with value ranges or individual values
- Display (and change) user assignments
- Group several criteria together in a responsibility

Prerequisites
Before defining roles, you must define workflow steps using the procedure described in SAP Business Workflow [Ext]. You then define the tasks that must be executed. Finally, you use roles to assign and find a list of possible agents for the task at runtime.

Procedure
Responsibilities can only be created for existing standard roles.

To define roles using responsibilities, proceed as follows:

1. Create a container definition [Page 20]
   A container is a generic structure that transfers data at runtime. You must create the container definition first because the responsibility depends on the data that you select in the container. You must define a container element for each criterion that you select for the evaluation at runtime.

2. Create a responsibility [Page 22], and define criteria (individual values or value ranges) in the responsibility editor for the container elements.
   At this point, you can also process the values and display the container elements.

3. Assign users or organizational objects to the responsibility [Page 24]
   If the values in the role container are compatible at runtime with the criteria defined for a responsibility, the organizational objects assigned to this responsibility are identified as possible agents for the work item.

Result
If the values in the role container are compatible with the criteria defined for the responsibilities, SAP Business Workflow identifies the possible agents for a work item. As a result, the right person receives the right work item at the right time. This ensures that business processes at your enterprise run efficiently and on schedule.
Creating a Container Definition

Prerequisites

A container definition informs the system about the data type processed by the workflow.

You must decide whether you want to create a container definition that references table fields or object types. When the container definition references object types, you use values in the key fields of objects to restrict the list of possible agents. When the container definition references Data Dictionary fields, you can use specific data such as the amount of an order or the customer name on an invoice to restrict the list of possible agents.

To call the transaction for processing roles, access the SAP menu and choose Tools → Business Workflow → Development → Definition tools → Standard roles → Create.

The Maintain Standard Role screen appears.

Creating a Container Definition with Table Fields

1. Choose Create.
   
   The Standard Role: Create screen appears.

2. Enter a name for your standard role in the Basic Data box.

3. Select the role type Responsibilities.

4. Choose Container Definition in the Role Definition box.
   
   The Standard Role: Process Container screen appears.

5. Choose Create.
   
   The Create Element dialog box appears.

6. If you want to use Data Dictionary fields, choose Yes.
   
   The Create with Data Dictionary Field Defaults dialog box appears.

7. Specify the table from which you want to select fields and Choose Continue.
   
   The table appears.

8. Select the fields that you want to appear in the container definition and confirm your entries by choosing Continue.
   
   The system prompts you to create the texts for the container elements in the Create dialog box.

   
   The Element <....> dialog box appears. If you select the required indicator, an error will occur in the workflow if no binding has been defined for the element. If you select the multiple lines indicator, you can specify multiple values for one container element. You can select both indicators. Choose Continue.

10. Choose Back.
    
    The Standard Role: Create screen appears.
Creating a Container Definition with Object Types

Carry out steps 1 to 5, and then proceed as follows:

6. If you want to use object types, choose No.

   The Standard Role: Process Container screen appears.

7. Enter a name for the element. If you select the required indicator, an error will occur in the workflow if no binding has been defined for the element. If you select the multiple lines indicator, you can specify multiple values for one container element. You can select both indicators.

8. Select the object type you want to reference, and choose Continue.

   The Standard Role: Process Container screen appears.


   The Standard Role: Create screen appears.

Result

You have created a container definition with either Data Dictionary fields or object types as elements. You use these elements to define the criteria for role resolution.
Creating a Responsibility

Prerequisites

Before you create responsibilities, you must Create a Container Definition [Page 20]. The values in the role container must either agree with the criteria defined for the responsibility or be in their area. The reason for this is that role resolution compares the two values in order to return a list of possible agents.

If you have created a container definition, the Responsibilities button appears on the Add Standard Role screen in the Role definition group box. If you are no longer on the Standard Role Definition screen, then in the SAP Standard Menu, choose Tools → Business Workflow → Development → Definition Tools → Standard Roles → Change and enter the required role. Choose Change.

Creating a Responsibility

On the Standard Role: Create screen:

1. Choose Responsibilities from the Role definition group box.
   The Responsibilities: Change screen appears.
2. Select the superior object (the role you are creating) and choose Create.
   The Create Responsibility screen appears.
3. Enter the name and the validity period of the responsibility and confirm your entries.
   The Change responsibilities for standard role screen appears. This is the responsibility editor.
4. Define values (either single values or value areas) and choose Save.
5. If you do not want to check all criteria for a particular responsibility, leave this line blank.
   The LED display turns yellow, to make you aware that some of the criteria of the standard role will not be checked for this responsibility.

Responsibility Editor

On the Change responsibilities screen, select the responsibility that you wish to edit and choose Change. The Change responsibilities for standard role screen appears. You can:

- Edit the values for each element
- Create a description for a responsibility
- Display a container definition
- Display details on each element

Result

You have created a responsibility with container elements.
Assigning Agents

Prerequisites
You must first create a container definition [Page 20] and then create a responsibility [Page 22], in which you define criteria for the container values. You then assign an agent to each responsibility.

If you are no longer on the Standard Role Definition screen, then in the SAP Standard Menu, choose Tools → Business Workflow → Development → Definition Tools → Standard Roles → Change and enter the required role. Choose Change and on the Standard Role: Change screen, choose Goto → Responsibilities.

Procedure
On the Responsibilities: Change screen:

1. Select the responsibility you want to assign to an agent and choose Edit → Agent assignment → Create.
   
   The Selection dialog box appears.

2. Select the organizational object type you want to assign as an agent and choose Continue.
   
   The system asks you to enter a search term and to create the relationship between the responsibility and the selected object. Confirm your entries.

   In the Overall View, you can also specify a validity period for the relationship.

Result
At runtime, the workflow evaluates the possible agents and ensures that the right tasks are routed to the right agents at the right time.
Defining Roles Using Organizational Data

Use

A Business Object is often related with an organizational entity (such as MRP controller, laboratory, sales group, purchasing organization, or planner group) by virtue of its master data. From a technical perspective, organizational entities are represented by object types in the Business Object Repository. The indicator organizational type in their basic data defines such object types as SAP Organizational Objects [Page 27]. The attributes of an application object type can be defined with a data type reference to a SAP organizational object type.

These can be evaluated for role resolution purposes to locate the agent of a step. For this to function correctly, you must assign specific agents in the form of positions or organizational units from Organizational Management to the abstract SAP organizational objects. At runtime, these assignments are evaluated in a role resolution if the required input data is available.

The role resolution finds a valid organizational object from Organizational Management as output data.

There are some changes required to be made to material master data.

This task should be routed to employees in the Laboratory/Design Office stored in their material master data. SAP delivers the sample role LABOR from the SAP Organizational Objects for agent determination purposes. For more information, see Role to Determine a Design Office [Page 43].

Someone should contact the supplier of a certain material.

This task should be routed to employees in the purchasing group stored in the material master data.

Procedure

Relationship Between Organizational Plan and SAP Organizational Objects

You have to set up a relationship between SAP Organizational Objects and the corresponding organizational units or positions in the organizational plan. This step must always be performed because the organizational plan is set up by each customer specific to the enterprise.

For more information, see Assign SAP Organizational Objects [Page 29].

Definition of a Role for Evaluating this Relationship

You define a role according to a predefined schema that can evaluate the above relationship between the organizational plan and SAP Organizational Objects. This step is only required if you cannot use any of the roles delivered in the standard system.

For more information, see Defining Roles [Page 38].
Defining Roles Using Organizational Data

Entering the Role for Specifying Responsibility

You enter the role as agent of an activity or a single-step task and maintain the role container binding.

For more information, see Defining Binding [Page 39].

The single step task Material Master: Maintain Design Data should always be processed by the MRP controller responsible for the material.

**Definition time:** The role Determine laboratory/design office is specified as the role of the agent of the step Material Master: Maintain Design Data. The binding definition is &Material.Labor& (Workflow Container) -> ORG_OBJECT_ID (Role container).

**Run time:** The material H4 Lamp, for example, is processed by the task. When the material is known, the agent determined for the work item could be the user that has the role of MRP controller for this material.

**Result**

At runtime, the workflow determines what organizational objects have the actual values of the key fields of the SAP organizational objects assigned to them. These organizational objects become the agents for the work items.

For more information, see Agent as Attribute of SAP Organizational Object [Page 40].
SAP Organizational Object

Definition

Instance of an SAP Organizational object type defined in the Business Object Repository.

Use

You can route tasks to the appropriate users by creating relationships between SAP Organizational Objects – which reside in the Business Object Repository (BOR) – and the Organizational Management objects. The system finds an agent by tracing the relationships between the task, the SAP Organizational Object and the Organizational Management object.

Before you can edit object assignments, you must choose the objects with which you want to work. You can then create relationships between the two kinds of objects. This allows you to use roles to identify potential agents for tasks in SAP Business Workflow. Once you have created these object assignments, you can edit, delete, delimit, and view them.

SAP Organizational object types represent organizational units on the object type level in the Business Object Repository. These units are used to form and describe employee groups.

Examples of organizational units and corresponding SAP organizational object types are:

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS0005</td>
<td>Shipping point</td>
</tr>
<tr>
<td>BUS0007</td>
<td>Purchasing organization</td>
</tr>
<tr>
<td>SAP_40132</td>
<td>Work scheduler group</td>
</tr>
<tr>
<td>T024</td>
<td>Purchasing groups</td>
</tr>
<tr>
<td>T024D</td>
<td>MRP controller</td>
</tr>
<tr>
<td>T024L</td>
<td>Laboratory/office for material</td>
</tr>
<tr>
<td>TVKGR</td>
<td>Sales group</td>
</tr>
</tbody>
</table>

What does SAP deliver?

The attribute relationships between Business object types and SAP organizational object types mentioned above are, as a rule, already defined in the Business Object Repository.

Structure

A relationship between an SAP organizational object and a business object type is defined in such a way that the SAP organizational object is available as an attribute of an application object.
SAP Organizational Object

For the object type BUS1001 (material), the attribute Laboratory is defined by a data type preference from object type T024L (laboratory/design office for material).

Integration

SAP Organizational Objects must be entered in table T7791, in order for these assignments to Organizational Management objects to be possible. This table is preset in the appropriate format, and you can add new entries.
Assigning SAP Organizational Objects

Use

So that you can define roles using organizational data, you must create and edit assignments between SAP organizational objects and Organizational Management organizational objects.

For example, you want to restrict the task of buying certain materials to certain individuals within a specific organizational unit. This is achieved by creating an assignment between a purchasing group (purchasing groups are SAP Organizational Objects) and an organizational unit.

You can create assignments between any object classified as an SAP Organizational Object, and the Organizational Management objects – organizational units, positions, jobs, and work centers. You apply a validity period to these assignments, so that changes in responsibility can be shown.

Procedure

1. From the SAP menu, choose Tools → Business Workflow → Development → Definition tools → Organizational Management → SAP Org. Objects → Create Assignments.

   The Assignment to SAP Organizational Objects: Initial screen appears.

2. In the Organizational unit and Selection period fields, identify the Organizational Management objects you want to edit.

   Entries in these fields allow you to confine the objects you edit to:
   - A specific area of the organizational plan
   - Objects in the organizational plan that are valid during a specified time frame

   Enter a superior organizational unit if you want to create a relationship between an SAP organizational object and a position. You will subsequently be able to navigate from the selected organizational unit to the object.

3. In the View dialog box, select the SAP Organizational Objects you want to edit. You can choose either:
   - Organizational object type
     You confine your work to specific SAP Organizational Object Types. This reduces the number of steps you perform later, if creating assignments.
   - All organizational object types
     You can work with all types of SAP Organizational Objects. Select an object.

4. You can also create [Page 31], delimit [Page 34] or delete [Page 36] object assignments.

Assignments between SAP organizational objects and organizational objects from Organizational Management can also be created in Infotype 1208 [Ext].
Creating Object Assignments

Prerequisites

You want to create a relationship between an organizational unit or a position and an SAP organizational object, in order to create the link between positions and MRP controllers or organizational units and design offices.

Prerequisites

You are in the Assigning SAP Organizational Objects: Initial screen and have selected the organizational unit and SAP organizational object, which you want to edit. (See Assigning SAP Organizational Objects [Page 29])

Procedure

1. Choose Assignment → Change.

   Another screen appears, displaying the Organizational Management objects you selected.

   The tree structure can display additional information, including existing assignments with SAP Organizational Objects, and other Organizational Management objects in the organizational plan. To adjust the data displayed so that it meets your requirements, choose View.

2. Select the Organizational Management object you want to assign.

3. Choose Assignment → Create.

4. The procedure now varies, depending on the selections made in step 2:

5. If you are working with a specific SAP Organizational Object type, the appropriate dialog box appears, in which you can identify a specific object (for example, a specific purchasing group).
   - Make the appropriate selections from the dialog boxes.

If you are working with all SAP Organizational Object types, a series of dialog boxes appears, allowing you to identify the type of SAP Organizational Object type you want to work with, and then a specific object.

   - Make the appropriate selections from the dialog boxes.

You want to create a relationship between the organizational unit 50001285 and the SAP organizational object Laboratory, which is described by the key field 002.

To do so, create a new relationship between the organizational unit and the SAP organizational object TO24L (Laboratory). A dialog box appears in which you can specify the key field for this SAP organizational object.
Creating Object Assignments

**Result**

The system saves the assignment and displays it in the tree structure.
Function Module

The following function module enables you to set up a relationship between an SAP organizational object and a position or organizational unit:

**RH_SAP_ORG_OBJEC_RELATE**

Assigns an SAP organizational object to an object in Organizational Management

**Interface**

**Export Parameters**

- **ACT_OBJTYPE**, reference field P1208-OBJTYP
- **ACT_OBJKEY**, reference field P1208-OBJKEY

**Exceptions**

- **SAP_OBJECT_KEY_NOT_VALID**

When the function module is accessed, you specify the SAP organizational object type (name is taken from the Business Object Repository) and the object type-specific key that is used to uniquely identify an object of this type.

You assign an organizational unit to this SAP organizational object in the input field. This relationship is transferred to Organizational Management.
Delimiting Object Assignments

Use

You can delimit object assignments to change the validity period applied to the relationship between an Organizational Management object and an SAP Organizational Object, so that the end date occurs sooner than stated.

It can be necessary to delimit the object assignment, for example, if you plan to redirect responsibility for a task at a specific time in the future.

Prerequisites

You are in the Assigning SAP Organizational Objects: Initial screen and have selected the organizational unit and SAP organizational object, which you want to edit. (See Assigning SAP Organizational Objects [Page 29])

Procedure

1. Choose Assignment → Change.

   Another screen appears, displaying the Organizational Management objects you selected.

   The tree structure can display additional information, including existing assignments with SAP Organizational Objects, and other Organizational Management objects in the organizational plan. To adjust the data displayed so that it meets your requirements, choose View.

2. Select the assignment that should be delimited:

   a) Locate the two objects in the assignment in the tree structure

   b) Choose the object that is at the lower level of the tree structure

3. Choose Assignment → Delimit.

   A screen appears, displaying the assignment information.

4. In the second Validity field, enter the appropriate end date for the validity period.

5. Choose SAP OrgObjects → Delimit.

   A message appears confirming the system has delimited the assignment.
Deleting Object Assignments

Use
You should only delete assignments between Organizational Management objects and SAP Organizational Objects only if you want to erase all record of an assignment from the database.

⚠️ Deletions should only be necessary if positions have been created incorrectly or by accident. If you want to indicate that responsibilities have changed, use the delimit feature instead.

Prerequisites
You are in the Assigning SAP Organizational Objects: Initial screen and have selected the organizational unit and SAP organizational object, which you want to edit. (See Assigning SAP Organizational Objects [Page 29])

Procedure
1. Choose Assignment → Change.
   Another screen appears, displaying the Organizational Management objects you selected.
   The tree structure can display additional information, including existing assignments with SAP Organizational Objects, and other Organizational Management objects in the organizational plan. To adjust the data displayed so that it meets your requirements, choose View.
2. Select the assignment, which you want to delete:
   a) Locate the two objects in the assignment in the tree structure
   b) Choose the object that is at the lower level of the tree structure
3. Choose Assignment → Delete.
   A message appears asking you to confirm that you want to delete.
4. Choose Yes.
   The system deletes the assignment.
Define Role

Prerequisites
You want to define a role whose resolution refers to an SAP organizational object type.

Procedure
1. Create a new role. To call the transaction for processing roles, access the SAP menu and choose Tools → Business Workflow → Development → Definition tools → Standard roles → Create.
2. Select the Organizational data checkbox.
3. Specify an SAP organizational object type.

Result
The role container is created automatically. It includes just one element, Org_Object_ID, in which the object reference to the SAP organizational object is stored.

In this instance, you do not need to specify a function module or define a role container when defining the role.
Define Binding

Prerequisites

You have used your role container to create a role whose resolution is based on the evaluation of organizational data. For more information, see Define Role [Page 38].

To “provide” the role container with the object reference to the SAP organizational object, you now define binding for the role container:

- If you use the role for a single-step task, you define binding from the task container.
- If you use the role for a step, you define binding from the workflow container.

Procedure

Assign the following to the role container element: an expression that references the SAP organizational object as an attribute of the application object to be processed.

\[ \text{Org Object ID} \leq &<\text{object reference}>.\langle\text{object reference}\rangle & \]

At runtime, the object reference to the processed object of the type material is included in the workflow container under the name Material. You assign the laboratory attribute of this object to the role container in the binding definition. By doing so, you take advantage of the fact that an attribute has been created for the material object type under the name Laboratory that includes an object reference to the design office. You define binding as follows:

<table>
<thead>
<tr>
<th>Org_Object_ID</th>
<th>\leq</th>
<th>&amp;Material.Labor&amp;</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Role container)</td>
<td>(Workflow container)</td>
<td></td>
</tr>
</tbody>
</table>
Agent as Attribute of SAP Organizational Object

Use

Organizational entities, which are specified in the master data of a business object, are usually supported by positions or organizational units, which may need to be addressed as the recipient of a work item. The following description illustrates the procedure used to determine these agents on the basis of organizational entities, and how they are indirectly available as attributes of the business object.

SAP Organizational Object Types

Prerequisites

Business Object Type and SAP Organizational Object Type

From a technical perspective, organizational entities are represented by SAP organizational objects [Page 27] in the Business Object Repository.

The attributes of an application object type can be defined with references to these SAP organizational object types.

SAP Organizational Object Type and the IFSTROBJCT Interface

Each SAP organizational object type (example: design office) should support the IFSTROBJCT interface. As a result, this object type inherits the agent attribute. This attribute returns the position or organizational unit that is related to the SAP organizational object.

Many SAP organizational object types supplied by SAP already support the IFSTROBJCT interface.
You only need to enhance a subtype of the corresponding object type with the IFSTROBJCT interface if this is not the case. Programming is not required.

**Activities**

**Relationship Between Organizational Plan and SAP Organizational Objects**

Each SAP organizational object must be related to the corresponding position or organizational unit. This step must always be performed because the organizational plan is initially determined for specific customers.

For more information, see Assign SAP Organizational Objects [Page 29].

**Responsibility for a Step**

When responsibility is determined for a step as part of a workflow definition, the agent can be derived from the workflow container and specified using a multi-level expression of the following type:

&<business object type>.<SAP organizational object type>.agents&.

On the entry screen for Responsibility, select Container and enter 
&Material.Labor.Agents&.

This procedure means there is no need to define and use a corresponding role.

**Error Handling**

When this step is performed, the following error situations can arise after the expression has been evaluated:

- The agent that is determined does not belong to the possible agents for the underlying single-step task.
- The relationship between the organizational plan and organizational object (see above) is not maintained, or not maintained in full.

If one of the above error situations arises, the step is instantiated as a work item and addressed to all of the possible agents for the single-step task.

**Reference to Related Topics**

An alternative concept exists that also makes use of the link between organizational entities and business objects and requires the definition of a role. This concept, which appears initially to be less easy to use, is required, for example, if you need to enter a role as a default role for a single-step task, or if a different method must be used to solve errors.
Role to Determine Design Office

Definition
A role delivered by SAP for determining the employees in a particular design office.

Use
This role enables you to use material to be processed to address the controller responsible for the material. As a result, the object reference to the material to be processed (object type BUS1001) is usually included in the _WI_Object_ID element of the task container, and/or in a Material element (or similar) of the workflow container.

This BUS1001 object type has the Laboratory attribute, so that an expression of type &_WI_Object_ID.Laboratory& and/or &Material.Laboratory& must be specified as the source of binding for the Org_Object_ID element of the role container.

Structure

<table>
<thead>
<tr>
<th>Role:</th>
<th>30100012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation:</td>
<td>Laboratory</td>
</tr>
<tr>
<td>Name:</td>
<td>Determine laboratory/design office</td>
</tr>
</tbody>
</table>

Integration
Individual positions from the organizational plan must be related with the corresponding SAP organizational objects of the T024L Laboratory/design office for material type. These relationships are evaluated for role resolution.
Defining Roles Using Function to Be Executed

Use
You use function modules for role definition when very complex selection criteria are required for agent determination, in other words, when it is not possible to use responsibilities to model agent selection. Function modules provide you with a very powerful tool for determining the agent of a task in Workflow.

Prerequisites
1. You must specify what job you expect the workflow to perform. Depending on this, you decide whether you want to use a standard function module delivered by SAP or your own function module that suits your requirements exactly. To avoid having to display the coding of the function module during the procedure, you should be absolutely sure about what container elements are required by the function module beforehand. If you do need to check the coding of a function module, on the Standard Role: Display screen, choose Goto → Function module.
2. You created your own function module, where relevant. The function module must enable the following process:
   a. The role container transferred as the table parameter AC_CONTAINER is read using the macro commands SWC_GET_ELEMENT and SWC_GET_TABLE.
      If you want to have the macro commands available, you must integrate the Include <CNTN01> as a sub-report for shared use. <CNTN01> mainly contains the macro command definitions for creating and processing a container instance.
      For a complete list of all macro commands, refer to:
      Macro Instructions for Processing a Container Instance in a Program [Ext.]
      Macro Instructions for Accessing Objects, Attributes and Methods [Ext.]
   b. The role parameters are used to determine the relevant agent. At its simplest, this sub-program consists of a loop on a (Customizing) table, from which the agent is selected.
   c. The table ACTOR_TAB is filled.
      (See also Example [Page 46])
2. You have created a role. To call the transaction for processing roles, access the SAP menu and choose Tools → Business Workflow → Development → Definition tools → Standard roles → Create.

Procedure
On the Standard Role: Create screen:
1. Select Function to be executed.
2. Enter the name of the function module. For example, if you want to use a function module for reporting on the organizational structure, you can enter RH_GET_STRUCTURE.
3. Save the role.
Depending on what function module you used, the field *Evaluation path* appears.

4. Enter the relevant evaluation path and choose *Save*.

5. Choose *Container Definition*.
   The *Standard Role: Process Container* screen appears.

6. Choose *Create*. The *Create Element* dialog box appears.

7. If you want to use Data Dictionary fields, choose *Yes*.
   The *Create with Data Dictionary Field Defaults* dialog box appears.

8. Specify the table from which you want to select fields and choose *Continue*.
   The table appears.

9. Select the fields that you want to appear in the container definition. Bear in mind that these are the elements required by the function module.
   The system prompts you to confirm the texts for the container elements.

10. Choose *Back*.
   The *Standard Role: Create* screen appears.

**Result**

Workflow executes the function module and, depending on the container data, returns a list of possible agents.
Function Module for Role Resolution

The following excerpts from a fictitious function module for role resolution, which determines the agent responsible on the basis of a release code and object to be released, can be used as an example.

The ReleaseCode and ReleaseObject elements are defined in the role container as role parameters.

```
FUNCTION GET_REL_RESPONSIBLE.
  "----------------------------------------------------------
  "* Lokale Schnittstelle:
  "* TABLES
  "* ACTOR_TAB STRUCTURE SWHACTOR
  "* AC_CONTAINER STRUCTURE SWCONT
  "* EXCEPTIONS
  "* NOBODY_FOUND
  "----------------------------------------------------------
  INCLUDE <CNTN01>.
  * define variables stored in container
  DATA: RELEASE_OBJECT TYPE SWC_OBJECT.
  DATA: RELEASE_CODE LIKE RM06B-FRGAB.
  * local data
  DATA: BEGIN OF RELOBJECTKEY,
     NUMBER LIKE EBAN-BANFN,
     POSITION LIKE EBAN-BNFPO,
  END OF RELOBJECTKEY.
  REFRESH ACTOR_TAB.
  CLEAR ACTOR_TAB.
  * convert persistent container to runtime container
  SWC_CONTAINER_TO_RUNTIME AC_CONTAINER.
  * read elements out of container
  SWC_GET_ELEMENT AC_CONTAINER 'ReleaseCode' RELEASE_CODE.
  SWC_GET_ELEMENT AC_CONTAINER 'ReleaseObject' RELEASE_OBJECT.
  * separate object key
  SWC_GET_OBJECT_KEY RELEASE_OBJECT RELOBJECTKEY.
  * loop and select table <TABLE> with
  "RELEASE_CODE
  "RELOBJECTKEY-NUMBER and REOBJECTKEY-POSITION
  ....
```
* end of selection

* exception and parameter handling
  IF SY-SUBRC NE 0.
    RAISE NOBODY_FOUND.
  ELSE.
    ACTOR_TAB-OYPE = <TABLE>-ACTOR_TYPE.
    ACTOR_TAB-OYPE = <TABLE>-ACTOR_TYPE.
    APPEND ACTOR_TAB.
    ENDIF.

ENDFUNCTION.
Interface of Function Module for Role Resolution

The interface of a function module for role resolution is described by the following parameters:

Table Parameters

**AC_CONTAINER, Reference Structure SWCONT**
Role container with role-specific parameters that must be available as input values for role resolution.

**ACTOR_TAB, Reference Structure SWHACTOR**
Table with results of role resolution as return values.

The SWHACTOR structure has the following logical appearance:

<table>
<thead>
<tr>
<th>Field name</th>
<th>Type</th>
<th>Length</th>
<th>Short text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otype</td>
<td>CHAR</td>
<td>2</td>
<td>Object type in Organizational Management</td>
</tr>
<tr>
<td>ObjID</td>
<td>CHAR</td>
<td>12</td>
<td>ID of object in Organizational Management</td>
</tr>
</tbody>
</table>

The structure consists of two fields:

- **OType** includes a 2-character character field that contains the identification of the object type in Organizational Management. At this time, the following object types are permitted as the result of role resolution:
  
  - **O** Organizational unit
  - **S** Position
  - **C** Job
  - **A** Work center
  - **US** User name
  - **P** Person (PD master data)

  The entries for **OType** are checked against table T779O [Ext.].

- **ObjID** includes a 12-character character field that contains the identifying name of a user and/or the unique ID (8-digit number) of an object in Organizational Management.

Exceptions

**NOBODY_FOUND**

If the function module for role resolution is exited via the **NOBODY_FOUND** exception, the status of the **Cancellation for role resolution without result for further procedure** indicator is decisive.

- The indicator is set:
  
  The work item and/or workflow from which role resolution was requested is assigned the **incorrect** status.

- The indicator is not set:
The work item and/or workflow from which role resolution was requested continues. To determine the agent, the possible agents are evaluated.

The cause of the error, which may have been output as a message when the exception was triggered, is logged in the history of the work item and/or in the workflow step log. The message type is not relevant to error handling.

**Error Handling for an Empty Table**

If the function module for role resolution is not exited via its `NOBODY_FOUND` exception, and if the `ACTOR_TAB` table with the agents is still returned empty, the above information applies accordingly.
Role to Determine Manager

Definition
A role delivered by SAP for determining the manager of an agent, position, or organizational unit.

Use
Oftentimes, you will use this role to find the manager of the initiator of a workflow, or the manager of the current agent of a step. The _WF_Initiator element of the workflow container and _WI_Actual_Agent element of the task container are used to store the user names in a 14-character character field in accordance with the RHOBJECTS-OBJECT reference. Binding, therefore, must be defined for the Org_Object element of the role container.

As an example, role 00000168 is also used in the example demo for processing a notification of absence. For more information, see Example Demo: Process Notification of Absence [Ext.].

Structure

<table>
<thead>
<tr>
<th>Role</th>
<th>00000168</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation:</td>
<td>Manager</td>
</tr>
<tr>
<td>Name:</td>
<td>Manager of...</td>
</tr>
</tbody>
</table>

The SWX_GET_MANAGER function module is used to define this role.

Integration
The organizational plan of the enterprise is used for role resolution.

The link between an employee and his or her manager can be depicted in the organizational plan by two different relationships:

- Indication of the chief position for an organizational unit (position "manages" organizational unit, relationship A/B012).
- Direct reporting structure between positions (position "reports to" position, relationship A/B002).
Role Resolution Using Evaluation Paths

Use

The organizational situation of employees within an enterprise is depicted in the organizational plan. Using this existing information, you can perform role resolution starting from one particular employee to determine one other employee, or several other employees, along specific relationships in the organizational plan.

The following role evaluates a function module to perform resolution. Please note that this function module is provided by SAP as a default.

Starting from a particular employee, you want to determine his or her organizational unit so that you can address a work item to all of the employees in this organizational unit.

The role that includes this functionality is available in your system and can be used as an explanation of this documentation. For more information, see the role used to determine the organizational unit of a user [Page 56].

Integration

From a technical perspective, this role resolution is very similar to Role Resolution Using a Function to be Executed [Page 44]. The RH_GET_STRUCTURE function module must be used; an evaluation path is also specified.

Activities

1. Maintain an organizational plan with the appropriate relationships.

2. An evaluation path describes how the relationships between organizational objects are processed in a particular logical order, as required for the role resolution described above.

3. Define a role that evaluates these relationships. This role uses the RH_GET_STRUCTURE function module to perform resolution.

   This step is only required if you cannot use any of the roles delivered in the standard system. For more information, see Define Role [Page 38].

4. If you enter the role as an agent for an activity or as a default role for a single-step task, maintain binding for the role container. For more information, see Define Binding [Page 54].
Define Role to Evaluate Evaluation Paths

Use
You want to define a role whose resolution is based on the evaluation of evaluation paths.

Procedure
4. Create a new role. To call the transaction for processing roles, access the SAP menu and choose Tools → Business Workflow → Development → Definition tools → Standard roles → Create.
2. Select the Function to be executed checkbox.
3. Enter RH_GET_STRUCTURE as the function module for role resolution.
   The named function module is provided by SAP for this purpose. Further programming is not required.
   If this function module is entered as a function module for role resolution, you can specify the evaluation path in an additional dialog box.
4. Define the role container.
   The role container for a role based on the RH_GET_STRUCTURE function module must only contain the following elements:
   Element OType, data type reference OBJEC-OTYPE: type of object in Organizational Management according to the first step in the evaluation path.
   Element Org_Agent, data type reference WFSYST-AGENT: C14 field as combination of object type in Organizational Management and object in Organizational Management.

Create the first two elements, or the last element, as role parameters.

The object type in Organizational Management (example: US) and the object in Organizational Management (example: SCHMIDT) can be transferred either to two separate fields or to one field (example: USSCHMIDT). Data specified in one field is evaluated first.

You define the manager_of role (manager of a user). To do so, you refer to the RH_GET_STRUCTURE function module and specify US_CHEF as the evaluation path.

You create a new element with the name Org_Agent in the role parameter container.
You define this container element as an obligatory element with a data type reference to dictionary table field WFSYST-AGENTS.
Define Binding

Prerequisites

You have created a role based on the RH_GET_STRUCTURE function module using your role container.

To "provide" the role container with the agent that represents the starting point of role resolution, you now define binding for the role container:

- If you use the role as a default role for a single-step task, you define binding from the task container.
- If you use the role as a role for a step, you define binding from the workflow container.

The workflow container and task container include system fields that are always available. In the standard system, they are filled by the workflow system. These container elements often include the information required as role parameters and can, therefore, be used as a source for binding. The following container elements include information on users in a C14 field in the <USName> structure.

- The _WF_Initiator element of the workflow container
- The _WI_Actual_Agent element of the task container

Procedure

The procedure is explained using the example of an "approve leave" single-step task. This task must always be completed by the manager of the person who submits the request. Therefore, you want to enter the manager_of role as the default role, and then integrate this customer task as an activity in a workflow definition.

1. Create an element in the task container called applicant with reference to the WFSYST-AGENTS ABAP Dictionary field.
2. Declare the manager_of role as the default role of this customer task.
3. Define the following binding from the task container to the role container:

<table>
<thead>
<tr>
<th>Org_Agent</th>
<th>&amp;Applicant&amp;</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Role container)</td>
<td>(Task container)</td>
</tr>
</tbody>
</table>

4. In the description of the appropriate activity within the workflow definition, define the following binding from the workflow container to the task container:

<table>
<thead>
<tr>
<th>APPLICANT</th>
<th>&amp;_WF_Initiator&amp;</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Task container)</td>
<td>(System variable in workflow container)</td>
</tr>
</tbody>
</table>
Binding Definition for Role Resolution

Workflow container

_Task container

Role container

ORG_AGENT

APPLICANT

_WF_INITIATOR
Role for Determining Organizational Unit of a User

Definition
A role delivered by SAP for determining the organizational unit to which a particular employee belongs.

Use
This role enables you to determine an employee’s organizational unit on the basis of the employee. A distinction is made between the following scenarios:

- The role is used in conjunction with a single-step task, which is classified as a general task [Ext.].
  The generated work item can be viewed by all of the employees from the organizational unit that has been determined (and can be processed by a user from this organizational unit).

- The role is used in conjunction with a single-step task whose possible agents [Ext.] are specified by one or more positions.
  The work item can only be viewed by employees with a position that belongs to the organizational unit that has been determined and is part of the possible agents.

- The role is used in conjunction with a single-step task whose possible agents [Ext.] are specified by a job.
  The work item can only be viewed by employees with a position that belongs to the organizational unit that has been determined and is described by the job.

  The possible agents of a single-step task result from the relationship with the job of secretary. If the described role is used, a work item can always be directed to the secretary of the organizational unit in question.

Structure

<table>
<thead>
<tr>
<th>Role</th>
<th>30000011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation</td>
<td>FindOwnOrgUn</td>
</tr>
<tr>
<td>Name</td>
<td>Organizational unit of a user</td>
</tr>
</tbody>
</table>

This role uses the RH_GET_STRUCTURE function module in conjunction with the WF_ORGUN evaluation path (organizational unit of a user/person).

Integration
Each user whose organizational unit must be found must, of course, belong to an organizational unit via his or her position.
The Cancellation for Role Resolution Without Result Indicator

Definition
Indicator that determines how the system reacts if role resolution fails to find a valid agent.

Use
It is possible for role resolution to fail to find a valid agent. This is the case:

- If role resolution runs with errors and does not provide any results at all
  (From a technical perspective: the function module for role resolution is exited via its \texttt{NOBODY\_FOUND} exception, and/or returns an empty agent table.)
- If role resolution provides agents that do not belong to the possible agents \[\text{[Ext.]}\] of the single-step task.
  (Of course, if recipients or persons responsible for workflow are expressed by specifying a role, the latter cannot occur.)

<table>
<thead>
<tr>
<th>If this indicator is...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>... flow is cancelled if role resolution fails to find an agent. This protects the data.</td>
</tr>
<tr>
<td>NOT SET</td>
<td>... all of the possible agents in the system become actual agents for the work item if role resolution fails to find an agent. The task is completed.</td>
</tr>
</tbody>
</table>

The error situation is recorded in the step log.

Role resolution is used to distribute invoices to various buyers at your enterprise. Only Mr Miller can execute this work item if the invoice amount exceeds $5,000. If you set the \textit{Cancellation for role resolution without result} indicator, and if role resolution fails to find an agent for an invoice that exceeds $5,000, the workflow is cancelled. Only the workflow administrator can restart it. If you do not set the \textit{Cancellation for role resolution without result} indicator, and if role resolution fails to find an agent for an invoice that exceeds $5,000, all buyers can process the invoice.
The Cancellation for Role Resolution Without Result Indicator
Selecting Objects from the Organizational Plan

Use

As well as defining roles, it can be necessary to describe certain relationships between employees and areas of responsibility or the borders between areas of responsibility in system tables. This information is then available for role resolution.

Create a table by assigning certain companies and invoice amounts to administrators via their positions.

<table>
<thead>
<tr>
<th>Position</th>
<th>Company</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50001234</td>
<td>A - H</td>
<td>0 - 50.000,-</td>
</tr>
<tr>
<td>50001235</td>
<td>A - H</td>
<td>&gt; 50.000,-</td>
</tr>
<tr>
<td>50001236</td>
<td>I - Z</td>
<td>0 - 60.000,-</td>
</tr>
<tr>
<td>50001237</td>
<td>I - Z</td>
<td>&gt; 60.000,-</td>
</tr>
</tbody>
</table>

If the name of the company and the invoice amount are known, the details in this table are used for role resolution, in order to find an administrator.

The following function modules are available, to ensure that you have access to objects from Organizational Management which you need to fill the table and that you can program possible entries.

Features

**RH_DETERMINE_ORG_OBJECT**

Determines the ID of any Organizational Management object.

**Interface**

**Import Parameter**

- ORG_OBJECT, Reference structure SWHACTOR

**Exceptions**

- NO_ACTIVE_PLVAR
- NO_OBJECT_ID_SELECTED
- NO_OBJECT_TYPE_SELECTED

This function module can be called without transfer parameters.

When you access this function module, as dialog box is displayed from which you can select an object type from Organizational Management.

Once you have selected an object type from Organizational Management, one of the Organizational Management objects stored for this type can be selected and displayed using the search function.

The object type and ID of this Organizational Management object is returned as an export.
parameter in the SWHACTOR structure and can be used in your application.

**RH_DETERMINE_ORG_OBJID**

Determines the ID of an Organizational Management object from a predefined Organizational Management object type.

**Interface**

**Export parameter**

- **ORG_OBJECT_TYPE**, Reference field OBJEC-OTYPE

**Import Parameter**

- **ORG_OBJECT_OBJID**, Reference field SWHACTOR-OBJID

**Exceptions**

- **NO_ACTIVE_PLVAR**
- **NO_OBJECT_ID_SELECTED**

This function module forms only the “second half” of the function module described above.

When you access it, you transfer the Organizational Management object type whose possible values you want to display using the possible entries function. You transfer this Organizational Management object type as a 1 or 2 character ID.

You can select and display one of the entries, which is stored for the Organizational Management object type using the search function.

The object type and ID of this Organizational Management object is returned as an export parameter in the variable **ORG_OBJECT_OBJID** and can be used in your application.
Specify Agent, Recipient, or Administrator by His or Her Role

Use

You want to specify an agent, the workflow administrator, or a recipient by his or her role. To do so, you can use the roles you defined yourself or the standard roles provided by SAP.

Procedure

The procedure for entering a role is always the same:

1. To enable you to specify the agent/administrator/recipient as a role, select Role.

2. Enter the unique, 8-digit number of the role in the appropriate input field.
   
   If you do not know what this number is, use the input help function. In the standard system, the input help function displays the abbreviation and description of the role. By choosing F17, you can display the plan version and number of the role instead of the description.

3. Define binding for assigning values to the role container:
   
   When a role is specified in the task definition or workflow definition, the role container must be filled with values from the appropriate container (task container or workflow container) via a binding definition. The binding definition editor is available for this purpose. It enables you to define the appropriate assignments to the elements of the role container.