

# CA - Cross-Application Components: Workflow Scenarios



HELP.BCBMTWFMCA

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## Icons

Icon	Meaning
	Caution
	Example
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	Recommendation
	Syntax

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## CA - Cross-Application Components: Workflow Scenarios

See also:

[BC - Workflow Scenarios in Applications \[Ext.\]](#)

### Processing a Document Info Record (CA-DMS)

#### Purpose

Document management is a central function of the R/3 System, which is integrated with many applications, such as Plant Maintenance, the Project System, and engineering change management.

SAP Business Workflow lets you optimize processing of document info records in all the departments that use them.

The standard tasks described here show how a document info record is processed. A document info record groups together information on a document (for example, a design drawing). It contains administrative data and original application files (for example, a design drawing or text file), and controls how the original application files (originals) are processed.

Workflow Management ensures that the steps for processing a document info record are performed at the correct point in time by the responsible persons.

#### Process flow

You control the extent to which users in your company are involved in the processes or are informed of changes. For example, when a document reaches a certain processing status, it is often necessary to inform responsible persons or perform specific activities.

In the standard R/3 System, the user responsible for a document is informed automatically when another user has changed the document.

In addition, you can define company-specific customer tasks, which are carried out when a particular document status is set.

### Technical Background (CA-DMS)

Below is the technical information that you need before you can use SAP Business Workflow for document management in the standard R/3 System.

## Technical Background (CA-DMS)

### Object Types

The object types form the interface between document management and the workflow system.

In the **Business Object Repository**, the object type for document management is under *Cross-Application Components → Document Management*.

### Business Object Type

Business [Object Type DRAW – Document \[Page 7\]](#) is defined for document management. At definition time, the system uses this object type to generate the document info record (DIR) to be processed.

### Organizational Object Type T024L

[Organizational Object Type T024L \[Page 9\]](#) is relevant to recipient determination.

For the organizational plan, you define the organizational units in which documents are processed with reference to organizational object type **T024L** (EngineeringDesignDepartment).

In the **Business Object Repository**, the object type for document management is under *Cross-Application Components → Document Management*.

### Standard Tasks

In the Standard R/3 System, standard tasks that are executed after a document has been changed are defined for document management.

The following guidelines apply to [Standard Tasks in Document Management \[Page 10\]](#):

- Each standard task is defined as a **single-step task**.  
A single-step task describes an elementary business activity in document management from the organizational point of view.
- At the defined point in time, a standard task appears in the integrated inbox of the responsible person as a dialog work item (automatic recipient determination), or is performed automatically by the system as a background work item.
- All standard tasks in document management are based on object type **DRAW** (document info record).

### Customer Tasks

You can define company-specific tasks, which are performed when a particular document status is set. You define the required settings for the document status in task-specific Customizing.

### Roles

The standard R/3 System provides standard role [User Responsible for Document \[Page 14\]](#), which is used to determine the user responsible for a document info record.

### Workflow Template

In the standard R/3 System, **no** workflow templates are defined for processing document info records.

You can define company-specific customer tasks and use standard tasks as steps in multi-step tasks, as required.

## Object Type DRAW – Document (CA-DMS)

### Definition

In document management scenarios, a document info record is processed. In the tasks provided, the document info record is a business application object of type **DRAW** (document). At definition time, the system uses this object type to generate the document info record (DIR) to be processed.

The technical data required is defined in the **Business Object Repository** (*Cross-Application Components* → *Document Management* → *DRAW (Document)*).

### Use

In the scenarios, a document info record is created, changed, displayed, or found. You can also find objects that are linked to a document info record.

### Structure

#### Key Field

An object of type **DRAW** is identified by the following key fields:

Technical name	Description
DocumentNumber	Document number (Document field)
DocumentType	Document type
DocumentPart	Document part
DocumentVersion	Document version



A document that is defined by the following data:

*Document:*           ma-ca-01  
*Document type*        DRW  
*Document part:*       001  
*Document version:* 00

### Attributes

An attribute describes a property of a document. The virtual attributes and database field attributes that are defined for documents are listed below.

#### Virtual Attributes

The following virtual attributes return a value that is determined when database contents are evaluated at runtime:

## Object Type DRAW – Document (CA-DMS)

Attribute name	Description	Data type reference
Laboratory	Laboratory/office	Object type T024L
DocumentVersion	Document version	Object type DRAW
HigherLevelDocument	Superior document	Object type DRAW
LowerLevelDocument	Subordinate document	Object type DRAW
DocumentPart	Document part	Object type DRAW

## Database Field Attributes

The following database field attributes return a field value from the ABAP dictionary:

Attribute name	Description	Data type reference
DocumentStatus	Document status	Dictionary field DRAW-DOKST
User	User responsible	Dictionary field DRAW-DWNAM
Description	Description	Dictionary field DRAT-DKTX

## Methods

A method defines an operation that is performed.

All methods for the document info record are defined without a result. The following table shows whether a method is executed synchronously and/or with dialog.

Method	Description	Synchronous	Dialog
Find_linked_objects	Find linked objects	X	X
Find	Find object	X	X
Edit	Edit		X
Display	Display		X
Create	Create		X

## Events

An event publishes changes to objects system-wide.

The following table shows the events that are published for object type **DRAW** (document) as either triggering or terminating events.

Event	Description
DMS_Object_Link_CHK	Check object link
Changed	Document changed



## Organizational Object Type T024L (CA-DMS)

Created	Document created
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## Organizational Object Type T024L (CA-DMS)

### Definition

In SAP Business Workflow, organizational object type **T024L** (EngineeringDesignDepartment) represents the people working in one office. At definition time, the system uses this object type to determine the users in a specific office.

For example, a document info record is created in office K-1, then processed in offices X-1 and X-2.

### Use

To define organizational responsibilities for document management clearly, you must assign possible agents to each standard task. Before you can assign agents, you must have a company-specific organizational plan, which defines the organizational assignment of users.

An organizational plan describes the existing **organizational units**. To define the organizational units for document management, you assign the users to specific design offices.

To define a specific design office, you must link the organizational unit to an **organizational object type**. Organizational object type **T024L** (EngineeringDesignDepartment) is for document management. As a specific organizational object, you can enter, for example, *Design office D-01*.



You define laboratories/design offices in Customizing for *Logistics – General or Production*.

See also:

[Defining the Laboratory/Design Office \(CA-DMS\) \[Page 16\]](#)

### Key Fields

Object type **T024L** is identified by the key field *Laboratory (Laboratory/design office)*. This is defined in Customizing.

### Attributes

No local attributes are defined.

### Method

For object type **T024L**, a synchronous method is defined, which checks whether the design office exists (Table T024L).

### Events

No events are defined for this object type.

## Standard Tasks for Document Management (CA-DMS)

# Standard Tasks for Document Management (CA-DMS)

## Definition

Goal-directed activities for document management.

## Use

You can use standard tasks as single-step tasks or as modules for multi-step tasks.

## Structure

The document management system encompasses processing activities for documents, which are based on object type **DRAW** – document.

The following standard tasks are defined in the standard R/3 System:

Task	Key	Description
00007842	DRAW Change	<a href="#">Standard Task: Change Document (CA-DMS) [Page 10]</a>
00200237	DRAW Display	<a href="#">Standard Task: Display Document (CA-DMS) [Page 11]</a>
00200124	DRAW Find	<a href="#">Standard Task: Find Document (CA-DMS) [Page 12]</a>
00200153	DRAW Objects	<a href="#">Standard Task: Find Objects Linked to Document (CA-DMS) [Page 12]</a>
00408150	DRAW.Create	<a href="#">Standard Task: Create Document (CA-DMS) [Page 13]</a>

## Agent Assignment

At definition time for a workflow, the recipients of standard tasks are determined automatically ([Recipient Determination for Standard Tasks \(CA-DMS\) \[Page 13\]](#)).

# Standard Task: Change Document (CA-DMS)

## Definition

Standard task for changing a document info record.

## Structure

**Standard task:** 00007842

**Key:** DRAW Change

**Description:** Change document info record

---

**Standard Task: Display Document (CA-DMS)****Referenced Object Method and Attributes**

**Object type:** DRAW – Document

**Method:** Edit

Object method with dialog

**Attributes:** Confirm end of processing

**Work item text:** <document type> <document number> was changed

**Agent Assignment**

The system uses standard role 00000155, which determines the responsible user from the document info record, to assign the agent.

**Further Notes**

The system starts this task automatically when a user that is not defined as the responsible user in the document info record changes the document.

The system uses a standard role to determine the responsible user that receives this standard task,.

**Standard Task: Display Document (CA-DMS)****Definition**

Standard task for displaying a document info record.

**Structure**

**Standard task:** 00200237

**Key:** DRAW Display

**Description:** Display document info record

**Referenced Object Method and Attributes**

**Object type:** DRAW – Document

**Method:** Display

Synchronous object method

Object method with dialog

**Work item text:** Display <document type> <document number>

**Agent Assignment**

The agents are assigned directly to the standard task. An agent type can be an organizational unit, a position, or a user.

If you define the task as a general task, any user can display the document.

---

**Standard Task: Finding a Document (CA-DMS)**

## Standard Task: Finding a Document (CA-DMS)

### Definition

Standard task for finding a document info record.

### Structure

**Standard task:** 00200124

**Key:** DRAW find

**Description:** Find document

### Referenced Object Method and Attributes

**Object type:** DRAW – Document

**Method:** Find

Synchronous object method

Object method with dialog

### Agent Assignment

The agents are assigned directly to the standard task. An agent type can be an organizational unit, a position, or a user.

If you define the task as a general task, any user can find the document.

## Standard Task: Find Objects Linked to Document (CA-DMS)

### Definition

Standard task for finding SAP objects that are linked to a document info record.

### Structure

**Standard task:** 00200153

**Key:** DRAW objects

**Description:** Find objects linked to document

### Referenced Object Method and Attributes

**Object type:** DRAW – Document

**Method:** Find

Synchronous object method

Object method with dialog

---

**Standard Task: Create Document (CA-DMS)****Agent Assignment**

The agents are assigned directly to the standard task. An agent type can be an organizational unit, a position, or a user.

If you define the task as a general task, any user can find SAP objects linked to the document.

**Standard Task: Create Document (CA-DMS)****Definition**

Standard task for creating a document info record.

**Standard task:** 00408150

**Key:** DRAW.CREATE

**Description:** Create object of type DRAW (document)

**Structure****Referenced Object Method and Attributes**

**Object type:** DRAW – Document

**Method:** Create

Object method with dialog

**Agent Assignment**

The agents are assigned directly to the standard task. An agent type can be an organizational unit, a position, or a user.

If you define the task as a general task, any user can create the document.

**Recipient Determination for Standard Tasks (CA-DMS)**

At definition time for a workflow, the recipients of standard tasks are determined automatically.

For document management, recipient determination for standard tasks is as follows:

- **General** tasks, which can be performed by any user  
For this type of recipient determination, you must make settings in Customizing for *Workflow Management*.

**See also:**

[Classifying a Standard Task as a General Task \(CA-DMS\) \[Page 18\]](#)

- Tasks whose recipients are allocated **directly** to the standard task

## Standard Role: User Responsible for Document (CA-DMS)

For this type of recipient determination, you must make settings in *Customizing for Workflow Management*.

**See also:**

[Assigning a Standard Task to Agents \(CA-DMS\) \[Page 17\]](#)

- Tasks for which **standard roles** are defined  
For this type of recipient determination, note the special features for document management.

**See also:**

[Standard Role: User Responsible for Document \(CA-DMS\) \[Page 14\]](#)

## Standard Role: User Responsible for Document (CA-DMS)

### Definition

This role can be used to determine the user that is responsible for a document.

The system reads the value in field *User* in the document info record.

### Structure

**Role:** 00000155

**Key:** DRAWresponse

**Description:** User responsible for document

### Role Parameters:

The role parameter container contains the following element:

**User** – Name of person responsible  
(data type reference: Dictionary table field DRAW-DWNAM)

### Integration

#### Settings in the Standard Task

The standard task contains the reference to object type **DRAW** (document). An attribute for the user responsible for the document is maintained for this object type.

**Object type:** DRAW – document

**Attribute:** User – Name of the user that is responsible for the document

**Standard role:** 00000155

Standard role 00000155 is defined as the default role for standard tasks for object type **DRAW** (document).

## Preparation and Customizing (CA-DMS)

### Purpose

In addition to the general settings for workflow in Customizing, you must also make application-specific settings in Customizing.

### Prerequisites

You have defined the general settings for SAP Business Workflow.

### Activities

The following activities are required:

- [Defining the Document Status \(CA-DMS\) \[Page 15\]](#)
- [Defining the Laboratory/Design Office \(CA-DMS\) \[Page 16\]](#)
- [Maintaining the Organizational Plan for Document Management \(CA-DMS\) \[Page 16\]](#)
- [Task-Specific Customizing \(CA-DMS\) \[Page 17\]](#)

## Defining the Document Status (CA-DMS)

In Customizing for document management, you define the different document statuses for a document type. You can allocate a customer task (single-step or multi-step task) to each status. This task is performed when the status is set.

### Procedure

Customizing for document management is under: *Cross-Application Components* → *Document Management System*.

- For one document type, process the document status that you want to trigger a workflow task (for example, *In work*). To do this, choose *Control Data* → *Define document types* → *Define document statuses* → *Detail screen*.
- On the detail screen of a document status (such as *Released*), enter the task to be performed when this status is set in the *Workflow task* dataset.
  - Identify the workflow task by making entries in the fields *Object type* and *Object ID*. In the Standard R/3 System, various standard tasks have been defined for documents (object type: **TS**, object ID: 8-digit number).
  - The system determines the recipients of the standard task automatically.

## Defining the Laboratory/Design Office (CA-DMS)

# Defining the Laboratory/Design Office (CA-DMS)

In the document info record, you enter the laboratory/design office that is responsible for maintaining the document.

For the organizational plan, you use organizational object type **T024L** (EngineeringDesignDepartment) to define the organizational units in which documents are processed. You can assign the standard task to an agent of agent type *Organizational unit* (object type **T024L**) and choose a specific design office (such as D-01). All users in this office are given the standard task.

## Procedure

You can maintain the laboratories and design offices in the following menus:

- Customizing *Logistics – General* → *Logistics Master Data* → *Material Master* → *Material*
- Customizing *Production* → *Basic Data* → *Bill of Material* → *General Data*

## Maintaining the Organizational Plan for Document Management (CA-DMS)

### Prerequisites

An organizational plan maps the organizational structure of a company. It usually groups together several organizational units. You can assign a standard task to an agent of agent type *Organizational unit*.

Organizational units and standard tasks are linked as follows:

- You can assign a standard task to an agent of agent type *Organizational unit*.
- You can link an organizational unit to a laboratory or design office. To do this, you assign the organizational unit for document management to organizational object type **T024L** (EngineeringDesignDepartment) and choose a design office (such as D-01).
- The users in the organizational unit receive the standard task.

Before you maintain the organizational plan, you must define [Laboratory/Design Offices \[Page 16\]](#).

## Procedure

1. Choose Customizing step *Basis* → *Business Engineering Workbench* → *Workflow Management* → *Edit organizational plan*.
2. Create an organizational unit or change an existing one, as required.



When you create an organizational unit (for example, D-01) for a design section, the system creates a structural overview which, at this point, contains only the new organizational unit (for example, D-01).



**Task-Specific Customizing (CA-DMS)**

You see the organization structure screen.

- 3. Maintain an object description (*Goto → Object description*).

You see a list of infotypes. The following infotypes are relevant to recipient determination in document management:

- Infotype 1001      *Links*

Example:

Type of linked object:                                  S (position)  
 ID of linked object:                                     50000603

- Infotype 1208      *SAP Organizational Objects*

To link the organizational unit to a particular laboratory/design office, link the organizational unit to organizational object type **T024L** (EngineeringDesignDepartment).

Enter the laboratory/design office that you want to be represented by this organizational unit (*Key field* pushbutton).

Example:

Design office D-01 for design changes (object type **T024L** – EngineeringDesignDepartment)

The organizational unit is now linked to a position that groups together all the users that are responsible for documents in a laboratory/design office. You can expand the structure of the organizational unit as required.

## Task-Specific Customizing (CA-DMS)

### Purpose

You need to customize standard tasks if you want to use certain standard tasks that are defined by SAP in your productive system.

### Features

You must perform the following steps in Customizing:

[Assigning a Standard Task to Agents \(CA-DMS\) \[Page 17\]](#)

[Classifying a Standard Task as a General Task \(CA-DMS\) \[Page 18\]](#)

## Assigning a Standard Task to Agents (CA-DMS)

Some standard tasks for object type **DRAW** – document must be assigned to organization management objects (for example, positions, users, or organizational units).

## Classifying a Standard Task as a General Task (CA-DMS)

### Procedure

1. Go to Customizing for Workflow Management (*Basis Components* → *Workflow Management*), then perform step *Perform task-specific customizing*.
2. Under *Cross-Application Components*, choose *Document Management System*.

You see the component hierarchy for document management. The following standard tasks are allocated to the individual components:

**Document Management:**

  - Find document (00200124)
  - Create document DRAW (00408150)

**Document Processing:**

  - Change document (00007842)
  - Display document (00200237)

**Find Document:**

  - Find objects linked to document (00200153)
3. For the entry you require, choose the activity *Assign Tasks to Agent*.

Assign the standard task you require to an agent (*Agent assignment* → *Create*). An agent type can be, for example, an organizational unit, a position, or a user.

## Classifying a Standard Task as a General Task (CA-DMS)

Some workflow templates contain standard tasks that can be performed by any user. These tasks are classified as general tasks.

### Procedure

1. Go to Customizing for Workflow Management (*Basis Components* → *Workflow Management*), then perform step *Perform task-specific customizing*.
2. Under *Cross-Application Components*, choose *Document Management System*.

You see the component hierarchy for document management. The following standard tasks are allocated to the individual components:

**Document Management:**

  - Find document (00200124)
  - Create document DRAW (00408150)

**Document Processing:**

  - Change document (00007842)
  - Display document (00200237)

**Find Document:**

- Find objects linked to document (00200153)
- 3. Choose *Assign tasks to agent*.  
Classify tasks as standard tasks, as required.

## Event-Consumer Linkage (CA-DMS)

### Use

Before you use the standard tasks for document management that are defined by SAP, you must link events to tasks.

A standard task can be started as a reaction to an event. Certain events are defined as triggering events for standard tasks. Before you can link a triggering event to a standard task, as defined in the Standard R/3 System, you must activate the linkage in your system.

In the Standard R/3 System, the events that trigger the workflow tasks are in the event linkage table.

### Features

The following table shows the events that you must activate to trigger the standard tasks.

**Events triggering workflow templates**

Standard task	Triggering event	Object type
00007842 Change document	changed	DRAW
00200237 Display document	changed	DRAW

## Activating an Event-Consumer Linkage (CA-DMS)

To activate an event-consumer linkage:

1. Go to Customizing for Workflow Management (*Basis Components → Workflow Management*), then perform step *Perform task-specific customizing*.
2. Under *Cross-Application Components*, choose *Document Management System*.  
The 2 standard tasks that you can activate for event linkage are allocated to the entry *Document Processing*.
3. Choose *Activate event linkage*.

## Operation and Link to Document Management (CA-DMS)

You see the standard tasks whose event-consumer linkage you can activate.

**See also:**

[Event-Consumer Linkage \(CA-DMS\) \[Page 19\]](#)

4. Display the defined events.

Place the cursor on the event you require, then choose *Event linkage* → *Activate*.

## Operation and Link to Document Management (CA-DMS)

### Tasks represented by background work items

For some standard tasks in document management, **no** triggering or terminating events have been defined. You can use these standard tasks to define a workflow if the system can perform these as background work items.

You can use the following standard tasks as background work items:

- *Find document* (DRAW Find)
- *Find objects linked to document* (DRAW objects)
- *Create document* (DRAW Create)

### Task represented by dialog work items

For some standard tasks in document management, triggering and terminating events have been defined. At runtime, these standard tasks are represented by a work item that appears as a dialog work item in the inboxes of the users responsible.

The operation of the following standard tasks and their link to document management is described below:

- *Change document* (DRAW Change)
- *Display document* (DRAW Display)

### Workflow: Change document (DRAW Change)

The following description is based on the assumption that a document info record has been changed by a user that is not defined as the responsible user in the document info record.

#### Create event

The event **changed** (document changed), which triggers the workflow, is created automatically whenever a document is changed by a user that is not defined as the responsible user in the document info record.

- Object type: TS
- Object ID: 00007842

#### Process document info record

The system uses standard role 00000155 (person responsible for document) to determine the user responsible for the document.

The standard task appears as a work item in the user's inbox.

### Workflow: Display document (DRAW Display)

The following description is based on the assumption that a document has been changed.

#### Create event

The event **changed** (document changed), which triggers the workflow, is created automatically whenever a document is changed.

- Object type: TS
- Object ID: 00200237

#### Display document info record

The system uses the agent assigned in task-specific Customizing to determine the user who is to display the document.

The standard task appears as a work item in the user's inbox.

## Issuing Approvals (CA-TS)

### Definition

The *SAP Business Workflow* workflow for issuing approvals is an optional part of the *Time Sheet*, which you can use to support and simplify the approval process.

### Use

Working time data that has been recorded in the time sheet can be checked before being transferred to the target component(s). Authorized persons check the data in a separate approval procedure.

The *Issue approvals* workflow supports and simplifies this process: it assigns the unapproved records directly to the person responsible for approving them. This has the following advantages for the person approving the data:

- A constant overview of the data that is ready for approval in his or her work area.
- He or she can monitor the progress of orders and projects.

The workflow for issuing approvals is triggered when the data is released in the time sheet. The specified agent receives notification of records ready for approval as work items in his or her *integrated inbox*.

The workflow for issuing approvals is a single-step workflow. For technical reasons, it cannot be extended to a multistep task at present.

## Technical Implementation of the SAP Business Workflow for Issuing Approvals



This documentation is only useful to you if you are familiar with the technology used to develop a workflow.

For general information on [SAP Business Workflow \[Ext.\]](#), see the SAP Library. Choose *BC - Basis* -> *Business Management* -> *SAP Business Workflow*.

## Technical Implementation of the SAP Business Workflow for Issuing Approvals

The workflow for issuing approvals is a single-step workflow. For technical reasons, it cannot be extended to a multistep task at present.

### Object Type

The interface between SAP functions and the workflow system is based on object technology.

The following information is technical and only relevant if you are interested in the technical aspects of implementation, or if you plan to create your own enhancements.

The SAP standard system contains the following object type:

**CATS** (Cross-Application Time Sheet)



If you want to modify the workflow, you must implement this object type.

### Standard Tasks

There are three standard tasks that you can use to notify persons who approve data that there are times ready for approval. The agent generates the work items in his or her *integrated inbox*, starting the report **RCATSB01** (*CATS: Approve times*). The agent either approves or rejects the time sheet data.

#### Standard task: Approval

**Standard task:** TS40007901

**Abbreviation:** Approval

**Name:** CATS: Approval

#### Standard task: Approval2

**Standard task:** TS20000459

**Abbreviation:** Approval2

**Name:** CATS: Approval by Time Administrator

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**Technical Implementation of the SAP Business Workflow for Issuing Approvals****Standard task: Approval3****Standard task:** TS20000460**Abbreviation:** Approval3**Name:** CATS: Approval by Superior**Referenced Object Method, Properties****Object type:** CATS**Method:** Approve (Approval request)**Properties:** None

If you want to modify the workflow, you must use this object method.

**Assigning Agents**

You can assign agents by:

- Assigning the standard task using an organizational plan object
- Defining the standard task as a *general task*. You are advised to use this option if you have not yet maintained an organizational plan and do not intend creating one.

For more information, see [Preparation and Customizing of the Approval Workflow \[Page 24\]](#).

- Determining the agent using the SAP enhancement *Determine Workflow Recipients for Approval* (CATS0008).

For more information, see the documentation for the SAP enhancement.

**Event**

This workflow does not have a triggering event, only a terminating event.

Terminating event:

**Object type:** CATS**Event:** COMPLETED**Element:** \_WI\_OBJECT\_ID

The event occurs once the agent has approved all of the records entered for a personnel number.

**Recommended Activities:**

You can currently:

1. Customize the work item text to suit your requirements

## Preparation and Customizing of the Approval Workflow

Use the parameters in the container for your copy of the standard task (TS\_ENAME - employee/applicant name, for example).

2. Maintain the long text for the work item

In the long text for the work item, you can describe the approval procedure, for example. You can also include the parameters in the container.

There are two ways to **copy a standard task**:

1. Copy the **standard task** to another standard task using the *Copy* function in the *Maintain task* transaction. In this case, the task is client-independent.
2. Copy the standard task to create your own **customer task**. In this case, the task is client-dependent.

## Preparation and Customizing of the Approval Workflow

### Defining the Organizational Plan

Data is entered in the time sheet by an employee or administrator, and then approved by another person with the required authorization. You can choose which SAP users you want to approve the data. They may be the immediate superior of the person who entered the data, or project managers, for example.

If you use the standard task *Approval* (TS40007901), the person who entered the data releases it for approval, and then specifies the appropriate agent (user ID), or enters an object, which the system uses to determine the agent according to the organizational plan.

The person who entered the data can choose between the following organizational plan objects to select the agent:

- Position
- Work center
- Job
- Organizational unit

Several agents can be entered for one object. In this case, the work item appears in the *integrated inbox* of each of these agents. If one of the agents executes the work item, it is no longer displayed in the integrated inbox of the other agents.



If you use the standard tasks *Approval2* (TS20000459) or *Approval3* (TS20000460), the recipient is assigned automatically; the person who entered the data must not therefore enter the agent manually. If your profile has not been set up for the recipient to be determined automatically, the system proposes the time administrator or superior assigned to the person who entered the data as the workflow recipient. The person who entered the data can then confirm the recipient proposed or manually enter an alternative recipient as for the standard task *Approval* (TS40007901).



## Assigning Users if You Use an Organizational Plan

To define a suitable organizational plan for the scenario, perform the *Edit Organizational Plan* step in the Implementation Guide (IMG). Choose *Basis* → *Business Management* → *SAP Business Workflow*.



For general information on [SAP Business Workflow \[Ext.\]](#), see the SAP Library. Choose *BC - Basis* → *Business Management* → *SAP Business Workflow*.

For more information on setting up workflow, see the [Reference Documentation \[Ext.\]](#) for SAP Business Workflow.

## Assigning Users if You Do Not Use an Organizational Plan

You can still use *SAP Business Workflow* even if you have not yet maintained your organizational plan. In this case, the person entering data in the time sheet specifies the appropriate agent by entering the agent's SAP user ID.

If you want to use this procedure, you must define the standard task as a *general task*. You can assign all SAP users that are set up in the system to a *general task*.

If you use this method, you can bypass *SAP HR Organizational Management*, which you use to select agents according to functional and organizational criteria. However, not just any SAP user can issue approvals with this procedure: you control who is responsible for issuing approvals using the authorization concept.

## Application-Specific Customizing

The approval procedure is an optional part of the time sheet. You can determine whether data entered using a certain data entry profile must undergo an approval procedure when you maintain your profiles.

If you want to trigger the approval procedure using *SAP Business Workflow*, make the following settings for each data entry profile:

1. In the IMG, choose *Time Sheet* → *Time Recording* → *Set Up Data Entry Profiles*.
2. Select the data entry profile for which you want to set up *SAP Business Workflow*.
3. In the *General settings* section, select the *Approval required* field to activate the approval procedure.
4. In the *Workflow* section, select the *Workflow approval* field and enter the task ID number in the relevant field.

In the standard system, you can use the following standard tasks:

- *Approval* (TS40007901) - The person who entered the data enters the workflow recipient manually.
- *Approval2* (TS20000459) - If the workflow recipient is determined automatically, he or she is the time administrator assigned to the relevant personnel number.
- *Approval3* (TS20000460) - If the workflow recipient is determined automatically, he or she is the superior of the employee whose times were recorded.

## Using and Linking to Application Functions

# Using and Linking to Application Functions

## Use

*SAP Business Workflow* is started when data records are released in the time sheet and terminated when all released records have been approved or rejected.

### Standard task: Approval (TS40007901) - CATS: Approval

Once persons entering data in the time sheet have released their records for approval, the *Time Sheet: Enter Release Information* dialog box appears. They then manually enter the agent who is assigned to them, or who is responsible for processing the data entered.

One of the agents may still have an unprocessed work item in his or her *inbox* for the person currently entering data. In this case, the person entering the data is displayed a list of the persons already assigned to approve his or her data (or assigned objects). He or she can choose a default value from the list. The record is then added to the work item already in the chosen agent's integrated inbox.

The person who entered the data can also choose the agent manually, by entering either an object from the organizational plan, or the agent's SAP user ID directly.

If the person who entered the data wants to notify the person approving the data of particular activities, special situations, and so on, he or she can enter a short message. By choosing *Continue*, the person who entered the data saves the record and starts the workflow.



If users create records that are to be approved by different agents, they must release the records separately for each agent.

#### Example:

A user wants to release ten records. Three are to be sent to agent XY, and seven to agent ZZ. The user should proceed as follows:

First, he or she releases the records for agent XY, saves the entries, and enters XY as the agent in the *Time Recording: Enter Release Information* dialog box. Then he or she starts the transaction again and repeats the above procedure for the seven records that are to be sent to agent ZZ.

The records appear in the chosen agent's *integrated inbox*. When the agent executes the work item, the approval report **RCATSB01** (*CATS: Approve times*) is started. The agent uses this report to approve or reject the records. If records are rejected, the agent can enter a rejection reason.

### Standard task: Approval2 (TS20000459) - CATS: Approval by Time Administrator

In this standard task, the recipient is determined automatically.

In the standard task *Approval2* (CATS: Approval by time administrator), the records for approval appear in the *inbox* of the time administrator assigned to the employee whose data is to be approved. You assign employees to a time administrator in the *Organizational Assignment* infotype (0001) in *SAP Human Resources*.

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**Using and Linking to Application Functions****Standard task: Approval3 (TS20000460) - CATS: Approval by Superior**

In this standard task, the recipient is determined automatically.

In the standard task *Approval3* (CATS: Approval by Superior) the records for approval appear in the *inbox* of the employee's superior. You assign employees to a superior in *SAP HR Organizational Management*.

If an employee is assigned to several superiors, the records for approval appear in the *inbox* of each superior. Note that in this case, the first superior to execute the work item must process all of the records contained in the work item. The other superiors are no longer able to execute the work item.