PM/CS - Plant Maintenance & Customer Service: Workflow Scenario

HELP.BCBMTWFMPM

Release 4.6C

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PM/CS - Plant Maintenance & Customer Service: Workflow Scenarios

PM/CS - Plant Maintenance & Customer Service: Workflow Scenarios

See also:

BC - Workflow Scenarios in Applications [Ext.]

Maintenance Notifications (PM-WOC-MN)

This workflow scenario supports you when processing maintenance notifications in the *Plant Maintenance* (PM) application component.

Processing of a Maintenance Notification (PM-WOC-MN)

Purpose

This workflow scenario supports your business processes for maintenance processing. In this scenario, the *SAP Business Workflow* component helps you to process, monitor and complete newly created maintenance notifications efficiently. This process is represented in a workflow template, which triggers and controls the execution of the following standard tasks:

- Notifying a person responsible (for example, the notification coordinator) that a new maintenance notification has been created or put in process, and that tasks must be defined for the notification
- Notifying a person responsible that tasks, which must be processed, have been created for the maintenance notification
- Notifying a person responsible (for example, the notification coordinator) that all the tasks for the maintenance notification have been completed, and the maintenance notification must either be completed or additional tasks must be defined for the notification

SAP Business Workflow

If the appropriate system settings have been made, the *SAP Business Workflow* automatically sends a work item to the person(s) or department(s) responsible and informs them that certain tasks need to be executed. The following tasks and triggering events belong to this process:

Task	Triggering Event
Processing of an outstanding maintenance notification without tasks	The person responsible is notified when a maintenance notification has been created manually in the system.
Processing of a maintenance notification with outstanding tasks	The person responsible is notified as soon as the tasks have been created in the notification and the notification has been saved.
Completion of a maintenance notification with completed tasks	The person responsible is notified as soon as the tasks have been completed in the notification and the notification has been saved.

Determination of the Person(s) or Department(s) Responsible

For each of the above tasks, the system notifies the following people or departments in the order listed below:

1. Notification coordinator
2. Department responsible (if no coordinator has been specified)
3. All the people, who are assigned to the task (if neither a coordinator, nor a department has been specified)

Prerequisites

Refer to Preparation and Customizing (PM-WOC-MN) [Page 14]

Process Flow

Refer to Process for Workflow Template WS20000317 [Page 13]

Technical Realization (PM-WOC-MN)

The interface between the R/3 functions and the *SAP Business Workflow* is realized using object technology. In this workflow scenario, the system processes the following objects:

Objects	What You Should Know:
Task group TG20000015	The task group contains all the workflow objects, which belong to the workflow scenarios for maintenance notifications.
Business object *BUS2038* (maintenance notification)	A maintenance notification corresponds to business object type *BUS2038*. A maintenance notification is identified by the notification number (key field). You can find the attributes, methods and events for business object *BUS2038* in the *Business Object Repository* of the R/3 System.
Standard tasks: • TS20000545 (process new notification) • TS20000544 (notification is processed) • TS20000546 (complete notification)	These are single-step tasks, which refer to an object method. This task is assigned to the people or departments that are authorized to process the object.
Workflow template WS20000317	This template contains the definitions of the workflow task for this workflow scenario. You can use this workflow template to notify the people responsible that a maintenance notification has been created. The triggering events for this workflow template are *CREATED* and *INPROCESSAGAIN*.
Standard role AC00000171	This is the standard role for maintenance notifications. The role resolution (defined in the standard role definition) is used to determine who is responsible for the processing of a maintenance notification.

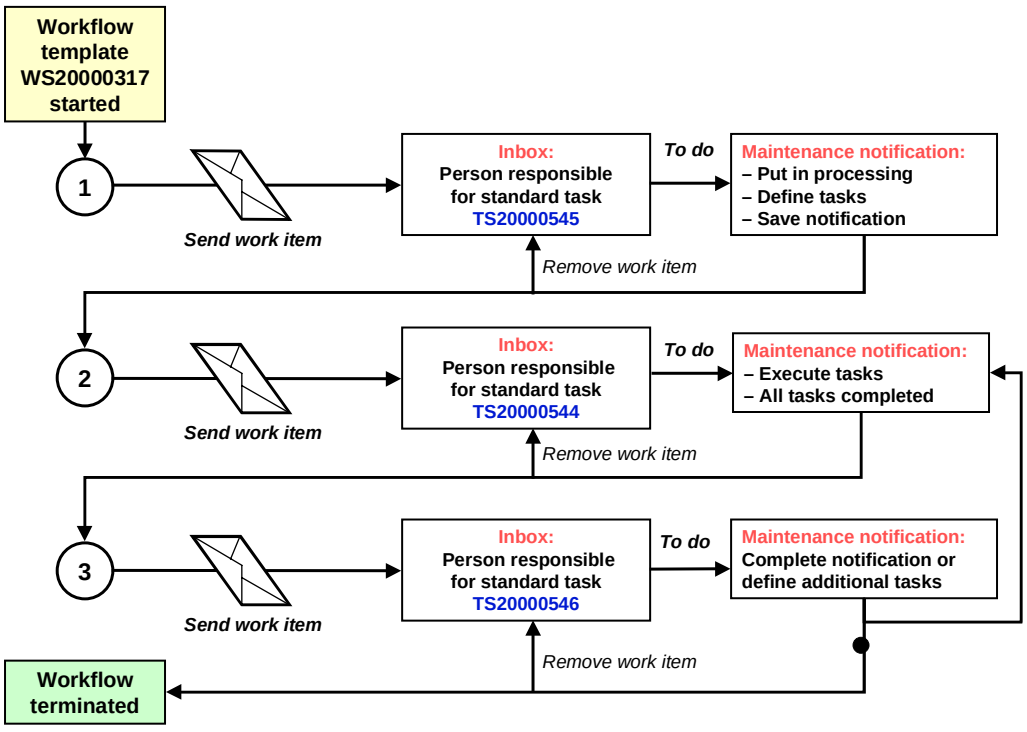
Process for Workflow Template WS20000317

Purpose

The workflow template for this process is started when you create a new maintenance notification.

Process Flow

1. The system triggers one of the following events for business object BUS2038 (maintenance notification):
   - CREATED (maintenance notification created)
   - INPROCESSAGAIN (maintenance notification in process again)
2. The triggering event starts the workflow template WS2000317 and the linked process as described in the following graphic.



The standard tasks in this process are valid from Release 4.6.

Preparation and Customizing (PM-WOC-MN)

Use

The **application-specific** Customizing settings, which you must make to process this workflow template, are described here.

Prerequisites

All the **general** Customizing settings, which are required for the *SAP Business Workflow* component to be used, have been made.

Activities

Make the following settings in Customizing:

1. Set up the organizational structure and thereby determine your organizational units:

   Basis → Business Management → SAP Business Workflow → Edit Organizational Structure

2. Assign the organizational units to the standard tasks:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Maintenance Notifications → Assign Agents to Tasks

3. Activate the link between triggering event (CREATED, INPROCESSAGAIN) and workflow template WS20000317:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Maintenance Notifications → Activate Event Linkage

   For step three, make sure that you activate the event linkage for the workflow template and **not** for the standard task.

For more information, see the Implementation Guide.

Operation and Link to Application Functions (PM-WOC-MN)

Use

This workflow is used to inform the people or departments responsible automatically that a series of tasks must be executed in the following order:

1. Processing of a newly created maintenance notification (notification status *Outstanding*)
2. Processing of a maintenance notification with outstanding tasks (notification status *In process*)
3. Completion of a maintenance notification (status of all tasks *Completed*)

The person(s) or department(s) responsible receive a mail (work item) in their inbox informing them of the tasks to be performed.

Activities

System Activities

If a maintenance notification is created or put in process again, then the *SAP Business Workflow* automatically ensures that:

1. The workflow-triggering event *CREATED* or *INPROCESSAGAIN* is generated
2. The workflow template WS20000317 is started
3. A work item is sent to the work center for the person(s) or department(s) responsible

User Activities

As the person responsible for a work item, you have the following options:

Options	What You Should Know:

Operation and Link to Application Functions (PM-WOC-MN)

Processing a work item as a workflow	To see the work item, choose *Office* → *Inbox*. You have the following processing options: • You can process the work item by double clicking on it. The transaction for changing a maintenance notification appears. • You can call up another screen for the work item, to obtain an overview of outstanding and completed tasks. • You can set a work item for resubmission as a reminder to process it later. • You can navigate from the maintenance notification to the workflow log, to define who has performed which activities. • You can receive a work item using another mail system client (for example, Lotus Notes™ or MS Outlook™).
Processing a maintenance notification manually using a worklist	If you process a maintenance notification manually (outside of the workflow), all the changes to the notification are also considered in the workflow process.

Completion of a Task (PM-WOC-MN)

Purpose

In a maintenance notification, you can define one or more tasks to solve the problem recorded in the notification. A task can refer both to the notification header and the individual notification items. It has a particular status.

If you create a task in a notification, the person responsible for completing the task can use the workflow to indicate this. If no person has been specified, then the system notifies all the people who are assigned to the task.

SAP Business Workflow

If the appropriate system settings have been made, the *SAP Business Workflow* automatically sends a work item to the integrated inbox of the person(s) responsible. It states that a new task has been created in a notification. The person(s) informed can process the work item directly from their inbox. The change transaction for the task is called up automatically during processing.

Prerequisites

Refer to Preparation and Customizing (PM-WOC-MN / Completing a Task) [Page 21]

Process Flow

Refer to Process for Workflow (PM-WOC-MN / Completing a Task) [Page 19]

Technical Realization (PM-WOC-MN / Completing a Task)

The interface between the R/3 functions and the *SAP Business Workflow* is realized using object technology. In this workflow scenario, the system processes the following objects:

Objects	What You Should Know:
Task group TG20000015	This task group contains the standard tasks and the workflow template required for this workflow scenario.
Object type *QM/SM* (task)	A task corresponds to object type *QMSM*. You can find the attributes, methods and events for object type *QMSM* in the *Business Object Repository* of the R/3 System.
Standard tasks TS00008318 (*Complete task*)	This is a single-step task, which refers to an object method. In this standard task, a task is completed in a maintenance notification. This task is assigned to the people or departments that are authorized to process the object.
Workflow template WS00200074 (*PM ComplTask*)	This workflow template contains the definitions of the workflow task for this workflow scenario. You can use this workflow template to notify the people responsible that a critical error must be processed. The triggering event for this workflow is *CREATED*.

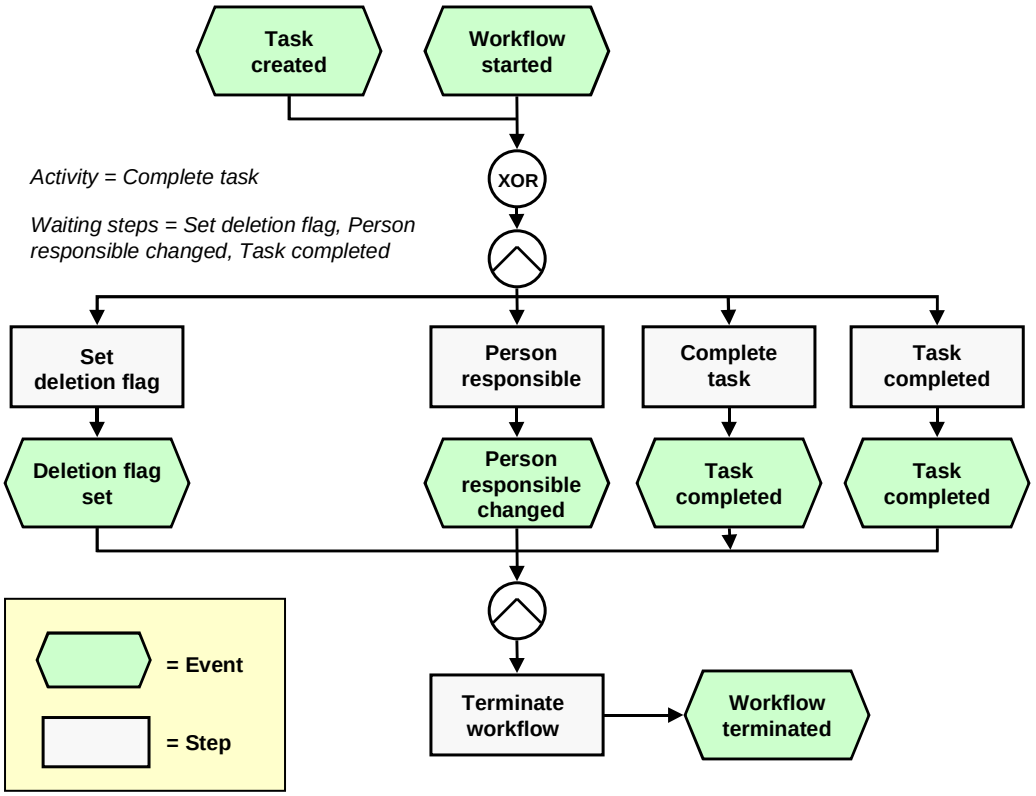
Process for Workflow (PM-WOC-MN / Completing a Task)

Purpose

If a task has been created in a maintenance notification, a workflow is started based on the template *PM Complete Task*.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps (see graphic). The structure is defined so that the system only has to process one of the branches. The standard task is specified in the activity.



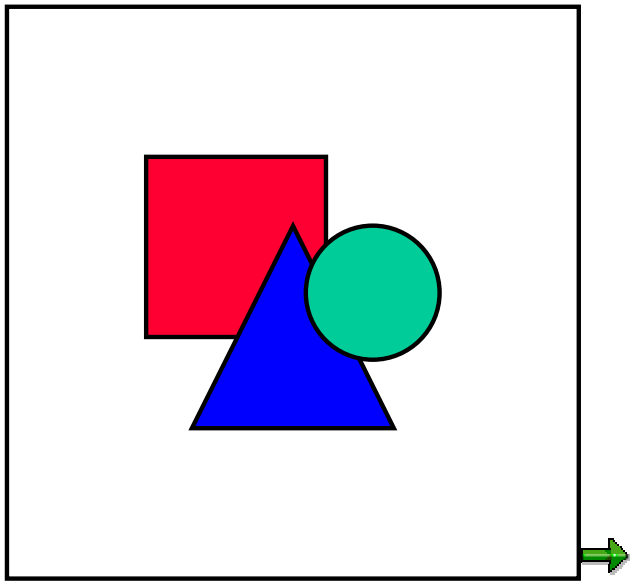
Determination of Agent

To determine the agent, the system searches in the maintenance notification for the person responsible for the tasks. If no person has been specified for this task, then the system notifies all the people who are assigned to this standard task.

The agent is determined using a role resolution. The role **`175 PM_TASK_ROLE`** (*standard role for maintenance notification*) is defined as the default role for this task.

Result of Processing and Termination of Workflow

The processing of the work item terminates the task and the entire workflow. The workflow is also terminated if one of the waiting steps occurs.



The terminating events *Deletion flag set*, *Person responsible changed* and *Task completed* can also occur outside of the workflow process.

Once the task has been processed, it obtains the status *Task completed*.

Preparation and Customizing (PM-WOC-MN / Completing a Task)

Use

The **task-specific** Customizing settings, which you must make to process this workflow template, are described here.

Prerequisites

All the **general** Customizing settings, which are required for the *SAP Business Workflow* component to be used, have been made.

Activities

Make the following settings in Customizing:

1. Set up the organizational structure and thereby determine your organizational units:

   Basis → Business Management → SAP Business Workflow → Edit Organizational Structure

2. Assign the organizational units to the standard tasks:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Maintenance Notifications → Assign Agents to Tasks

3. Activate the link between triggering event (CREATED) and workflow template WS00200074:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Maintenance Notifications → Activate Event Linkage

   For step three, make sure that you activate the event linkage for the workflow template and **not** for the standard task.

For more information, see the Implementation Guide.

Operation/Link to Application Functions (PM-WOC-MN/Complete Task)

Use

This workflow is used to inform all the responsible people or departments that:

- A new task has been created in a maintenance notification (task status *Outstanding*)
- The task must be processed

Activities

System Activities

If an existing maintenance notification is put in process, then the *SAP Business Workflow* automatically ensures that:

1. The workflow-triggering event *CREATED* is generated
2. The workflow template WS00200074 is started
3. A work item is sent to the work center for the person(s) or department(s) responsible

User Activities

As the person responsible for a work item, you have the following options:

Options	What You Should Know:
Processing a work item as a workflow	To see the work item, choose *Office* → *Inbox*. You have the following processing options: • You can process the work item by double clicking on it. The transaction for changing a maintenance notification appears. • You can call up another screen for the work item, to obtain an overview of outstanding and completed tasks. • You can set a work item for resubmission as a reminder to process it later. • You can navigate from the maintenance notification to the workflow log, to define who has performed which activities. • You can receive a work item using another mail system client (for example, Lotus Notes™ or MS Outlook™).
Processing a maintenance notification manually using a worklist	If you process a maintenance notification manually (outside of the workflow), all the changes to the notification are also considered in the workflow process.

Processing an Outstanding Maintenance Notification (PM-WOC-MN)

This workflow scenario is **obsolete and should no longer be used**. The functions for this scenario have been integrated into the new workflow scenario Processing of a Maintenance Notification (PM-WOC-MN) [Page 10].

Definition

If a maintenance notification is created in the system, it initially obtains the status "Outstanding". This means that the notification is entered in the system, and is ready to be processed. To ensure that the notification is processed, the person or department responsible is notified automatically that the maintenance notification must be processed. The system informs the following people or departments in the order listed below:

- Coordinator of maintenance notification
- Department responsible (if no coordinator has been specified)
- All the people, who are assigned to the task (if neither a coordinator, nor a department has been specified)

SAP Business Workflow

If a maintenance notification has been created with the status "Outstanding", a person or group of people can be notified by workflow using the corresponding system setting. These people see a work item in their integrated inbox, and it can be processed directly from there. The change transaction for the maintenance notification is called up automatically during processing.

Technical Realization (PM-WOC-MN / Outstanding PM Notification)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2038 (Maintenance Notification) [Page 26]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS00008314 (Processing an Outstanding Maintenance Notification) [Page 27]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS00200065 (PM: Processing a Notification) [Page 28]

Object Type BUS2038 (Maintenance Notification)

In this scenario, the system processes a business application object of the type **`BUS2078 (maintenance notification)`**. This means that a maintenance notification with the status “Outstanding notification” will be processed.

Location in object repository:

Plant Maintenance and Service Management → Maintenance processing → Maintenance notifications

Standard Task TS00008314 (Process Outstanding PM Notification)

In this standard task, you process a maintenance notification that has the status “Outstanding notification”.

Standard task: `TS00008314`

`ID`: `Outstanding`

Description: *PM task: Process notification*

Referenced object method and attributes

Object type: `BUS2038` (*PM notification*)

Method: `Edit` (*Change*)

Attributes: *Confirm end of processing*

Maintain agent assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS00200065 (PM: Processing a Notification)

If a maintenance notification is created with the status "Outstanding", a workflow is started from the template **Process PM**.

Workflow template: 00200065

ID: Process PM

Description: *PM: Process notification*

Triggering Event for Workflow Template

The events **ACTIVATED** (*notification activated)* and **CREATED** *(notification created)* have been entered as the triggering event for object type **BUS2038** (*maintenance notification*).

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Workflow Container and Data Flow

The most important information that must be available during the workflow is the object reference to the maintenance notification to be processed (**_EVT_OBJECT**), the name of the creator of the notification (**_EVT_Creator**) and the sort key (**_WI_Group_ID**). This information is available as event parameters in the container for the triggering event and must be transferred to the workflow container “per data flow”.

In the standard system, the following data flow definition has been established between the triggering event and workflow container:

Workflow Container		Event Parameter Container
_WF_Initiator	**<-**	**_EVT_Creator**
_WI_Group_Id	**<-**	**_EVT_OBJECT**
NOTIFICATION	**<-**	**_EVT_OBJECT**

The element **_WF_Initiator** is available in the workflow container in the standard system. The element **NOTIFICATION** has been created in addition to the existing standard elements.

Steps in a Workflow

If a maintenance notification is created with the status "Outstanding", a workflow is started from the template **Process PM**.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps. The structure is defined so that the system only has to process one of the branches. The activity makes reference to the standard task.

Determination of Agent

To determine the agent, the system searches for the person responsible in the maintenance notification. The following two roles are defined in the maintenance notification:

- Coordinator
- Department responsible

The system searches first for the coordinator. If a coordinator has not been specified, it searches for the responsible department. If no department has been specified, then all the people, who are assigned to the task in the system, are notified.

This agent determination is based on a role resolution. The role 171 **PM_NOTIF_ROL** *(Person responsible for processing the maintenance notification)* is defined as the default role for the standard task.

Role Container		Task Container
NOTIFICATION	**<-**	**NOTIFICATION**

Binding

The following binding is defined for the step "Process Maintenance Notification".

Task Container		Workflow Container
_WI_Object_ID	**<-**	**NOTIFICATION**
NOTIFICATION	**<-**	**NOTIFICATION**

Result of Processing and Termination of Workflow

The processing of the work item results in the event *Maintenance notification processed*. This event terminates the task and the complete workflow.

After the user has processed the maintenance notification, it can either have the status "In process" or "Completed".

The terminating events *Deletion flag set*, *Maintenance notification completed*, *Maintenance notification in process* and *All tasks completed* can also occur outside of the workflow process.

Steps in a Workflow

Preparation and Customizing (PM-WOC-MN / Outstanding Maintenance Notification)

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this workflow template.

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 32]

Performing Task-Specific Customizing [Page 33]

Activating Event-Receiver Linkage [Page 34]

Processing the Organizational Structure

All persons who will be responsible for processing an outstanding maintenance notification must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all of the persons individually or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period) and then select *Organizational plan* → *Create* or *Change*.
5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to these units or positions using the available menu functions.

Perform Task-Specific Customizing

List all organization management objects that will be authorized to process an outstanding maintenance notification.

To assign the Plant Maintenance tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Perform task-specific customizing*.
4. In the overview for task customizing, select *Plant Maintenance and Service Management* → *Maintenance processing* → *Maintenance notifications* → *Assign tasks to agents*.
5. Assign the persons who will carry out this task in your company to the standard task **`TS00008314`** *(PM task process notification)*.

Activate Event-Receiver Linkage

The events **ACTIVATED** and **CREATED** for object type **BUS2038** (PM notification) are the triggering events for workflow template **WS00200065.** As such, it is entered in the event linkage table in the standard system. To ensure that the workflow template can be started, the linkage between the triggering event and the workflow template as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the workflow template **Process PM** in your system, proceed as follows:

1. Call up the SAP Business Workflow from the main menu by selecting *Tools Business Engineering → Business Workflow → Development*.
2. Select *Utilities → Other tools → Event linkage*. The system displays a screen for viewing the event linkage for various objects.
3. Select *Goto → Detail* to display the detail screen for the following object type, event and receiver type:
   - Object type: *BUS2038*
   - Event: *CREATED*
   - Receiver type: *WS00200065*
4. Mark the *Enabled* field to activate the event linkage.

(Alternatively, you can also activate the event-receiver linkage by processing the workflow template directly.)

Operation and Link to Application Functionality (PM-WOC-MN / Outstanding PM Notification)

The following description assumes that a maintenance notification with the status “outstanding” has been created in the system and the notification has not yet been processed.

Generate event

The workflow-triggering events **ACTIVATED** or **CREATED** are generated automatically if a maintenance notification is created without being processed.

Process outstanding maintenance notification

The person or persons responsible for this task will find a work item that represents the standard task *Process maintenance notification* in their integrated inbox. Processing this work item makes it possible to put the notification “in-process”.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Processing an "In Process" Maintenance Notification (PM-WOC-MN)

This workflow scenario is **obsolete and should no longer be used**. The functions for this scenario have been integrated into the new workflow scenario Processing of a Maintenance Notification [Page 10].

Definition

You can use this workflow scenario to process maintenance notifications that have the status "In process", but which have not yet been completed. For example, a certain person in an organization may be responsible for putting all outstanding maintenance notifications in process (see Processing Outstanding Maintenance Notifications (PM-WOC-MN) [Page 24]). However, another person may actually be responsible for processing a notification.

The system informs the following people or departments in the order listed below:

- Coordinator of maintenance notification
- Department responsible (if no coordinator has been specified)
- All the people, who are assigned to the task (if neither a coordinator, nor a department has been specified)

SAP Business Workflow

If a maintenance notification obtains the status "In process", the person or group of people responsible can be notified by *SAP Business Workflow* using the corresponding system setting. These people see a work item in their integrated inbox, and it can be processed directly from there. The change transaction for the maintenance notification is called up automatically during processing.

Technical Realization (PM-WOC-MN / PM Notification in Process)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2038 (Maintenance Notification) [Page 38]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS00008314 (Processing a Notification) [Page 39]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS00200065 (PM: Putting a Notification in Process) [Page 40]

Object Type BUS2038 (PM Notification)

In this scenario, the system processes a business application object of the type **`BUS2038 (PM notification).`** This means that a maintenance notification with the status “Notification in process” will be edited.

Location in object repository:

Plant Maintenance and Service Management → Maintenance Processing → Maintenance Notifications

Standard Task TS00008314 (PM Task Process Notification)

In this standard task, you process a maintenance notification that has the status “Notification in process.”

Standard task: `TS00008314`

ID: `Process`

Description: *PM task process notification*

Referenced object method and attributes

Object type: `BUS2038` (*PM notification*)

Method: `Edit` (*Change*)

Attributes: *Confirm end of processing*

Maintain agent assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS00200095 (PM: Putting a Notification in Process)

If a maintenance notification is created with the status "In process", a workflow is started from the template **PM: Put notification in process**.

Workflow template: 00200095

ID: PM InProcess

Description: *PM: Put notification in process*

Triggering Event for Workflow Template

The event **INPROCESS** (*notification in process)* for object type **BUS2038** (*maintenance notification*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Workflow Container and Data Flow

The most important information that must be available during the workflow is the object reference to the maintenance notification to be processed (**_EVT_OBJECT**), the name of the creator of the notification (**_EVT_Creator**) and the sort key (**_WI_Group_ID**). This information is available as event parameters in the container for the triggering event and must be transferred to the workflow container “per data flow”.

In the standard system, the following data flow definition has been established between the triggering event and workflow container:

Workflow Container		Event Parameter Container
_WF_Initiator	**<-**	**_EVT_Creator**
_WI_Group_Id	**<-**	**_EVT_OBJECT**
NOTIFICATION	**<-**	**_EVT_OBJECT**

The element **_WF_Initiator** is available in the workflow container in the standard system. The element **NOTIFICATION** has been created in addition to the existing standard elements.

Steps in a Workflow

If a maintenance notification receives the status “Notification in process,” a workflow based on the template **PM InProcess** is started.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps. The structure is defined in such a way that the system processes only one of the branches. The activity makes reference to the standard task.

Determination of Agent

To identify the agent, the system searches for the person responsible in the maintenance notification. The following two partner functions are defined in the maintenance notification:

- Coordinator
- Department responsible

The system first searches for the coordinator. If a coordinator is not specified, the system then searches for the responsible department. If a responsible department cannot be found, then all persons in the system assigned to this task will be notified.

The system identifies the agent on the basis of a role resolution. The role **171 PM_NOTIF_ROL** *(Person responsible for processing the PM notification*) is defined as the default role for this standard task.

Role container		Task container
NOTIFICATION	**<-**	**NOTIFICATION**

Binding

The following binding is defined for the step “Process PM notification”.

Task container		Workflow container
_WI_Object_ID	**<-**	**NOTIFICATION**
NOTIFICATION	**<-**	**NOTIFICATION**

Result of Processing and Termination of Workflow

The processing of the work item results in the event *Maintenance notification processed*. This event terminates the task and the entire workflow.

After the user has processed the maintenance notification, it will have the status “Notification completed”.

The terminating events *Deletion flag set, Maintenance notification completed, All tasks completed* can also occur outside of the workflow process.

Preparation and Customizing (PM-WOC-MN / Maintenance Notification in Process)

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this workflow template.

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 43]

Performing Task-Specific Customizing [Page 44]

Activating Event-Receiver Linkage [Page 45]

Processing the Organizational Structure

All persons who will be responsible for processing maintenance notifications that have the status “Notification in process” must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all of the persons individually or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period) and then select *Organizational plan* → *Create* or *Change*.
5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to these units or positions using the available menu functions.

Perform Task-Specific Customizing

List all organization management objects that will be authorized to process an maintenance notification with the status “in process”.

To assign the Plant Maintenance tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Perform task-specific customizing*.
4. In the overview for task customizing, select *Plant Maintenance and Service Management* → *Maintenance processing* → *Maintenance notifications* → *Assign tasks to agents*.
5. Assign the persons who will carry out this task in your company to the standard task **TS00008314**.

Activate Event-Receiver Linkage

The event **INPROCESS** (notification in process) for object type **BUS2038** (maintenance notification) is the triggering event for workflow template **WS00200065.** As such, it is entered in the event linkage table in the standard system. To ensure that the workflow template can be started, the linkage between the triggering event and the workflow template as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the workflow template **PM: Set notification is process** in your system, proceed as follows:

1. Call up the SAP Business Workflow from the main menu by selecting *Tools Business Engineering* → *Business Workflow* → *Development*.
2. Select *Utilities* → *Other tools* → *Event linkage*. The system displays a screen for viewing the event linkage for various objects.
3. Select *Goto* → *Detail* to display the detail screen for the following object type, event and receiver type:
   - Object type: *BUS2038*
   - Event: *CREATED*
   - Receiver type: *WS00200095*
4. Mark the *Enabled* field to activate the event linkage.

(Alternatively, you can also activate the event-receiver linkage by processing the workflow template directly.)

Operation and Link to Application Functionality (PM-WOC-MN / In-process PM notification)

The following description assumes that a maintenance notification has been set to the status “Notification in process.”

Generate event

The workflow-triggering event **`INPROCESS`** are generated automatically if a maintenance notification is put “in-process.”

Edit “in-process” maintenance notification

The person or persons responsible for this task will find a work item that represents the standard task *Edit in-process maintenance notification* in their integrated inbox. Processing this work item makes it possible to complete the notification.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Completing a Maintenance Notification (PM-WOC-MN)

This workflow scenario is **obsolete and should no longer be used**. The functions for this scenario have been integrated into the new workflow scenario Processing of a Maintenance Notification [Page 10].

Definition

If a maintenance notification contains one or more tasks, and all of these tasks have been completed, the maintenance notification obtains the status "All tasks completed". When this status is set, the system automatically informs the coordinator of the maintenance notification (specified in the notification header) that one of the following processing steps must be executed:

- Complete the maintenance notification (if all the other notification processing steps have been completed)
- Define additional tasks (if, for example, the problem has not been resolved)

SAP Business Workflow

If a maintenance notification obtains the status "All tasks completed", the person or group of people responsible can be notified by *SAP Business Workflow* using the corresponding system setting. These people see a work item in their integrated inbox, and it can be processed directly from there. The change transaction for the maintenance notification is called up automatically during processing.

Technical Realization (PM-WOC-MN / Completing PM Notification)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2038 (Maintenance Notification) [Page 49]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS00008316 (PM: Completing a Notification) [Page 50]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS00200075 (PM: Completing a Notification) [Page 51]

Object Type BUS2038 (Maintenance Notification)

In this scenario, the system processes a business application object of the type **`BUS2038 (maintenance notification).`** This means that a maintenance notification will be completed.

Location in object repository:

Plant Maintenance and Service Management → Maintenance Processing → Maintenance Notifications

Standard Task TS00008316 (Complete)

In this standard task, you complete a maintenance notification.

Standard task: `TS00008316`

ID: `Complete`

Description: *PM task: Complete notification*

Referenced object method and attributes

Object type: `BUS2038` (*maintenance notification*)

Method: `Edit` (*Change*)

Attributes: *Confirm end of processing*

Maintain agent assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS00200075 (PM: Completing a Notification)

If all the tasks for a maintenance notification have been completed, a workflow is started from the template **PM Complete notification**.

Workflow template: 00200075

ID: PM Complete

Description: *PM: Complete notification*

Triggering Event for Workflow Template

The event **ALLTASKSCOMPLETED** (*all tasks completed)* for object type **BUS2038** (*maintenance notification*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Workflow Container and Data Flow

The most important information that must be available during the workflow is the object reference to the maintenance notification to be processed (**_EVT_OBJECT**), the name of the creator of the notification (**_EVT_Creator**) and the sort key (**_WI_Group_ID**). This information is available as event parameters in the container for the triggering event and must be transferred to the workflow container “per data flow”.

In the standard system, the following data flow definition has been established between the triggering event and workflow container:

Workflow Container		Event Parameter Container
_WF_Initiator	**<-**	**_EVT_Creator**
_WI_Group_Id	**<-**	**_EVT_OBJECT**
NOTIFICATION	**<-**	**_EVT_OBJECT**

The element **_WF_Initiator** is available in the workflow container in the standard system. The element **NOTIFICATION** has been created in addition to the existing standard elements.

Steps in a Workflow

If all the tasks in a maintenance notification have been completed, a workflow is started from the template **PM Complete notification**.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps. The structure is defined so that the system only has to process one of the branches. The activity makes reference to the standard task.

Determination of Agent

To determine the agent, the system searches for the person responsible in the maintenance notification. The following two roles are defined in the maintenance notification:

- Coordinator
- Department responsible

The system searches first for the coordinator. If a coordinator has not been specified, it searches for the responsible department. If no department has been specified, then all the people, who are assigned to the task in the system, are notified.

This agent determination is based on a role resolution. The role 171 **PM_NOTIF_ROL** *(Person responsible for processing the maintenance notification)* is defined as the default role for the standard task.

Role Container		Task Container
NOTIFICATION	**<-**	**NOTIFICATION**

Binding

The following binding is defined for the step "Complete Maintenance Notification".

Task Container		Workflow Container
_WI_Object_ID	**<-**	**NOTIFICATION**
NOTIFICATION	**<-**	**NOTIFICATION**

Result of Processing and Termination of Workflow

The processing of the work item results in the event *Maintenance notification processed*. This event terminates the task and the complete workflow.

After the user has processed the maintenance notification, it has the status "Completed".

The terminating events *Maintenance notification completed*, *Maintenance notification in process again* and *Deletion flag set* can also occur outside of the workflow process.

Preparation and Customizing (PM-WOC-MN / Completing a Maintenance Notification)

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this workflow template.

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 54]

Performing Task-Specific Customizing [Page 55]

Activating Event-Receiver Linkage [Page 56]

Processing the Organizational Structure

All persons who will be responsible for completing a maintenance notification must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all of the persons individually or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period) and then select *Organizational plan* → *Create* or *Change*.
5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to these units or positions using the available menu functions.

Perform Task-Specific Customizing

List all organization management objects that will be authorized to process an outstanding task in a maintenance notification.

To assign the Plant Maintenance tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Perform task-specific customizing*.
4. In the overview for task customizing, select *Plant Maintenance* → *Maintenance notifications* → *Assign tasks to agents*.
5. Assign the persons who will carry out this task in your company to the standard task **`TS00008316`**.

Activate Event-Receiver Linkage

The event **ALLTASKSCOMPLETED** (all tasks completed) for object type **BUS2038** (maintenance notification) is the triggering event for workflow template **WS00200075.** As such, it is entered in the event linkage table in the standard system. To ensure that the workflow template can be started, the linkage between the triggering event and the workflow template as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the workflow template **PM Complete notification** in your system, proceed as follows:

1. Call up the SAP Business Workflow from the main menu by selecting *Tools Business Engineering → Business Workflow → Development*.
2. Select *Utilities → Other tools → Event linkage*. The system displays a screen for viewing the event linkage for various objects.
3. Select *Goto → Detail* to display the detail screen for the following object type, event and receiver type:
   - Object type: *BUS2038*
   - Event: *ALLTASKSCOMPLETED*
   - Receiver type: *WS00200075*
4. Mark the *Enabled* field to activate the event linkage.

(Alternatively, you can also activate the event-receiver linkage by processing the workflow template directly.)

Operation and Link to Application Functionality (PM-WOC-MN / Complete PM Notification)

The following description assumes that all tasks in a maintenance notification have been completed.

Generate event

The workflow-triggering event **ALLTASKSCOMPLETED** is generated automatically if all tasks in a maintenance notification have been completed.

Complete maintenance notification

The person or persons assigned to this task will find a work item that represents the standard task *Complete maintenance notification* in their integrated inbox. Processing this work item makes it possible to complete and possibly archive the quality notification.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Maintenance and Service Orders (PM-WOC-MO / CS-SE)

These workflow scenarios support you when processing maintenance and service orders.

Purchase Order Change (PM-WOC-MO / CS-SE)

Purpose

The workflow is used to notify employees in purchasing of all the changes to order data, which result in purchase order requisitions being changed automatically. Where the purchase requisitions have been changed automatically, the purchase orders must also be changed.

The following changes in the order result from changes to the purchase requisitions:

- The requirement quantity of an external material or external service has been changed.
- The requirement date of an external material or external service has been changed.
- An external material item or an external service operation has been deleted.
- An external service operation has been changed in an internally processed operation.
- The order has been technically completed; that is, the external material or external service is no longer required.
- Purchase orders have already been created.

The employee notified can check the purchase orders and purchase requisitions concerned. They can also change purchase orders manually or create new purchase orders.

Process Flow

If plans are made in an order to procure external material or an external service, a purchase requisition is generated by the system for this. This is processed by the employee responsible from the purchasing department. Then one or more purchase orders are created. It is noted in the order that a purchase order has been created.

If changes in an order occur to the material/services ordered (for example, if dates or quantities change) owing to planning and execution of work, the system automatically amends the purchase requisition.

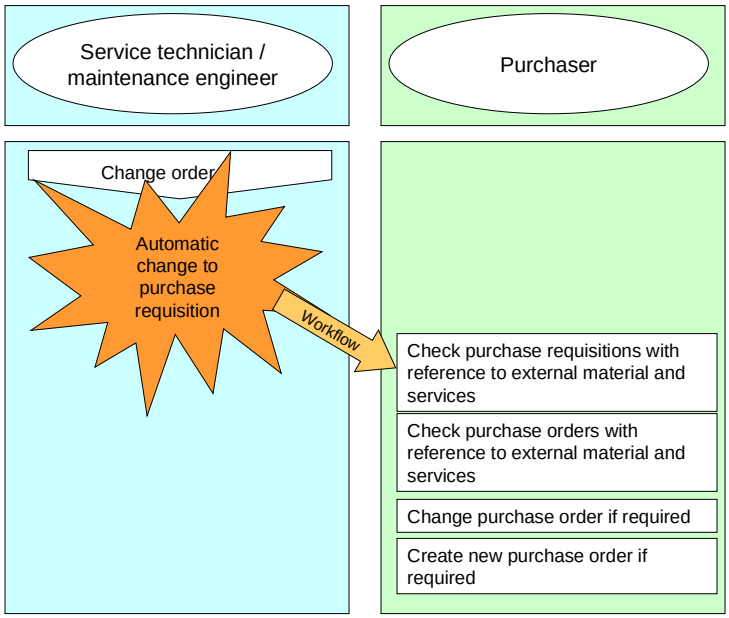
Since in this case, the existing purchase order must be changed, the person or department responsible is informed automatically through the workflow that the purchase order for the order needs to be processed. The system sends a work item to the integrated inbox of all the people, who are assigned to the task in the system.

It can be processed directly from the inbox.

For more information, see Operation & Link to Application Functions (PM-WOC-MO) [Page 65].

The graphic shows the workflow with all the employees involved:

Purchase Order Change (PM-WOC-MO / CS-SE)



Technical Realization (PM-WOC-MO / CS-SE)

The interface between the SAP functions and the SAP business scenario is realized using object technology. In this workflow scenario, the system processes the following objects:

Workflow Elements	What You Should Know:
Object types: BUS2007 (maintenance order) BUS2088 (service order) T024 (purchasing group)	Both the maintenance order and service order are identified using the order number. You can find the object types in the *Business Object Browser* (*Tools* → *ABAP Workbench* → *Overview)* by choosing *Plant maintenance* → *Maintenance processing* → *Maintenance orders* or by choosing *Materials management* → *Purchasing*.
Standard tasks: TS20000650 (purchase order change for maintenance order) TS20000652 (purchase order change for service order)	The tasks are assigned to the employees or departments that are authorized to process the objects.
Methods: DisplayPurchaseOrderChange	DisplayPurchaseOrderChange runs synchronously and in a dialog.
Event PurchaseOrderChange	This event is the triggering event for standard tasks TS20000650 and TS20000652. Its parameters are PurchasingGroup and TodoList (internal table with the changed materials and services).
Standard role: 00900010 (purchasing group)	The definition of the standard role determines who is responsible for processing a purchase order change. If no users are linked to the purchasing group using Organizational Management, all the agents assigned to the standard task (TS2000650 or TS2000652) receive a work item.

The following data flow is defined between the event PurchaseOrderChange and the task TS20000650 or TS20000652:

Task Container	Event Parameter Container
Order	*_Evt_Object*
Start date	*_Evt_Creation_Date*
Start time	*_Evt_Creation_Time*
Trigger	*_Evt_Creator*

Technical Realization (PM-WOC-MO / CS-SE)

Simple to do list	*TodoList*
Purchasing group	*PurchasingGroup*

Preparation and Customizing (PM-WOC-MO / CS-SE Purchase Order Change)

Prerequisites

All the general Customizing settings for the *SAP Business Workflow* component have been made.

Use

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps (standard task TS20000650 or TS20000652) are required for this workflow template.

For more information, see the Customizing documentation in Setting Up Workflow for Orders [Ext.].

Alternatively, you can also set up some assignments using the SAP menu.

Maintaining Agent Assignment

Assign the users or organizational units that should process the task in your company to the standard task TS20000650 or TS20000652.

1. Choose *Tools* → *Business Workflow* → *Development* → *Definition tools* → *Tasks/task groups* → *Change.*
2. Enter the standard task 20000650 or 20000652.
3. Choose *Additional data* → *Agent assignment* → *Maintain*.
4. Choose *Create agent assignment*.

Linking the Purchaser to Organizational Management

If you do not want all possible agents assigned to standard task TS20000650 or TS2000652 to receive a work item, just the purchaser responsible, then link the purchaser to the SAP Organizational Management.

1. Choose *Tools* → *ABAP Workbench* → *Development* → *Workflow* → *Definition tools* → *Organizational management* → *SAP organizational objects* → *Create assignments*.
2. Enter the organizational object type T024 and assign the required organizational unit to it.

Activating Event Linkage

The event PurchaseOrderChange for object type BUS2007 or BUS2088 is the triggering event for standard task TS20000650 or TS20000652. To start the standard task, the event linkage must be activated.

1. Choose *Tools* → *Business Workflow* → *Development* → *Definition tools* → *Tasks/task groups* → *Display*.
2. Enter the standard task 20000650 or 20000652 and choose *Display*.
3. On the *Triggering events* tab page, click on the color symbol to activate the assignment.

Maintaining Order Type-Based Parameters

In Customizing, you must define for each order type and plant whether the standard task TS20000650 or TS20000652 should be started.

1. Choose *Plant Maintenance and Customer Service → Maintenance and Service Processing → Maintenance and Service Orders → Functions and Settings for Order Types → Define Change Docs, Collective Purc. Req. Indicator, Operation No. Interval*.
2. Set the indicator *Workflow for purchase order change*.

Operation & Link to Application Functions (PM-WOC-MO / CS-SE Purchase Order Change)

Use

When you execute a work item for the standard task TS20000650 or TS20000650, you see a split screen:

On the left side of the screen, there is an overview list with the materials or services. Behind each material or service is a checkbox. You can use this checkbox to indicate which materials or services you have already processed.

If a red LED appears before a material or service, this means that a new work item has been generated for this material or service after the present work item was generated.

By double clicking on a material or service in the overview list, you can display the detail data on the right side of the screen.

You have the option of processing the existing purchase orders for creating new purchase orders. After you have created a new purchase order, this does not appear immediately in the table with the other purchase orders already created. The purchase order must first be updated in the database. After the update, you can display the purchase order in the following ways:

- Press the *Refresh* pushbutton
- Double click on the material or service in the overview list

You can stop processing the work item at any time using *Cancel*, *Back* or *Exit*, and resume at a later date. If you choose *Complete workflow*, the workflow is terminated.

Notifying the Order Creator(PM-WOC-MO)

Purpose

You use this workflow if you want the creator of a maintenance order to be notified when the maintenance order is opened or released, or when final confirmation, technical completion, or business completion is performed for it. By using this workflow, the author is always able to:

- See in which phase of processing the orders that he created are in, by looking in his integrated inbox
- Branch immediately into the corresponding orders

This scenario has been implemented in the standard system for the application component *Plant Maintenance (PM)*. You can also use it for the component *Service Management (SM)*. To do this, you can copy this scenario and change the check for maintenance orders into a check for service orders.

Prerequisites

You can only implement this workflow if you use maintenance or service orders in your system.

To be able to use the workflow successfully, you must have made all the necessary settings for it in your R/3 System.

Process Flow

1. The order creator creates an order.
2. The creator of the order will be notified via workflow in the following circumstances:
   - Order release
   - Final confirmation of the order
   - Technical completion of the order
   - Business completion of the order
3. In these circumstances, the order creator sees a work item in his integrated inbox, that can be processed directly from the inbox.
4. When the order creator processes the work item, the change transaction for the order is called up automatically.
5. The work item is terminated when the maintenance order enters the next processing phase.

Technical Realization (PM-WOC-MO / Notification of the Order Creator)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2007 (Maintenance Order) [Page 83]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS20000004 (PMO Order Created) [Page 69]

Standard Task TS20000005 (PMO Order Released) [Page 70]

Standard Task TS20000006 (PMO Order Completely Confirmed) [Page 71]

Standard Task TS20000007 (PMO Order Technically Completed) [Page 72]

Standard Task TS20000031 (PMO Order Completed for Business) [Page 73]

Object Type BUS2007 (Maintenance Order)

In this scenario, a business application object of type BUS2007 (*maintenance order*) is processed. This means that a maintenance order is created.

Location in object repository:

Plant Maintenance and Service Management

Standard Task TS20000004 (PMO Order Created)

In this standard task, a maintenance order is changed.

Standard task: TS20000004

Abbreviation: `PMO CRTD`

Task name: *PMO order created*

Referenced Object Method and Attributes

Object type: `BUS2007` *(Maintenance order)*

Method: `edit` *(edit)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Standard Task TS20000005 (PMO Order Released)

In this standard task, a maintenance order is changed.

Standard task: TS20000005

Abbreviation: `PMO RELSD`

Task name: *PMO order released*

Referenced Object Method and Attributes

Object type: `BUS2007` *(Maintenance order)*

Method: `edit` *(edit)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Standard Task TS20000006 (PMO Order Completely Confirmed)

In this standard task, a maintenance order is changed.

Standard task: TS20000006

Abbreviation: `PMO CONFR`

Task name: *PMO order completely confirmed*

Referenced Object Method and Attributes

Object type: `BUS2007` *(Maintenance order)*

Method: `edit` *(edit)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Standard Task TS20000007 (PMO Order Technically Completed)

In this standard task, a maintenance order is changed.

Standard task: TS20000007

Abbreviation: `PMO TCOMP`

Task name: *PMO order technically completed*

Referenced Object Method and Attributes

Object type: `BUS2007` *(Maintenance order)*

Method: `edit` *(edit)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Standard Task TS20000031 (Business Completion for PMO Order)

In this standard task, a maintenance order is changed.

Standard task: TS20000031

Abbreviation: `PMO CMPD`

Task name: *Business completion for PMO order*

Referenced Object Method and Attributes

Object type: `BUS2007` *(Maintenance order)*

Method: `display` *(display)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS20000021 (PMO Author)

When a maintenance order is created, a workflow is started by the PMO author template.

Workflow template: WS20000021

ID: `PMO author`

Description: *PM author*

Triggering Event for Workflow Template

The event **`created`** for object type **`BUS2007`** (*maintenance order*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Scenario Procedure

This workflow template enables the creators of maintenance orders to track in which phase of processing their maintenance orders are.

1. When the order is created, the standard task TS20000004 is started by an event. This event starts work item X. When the order is released, the work item X is terminated, as it has the release as a terminating event.
2. Now, the standard task **TS20000005** is started by the event *PMO order released*. This task starts work item Y. The maintenance order is now processed, and final confirmation has been performed. Now work item Y is terminated, as it has the final confirmation as a terminating event.
3. Now, the standard task **TS20000006** is started by the event *PMO order completely confirmed*. This task starts work item Z. The maintenance order is now technically complete. Now work item Z is terminated, as it has the technical completion as a terminating event.
4. Now, the standard task **TS20000007** is started by the event *PMO order technically completed*. This task starts work item Q. Business completion has now been performed for the maintenance order. Now work item Q is terminated, as it has the business completion as a terminating event.
5. Now, the standard task **TS20000031** is started by the event *Business completion for PMO order*. This task starts work item R. To complete this work item (mail in integrated inbox), the work item R must be terminated manually.

Preparation and Customizing (PM-WOC-MO / Notification of Order Creator)

Use

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this standard task.

Features

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 77]

Performing Task-Specific Customizing [Page 78]

Activating Event-Receiver Linkage [Page 79]

Processing the Organizational Structure

All persons who are responsible for processing an order in a particular phase, must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all the persons individually, or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.
   The system displays the initial screen for the Customizing application.
2. Choose *Implement. projects* → *SAP Reference IMG*.
   The system displays the screen *Display Structure: SAP Reference IMG*.
3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period). Then choose *Organizational plan* → <*Create/Change*>.
5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to the appropriate units or positions using the available menu functions.

Performing Task-Specific Customizing

List all organization management objects that will be authorized to process an order.

To assign the Plant Maintenance tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.
   The system displays the initial screen for the Customizing application.
2. Choose *Implement. projects* → *SAP Reference IMG*.
   The system displays the screen *Display Structure: SAP Reference IMG*.
3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Perform task-specific Customizing*.
4. In the screen for task-specific customizing, choose *Plant Maintenance* → *Maintenance Order Management* → *Maintenance Orders* → *Assign tasks to agent*.
5. Assign the person or persons who will perform the respective tasks in your company to the standard tasks **TS20000004** to **TS20000007** and **TS20000031**

Activating Event-Receiver Linkage

The event **created** for object type **BUS2007** *(maintenance order*) is the triggering event for the workflow template **WS20000021** (*PMO author*) and is entered as such in the event linkage table in the standard system. To ensure that the workflow is started, the linkage between the triggering event and the standard task as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the linkage in your system, proceed as follows:

1. From the initial menu, choose *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. Choose *Implementation projects* → *SAP Reference IMG*.

   The system displays the screen *Display Structure: SAP Reference IMG*.

3. In the structural display, choose *Basis* → *Business Management* → *SAP Business Workflow* → *Perform task-specific Customizing*.

4. On the screen for task-specific Customizing, choose *Plant Maintenance and Customer Service* → *Maintenance Processing* → *Maintenance Orders* → *Activate Event Linkage*.

5. Activate the event linkage for workflow template **WS20000021** (*PMO author*).

Operation and Link to Application Functionality (PM-WOC-MO / Notifying the Order Creator)

Create event

The standard task is started by an event when the order enters a new processing phase.

Process order

The person or persons responsible for this standard task will find a work item that represents the *Order phase change* in their integrated inbox. Executing this work item makes it possible to process the order.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Notifying the Employee Responsible (PM-WOC-MO)

Purpose

You use this workflow if you want the maintenance planner (PM planner for short) to be notified when an order is created and needs to be released. By using this workflow, he sees a work item in his integrated inbox, that he can process directly from the inbox. When the work item is processed, the change transaction for the order is automatically called up.

This scenario has been implemented in the standard system for the application component *Plant Maintenance (PM)*. You can also use it for the component *Service Management (SM)*. To do this, you can copy this scenario and change the check for maintenance orders into a check for service orders.

Prerequisites

You can only implement this workflow if you use maintenance or service orders in your system.

To be able to use the workflow successfully, you must have made all the necessary settings for it in your R/3 System.

Process Flow

1. The order creator creates an order.
2. The maintenance planner is notified that the order needs to be released. In these circumstances, he sees a work item in his integrated inbox, that he can process directly from the inbox.
3. When the maintenance planner processes the work item, the change transaction for the order is called up automatically.
4. The work item is terminated when the maintenance order is released or if it is not executed.

Technical Realization (PM-WOC-MO / Notification of the Employee Responsible)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2007 (Maintenance Order) [Page 83]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS20000064 (PMO Order to be Released by Maintenance Planner) [Page 84]

Object Type BUS2007 (Maintenance Order)

In this scenario, a business application object of type BUS2007 (*maintenance order*) is processed. This means that a maintenance order is created.

Location in object repository:

Plant Maintenance and Service Management

Standard Task TS20000064 (PMO Order is Released by PM Planner)

In this standard task, a maintenance order is changed.

Standard task: TS20000064

Abbreviation: PMO PMPlannr

Task name: *PMO order is released by PM Planner*

Referenced Object Method and Attributes

Object type: BUS2007 *(Maintenance order)*

Method: edit *(edit)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS20000014 (PM: PMO Maintenance Planner)

When a maintenance order is created, a workflow is started by the PMO maintenance planner template.

Workflow template: WS20000014

ID: `PMO PMPlanner`

Description: *PMO maintenance planner*

Triggering Event for Workflow Template

The event **`created`** for object type **`BUS2007`** (*maintenance order*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Scenario Procedure

When the order is created, the standard task TS20000064 is started by an event.

After the user has released the maintenance order, a terminating event **`released`** is triggered. With this, the work item is terminated and no longer appears in the integrated inbox of the employee responsible.

Preparation and Customizing (PM-WOC-MO / Notification of Employees Responsible)

Use

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this standard task.

Features

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 88]

Performing Task-Specific Customizing [Page 89]

Activating Event-Receiver Linkage [Page 90]

Processing the Organizational Structure

All persons who are responsible for processing an order in a particular phase, must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all the persons individually, or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*.

   The system displays the screen Display Structure: *SAP Reference IMG*.

3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Edit organizational plan*.

4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period). Then choose *Organizational plan* → <*Create/Change*>.

5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to the appropriate units or positions using the available menu functions.

Performing Task-Specific Customizing

List all organization management objects that will be authorized to process an order.

To assign the Plant Maintenance tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*.

   The system displays the screen Display Structure: *SAP Reference IMG*.

3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Perform task-specific Customizing*.

4. In the screen for task-specific customizing, choose *Plant Maintenance* → *Maintenance Order Management* → *Maintenance Orders* → *Assign tasks to agent*.

5. Assign the person or persons who will perform this task in your company to the standard task TS20000014 *(PMO operation created)*.

Activate Event-Receiver Linkage

The event created for the object type BUS2007 (*maintenance* order) is the triggering event for the workflow template WS20000014 and is entered in the event linkage table in the standard system as such. To ensure that the workflow can be started, the linkage between the triggering event and the standard task as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the linkage in your system, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*.

   The system displays the screen Display Structure: *SAP Reference IMG*.

3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Perform task-specific Customizing*.

4. In the screen for task-specific customizing, choose *Plant Maintenance* → *Maintenance Order Management* → *Maintenance Orders* → *Activate event linking*.

5. Activate the event linkage for the workflow template WS20000014 (*PMO maintenance planner*).

Operation and Link to Application Functionality (PM-WOC-MO / Notifying the Employee Responsible)

Create event

The standard task is started by an event when an order is created.

Process order

The person or persons responsible for this standard task will find a work item that represents the *Creation of order* in their integrated inbox. Executing this work item makes it possible to process the order.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Notifying the Work Centers Involved (PM-WOC-MO)

Purpose

You use this workflow if you want the work centers that are involved in the processing of an order to be notified when their operations are released, partially confirmed, or completely confirmed. By using the workflow functionality, the person or persons who are assigned to the work centers involved, see a work item in their integrated inbox. They can process the work item directly from their inbox. When the work item is processed, the display transaction for the order is automatically called up for the order or completion confirmation.

This scenario has been implemented in the standard system for the application component *Plant Maintenance (PM)*. You can also use it for the component *Service Management (SM)*. To do this, you can copy this scenario and change the check for maintenance orders into a check for service orders.

Prerequisites

You can only implement this workflow if you use maintenance or service orders in your system.

To be able to use the workflow successfully, you must have made all the necessary settings for it in your R/3 System.

Process Flow

1. The order creator creates an order and plans the work to be executed by assigning the individual operations to specific work centers.
2. The maintenance planner releases the order.

   The person or persons assigned to the work centers responsible for the released operations then find a work item “PM operation was released” for each relevant operation in their integrated inbox.
3. Those employees responsible process the work items directly from their inbox. The display transaction for the order is called up automatically when doing this.

   The work item “PM operation was released” is terminated when the operation is partially or completely confirmed.
4. When partial completion of an operation is performed, the employees of the work center involved receive the work item “PM operation partially confirmed”. This work item can also be processed directly from the inbox by the employees assigned to the work center involved. The display transaction for the order is called up automatically when doing this.

   The work item “PM operation was partially confirmed” is terminated when the operation is completely confirmed.
5. When final completion of an operation is performed, the employees of the work center involved receive the work item “PM operation completely confirmed”. This work item can also be processed directly from the inbox. The display transaction for the completion confirmations is called up automatically when doing this.

   After displaying the completion confirmations, the processor specifies whether processing has been finished. If so, the system deletes the work item “PM operation completely confirmed”.

If you want to implement this workflow as described above, you must ensure that the work centers entered for the operations are not changed after the order is released. When the work center is changed, the system continues sending the work items to the person or persons assigned to the work centers that were originally entered.

Technical Realization (PM-WOC-MO / Notification of Work Centers Involved)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type AFVC_PM (Maintenance Order Operation) [Page 95]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS20000015 (PMO Operation Released) [Page 96]

Standard Task TS20000016 (PMO Operation Completely Confirmed) [Page 98]

Standard Task TS20000056 (PMO Operation Partially Confirmed) [Page 97]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS20000031 (PMO Operation) [Page 99]

Object Type AFVC_PM (Maintenance Order Operation)

In this scenario, the system processes a business application object of the type AFVC_PM ***(Maintenance order operation).*** **This means that the operation of a maintenance order is released/partially confirmed/completely confirmed.**

Location in object repository:

Plant Maintenance and Service Management

Standard Task TS20000015 (PMO Order Released)

In this standard task, a maintenance order is displayed.

Standard task: `TS2000015`

Abbreviation: PMO OP RLSD

Task name: *PMO operation released*

Referenced Object Method and Attributes

Object type: `AFVC_PM` *(PM order operation)*

Method: `DISPLAYORDER` *(Display order)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Standard Task TS20000056 (PMO Operation Completely Confirmed)

In this standard task, a maintenance order is displayed.

Standard task: TS20000056

Abbreviation: PMO OP PCON

Task name: *PMO operation partially confirmed*

Referenced Object Method and Attributes

Object type: `AFVC_PM` *(PM order operation)*

Method: `DISPLAYORDER` *(Display order)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Standard Task TS20000016 (PMO Operation Completely Confirmed)

In this standard task, a completion confirmation is displayed.

Standard task: TS20000016

Abbreviation: PMO OP CONF

Task name: *PMO operation completely confirmed*

Referenced Object Method and Attributes

Object type: `AFVC_PM` *(PM order operation)*

Method: `DISPLAYCONFIRMATION` *(Display confirmation)*

Maintain Agent Assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS20000031 (PMO Operation)

When an operation is released, a workflow is started by the **PMO operation** template.

Workflow template: WS20000031

ID: PMO operation

Description: *PMO operation*

Triggering Event for Workflow Template

The event **RELEASED** for object type **AFVC_PM** (*maintenance order operation*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Scenario Procedure

This workflow template makes it possible to inform the person or persons at the work centers involved in the execution of an order, about the processing status of the operations.

1. When the operation of an order is released, the standard task **TS20000015** is started by the event *Operation released*. This task starts work item X. When the order is partially or completely confirmed, the work item X is terminated, as it has partial or final completion as a terminating event.
2. When partial confirmation is performed for the operation, the standard task **TS20000056** is started by the event *Operation partially confirmed*. This task starts work item Y. The operation is now processed further, and final confirmation is performed for it. Now work item Y is terminated, as it has the final confirmation as a terminating event.
3. Now the standard task **TS20000016** is started by the event *Operation completely confirmed*. This task starts work item Z. To close work item Z it must be ended manually.

Preparation and Customizing (PM-WOC-MO / Notification of Work Centers Involved)

Use

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this standard task.

Features

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 102]

Performing Task-Specific Customizing [Page 103]

Activating Event-Receiver Linkage [Page 104]

Processing the Organizational Structure

All persons who are responsible for processing an order in a particular phase, must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all the persons individually, or you can assign entire organizational units (for example, departments) to the task.

Procedure

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*.

   The system displays the screen Display Structure: *SAP Reference IMG*.

3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Edit organizational plan*.

4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period). Then choose *Organizational plan* → <*Create/Change*>.

5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to the appropriate units or positions using the available menu functions.

Performing Task-Specific Customizing

List all organization management objects that will be authorized to process an order.

Procedure

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*.

   The system displays the screen Display Structure: *SAP Reference IMG*.

3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Perform task-specific Customizing*.

4. In the screen for task-specific customizing, choose *Plant Maintenance* → *Maintenance Order Management* → *Maintenance Orders* → *Assign tasks to agent*.

Assign the persons or work centers that should perform the tasks in your company to the standard tasks TS20000015 *(Operation released),* TS20000056 *(PMO Operation partially confirmed)* and TS20000016 *(PMO Operation completely confirmed)*.

Activate Event-Receiver Linkage

The event RELEASED for the object type AFVC_PM (*Maintenance order operation*) is the triggering event for the workflow template WF20000031 and is entered in the event linkage table in the standard system as such. To ensure that the workflow can be started, the linkage between the triggering event and the workflow template task as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

Procedure

1. From the main menu, select *Tools* → *Business Engineer* → *Customizing*.

   The system displays the initial screen for the Customizing application.

2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*.

   The system displays the screen Display Structure: *SAP Reference IMG*.

3. In the IMG structure, choose *Basis Components* → *Business Management* → *SAP Business Workflow* → *Perform task-specific Customizing*.

4. In the screen for task-specific customizing, choose *Plant Maintenance* → *Maintenance Order Management* → *Maintenance Orders* → *Activate event linking*.

5. Activate the event linkage to the workflow template WS20000031 (*PMO Operation*).

Operation and Link to Application Functionality (PM-WOC-MO / Notifying the Work Centers Involved)

Create event

The standard task TS20000015 is started by an event when a operation is released.

The standard task TS20000056 is started by an event when an operation is partly confirmed.

The standard task TS20000016 is started by an event when an operation is completely confirmed.

Display order

The person or persons who are responsible for the standard tasks TS20000015 and TS20000056 will find a work item in their integrated inbox that represents the *Release of an order operation* or the *Partial confirmation of an order operation*. Executing this work item makes it possible to display the order.

The person or persons responsible for the standard task TS20000016 will find a work item in their integrated inbox that represents the *Final confirmation of an order operation*. Executing this work item makes it possible to display the completion confirmation.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Service Notifications (CS-PM-SN)

These workflow scenarios support you when processing service notifications in the *Customer Service* (CS) application component.

Processing of a Service Notification (CS-CM-SN)

Purpose

This workflow scenario supports your business processes for service processing. In this scenario, the *SAP Business Workflow* component helps you to process, monitor and complete newly created service notifications efficiently. This process is represented in a workflow template, which triggers and controls the execution of the following standard tasks:

- Notifying a person responsible (for example, the notification coordinator) that a new service notification has been created or put in process, and that tasks must be defined for the notification
- Notifying a person responsible that tasks, which must be processed, have been created for the service notification
- Notifying a person responsible (for example, the notification coordinator) that all the tasks for the service notification have been completed, and the service notification must either be completed or additional tasks must be defined for the notification

SAP Business Workflow

If the appropriate system settings have been made, the *SAP Business Workflow* automatically sends a work item to the person(s) or department(s) responsible and informs them that certain tasks need to be executed. The following tasks and triggering events belong to this process:

Task	Triggering Event
Processing of an outstanding service notification without tasks	The person responsible is notified when a service notification has been created manually in the system.
Processing of a service notification with outstanding tasks	The person responsible is notified as soon as the tasks have been created in the notification and the notification has been saved.
Completion of a service notification with completed tasks	The person responsible is notified as soon as the tasks have been completed in the notification and the notification has been saved.

Determination of the Person(s) or Department(s) Responsible

For each of the above tasks, the system notifies the following people or departments in the order listed below:

1. Notification coordinator
2. Department responsible (if no coordinator has been specified)
3. All the people, who are assigned to the task (if neither a coordinator, nor a department has been specified)

Prerequisites

Refer to Preparation and Customizing (CS-CM-SN) [Page 111]

Process Flow

Refer to Process for Workflow Template WS20000318 [Page 110]

Technical Realization (CS-CM-SN)

The interface between the R/3 functions and the *SAP Business Workflow* is realized using object technology. In this workflow scenario, the system processes the following objects:

Objects	What You Should Know:
Task group TG20000016	The task group contains all the workflow objects, which belong to the workflow scenarios for service notifications.
Business object *BUS2080* (service notification)	A service notification corresponds to business object type *BUS2080*. A service notification is identified by the notification number (key field). You can find the attributes, methods and events for business object *BUS2080* in the *Business Object Repository* of the R/3 System.
Standard tasks: • TS20000549 (process new notification) • TS20000548 (notification is processed) • TS20000555 (complete notification)	These are single-step tasks, which refer to an object method. This task is assigned to the people or departments that are authorized to process the object.
Workflow template WS20000318	This template contains the definitions of the workflow task for this workflow scenario. You can use this workflow template to notify the people responsible that a service notification has been created. The triggering events for this workflow template are *CREATED* and *INPROCESSAGAIN*.
Standard role AC00000178	This is the standard role for service notifications. The role resolution (defined in the standard role definition) is used to determine who is responsible for the processing of a service notification.

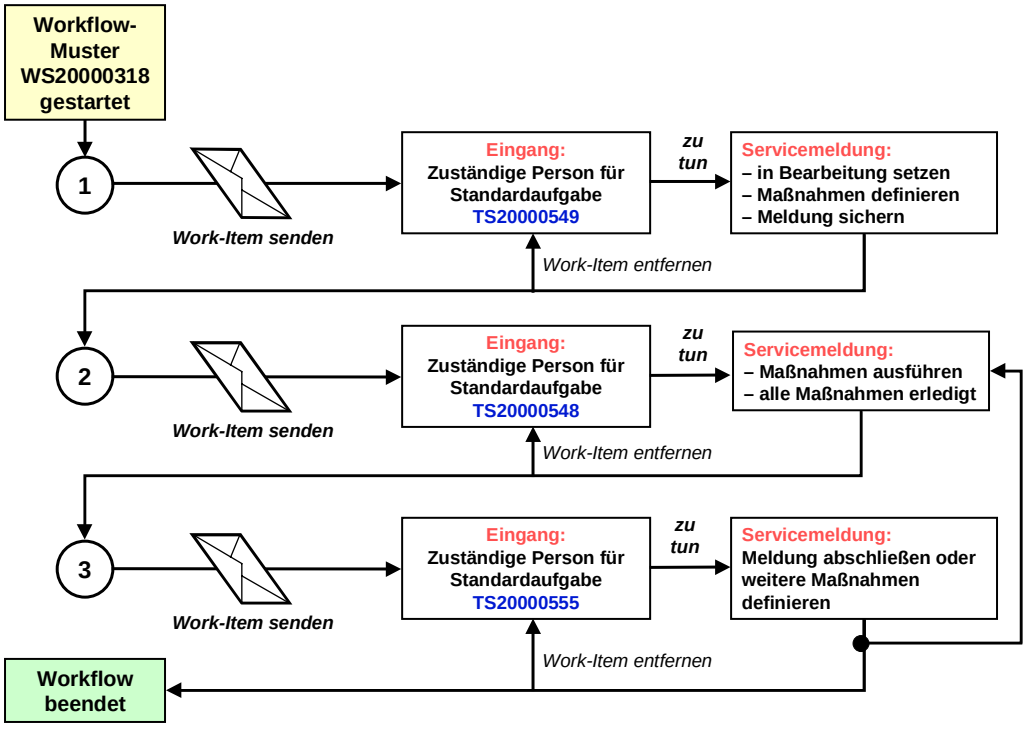
Process for Workflow Template WS20000318

Purpose

The workflow template for this process is started when you create a new service notification.

Process Flow

1. The system triggers one of the following events for business object BUS2080 (service notification):
   - CREATED (service notification created)
   - INPROCESSAGAIN (service notification in process again)
2. The triggering event starts the workflow template WS2000318 and the linked process as described in the following graphic.



The standard tasks in this process are valid from Release 4.6.

Preparation and Customizing (CS-CM-SN)

Use

The **application-specific** Customizing settings, which you must make to process this workflow template, are described here.

Prerequisites

All the **general** Customizing settings, which are required for the *SAP Business Workflow* component to be used, have been made.

Activities

Make the following settings in Customizing:

1. Set up the organizational structure and thereby determine your organizational units:

   Basis → Business Management → SAP Business Workflow → Edit Organizational Structure

2. Assign the organizational units to the standard tasks:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Service Notifications → Assign Agents to Tasks

3. Activate the link between triggering event (CREATED, INPROCESSAGAIN) and workflow template WS20000318:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Service Notifications → Activate Event Linkage

   For step three, make sure that you activate the event linkage for the workflow template and **not** for the standard task.

For more information, see the Implementation Guide.

Operation and Link to Application Functions (CS-CM-SN)

Use

This workflow is used to inform the people or departments responsible automatically that a series of tasks must be executed in the following order:

1. Processing of a newly created service notification (notification status *Outstanding*)
2. Processing of a service notification with outstanding tasks (notification status *In process*)
3. Completion of a service notification (status of all tasks *Completed*)

The person(s) or department(s) responsible receive a mail (work item) in their inbox informing them of the tasks to be performed.

Activities

System Activities

If a service notification is created or put in process again, then the *SAP Business Workflow* automatically ensures that:

1. The workflow-triggering event *CREATED* or *INPROCESSAGAIN* is generated
2. The workflow template WS20000318 is started
3. A work item is sent to the work center for the person(s) or department(s) responsible

User Activities

As the person responsible for a work item, you have the following options:

Options	What You Should Know:
Processing a work item as a workflow	To see the work item, choose *Office* → *Inbox*. You have the following processing options: • You can process the work item by double clicking on it. The transaction for changing a service notification appears. • You can call up another screen for the work item, to obtain an overview of outstanding and completed tasks. • You can set a work item for resubmission as a reminder to process it later. • You can navigate from the service notification to the workflow log, to define who has performed which activities. • You can receive a work item using another mail system client (for example, Lotus Notes™ or MS Outlook™).

Processing a service notification manually using a worklist	If you process a service notification manually (outside of the workflow), all the changes to the notification are also considered in the workflow process.

Completion of a Task (CS-CM-SN)

Purpose

In a service notification, you can define one or more tasks to solve the problem recorded in the notification. A task can refer both to the notification header and the individual notification items. It has a particular status.

If you create a task in a notification, the person responsible for completing the task can use the workflow to indicate this.

If no person has been specified, then the system notifies all the people who are assigned to the task.

SAP Business Workflow

If the appropriate system settings have been made, the *SAP Business Workflow* automatically sends a work item to the integrated inbox of the person(s) responsible. It states that a new task has been created in a notification. The person(s) informed can process the work item directly from their inbox. The change transaction for the task is called up automatically during processing.

Prerequisites

Refer to Preparation and Customizing (CS-CM-SN / Completing a Task) [Page 118]

Process Flow

Refer to Process for Workflow (CS-CM-SN / Completing a Task) [Page 116]

Technical Realization (CS-CM-SN / Completing a Task)

The interface between the R/3 functions and the *SAP Business Workflow* is realized using object technology. In this workflow scenario, the system processes the following objects:

Objects	What You Should Know:
Task group TG20000016	This task group contains the standard tasks and the workflow template required for this workflow scenario.
Object type *QM/SM* (task)	A task corresponds to object type *QMSM*. You can find the attributes, methods and events for object type *QMSM* in the *Business Object Repository* of the R/3 System.
Standard tasks TS00008340 (*Complete task*)	This is a single-step task, which refers to an object method. In this standard task, a task is completed in a service notification. This task is assigned to the people or departments that are authorized to process the object.
Workflow template WS00200097 (*SM ComplTask*)	This workflow template contains the definitions of the workflow task for this workflow scenario. You can use this workflow template to notify the people responsible that a critical error must be processed. The triggering event for this workflow is *CREATED*.

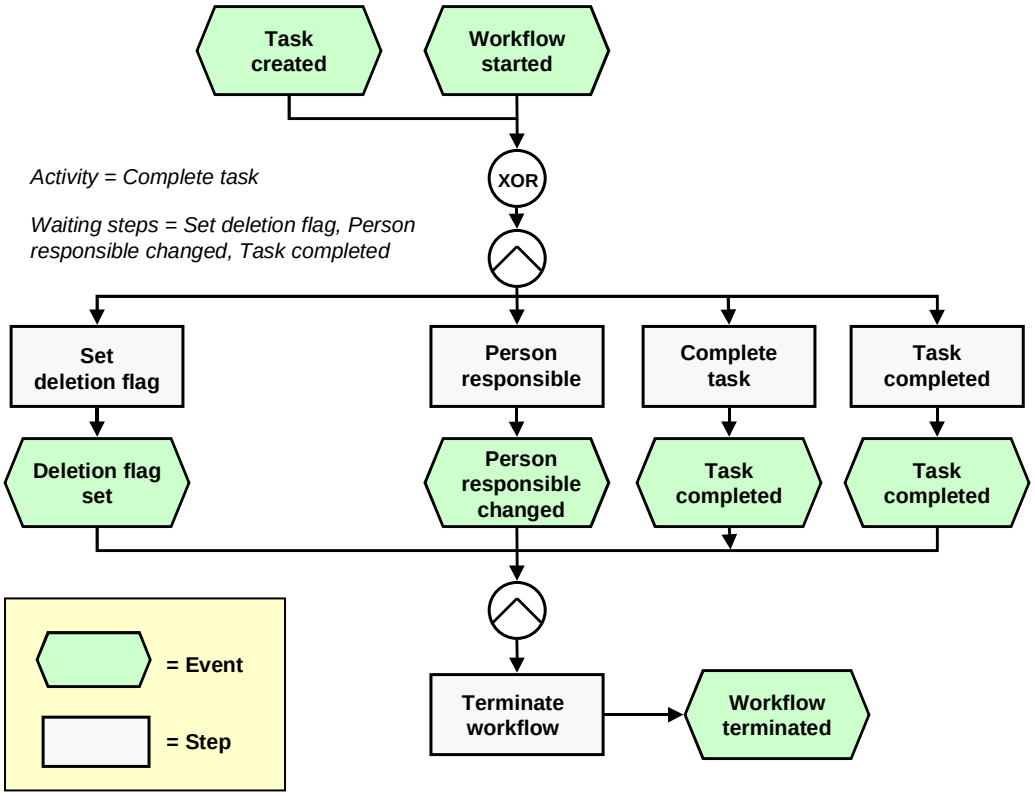
Process for Workflow (CS-CM-SN / Completing a Task)

Purpose

If a task has been created in a service notification, a workflow is started based on the template *SM Complete Task*.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps (see graphic). The structure is defined so that the system only has to process one of the branches. The standard task is specified in the activity.



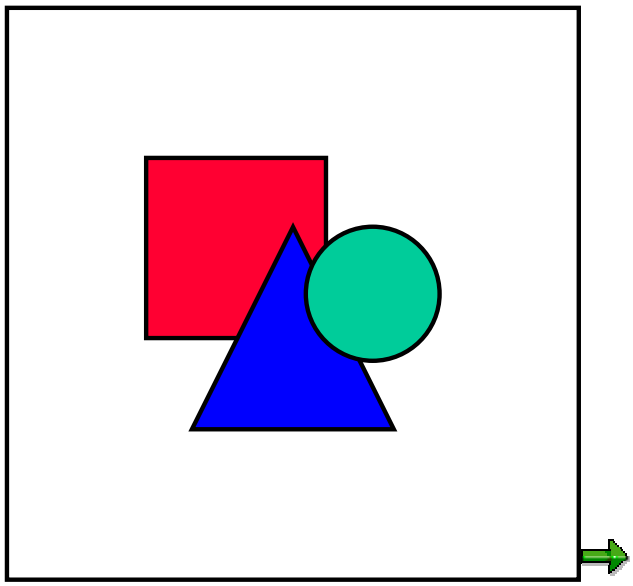
Determination of Agent

To determine the agent, the system searches in the service notification for the person responsible for the tasks. If no person has been specified for this task, then the system notifies all the people who are assigned to this standard task.

The agent is determined using a role resolution. The role **`178 SM_TASK_ROLE`** (*standard role for service notification*) is defined as the default role for this task.

Result of Processing and Termination of Workflow

The processing of the work item terminates the task and the entire workflow. The workflow is also terminated if one of the waiting steps occurs.



The terminating events *Deletion flag set*, *Person responsible changed* and *Task completed* can also occur outside of the workflow process.

Once the task has been processed, it obtains the status *Task completed*.

Preparation and Customizing (CS-CM-SN / Completing a Task)

Use

The **task-specific** Customizing settings, which you must make to process this workflow template, are described here.

Prerequisites

All the **general** Customizing settings, which are required for the *SAP Business Workflow* component to be used, have been made.

Activities

Make the following settings in Customizing:

1. Set up the organizational structure and thereby determine your organizational units:

   Basis → Business Management → SAP Business Workflow → Edit Organizational Structure

2. Assign the organizational units to the standard tasks:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Service Notifications → Assign Agents to Tasks

3. Activate the link between triggering event (CREATED) and workflow template WS00200097:

   Plant Maintenance and Customer Service → Maintenance and Service Processing → Notifications → Set Workflow for Service Notifications → Activate Event Linkage

   For step three, make sure that you activate the event linkage for the workflow template and **not** for the standard task.

For more information, see the Implementation Guide.

Operation and Link to Application Functions (CS-CM-SN / Completing a Task)

Use

This workflow is used to inform all the responsible people or departments that:

- A new task has been created in a service notification (task status *Outstanding*)
- The task must be processed

Activities

System Activities

If an existing service notification is put in process, then the *SAP Business Workflow* automatically ensures that:

1. The workflow-triggering event *CREATED* is generated
2. The workflow template WS00200097 is started
3. A work item is sent to the work center for the person(s) or department(s) responsible

User Activities

As the person responsible for a work item, you have the following options:

Options	What You Should Know:
Processing a work item as a workflow	To see the work item, choose *Office* → *Inbox*. You have the following processing options: • You can process the work item by double clicking on it. The transaction for changing a service notification appears. • You can call up another screen for the work item, to obtain an overview of outstanding and completed tasks. • You can set a work item for resubmission as a reminder to process it later. • You can navigate from the service notification to the workflow log, to define who has performed which activities. • You can receive a work item using another mail system client (for example, Lotus Notes™ or MS Outlook™).
Processing a service notification manually using a worklist	If you process a service notification manually (outside of the workflow), all the changes to the notification are also considered in the workflow process.

Processing an Outstanding Service Notification (CS-CM-SN)

This workflow scenario is **obsolete and should no longer be used**. The functions for this scenario have been integrated into the new workflow scenario Processing of a Service Notification [Page 107].

Definition

When a service notification is created in the system, it obtains the initial status "Outstanding". This means that the notification is entered in the system, and is ready to be processed. To ensure that the notification is processed, the person or department responsible is notified automatically that the service notification must be processed. The system informs the following people or departments in the order listed below:

- Coordinator of service notification
- Department responsible (if no coordinator has been specified)
- All the people, who are assigned to the task (if neither a coordinator, nor a department has been specified)

SAP Business Workflow

If a service notification has been created with the status "Outstanding", a person or group of people can be notified by workflow using the corresponding system setting. These people see a work item in their integrated inbox, and it can be processed directly from there. The change transaction for the service notification is called up automatically during processing.

Technical Realization (CS-CM-SN / Outstanding Service Notification)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2080 (Service Notification) [Page 123]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS00008336 (Processing an Outstanding Service Notification) [Page 124]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS00200096 (Processing a Service Notification) [Page 125]

Object Type BUS2080 (Service Notification)

In this scenario, the system processes a business application object of the type **`BUS2080 (Service notification).`** This means that a service notification with the status “Outstanding notification” will be processed.

Location in object repository:

Plant Maintenance and Service Management → Service Management → Service processing

Standard Task TS00008336 (Process Outstanding Service Notification)

In this standard task, you process a service notification that has the status “Outstanding notification.”

Standard task: `TS00008336`

`ID`: `Outsanding`

Description: *Service task: Process notification*

Referenced object method and attributes

Objekttyp: `BUS2080` (*Service notification*)

Methode: `Edit` (*Change*)

Eigenschaften: *Confirm end of processing*

Maintain agent assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS00200096 (Processing a Service Notification)

If a service notification is created with the status "Outstanding", a workflow is started from the template **Process SM**.

Workflow template: 00200096

ID: Process SM

Description: *SM: Process service notification*

Triggering Event for Workflow Template

The events **ACTIVATED** (*notification activated)* and **CREATED** *(notification created)* for object type **BUS2080** (*service notification*) have been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Workflow Container and Data Flow

The most important information that must be available during the workflow is the object reference to the service notification to be processed (**_EVT_OBJECT**), the name of the creator of the notification (**_EVT_Creator**) and the sort key (**_WI_Group_ID**). This information is available as event parameters in the container for the triggering event and must be transferred to the workflow container “per data flow”.

In the standard system, the following data flow definition has been established between the triggering event and workflow container:

Workflow Container		Event Parameter Container
_WF_Initiator	**<-**	**_EVT_Creator**
_WI_Group_Id	**<-**	**_EVT_OBJECT**
NOTIFICATION	**<-**	**_EVT_OBJECT**

The element **_WF_Initiator** is available in the workflow container in the standard system. The element **NOTIFICATION** has been created in addition to the existing standard elements.

Steps in a Workflow

If a service notification is created in the system with the status “Outstanding notification,” a workflow based on the template **Process SM** is started.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps. The structure is defined in such a way that the system processes only one of the branches. The activity makes reference to the standard task..

Determination of Agent

To identify the agent, the system searches for the person responsible in the service notification. The following two partner functions are defined in the service notification:

- Coordinator
- Department responsible

The system first searches for the coordinator. If a coordinator is not specified, the system then searches for the responsible department. If a responsible department cannot be found, then all persons in the system assigned to this task will be notified.

The system identifies the agent on the basis of a role resolution. The role **178 SM_NOTIF_ROL** *(Person responsible for processing the service notification*) is defined as the default role for this standard task.

Role container		Task container
NOTIFICATION	**<-**	**NOTIFICATION**

Binding

The following binding is defined for the step “Process service notification”.

Task container		Workflow container
_WI_Object_ID	**<-**	**NOTIFICATION**
NOTIFICATION	**<-**	**NOTIFICATION**

Result of Processing and Termination of Workflow

The processing of the work item results in the event *Service notification processed*. This event terminates the task and the entire workflow.

After the user has processed the service notification, it can either have the status “Notification in process” or “Notification completed.”

The terminating events *Deletion flag set, Service notification completed, Service notification in process* and *All tasks completed* can also occur outside of the workflow process.

Preparation and Customizing (CS-CM-SN / Outstanding Service Notification)

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this workflow template.

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 128]

Performing Task-Specific Customizing [Page 129]

Activating Event-Receiver Linkage [Page 130]

Processing the Organizational Structure

All persons who will be responsible for processing an outstanding service notification must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all of the persons individually or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period) and then select *Organizational plan* → *Create* or *Change*.
5. In the subsequent screen, create or change the desired organizational units and/or positions. Assign the desired persons to these units or positions using the available menu functions.

Perform Task-Specific Customizing

List all organization management objects that will be authorized to process an outstanding service notification.

To assign the Service Management tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Perform task-specific customizing*.
4. In the overview for task customizing, select *Plant Maintenance and Service Management* → *Service Management* → *Service processing* → *Assign tasks to agents*.
5. Assign the persons who will carry out this task in your company to the standard task **`TS00008336`** *(Process outstanding service notification)*.

Activate Event-Receiver Linkage

The events **ACTIVATED** and **CREATED** for object type **BUS2080** (Service notification) are the triggering events for workflow template **WS00200096.** As such, it is entered in the event linkage table in the standard system. To ensure that the workflow template can be started, the linkage between the triggering event and the workflow template as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the workflow template **Process service notification** in your system, proceed as follows:

1. Call up the SAP Business Workflow from the main menu by selecting *Tools Business Engineering → Business Workflow → Development*.
2. Select *Utilities → Other tools → Event linkage*. The system displays a screen for viewing the event linkage for various objects.
3. Select *Goto → Detail* to display the detail screen for the following object type, event and receiver type:
   - Object type: *BUS2080*
   - Event: *CREATED*
   - Receiver type: *WS00200096*
4. Mark the *Enabled* field to activate the event linkage.

(Alternatively, you can also activate the event-receiver linkage by processing the workflow template directly.)

Operation and Link to Application Functionality (PM-SMA-SC / Outstanding Service Notification)

The following description assumes that a service notification with the status “outstanding” has been created in the system and the notification has not yet been processed.

Generate event

The workflow-triggering events **ACTIVATED** or **CREATED** are generated automatically if a service notification is created without being processed.

Process outstanding maintenance notification

The person or persons responsible for this task will find a work item that represents the standard task *Process outstanding service notification* in their integrated inbox. Processing this work item makes it possible to put the notification “in-process”.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Processing a Service Notification in Process (CS-CM-SN)

This workflow scenario is **obsolete and should no longer be used**. The functions for this scenario have been integrated into the new workflow scenario Processing of a Service Notification [Page 107].

Definition

You can use this workflow scenario to process service notifications that have the status "In process", but which have not yet been completed. For example, a certain person in an organization may be responsible for putting all outstanding service notifications in process (refer to Processing Outstanding Service Notifications (CS-CM-SN) [Page 121]). However, another person may actually be responsible for processing a notification.

The system informs the following people or departments in the order listed below:

- Coordinator of service notification
- Department responsible (if no coordinator has been specified)
- All the people, who are assigned to the task (if neither a coordinator, nor a department has been specified)

SAP Business Workflow

If a service notification obtains the status "In process", the person or group of people responsible can be notified by *SAP Business Workflow* using the corresponding system setting. These people see a work item in their integrated inbox, and it can be processed directly from there. The change transaction for the service notification is called up automatically during processing.

Technical Realization (CS-CM-SN / Service Notification in Process)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2080 (Service Notification) [Page 134]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS00008336 (Processing a Service Notification) [Page 135]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS00200099 (Putting a Service Notification in Process) [Page 136]

Object Type BUS2080 (Service Notification)

In this scenario, the system processes a business application object of the type **`BUS2080 (Service notification)`**. This means that a service notification with the status “Notification in process” will be edited.

Location in object repository:

Plant Maintenance and Service Management → Service Management → Service processing

Standard Task TS00008336 (Process Service Notification)

In this standard task, you process a service notification that has the status “Notification in process.”

Standard task: `TS00008336`

ID: `Process`

Description: *SM task process notification*

Referenced object method and attributes

Object type: `BUS2080` (*Service notification*)

Method: `Edit` (*Change*)

Attributes: *Confirm end of processing*

Maintain agent assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS00200099 (Putting a Service Notification in Process)

If a service notification is created with the status "In process", a workflow is started from the template **SM: Put service notification in process**.

Workflow template: 00200099

ID: SM InProcess

Description: *SM: Put service notification in process*

Triggering Event for Workflow Template

The event **INPROCESS** (*notification in process)* for object type **BUS2080** (*service notification*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Workflow Container and Data Flow

The most important information that must be available during the workflow is the object reference to the service notification to be processed (**_EVT_OBJECT**), the name of the creator of the notification (**_EVT_Creator**) and the sort key (**_WI_Group_ID**). This information is available as event parameters in the container for the triggering event and must be transferred to the workflow container “per data flow”.

In the standard system, the following data flow definition has been established between the triggering event and workflow container:

Workflow Container		Event Parameter Container
_WF_Initiator	**<-**	**_EVT_Creator**
_WI_Group_Id	**<-**	**_EVT_OBJECT**
NOTIFICATION	**<-**	**_EVT_OBJECT**

The element **_WF_Initiator** is available in the workflow container in the standard system. The element **NOTIFICATION** has been created in addition to the existing standard elements.

Steps in a Workflow

If a service notification receives the status “Notification in process,” a workflow based on the template **SM inProcess** is started.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps. The structure is defined in such a way that the system processes only one of the branches. The activity makes reference to the standard task.

Determination of Agent

To identify the agent, the system searches for the person responsible in the service notification. The following two partner functions are defined in the service notification:

- Coordinator
- Department responsible

The system first searches for the coordinator. If a coordinator is not specified, the system then searches for the responsible department. If a responsible department cannot be found, then all persons in the system assigned to this task will be notified.

The system identifies the agent on the basis of a role resolution. The role **178 SM_NOTIF_ROL** *(Person responsible for processing the service notification*) is defined as the default role for this standard task.

Role container		Task container
NOTIFICATION	**<-**	**NOTIFICATION**

Binding

The following binding is defined for the step “Process service notification”.

Task container		Workflow container
_WI_Object_ID	**<-**	**NOTIFICATION**
NOTIFICATION	**<-**	**NOTIFICATION**

Result of Processing and Termination of Workflow

The processing of the work item results in the event *Service notification processed*. This event terminates the task and the entire workflow.

After the user has processed the service notification, it will have the status “Notification completed”.

The terminating events *Deletion flag set, Service notification completed, All tasks completed* can also occur outside of the workflow process

Preparation and Customizing (CS-CM-SN / Service Notification in Process)

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this workflow template.

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 139]

Performing Task-Specific Customizing [Page 140]

Activating Event-Receiver Linkage [Page 141]

Processing the Organizational Structure

All persons who will be responsible for processing service notifications that have the status “Notification in process” must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all of the persons individually or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows::

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period) and then select *Organizational plan* → *Create* or *Change*.
5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to these units or positions using the available menu functions.

Perform Task-Specific Customizing

List all organization management objects that will be authorized to process a service notification with the status “in process”.

To assign the Service Management tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Perform task-specific customizing*.
4. Auf dem Bild zum aufgabenspezifischen Customizing wählen Sie In the overview for task customizing, select *Plant Maintenance and Service Management* → *Service Management* → *Service processing* → *Assign tasks to agents*.
5. Assign the persons who will carry out this task in your company to the standard task **`TS00008336`** *(SM task: Process notification).*

Activate Event-Receiver Linkage

The event **InProcess** (notification in process) for object type **BUS2080** (service notification) is the triggering event for workflow template **WS00200099.** As such, it is entered in the event linkage table in the standard system. To ensure that the workflow template can be started, the linkage between the triggering event and the workflow template as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the workflow template **SM: Set service notification is process** in your system, proceed as follows:

1. Call up the SAP Business Workflow from the main menu by selecting *Tools Business Engineering → Business Workflow → Development*.
2. Select *Utilities → Other tools → Event linkage*. The system displays a screen for viewing the event linkage for various objects.
3. Select *Goto → Detail* to display the detail screen for the following object type, event and receiver type:
   - Object type: *BUS2038*
   - Event: *CREATED*
   - Receiver type: *WS00200095*
4. Mark the *Enabled* field to activate the event linkage.

(Alternatively, you can also activate the event-receiver linkage by processing the workflow template directly.)

Operation and Link to Application Functionality (PM-SMA-SC / In-process Service Notification)

The following description assumes that a service notification has been set to the status “Notification in process.”

Generate event

The workflow-triggering event **INPROCESS** are generated automatically if a service notification is put “in-process.”

Edit “in-process” service notification

The person or persons responsible for this task will find a work item that represents the standard task *Edit in-process service notification* in their integrated inbox. Processing this work item makes it possible to complete the notification.

You can access the integrated inbox via the menu path *Office* → *Inbox*.

Completing a Service Notification (CS-CM-SN)

This workflow scenario is **obsolete and should no longer be used**. The functions for this scenario have been integrated into the new workflow scenario Processing of a Service Notification [Page 107].

Definition

If a service notification contains one or more tasks, and all of these tasks have been completed, the service notification obtains the status "All tasks completed". When this status is set, the system automatically informs the coordinator of the service notification (specified in the notification header) that one of the following processing steps must be executed:

- Complete the service notification (if all the other notification processing steps have been completed)
- Define additional tasks (if, for example, the problem has not been resolved)

SAP Business Workflow

If a service notification obtains the status "All tasks completed", the person or group of people responsible can be notified by *SAP Business Workflow* using the corresponding system setting. These people see a work item in their integrated inbox, and it can be processed directly from there. The change transaction for the service notification is called up automatically during processing.

Technical Realization (CS-CM-SN / Completing a Service Notification)

Object Types Used

Object technology is used to realize the interface between the R/3 functions and the *SAP Business Workflow*. For this reason, the following information is primarily of a technical nature and is not required for an initial overview.

Object Type BUS2080 (Service Notification) [Page 145]

Standard Tasks

Standard tasks are single-step tasks provided by SAP, which describe elementary business activities from an organizational standpoint. In each case, a single-step task relates to one object method (= technical link to R/3 functions) and is linked to the people in the organization who can process the object.

Standard Task TS00008338 (Completing a Service Notification) [Page 146]

Workflow Template

The actual process flow is implemented in the form of a workflow template. You can find this workflow template in your R/3 system.

Workflow Template WS00200098 (Completing a Service Notification) [Page 147]

Object Type BUS2080 (Service Notification)

In this scenario, the system processes a business application object of the type **`BUS2080 (service notification).`** This means that a service notification will be completed.

Location in object repository:

Plant Maintenance and Service Management t → Service Management → Service Processing

Standard Task TS00008338 (Complete Service Notification)

In this standard task, you complete a service notification.

Standard task: `TS00008338`

ID: `abschließen`

Description: *SM task: Complete notification*

Referenced object method and attributes

Object type: `BUS2080` (*service notification*)

Method: `Edit` (*Change*)

Attributes: *Confirm end of processing*

Maintain agent assignment

All persons or organizational units assigned to this standard task can be notified.

Workflow Template WS00200098 (Completing a Service Notification)

If all the tasks for a service notification have been completed, a workflow is started from the template **SM Complete notification**.

Workflow template: 00200098

ID: SM Complete

Description: *SM: Complete notification*

Triggering Event for Workflow Template

The event **ALLTASKSCOMPLETED** (*all tasks completed)* for object type **BUS2080** (*service notification*) has been entered as the triggering event for the workflow template.

This “linkage” between the event and the workflow template to be started is normally inactive in the standard system. If the workflow template is to be started, it must first be activated in the Customizing for the SAP Business Workflow.

Workflow Container and Data Flow

The most important information that must be available during the workflow is the object reference to the service notification to be processed (**_EVT_OBJECT**), the name of the creator of the notification (**_EVT_Creator**) and the sort key (**_WI_Group_ID**). This information is available as event parameters in the container for the triggering event and must be transferred to the workflow container “per data flow”.

In the standard system, the following data flow definition has been established between the triggering event and workflow container:

Workflow Container		Event Parameter Container
_WF_Initiator	**<-**	**_EVT_Creator**
_WI_Group_Id	**<-**	**_EVT_OBJECT**
NOTIFICATION	**<-**	**_EVT_OBJECT**

The element **_WF_Initiator** is available in the workflow container in the standard system. The element **NOTIFICATION** has been created in addition to the existing standard elements.

Steps in a Workflow

If all tasks in a maintenance notification have been completed, a workflow based on the template **`SM Complete notification`** is started.

Workflow Structure

The workflow structure has several parallel branches to an activity and several wait steps. The structure is defined in such a way that the system processes only one of the branches. The activity makes reference to the standard task.

Determination of Agent

To identify the agent, the system searches for the person responsible in the service notification. The following two partner functions are defined in the service notification:

- Coordinator
- Department responsible

The system first searches for the coordinator. If a coordinator is not specified, the system then searches for the responsible department. If a responsible department cannot be found, then all persons in the system assigned to this task will be notified.

The system identifies the agent on the basis of a role resolution. The role **`178 SM_NOTIF_ROL`** *(Person responsible for processing the service notification*) is defined as the default role for this standard task.

Role container		Task container
`NOTIFICATION`	**`<-`**	**`NOTIFICATION`**

Binding

The following binding is defined for the step “Complete service notification”.

Task container		Workflow container
`_WI_Object_ID`	**`<-`**	**`NOTIFICATION`**
`NOTIFICATION`	**`<-`**	**`NOTIFICATION`**

Result of Processing and Termination of Workflow

The processing of the work item results in the event *Service notification processed*. This event terminates the task and the entire workflow.

After the user has processed the service notification, it has the status “Notification completed.”

The terminating events Complete service notification, Service notification in process again and Deletion flag set can also occur outside of the workflow process.

Preparation and Customizing (CS-CM-SN / Completing a Service Notification)

In addition to general Customizing, which ensures that the workflow system functions properly, several other Customizing steps are required for this workflow template.

Customizing of SAP Business Workflow

Editing the Organizational Structure [Page 150]

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Activating Event-Receiver Linkage [Page 152]

Processing the Organizational Structure

All persons who will be responsible for completing a service notification must be identified in the Customizing application for the SAP Business Workflow. For this purpose, you can either list all of the persons individually or you can assign entire organizational units (for example, departments) to the task.

Set up your organizational structure in the Customizing application as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Edit organizational plan*.
4. In the initial screen for changing the organizational plan, enter the required data (for example, organizational unit and processing period) and then select *Organizational plan* → *Create* or *Change*.
5. In the subsequent screen, create or change the required organizational units and/or positions. Assign the required persons to these units or positions using the available menu functions.

Perform Task-Specific Customizing

List all organization management objects that will be authorized to process an outstanding task in a service notification.

To assign the Service Management tasks, proceed as follows:

1. From the main menu, select *Tools* → *Business Engineering* → *Customizing*. The system displays the initial screen for the Customizing application.
2. From the menu bar, select *Implement. projects* → *SAP Reference IMG*. The system displays the SAP Reference IMG.
3. In the IMG structure, select *Basis* → *Workflow Management* → *Perform task-specific customizing*.
4. In the overview for task customizing, select *Plant Maintenance and Service Management* → *Service processing* → *Assign tasks to agents*..
5. Assign the persons who will carry out this task in your company to the standard task **`TS00008338`** *(Complete service notification)*.

Activate Event-Receiver Linkage

The event **ALLTASKSCOMPLETED** (all tasks completed) for object type **BUS2080** (service notification) is the triggering event for workflow template **WS00200098.** As such, it is entered in the event linkage table in the standard system. To ensure that the workflow template can be started, the linkage between the triggering event and the workflow template as the receiver of the event must be activated in the development environment for the SAP Business Workflow.

To activate the workflow template **SM Complete notification** in your system, proceed as follows:

1. Call up the SAP Business Workflow from the main menu by selecting *Tools Business Engineering* → *Business Workflow* → *Development*.
2. Select *Utilities* → *Other tools* → *Event linkage*. The system displays a screen for viewing the event linkage for various objects.
3. Select *Goto* → *Detail* to display the detail screen for the following object type, event and receiver type:
   - Object type: *BUS2080*
   - Event: *ALLTASKSCOMPLETED*
   - Receiver type: *WS00200098*
4. Mark the *Enabled* field to activate the event linkage.

(Alternatively, you can also activate the event-receiver linkage by processing the workflow template directly.)

Operation and Link to Application Functionality (PM-SMA-SC / Complete Service Notification)

The following description assumes that all tasks in a service notification have been completed.

Generate event

The workflow-triggering event **ALLTASKSCOMPLETED** is generated automatically if all tasks in a service notification have been completed.

Complete maintenance notification

The person or persons assigned to this task will find a work item that represents the standard task *Complete service notification* in their integrated inbox. Processing this work item makes it possible to complete and possibly archive the quality notification.

You can access the integrated inbox via the menu path *Office* → *Inbox*.