Quality Notifications (QM-QN)

HELP.QMQN

Release 4.6C

SAP™

Copyright

Icons

Icon	Meaning
⚠	Caution
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Contents

Quality Notifications (QM-QN)

Purpose

This component contains functions for recording and processing different types of problems (for example, problems resulting from poor-quality goods or services). You can use the notifications to analyze the recorded defects and monitor the correction of these problems. In particular, the notifications can help you process internal or external problems such as:

- Complaints filed by customers

- Complaints against vendors

- Company-internal problems

- Other user-specific problems

As an extremely flexible system, you can also use this component to process and manage information of a positive nature (for example, to implement a "suggestion system" in your company to manage improvements).

Implementation Considerations

You should implement this component if your company needs an effective and efficient tool that can:

- Manage and process its internal and external problems

- Help you optimize your business processes through continuous process improvement

Integration

The quality notifications are a part of the general system of notifications in the R/3 System that also includes maintenance notifications in the *Plant Maintenance* (PM) component and service notifications in the *Customer Service* (CS) component.

The quality notifications are also integrated with the following processes in the logistics supply chain:

- Repairs Processing [Page 93] (*Quality Management*, *Customer Service*, *Sales and Distribution*)

- Complaint Processing [Page 96] (*Quality Management*, *Materials Management*, and *Sales and Distribution*)

Integration with Other Quality Management Components

If you want to	You must install
Access catalog code groups and codes to document the defect items, causes, and tasks in a quality notification	*Catalog* (QM-PT-BD-CAT)
Create quality notifications while processing an inspection to record quality-related problems	*Quality Inspection* (QM-IM)
Analyze the notification data using various evaluation tools	*QM Information System* (QM-QC-IS)

Create quality notifications for customer complaints over the Internet	*Quality Notifications on the Internet* (QM-QN-NT)

Integration with Other R/3 Components

If you want to	You must install
Settle the nonconformity costs recorded for a notification problem in a QM order	*Controlling* (CO)
Trigger workflow tasks in the course of notification processing.	*SAP Business Workflow* (BC-BMT-WFM)
Store notification-related documents in an optical archive	*SAP ArchiveLink* (BC-SRV-ARL)
Classify defect items in a notification using general characteristics	*Classification System* (CA-CL)
Link documents managed in the R/3 System's Document Management System to a quality notification	*Document Management System* (CA-DMS)

Features

The quality notifications include a wide range of features and functions. In general, you can use a quality notification to:

- Describe a problem and identify the affected reference objects (for example, material, vendor, manufacturer)

- Record the names of all persons (partners) who are involved with the problem

- Define processing parameters for the quality notification (for example, assigning a priority to the notification and specifying a time range within which the problem should be completed)

- Record individual defect items that relate to the problem and analyze their causes

- Specify the corrective actions to be taken (for example, tasks that are implemented immediately or corrective tasks that are implemented after a thorough analysis of the defects)

- Monitor the execution of corrective actions through a status management function

- Log all activities that have been carried out for the problem

- Record the nonconformity costs incurred while processing and correcting a problem

- Print, fax, archive or export various types of reports (shop papers) that relate to the problem

In addition, this component also allows you to selectively generate lists of recorded notifications for processing or evaluation purposes.

Quality Notification

Definition

Describes a business object's nonconformance with a quality requirement and contains a request to take appropriate action.

The following quality notification types are predefined in the system:

- Customer complaint

- Complaint against a vendor

- Internal problem report

In addition to the standard notification types, you can also define your own user-specific notification types.

Use

You can use a quality notification to record the following information:

- Problem description

- Affected reference objects (for example, material, purchase order or delivery)

- Partner information (for example, customer, vendor, or coordinator)

- Defect items

- Causes of defect items

When you process a quality notification, you can:

- Define tasks for the notification or for individual defect items

- Log the activities carried out for the notification or for individual defect items

- Record problem-related nonconformity costs in a QM order. You can assign an existing QM order to a quality notification or create a new QM order and assign it to a notification.

- Print shop papers

- Select and evaluate quality notifications

A quality notification supports you in your processing activities with the following functions:

- Response monitoring for tasks

- Status management

- Follow-up actions for tasks

- Action box

- Action log

Structure

A quality notification has the following basic structure:
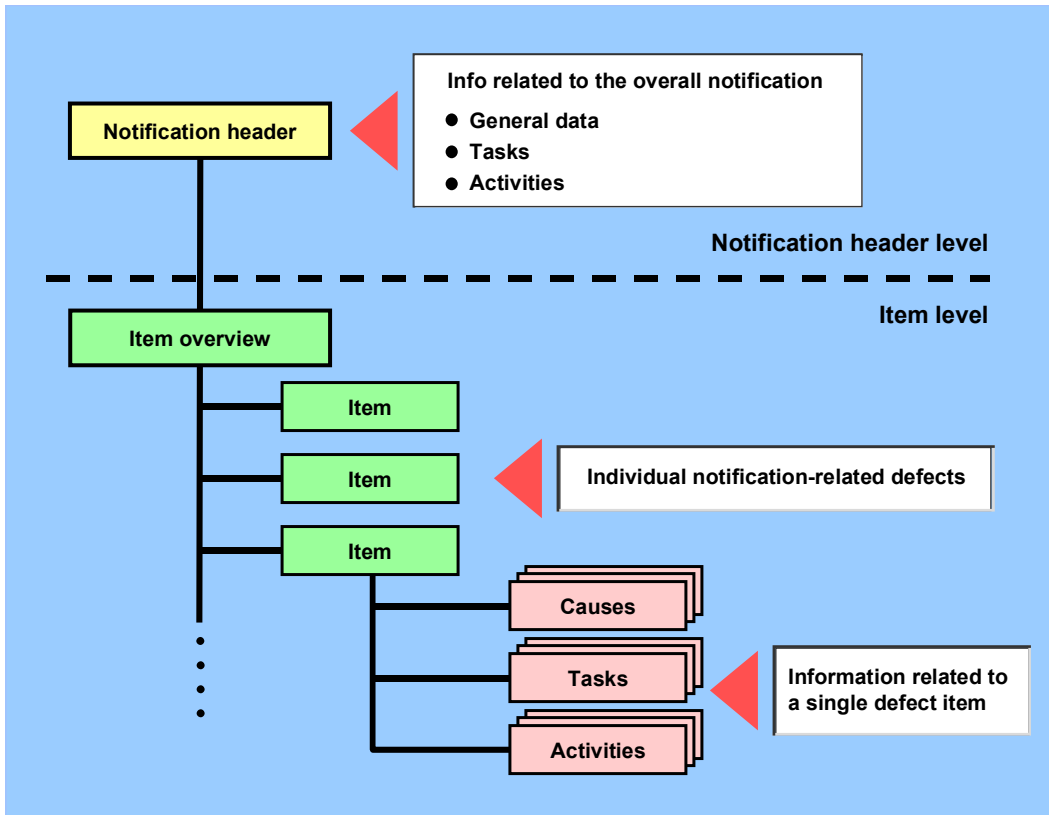
See also:

Notification header [Page 22]

Item [Page 37]

Cause [Page 40]

Task [Page 42]

Activity [Page 48]

Customer Complaint

Definition

A customer complaint is a quality notification type (Q1) that deals with a problem involving poor-quality goods or services delivered to a customer.

Use

You can use a notification for a customer complaint to record and process a problem that is reported by a customer.

Integration

In a quality notification for a customer complaint, you can specify one or more **reference objects**. A reference object has a relationship to the problem in a quality notification. A customer complaint may include the following reference objects:

- Customer

- Material / batch

- Sales order

- Sales organization

- Division

- Distribution channel

- Delivery

- Inspection lot

- Serial number

- Device data

- Notification number (field in which you can reference a quality notification that was used as a copy model)

- Reference number (field in which you can assign an external reference number to a notification; for information purposes only)

- Purchase order number

- Purchase order date

When you process a quality notification for a customer complaint, you can also display the following supplementary information for a customer:

- Sales summary

- Summary of important customer information (for example, order data, terms of payment, transaction data, and so on).

Complaint Against a Vendor

Definition

A complaint against a vendor is a quality notification type (Q2) that deals with a problem involving poor-quality goods or services delivered by a vendor or manufacturer.

Use

You can use a notification for a complaint against a vendor to record and process a problem that was confirmed in a delivery.

Integration

In a quality notification for a complaint against a vendor, you can specify one or more **reference objects**. A reference object has a relationship to the problem in a quality notification. A complaint against a vendor may include the following reference objects:

- Vendor

- Material / batch

- Material document (goods receipt)

- Purchase order

- Purchase organization

- Purchasing document

- Inspection lot

- Serial number

- Device data

- Notification number (field in which you can reference a quality notification that was used as a copy model)

- Reference number (field in which you can assign an external reference number to a notification; for information purposes only)

When you process a quality notification for a complaint against a vendor, you can also display the following supplementary information for a vendor:

- Buyer's negotiation sheet

- Summary of important information for the vendor/material (for example, quantities of materials ordered from vendor, vendor prices and conditions, and so on).

Internal Problem Report

Definition

An internal problem report is a quality notification type (Q3) that deals with quality-related problems that originate within one's own organization.

Use

You can use a notification for an internal problem report to record and process company-internal problems (for example, defects confirmed for a material or product in a production process).

Integration

In a quality notification for an internal problem report, you can specify one or more **reference objects**. A reference object has a relationship to the problem in a quality notification. An internal problem report may include the following reference objects:

- Material / batch

- Production order / run schedule header

- Work center

- Inspection lot

- Serial number

- Device data

- Notification number (field in which you can reference a quality notification that was used as a copy model)

- Reference number (field in which you can assign an external reference number to a notification; for information purposes only)

User-Specific Quality Notification

Definition

A user-specific quality notification is one that does not belong to one of the standard notification types **predefined** in the QM component.

Use

You can create user-specific notifications:

- To handle the types of problems that cannot be processed adequately using one of the predefined notification types

- If you want to evaluate the data for user-specific notification types separately

Structure

A user-specific notification type has the same basic structure as the standard, predefined notification types. The screen layouts, reference objects, and tab indexes, however, may differ from those in the predefined notification types, depending on how you customize the user-specific notification type.

Creating and Processing Quality Notifications

To call up the functions for creating and processing quality notifications, proceed as follows:

Function	Menu path	What you should know
Creating a quality notification	1. Choose *Logistics → Quality management → Quality notification → Create*. 2. Enter the notification type and then choose *Enter*.	Notification types: *Q1* - Customer complaint *Q2* - Complaint against vendor *Q3* - Internal problem Another dialog box may be displayed before the notification is created, depending on how the quality notifications were customized. If a dialog box is displayed, you may have to enter additional reference information (for example, a material, sales order or delivery).
Creating a user-specific quality notification	1. Choose *Logistics → Quality management → Quality notification → Create*. 2. Enter the notification type and then choose *Enter*.	To be able to create a user-specific notification, you must specify a user-specific notification type that has been predefined in Customizing.
Creating a quality notification with reference	1. Choose *Logistics → Quality management → Quality notification → Create*. 2. Enter the notification type. 3. Enter the number of the notification you want use as a copy model and choose *Enter*.	To reduce the amount of data that you need to enter, you can use an existing quality notification as a copy model. You can use any notification type as a copy model, regardless of the notification type for the new notification. When you save the new quality notification, the notification you used as a copy model is saved at the same time in the notification. This means that you can later select the quality notifications that were created using certain references.

Changing a quality notification	1. Choose *Logistics → Quality management → Quality notification → Change*. 2. Enter the number of the notification you want to change and choose *Enter*.	Make the necessary changes to the notification and then save the data.
Displaying a quality notification	1. Choose *Logistics → Quality management → Quality notification → Display*. 2. Enter the number of the notification you want to display and choose *Enter*.	
Defining user default values	1. Choose *Logistics → Quality management → Quality notification → Create* or *Change*. 2. In the notification, choose *Extras → Settings → Ctrl/Default values*	In this dialog box, you can define default values that the system will automatically propose when you create a notification (also see Setting User Default Values [Page 21]).

Displaying Changes in Quality Notifications

Use

The system automatically documents the changes that are made to the following data in a quality notification:

- Tasks

- Items

- Causes

- Activities

- Partners

The system only records the changes that are made to existing data in the notification. For example, if you create a **new** task in a notification, the system does not create a change document. It only creates a change document if you change the task after it was saved at least once.

Procedure

1. Call up a notification in the display or change mode.

2. Choose *Extras → Notification documents → Changes*.

   The change documents that were recorded for the notification are displayed.

3. To view the contents of a change document, position the cursor on a document and choose *Display documents*.

   The system displays the changes recorded in the change document.

Displaying the Action Log for a Notification

Use

The system records the changes you make in a notification in the action log. This allows you to determine:

- Which data or statuses were changed for the selected fields

- Who made the changes

- When were the changes made

The action log also records the changes that a person processing the notification made to tasks, items, and activities.

Procedure

1. Call up a notification in the display or change mode.

2. Choose *Extras → Notification documents → Action log*.

   The action log for the notification appears.

3. To display the changes to tasks, items, or activities, choose *Task/Item/Act.*, position the cursor on a desired object, and then choose *Detail action log*.

Document Flow

Use

You can use this function to display the document flow for a quality notification in the form of a list or network graphic. The document flow allows you to identify:

- Preceding documents (documents from which the current notification originated)

- Subsequent documents (documents originating from the current notification)

- "To-and-from" references between documents

Each document contains the following information:

- Description of document (for example, quality notification or sales order)

- Document number

- Additional data (if available)

- Logical system (if any of the other documents was created in a logical system other than the one in which the original notification was created)

You can also display detailed information for each document in the graphic.

Integration

The document flow can also include notifications from the *Customer Service* (CS) and *Plant Maintenance* (PM) components. The document flow is also integrated with the following other components in the logistics supply chain:

- *Materials Management* (MM)

- *Production Planning and Control* (PP)

- *Sales and Distribution* (SD)

Features

The document flow can display the following objects:

- Quality notification

- Service notification

- Maintenance notification

- Service order

- Sales order

- Production order

- Run schedule header

- Goods movement

- Purchase order

- Inspection lot

Displaying the Document Flow for a Notification

1. Call up a quality notification in the display or change mode.

2. Choose one of the following menu paths, depending on whether you want to display the document flow as a list or graphic:

   − *Extras → Notification documents → Document flow → List*

   − *Extras → Notification documents → Document flow → Graphics*

   In the list display, the notifications that reference other subsequent notifications are labeled with a *(Ref.)* designation.

3. If you displayed the document flow as a graphic, select a document in the graphic and choose *Goto → Display document*.

   The detailed information about the selected document is displayed.

Setting User Default Values

Use

If you create notifications in which certain data is always the same, you can permanently define certain user default values to make it easier to create the notifications. The system automatically copies this default data into the appropriate notification fields. You can, however, overwrite the proposed information.

Features

You can define default values for the following data:

- General data (for example, notification type, reference object, or contact person)

- Sales and distribution data (for example, sales organization)

- Purchasing/internal data (for example, purchasing organization or work center)

The default values that are valid for:

- All notification types (for example, material, plant, screen group) are copied into all notification types

- Specific notification types (for example, customer, vendor, and so on) are copied into the applicable notification types only

You can also set the reference object view here using the screen category.

Activities

To define default values for a notification, choose *Extras → Settings → Ctrl/Default values* and then maintain the data on the appropriate tab pages.

Notification Header

Definition

The notification header contains a variety of general information about a quality notification.

Use

You use the information in the notification header for identification and processing purposes. The header data applies to the quality notification as a whole.

Structure

Because the quality notification screens can be customized, the information contained in a quality notification will vary. The table below shows the header information contained in the standard quality notification types.

Customer complaint (Q1)	Complaint against vendor (Q2)	Internal problem report (Q3)
General notification data For example: • Notification number • Notification type • Notification status	**General notification data** For example: • Notification number • Notification type • Notification status	**General notification data** For example: • Notification number • Notification type • Notification status
Problem information For example: • Reference objects • Contact persons • Problem description • Organizational data	**Reference objects** For example: • Material, vendor, manufacturer • Address data • Reference documents • Quantities	**Problem information** For example: • Reference objects • Reference documents • Problem description
Processing information For example: • Priority • Notification start/end dates • Reference documents • Quantities • Costs	**Organizational information** For example: • Organization • Work center • Execution • Malfunction data • Problem description	**Contact persons** For example: • Organization • Address data • Execution • Malfunction data

		Supplementary information
		For example:
		• Quantities
		• Material data
		• Effect on system
		• System availability
		• Costs
Tasks / Activities	**Tasks / Activities**	**Tasks / Activities**
Header-related immediate tasks and activities	Header-related immediate tasks and activities	Header-related immediate tasks and activities

Linking a Document from the DMS

Use

In the standard system, quality notifications are linked to the R/3 System's *Document Management System* (DMS). This allows you to link documents that are managed in the DMS to a quality notification.

Procedure

1. Call up a notification in the create or change mode.

2. Choose *Environment → Documents.*

    A dialog box appears in which you can link one or more documents from the DMS.

3. Enter the data as required.

4. Choose *Continue* and save the data.

Result

Once you have linked documents to a notification, you can display or print them from the notification.

Entering a Notification Header Text

1. Call up a notification in the create or change mode.

2. Enter a notification short text in the *Description* field (for example, a short description of the problem that occurred).

    In the standard notification types, the *Description* field is located on the following tab pages:

    - Customer complaint (Q1): tab for subject matter

    - Complaint against vendor (Q2): tab for organizational data

    - Internal problem (Q3): tab for subject matter

3. If the short text field is too short for the description, choose the icon *Create text*.

    A word processing screen appears.

4. Enter a long text and then return to the notification header by choosing *Back*.

    If you specified that a long text may not be changed for a notification type in Customizing for *Notification Types*, you cannot change a previously entered long text when you change a notification. However, you can enter a new text in a new block at the end of the existing long text.

    In Customizing for *Notification Types*, you can also specify that the system should record the user name and date with any long text changes.

5. Save the data.

Partners in Quality Notification Processing

Definition

The business object **business partner** is a natural person, organization, group of natural persons, or group of organizations in which a company has a business interest. A business partner may also be a person, organization, or group within a company.

A business partner can have several **functions** at one time. The meaning of functions is defined by function types. A function type, for example, may be a sold-to party, sales party, payer, or payee.

A business partner can have relationships with other business partners. The meaning of relationships is defined by **relationship types**. Relationships, for example, are "is the subsidiary of," "is the contact person for," or "is identical to." A business partner can have several addresses. Addresses are defined by address types. Address types are, for example, delivery address or correspondence address.

One business partner can be assigned other business partners using function determination. These business partners represent the business partner in a certain role. For example, a business partner can be defined as a payee for another business partner.

For more information about business partners, see the SD documentation *Basic Functions and Master Data in Sales and Distribution*.

Use

In a quality notification, you can record all partners who are affected by the problem described in the notification. This includes the person who reported the quality notification, the persons responsible for processing the notification, and those responsible for processing individual notification tasks. The partner data you can maintain in a notification is predefined for each notification type in Customizing.

The following graphic depicts the roles of partners in notification processing.
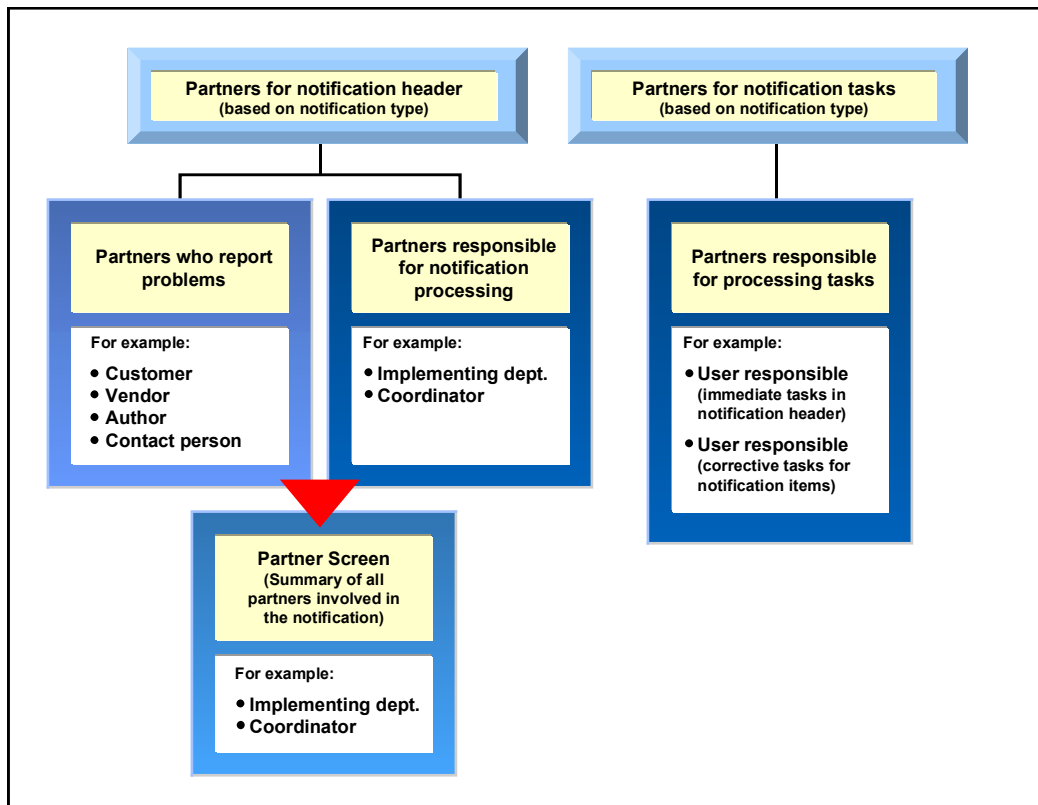
Structure

Partner type

Partners can be:

- Internal partners (for example, internal employees or partners in the HR Human Resources system)

- External partners (for example, customers, vendors, or manufacturers)

Partner function

The various partner types can be subdivided into **partner functions**. The partner function defines the rights, responsibilities and tasks of each partner during the processing of a business transaction.

Predefined Partner Functions for the Standard Notification Types		
Notification Type	**Partner Functions for Notification Header**	**Partner Functions for Tasks**

Partners in Quality Notification Processing

Customer complaint (Q1)	Sold-to party Contact person Implementing department Coordinator	User responsible
Complaint against vendor (Q2)	Vendor Manufacturer Implementing department Coordinator	User responsible
Internal problem report (Q3)	Author Implementing department Coordinator	User responsible

Partner determination procedure

The partner determination procedure specifies which partners can be assigned to a quality notification and which partner functions are possible for processing a particular business function. Your system administrator defines the partner determination procedure in Customizing.

Processing the Partner Information

Prerequisites

You can only display the partner data screen if a partner determination procedure has been defined centrally for your company in Customizing for *Notification Creation*.

Procedure

1. In a notification, choose *Goto* → *Partner.*

    The screen for the partner data appears. If partner data already exists for the notification, it will be displayed in a table on this screen. In this screen, you can use the following functions:

Function	Follow-on menu path
Display partner data	Select a partner and choose *Environment* → *Display object*
Delete a partner	Select a partner and choose *Delete partner assignment*
Phone a partner	Select a partner and choose *Phone partner*
Sort partners by function	Choose *Edit* → *Sort by partner function*
Display, change, or delete partner addresses	Select a partner and choose the corresponding pushbutton

    If you want to enter new partner data for the notification, enter the data directly in the table.

2. Go back to the notification header and save the new or changed partner data.

Specifying a Priority

Use

By assigning a priority to a notification, you can specify the importance and urgency of the notification. When you specify a priority in a quality notification, the system automatically calculates the start and end dates for processing the notification based on this priority. You can change the priority of a notification as long as the notification has not been completed.

Prerequisites

The priorities and associated time intervals are defined in Customizing for *Notification Processing*.

> In Customizing, your system administrator can define an execution interval for each priority. For example, priority 1 might have the following meaning: the notification processing must begin within 2 hours after creating the notification and the notification must be completed within 2 days.

Procedure

1. Call up a quality notification in the create or change mode.

2. Enter the required key in the *Priority* field and choose *Continue*.

   The system calculates the start and end for the notification in the background and enters these dates in the relevant fields. You can see the newly-calculated dates next to the priority field.

   When you release the notification, the system also calculates the dates for the tasks. This is done on the basis of the factory calendar. The dates for the tasks are displayed in the task overview screen.

3. Save the data.

Displaying Administrative Information

Use

The system records administrative information for the notification header and for individual items, tasks and activities. This information specifies who created the quality notification, item, task, or activity and who made the latest changes.

Displaying Administrative Information for the Notification

1. Call up a notification in the create or change mode.

2. Position the cursor somewhere on the notification screen, but **not** on an item, task, or activity, and choose *Goto → Administrative data*.

   The dialog box for the administrative data appears. It specifies who created the notification and who made the latest changes to the notification.

3. Choose *Continue* to close the dialog box.

Displaying Administrative Data for an Item, Task, or Activity

1. Call up a notification in the create or change mode.

2. Choose the tab for the item, task, or activity overview.

3. Select an item, task, or activity, and choose *Goto → Administrative data*

   The dialog box for the administrative data appears. It specifies who created the notification and who made the latest changes to the item, task, or activity.

4. Choose *Continue* to close the dialog box.

Transfer of One-Time Customer Data

Use

When you create or process a quality notification, you can record the data for a one-time customer in the notification. The data for a one-time customer can be transferred from a:

- Sales order to the quality notification

- Quality notification to a service notification

You use the one-time customer data if you do not want to create a complete customer master record (for example, for customers you process occasionally or only once).

The one-time customer data consists of a one-time customer master record and an address.

Integration

The one-time customer master record is created in the *Sales and Distribution* (SD) component. For more information, see One-Time Customers and One-Time Vendors [Ext.].

Activities

When you record the one-time customer data in a notification, the system prompts you to enter a customer address.

Displaying Related Notifications

Use

When you create, change, or display a notification, you can also display related notifications that contain the same reference objects. The information in these related notifications may help you analyze or correct the problem you are processing in the current notification (for example, by informing you how many times this problem occurred in the past, which tasks were implemented, and so on).

Prerequisites

You can only display related notifications if the system contains other notifications that specify the same reference objects.

Procedure

1. Create a new notification and enter the applicable reference object(s) in the notification header (for example, material, customer, or vendor).

2. Choose *Enter*.

   If one or more notifications already exist for this reference object, a corresponding pushbutton for related notifications appears.

3. Choose *Related notifications.*

   A dialog box appears that indicates how many outstanding and completed notifications that exist for the reference objects.

4. You have two options for displaying the notifications:

	Option 1	**Option 2**
a)	Choose *Select notifications* to display a selection screen.	Choose one of the detail functions to display the outstanding, completed, or all notifications for the reference object.
b)	Enter the desired selection criteria in the selection screen.	Position the cursor on a notification in the dialog box.
c)	Choose *Execute*. The system displays a list of notifications that meet the selection criteria.	Choose *Continue*. The selected notification is displayed.
d)	Select one or more of the notifications in the list.	Choose *Back* to return to the list of notifications. The notification you previously displayed is highlighted.
e)	Choose *Choose* to display the first of the selected notifications.	Choose another notification or choose *Cancel* to return to original dialog box described in step 3.
f)	Choose *Back* to display the next notification if several notifications were selected or to return to the list of notifications.	

Displaying Related Notifications

When you display a related notification, you can use this function again to call up additional related notifications.

Inbound Telephone Calls

Use

You can use this function to create quality notifications for problems that are reported by incoming telephone calls. For example, when a customer contacts you by phone, the system can automatically call up the function to create a quality notification (either directly or via a list of workflow tasks). When you create the notification, the system searches for the customer data assigned to the phone number and copies this information into the notification.

Prerequisites

The *SAPphone* component in Customizing for *Basis Components* (*Basis Services* → *Communication Interfaces*) must be active. Refer to the SAPphone [Ext.] documentation for more information.

Activities

The system notifies you by express mail that an incoming telephone call has been received. Depending on how the *SAPphone* component was installed, you can proceed in one of two ways:

- The system displays a list of workflow tasks that are assigned to your user (for example, create a new quality notification for a telephone call). You select the function to create a new notification, enter the required data, and save the notification.

- The function for creating a quality notification is called up automatically. You enter the required data and save the notification.

Outbound Telephone Calls

Use

When you process a quality notification, you can use this function to initiate a telephone call to a customer, vendor, or other partner directly from within a notification.

You can initiate an outgoing telephone call in a notification from:

- The partner overview screen

- A worklist screen for processing notifications, items, tasks or activities

- The action box as a follow-up function (provided this function was integrated into the action box in Customizing)

Prerequisites

The *SAPphone* component in Customizing for *Basis Components* (*Basis Services* → *Communication Interfaces)* must be active. Refer to the SAPphone [Ext.] documentation for more information.

Activities

Choose the function for outgoing telephone calls in the partner overview screen, in a notification list, or in the action box.

Item

Definition

A notification item (or defect item) describes a specific notification-related problem or defect. You can record one or more defect items in a quality notification.

Use

The item data for a notification can be displayed in various degrees of detail in the:

- Notification header

- Item overview

- Item detail screen

You should maintain at least one item in a notification, so you can:

- Evaluate the notification on the basis of the defect data (for example, defect type or defect location)

- Classify the notification (provided you use the R/3 *Classification System* in your company).

     You can only classify at the level of notification items. If the notification has only one item, the classification data is valid for the whole notification, even though you entered it for the item. If the notification has several items, the classification data applies to each item accordingly.

You should create several items, for example, if a notification problem was caused by several defects or if more than one class has to be assigned to a defect

Structure

A notification item typically contains the following information:

- Item number

- Item short text and long text

- Defect location data (for example, a code group and code identifying the defect location, a reference to an assembly part in a bill of materials)

     If a notification contains a reference to a production order, the system determines the procedure for drilling down a bill of materials (BOM) on the basis of the order type and plant.

For each defect item, you can also record one or more:

- Causes

- Tasks

- Activities

Item

Entering Items

To use the individual functions in the table, call up a notification in the create or change mode.

Function	Tab page / Pushbutton / Menu path	What you should know
Entering item data in the notification header (notification type Q3 only)	Choose the *Subject* tab.	You can enter data for a **single** item directly in the header of an internal problem report (notification type Q3). In all other standard notification types, you enter the item data in the item overview.
Entering item data in the item overview	Choose the *Overview* tab.	Enter the data for an item in the various columns of a single row.
Entering item data in the item detail screen	Choose the *Overview* tab. Select an item in the item overview and choose *Detail view* to display the dialog box for the item detail.	You can only access the fields for classification and assembly in the item detail screen. If you selected several items in the item overview, choose *Next* to go to the detail screen for the next item. To create a new item from the detail screen, choose *New entry*.

Cause

Definition

A reason or event that led to the occurrence of a notification item. A cause item contains the following information:

- Code group
- Code
- Short text
- Long text

Use

You can record one or more causes for an individual defect item. You can display the cause information in varying levels of detail on the following screens:

- Cause overview
- Cause detail screen

The cause overview and the cause detail screen are the same for all notification types.

Entering Causes for an Item

To use the individual functions in the table, call up a notification in the create or change mode.

Function	Tab page	What you should know
Entering the cause data for an item in the cause overview	Choose *Causes*.	You must select an item in the item overview before you can enter the cause data.
Entering the cause data for an item in the cause detail screen	Choose *Causes*. Select a cause item and then choose *Detail view.*	If you selected several causes in the cause overview, choose *Next cause* to go to the next cause detail screen. To create a new cause from the detail screen, choose *New cause*.

Quality Notifications (QM-QN)   ◼◤ **SAP AG**
Task

Task

Definition

Activities that describe the planning and organizational aspect within a notification. Using tasks, you can plan the way in which various people work together to process the notification and perform the activities within a specified period of time.

A task can relate both to the notification headers to the individual items. They can have different statuses.

> In an internal problem report, a task might consist of a follow-up action that notifies the author of the notification of production-related defects.

Use

The task data in a notification is displayed in varying levels of detail in the:

- Task overview

- Task detail screen

The task overview and detail screens are the same for all notification types.

You can enter task data for the notification header and for individual notification items. The tasks:

- For the notification header are also referred to as "immediate tasks." These tasks usually provide a "quick fix" for a problem requiring immediate attention.

- For notification items are also referred to as "corrective tasks." These tasks usually provide final solutions that will prevent the problem from reccurring.

For each task, you can enter the:

- Key for the task to be performed and a brief instruction of how the work is to be performed

- Planned start and end dates for the task

> When the system calculates the task deadlines, it uses the plant-specific factory calendar to calculate the dates. This means that the dates are calculated on the basis of the number of **working days** defined in the factory calendar.

- Task status

Integration

If the appropriate data is maintained in Customizing, the system can trigger certain follow-up actions on the basis of the task code (for example, printing a paper or calling up a certain SAP function). You can determine these follow-up actions in your company individually (see Follow-Up Actions for Tasks [Page 47]).

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Entering Tasks

To call up the individual functions in the table, call up a notification in the create or change mode.

Function	Tab page / Pushbutton / Menu path	What you should know
Entering immediate tasks for the notification header	Choose the *Tasks* tab.	Enter the data in the task overview.
Entering the immediate task data in task detail screen	Select a task in the task overview and choose *Detail view.*	Enter the data in the task detail screen.
Entering corrective tasks for a notification item	Choose the *Items* tab, select an item, and then choose the *Item tasks* tab.	Enter the task data for the item.
Entering the corrective task data in the task detail screen	Choose the *Items* tab and then select an item. Choose the *Item tasks* tab, select a task and then choose *Detail view*.	In this screen, you specify the planned start and finish date for the task. The dates entered may be changed based on the status issued (see Status Management for Tasks [Page 44]).

See also:

Automatic Determination of Tasks [Page 46]

Status Management for Tasks

Use

A task status informs you of a task's current processing stage. You can set the following statuses for a task:

- Released

  Indicates that the task can now be executed.

- Completed

  Indicates that the task has been performed.

- Successful

  Indicates that the task was successfully implemented and the notification problem has been solved.

Integration

The various task statuses are independent of one another. This means that a notification can be put in process even if it contains outstanding tasks that have not yet been released. You cannot, however, complete a notification if it contains outstanding tasks.

The system does not distinguish between notification header tasks (immediate tasks) and item tasks (corrective tasks). If the status information indicates that there are outstanding tasks in the notification, these can be both immediate tasks and corrective tasks.

> A notification will retain the status "outstanding tasks" as long as a task has not been completed (even if the task has already been released).

For more information about the general status management function, see Status Management [Page 89].

Features

You can use the status management function for tasks as follows:

- **Assigning a status to a task**

  You assign a status to a task by choosing the corresponding function in the task overview or task detail screens. You should assign a status to each task individually. If you select several tasks in the overview screen and choose a status, the system assigns the status to all of the selected tasks.

- **Status information**

  After you assign a status to a task, the system displays the status code in the status field in both the task overview and task detail screen. If you want to display the text for the status code, choose *StatusDetail*.

- **Date changes as a result of status assignments**

  When you assign a status to a task, the system automatically changes the relevant dates as follows:

Status	The system completes these fields
Released	*Planned start* with the current time
	Planned finish with either the current time or with the required notification end time.
	You can overwrite both fields.
Completed	*Date carried out <date> Carried out by <user name>* with the current date and the current user name.
	You cannot overwrite these fields.
Successful	None

The planned dates for a task must fall within the desired start and end dates of the notification. If you specify other dates for the task, the system issues a message to remind you of this. If no dates are maintained for the quality notification, the system uses the value 0 as a basis, so that it can still issue an information message if the dates are inconsistent.

Automatic Determination of Tasks

Use

The system can automatically determine which tasks should be performed first, based on the predefined parameters **response profile** and **service profile**. The response profile and service profile determine the times and the time interval within which your company should respond to a notification in a particular way:

- In the response profile, you can define one or more standard tasks based on a notification's priority, which the system can propose automatically and which must be performed within a specified time period. The system automatically assigns the determined tasks to the notification header.

- In the service profile, you can define time periods for individual workdays (service windows), in which a quality notification can be processed.

> You create a notification at 10:00 am. The response profile defines a time interval of two hours for the task code "Call back customer" and a time interval of 4 hours for the code "Check whether technician is on site". The times defined in the service window are 8:00 am to 12.00 noon and from 2:00 pm to 6:00 pm.
>
> In this case, you should call back the customer by 12:00 noon to discuss or clarify the problem. If you have to send a technician to the customer site, the technician must arrive by 4:00 pm.

Prerequisites

Your system administrator must assign both a response profile and a service window to each notification type in Customizing for *Notification Processing*.

Activities

Choose *Edit → Tasks → Determine* to automatically determine the tasks. You can also choose *Edit → Tasks → Simulation(Det.)…* to simulate the task determination (without actually assigning the tasks to the notification).

Follow-Up Actions for Tasks

Use

You can define one or more follow-up actions for a notification task. These follow-up actions are automatically executed by the system after you have processed and saved the notification.

Prerequisites

In Customizing for *Quality Management*, your system administrator must:

- Set the indicator for follow-up actions in the task catalog (catalog type 2)

- Define a follow-up action key and assign this to one or more function modules (the function modules determine the actions to be executed)

Features

The system automatically executes a follow-up action for a task after you have:

1. Entered a task code (for the notification header or for a notification item) that has one or more follow-up actions assigned to it.

2. Saved the notification

You can display a log on the task detail screen that lists the follow-up actions.

Activity

Definition

An action performed within the framework of a notification. It documents an activity that someone has performed in the process of solving a notification problem.

Use

You can enter the following data for each individual activity:

- Key for the activity that was performed and a short text that can be changed individually

- Start and end of the activity

- Quantity factor for the activity (for example, if an activity consisted of sending three units of a material to a laboratory for testing, you might enter the value "3" for the quantity factor)

An activity can relate both to the notification header and to the individual notification items. The activity data is displayed in various degrees of detail in two places in the quality notification:

- In the activity overview

- In the activity detail screen

The activity overview and detail screens are the same for all notification types.

> The main difference between an activity and a task is that an activity does not have a status and cannot be assigned a partner. The activity is used strictly for documentation purposes.

Entering Activities

To call up the individual functions in the table, call up the notification in the create or change mode.

Function	Tab page / Pushbutton / Menu path	What you should know
Entering activities for the notification header	Choose the *Activities* tab.	Enter the data in the activity overview.
Entering activities for the notification header in the activities detail screen	Select an activity in the activity overview and choose *Detail view*.	Enter the data in the activity detail screen. Here you specify the dates and times for executing the activity. To create a new activity from the detail screen, choose *New entry*.
Entering activities for a single item	Choose the *Items* tab, select an item, and then choose the *Item activities* tab.	Enter the activity data for the item.

You can overwrite the activity text if the text proposed by the system based on the activity code does not really apply for this activity.

If you have entered your own activity text, you can also enter a long text for the activity by choosing *Create text*.

Both texts are displayed in the activity detail screen. In evaluations, you only see the activity text that is defined in the catalog, not your own text.

Catalog Profile

Definition

A combination of code groups from several catalogs that have been grouped together as allowed values for notification processing or defects recording.

The catalog profile is defined in Customizing and assigned to the notification type. You can also assign a catalog profile to a:

- Material in the material master

- Report type in defects recording

A catalog profile assigned to a material master or report type has priority over a catalog profile assigned to a notification type.

Standard catalog profile

This is the catalog profile assigned to a notification type in Customizing for *Notification Types*. The system proposes this catalog profile for all quality notifications of the corresponding notification type.

Using other catalog profiles

You can also copy a catalog profile other than the standard one in a notification, provided this is allowed by Customizing. If you copy another catalog profile into a notification, the new catalog profile becomes the standard catalog profile for this notification only.

For more information, see Selection of an Alternative Catalog Profile [Page 51].

Use

The catalog profile has two primary functions for notification processing:

- It controls which code groups you can access from the individual catalogs, to record defects, tasks, and activities in a quality notification.

- You can store a default class in the catalog profile under which a defect item can be classified in the R/3 System's *Classification System* (provided the *Classification System* was activated for the notification type in Customizing).

You can use the catalog profile, for example, to restrict the selection of codes to specific types of defects or damage, based on the notification type.

With the help of classes in the *Classification System*, you can record additional problem attributes if the criteria in the quality notification (for example, defect type, defect location, defect cause, and so on) is not sufficient for your needs. For example, if you maintain the class "problems in production" along with the class characteristic "cause," you can record the causes of production problems as characteristic values.

For notification processing and defects recording, the catalog profile specifies the unit of measurement and the degree of accuracy to be used when you record the quantitative defect valuations. You can valuate the defects quantitatively and, if necessary, assign a unit of measurement to the value. For example, you can use the damage potential or the time and effort necessary to eliminate a defect as a criterion for weighting the defects.

Selection of an Alternative Catalog Profile

Use

A catalog profile is typically assigned to a quality notification type. The information in a catalog profile is usually broad enough so you can use it to process a variety of problems. In some cases, however, you have to use a catalog profile other than the one assigned to the notification type. When such a situation arises:

- The system can copy another catalog profile automatically.

  For example, if you specify a material in a notification for which a catalog profile has assigned in the material master, the system automatically selects the catalog profile assigned to the material (and not the catalog profile assigned to the notification type).

- You can change the catalog profile manually (see "Prerequisites" below).

Prerequisites

You can only change a catalog profile manually, if the QM Customizing application allows it. If you change the catalog profile in a quality notification manually or if you manually enter defect codes that are not contained in the assigned catalog profile, the system responds differently, depending on the message category that is stored for the catalog profile "check" in Customizing for *Notification Contents*:

System message (message category)	Effect
Information message	The system copies the new catalog profile
Warning message	The system copies the new catalog profile
Error message	The system does not copy the new catalog profile; instead, it retains the existing catalog profile

For example, if a particular catalog profile applies to a certain notification type and this catalog profile and its codes are intended to be binding for the notification processor, the message category "error message" should be stored in Customizing. In this way, no other catalog profile can be copied and only the codes in this catalog profile can be used in the notification.

> If a message category is not specified in Customizing, the system will copy a catalog profile without issuing a system message.

Activities

To see which catalog profile is valid for a notification, choose *Extras → Catalog profile → Display*.

Changing the Catalog Profile

1. In a notification, choose *Extras → Catalog profile → Catalog profile*.

    A dialog box appears. The *Current catalog profile* block contains the current or last copied catalog profile and the *Default catalog profile* block contains the catalog profile that was previously valid.

2. If you want to copy the catalog profile proposed by the system, choose *Default transfer.*

    The catalog profile is displayed in the *Current catalog profile* block.

3. If you do not want to use the current or proposed catalog profile, enter the desired catalog profile in the *Individual catalog profile* block and choose *Individual transfer.*

    The catalog profile is displayed in the *Current catalog profile* block.

    The individual catalog profile applies to the **current notification only** and will remain valid until you change it explicitly.

    If you create a new notification (of this notification type), the system uses the standard catalog profile assigned to the notification type and not this individual catalog profile.

4. Close the dialog box and save the changes.

Reference Object

Definition

An object that relates to a problem in a quality notification. Reference objects are defined in Customizing for *Notification Types*.

The following table contains the possible reference objects for the standard notification types:

Customer Complaint (Q1)	Complaint Against Vendor (Q2)	Internal Problem Report (Q3)
Customer	Vendor	Internal partner
Material or batch	Material or batch	Material or batch
Sales order	Material document (GR)	Production order, run schedule header
Sales organization	Purchase order	Work center
Division	Purchasing organization	Inspection lot
Distribution channel	Purchasing document	Serial number
Delivery	Inspection lot	Device data
Inspection lot	Serial number	Notification number (copy model)[1]
Serial number	Device data	Reference number[2]
Device data	Notification number (copy model)[1]	
Notification number (copy model)[1]	Reference number[2]	
Reference number[2]		
Purchase order number		
Purchase order date		

[1] Field in which you can reference another quality notification that was used as a copy model

[2] Field in which you can assign an external reference number to a notification (for informational purposes only).

Processing Reference Objects

To call up the individual functions in the table, call up the notification in the create or change mode.

Function	Tab page / Pushbutton / Menu path	What you should know
Processing a notification without a reference object		The Customizing settings for the standard quality notification types require you enter at least the material when you create a notification. If you want to create a notification without entering a reference object, have your system administrator make the necessary changes in Customizing for *Notification Creation*.
Entering a reference object		When you create a notification for a customer complaint (Q1), you must enter the reference object "**material**" in a dialog box before the system displays the notification screen. For a complaint against a vendor (Q2) or an internal problem report (Q3), you enter the reference objects in the notification.
Changing a reference object		You can change a reference object in a quality notification at any time. If you change the reference object "**material**," the system may automatically try to select another catalog profile if the new material has a different catalog profile assigned to it. For more information, see Catalog Profile [Page 50].

Changing the reference object view	*Extras → Settings → Reference object view*	Using this function, you can change the information displayed for a reference object. You can only change the view if a reference object has not yet been entered. After saving the notification, the selected setting will be retained for this notification **only**.
Changing the reference object view	*Extras → Settings → Ctrl/Default values*	Using this function, you can change the reference object view permanently for all notifications of this notification type.
Entering or changing reference documents		If you enter or change a reference document (for example, a sales order, production order, or material document) in a notification that was previously saved, the system overwrites the existing document-related data with new information, unless you choose to retain the original data.
Displaying object information	*Environment → Display object*	This function allows you to display detailed information for a reference object (for example, the material master record for a material).

Action Box

Use

When you process quality notifications, maintenance notifications, or service notifications, you can use the **action box** to execute **follow-up functions**. Follow-up functions can help you process a notification problem and are documented as an **activity** or **task** for the notification header after being executed. Depending on your settings in Customizing for *Notification Processing*, the follow-up functions in the action box can include functions that you can execute:

- More than once and independently of other follow-up functions in the action box

- Only once and/or after certain other follow-up functions have been executed (for example, interdependent, process-related functions)

> Follow-up functions in the action box are different from task-related follow-up actions [Page 47]. Both follow-up functions and follow-up actions call function modules. With a follow-up action, however, the system executes the corresponding function module when you **save** a quality notification. With a follow-up function, the system executes the corresponding function module as soon as **you execute the follow-up function** in the action box. Also, when you process follow-up functions, you enter information in a dialog box. This is not possible with follow-up actions.

Integration

You can link the follow-up functions that are documented as **tasks** to the functions of the *SAP Business Workflow* component. This allows the system to trigger certain workflow tasks, once a function has been executed and the notification has been saved.

The action box contains follow-up functions that support the following business processes:

- Repairs Processing Using Quality Notifications (RMA) [Page 93]

- Processing Return Deliveries to Vendors [Page 96]

Prerequisites

The follow-up functions delivered in the standard system are ready for use. If you do not need a particular follow-up function, you can delete it in Customizing for *Notification Processing*. If you want to include your own, self-programmed functions in the action box, you must define them in Customizing for *Notification Processing*.

Features

Function	What you should know

Appearance of the action box	In the standard system, the action box is displayed as an overview tree. In this mode, the follow-up functions are displayed in a list in different colors. The colors have the following meaning: • Blue: The follow-up function is active and can be executed. • Black: The follow-up function is inactive and cannot be executed (yet). • Gray: The follow-up function has been executed and cannot be executed again. If you set the *Action box: Table* indicator in the user default values, the system displays the action box as a table. In this mode, the system only displays the follow-up functions that can be executed (without the color coding).
Standard follow-up functions	The action box contains several follow-up functions that have been predefined in Customizing for *Notification Processing*. For more information about these functions, see: • Standard Follow-Up Functions for Activities [Page 59] • Standard Follow-Up Functions for Tasks [Page 60]
Business transactions	You can also assign a business transaction to each follow-up function in Customizing for *Notification Processing*. The business transaction determines whether an activity or task resulting from a follow-up function can be executed, based on the current status of a notification.
Authorization check	Each follow-up function is assigned a code group in Customizing for *Notification Processing*. When you process a notification, the system automatically checks whether you are authorized to access the code groups assigned to the various follow-up functions. If you do not have authorization for a particular code group, the corresponding follow-up function does not appear in the action box. This means that you can only use the follow-up functions for which you have authorization.

Activities

To execute a follow-up function in the action box, click the text or double-click the symbol for a follow-up function that is displayed in blue. A dialog box appears, in which you can enter the data that is required to execute the function.

> You can only execute a follow-up function if you select it from the action box. If you create an activity or task in the notification using the possible entries help for a catalog, the system will not execute a follow-up function.

Action Box

The system executes the selected function and documents it as an activity or task for the notification header.

Standard Follow-Up Functions (Activities)

Use

The action box contains several standard follow-up functions that you can use to help you process a notification problem. When you execute one of these follow-up functions, the system documents the execution of the function as an activity for the notification header.

Features

Follow-up function	What you should know
Telephone contact using *SAPphone*	You can use this function to initiate a telephone call using *SAPphone*. The system logs the details of your telephone call as a notification activity.
	To be able to use this function, the telephone and computer in your office must be interconnected and the *SAPphone* component must be active.
Telephone contact without *SAPphone*	You can use this function to record a telephone call that you initiated while processing a notification. The system logs the details of your telephone call as a notification activity.
Internal memo	You can use this function to record an internal message or remark that relates to the subject matter of the notification. The system logs the memo as a notification.
Solution database [Ext.]	You can use this function to search the solution database for symptoms and solutions that may be similar to the problem you are currently processing.
	If you find a symptom/solution in the database that applies to the problem in your current notification, you can:
	• Document your database search as an activity in the notification
	• Copy the tasks associated with the solution into your notification

Standard Follow-Up Functions (Tasks)

Use

The action box contains several standard follow-up functions that you can use to help you process a notification problem. When you execute one of these follow-up functions, the system documents the execution of the function as a task for the notification header.

Features

Follow-up function	What you should know
Changing the quality level	You can choose one or more quality levels in QM and increase the inspection severity for these levels. The selected quality levels may relate to the following criteria: • Material • Material / vendor • Material / customer • Material / manufacturer • Material / vendor / customer / manufacturer • Material / inspection type You can only increase the inspection severity for a quality level by a single stage (even if you select the same quality level more than once). When you save the notification, the system increases the inspection severity for the selected quality levels by executing a corresponding follow-up action.
Resetting the quality level	You can choose one or more quality levels in QM and reset the inspection severity to the initial inspection stages. When you save the notification, the system resets the inspection severity for the selected quality levels by executing a corresponding follow-up action.

Sending notices during notification processing	You can use this function to read and format selected data in a notification, which the system can then print, fax, or send as an e-mail to an internal or external (Internet) address.
	The standard system supports the following types of notices:
	• Confirmation of receipt
	• Interim report
	• Final report
	When you execute this function, the system retrieves and displays a standard text that is stored as a long text under the corresponding catalog task code. You can edit this text as necessary without changing the original long text. If several partners exist for the notification, you can select a partner before you process the text.
	You can view the document in a print preview before you save the notification. When you save the notification, the system sends the notice by executing a corresponding follow-up action.
Creating a new notification	You can use this function to create a new notification while you are processing an existing notification. When you create a new notification, you can copy the:
	• Header data from the existing notification into the new notification and edit the data as necessary.
	• Defect data from the existing notification into the new notification. This defect data does not include the cause, task, activity, classification, and long text data.
Requesting an 8D report (notification type Q2, complaint against vendor)	An 8D report is a standard form that is used in the automobile industry to document the correction of defects. For example, as an automobile manufacturer, you can use this follow-up function to request an 8D report from a vendor to receive a statement about the confirmed defects and how the vendor intends to correct the defects.
	You can use this function to create an 8D report for a defect while processing a quality notification. When you save the notification, the system prints the 8D report by means of a corresponding follow-up action.

Standard Follow-Up Functions (Tasks)

Creating an 8D report (notification type Q1, customer complaint)	If a customer submits a complaint about a product you delivered as vendor, the customer may ask you to submit an 8D report. In this case, you create a quality notification for a customer complaint to describe the defects and possible causes, and to define appropriate tasks.
	You can also create an 8D report for each defect item. The system inserts the tasks in the various sections of the 8D report, based on the task sort number.
	For example, if a task has the sort number "4," the system inserts the task in the fourth section of the 8D report. The system prints all tasks with the corresponding sort numbers in appropriate sections of the 8D report.
	The system selects the persons responsible as follows: for tasks, it specifies the person responsible for the task; for causes, the person responsible for the notification.
	The system determines dates for the tasks as follows:
	• If the task has already been completed, it specifies the completion date and includes the text "completed."
	• If the task has not been completed yet, but an end date has been planned, it specifies the planned end date and includes the text "planned."
	• If no date has been specified for a task, it record the text "outstanding."
	If you want to use your own form for an 8D report, assign your form to the shop paper "8D_C" in the print control for the quality notification.

Permission to Deviate from Specification	Using this follow-up function, you can contact a notification partner to obtain permission to a deviate from a specification. For example, if parts delivered by a vendor are found to be out of tolerance, you can document this as a defect in a quality notification. When you process the notification, you can execute this function to obtain permission from an internal or external notification partner, for example, to allow you to use the out-of-tolerance parts in production.
	This function starts the following workflow:
	• It sends an e-mail to the partner that contains a description of the problem and an address (URL).
	• Using the URL, the partner can access his or her workflow inbox (provided he or she has an Internet user) where the work item can be processed.
	• Once the partner has processed the work item by entering a response and a decision, this information is documented as a long text in the original quality notification.
	• Both the processor (partner) and the person who initiated the workflow receive a confirmation mail.

See also:

Functions for Repairs Processing [Page 95]

Functions for Processing Return Deliveries [Page 99]

Defining Responsibilities (SAP Business Workflow)

Purpose

The activities associated with problem management can often involve many departments in a company's organization. Such cross-departmental business processes may involve considerable resources if the work is not closely coordinated and the resources are not organized efficiently.

The *SAP Business Workflow* component can help you streamline your problem management activities in the course of processing quality notifications by defining the employees' responsibilities and optimizing the flow of work within the company.

Process Flow

The *SAP Business Workflow* supports the following workflow scenarios for quality notifications:

- **Processing quality notifications**

  This workflow scenario helps you process, monitor and complete newly created or activated quality notifications promptly and efficiently. This process is implemented in a workflow template that triggers and controls the execution of the following standard tasks:

  − Notifying an authorized person (for example, the notification coordinator) that a new quality notification has been created or activated in the system and that tasks need to be defined for the notification

  − Notifying an authorized person that tasks have been created for the quality notification and that these tasks need to be processed

  − Notifying an authorized person (for example, the notification coordinator) that all tasks have been completed for the quality notification and that the notification needs to be completed or new tasks need to be defined for the notification

- **Completing tasks**

  If one or more tasks were created in a quality notification, this workflow notifies the responsible department or person that a task must be implemented. Once a task has been completed, the relevant work item is deleted from the responsible person's inbox.

- **Processing critical defects**

  This workflow informs the responsible department or person that a critical defect has been recorded during a quality inspection and activated as a quality notification.

- **Notifying an interested party that a notification has been created**

  This workflow automatically sends a mail to an interested party when a notification is created.

See also:

SAP Business Workflow for Quality Notifications [Ext.]

Shop Papers for Quality Notifications

Definition

Notification-related documents that can be printed, faxed, or archived in the course of processing quality notifications.

Structure

The standard system supports the following shop papers for quality notifications:

- **Notification overview**

    A complete printout of a quality notification that provides the notification-processing department with an overview of the important notification data.

- **Item list**

    A partial or complete listing of defect items contained in a quality notification. You can selectively include or exclude individual defect items in an item list.

- **Letter of complaint to a vendor**

    A standard letter of complaint that can be sent to a vendor who delivered defective goods. This shop paper can only be printed for notifications that involve complaints against vendors (notification type Q2).

- **8D-report**

    A standard form that is used in the automotive industry to process vendor-related problems.

    Unlike the other shop papers described above, you cannot print an 8D-report using the standard print functions for shop papers. You must print this report using the action box. For more information, see Standard Tasks in the Action Box [Page 60] (Creating an 8D-report).

- **User-specific shop papers**

    Your can also define user-specific shop papers for your company in Customizing for *Notification Processing* (*Print Control*).

Printing and Faxing Shop Papers

Use

In addition to displaying the shop papers for quality notifications on screen, you can also:

- Print the shop papers

- Transmit the shop papers by fax

- Archive the shop papers in the *SAP ArchiveLink* (optical storage medium)

- Copy the shop papers to an external database (for example, Microsoft Access®)

When you print or fax shop papers:

- You can either print or fax a selected shop paper (that is, you cannot simultaneously print and fax the same shop paper). Therefore, make sure you specify **either** an output device (printer destination) **or** a fax number (subscriber number) for a selected shop paper.

- The first printout is always the original. All additional printouts are treated as copies. For example, if you initially send a shop paper as a fax and then print it, the fax is the original and the printout is the copy.

- The sequence for printing/faxing can differ, depending on whether you called up the notification in the display or change mode:

    - In the display mode, the system prints the notification after you exit the notification.

    - In the change mode, the system automatically saves the notification when you choose the function to print the notification.

Features

Function	Use
Printing a Quality Notification in Full [Page 67]	Printing out the complete notification including all items
Printing a Quality Notification Item [Page 68]	Printing out individual notification items
Printing Shop Papers for Several Notifications [Page 69]	Printing shop papers for several notifications at the same time
Faxing Shop Papers [Page 70]	Faxing notifications or notification items
Viewing the Print Log [Page 71]	Determining which parts of a notification have been printed
Archiving Shop Papers in SAP ArchiveLink [Page 72]	Storing notifications or notification items in ArchiveLink, the optical storage medium in the R/3 System
Downloading Quality Notifications [Page 73]	Downloading notifications from the R/3 System to PC application

Printing a Quality Notification in Full

Procedure

1. Call up a quality notification in the change or display mode.

2. Choose *Notification* → *Print* → *Notification.*

   A dialog box for choosing the shop papers is displayed. This dialog box contains a list of all the shop papers that can be printed out for this quality notification type.

3. Select the shop papers you want to print.

   Individual shop papers may already be selected on the basis of predefined entries in Customizing. Check the other entries in this dialog box and change them where necessary.

   You can select the archiving mode by choosing *Choose.* Archiving means "saving in the ArchiveLink", the system's optical storage medium.

4. Choose *Print/fax* to print the selected shop papers.

   The dialog box is closed and the notification will be printed or faxed when you exit the transaction.

5. Save the notification.

Result

The notification is printed on the specified printer. Each item is printed on a separate page with the notification header in the first section. The notification is assigned the status "printed" (*NOPT*).

Printing a Quality Notification Item

Procedure

1. Call up a quality notification in the display or change mode.

2. Choose *Notification* → *Print* → *Item selection.*

   A dialog box is displayed that contains a list of all defect items in the notification.

3. Select the items you want to print and choose *Continue*.

   A dialog box for choosing the shop papers is displayed.

4. Select the shop papers you want to print.

   Individual shop papers may already have been selected on the basis of predefined entries in Customizing. Check the other entries in this dialog box and change them where necessary.

5. Choose *Print/fax* to print the selected items.

   The dialog box is closed and the selected notification items are flagged for printing/faxing.

6. Save the notification.

Result

Each selected notification item is printed out on the specified printer. Each item is printed on a separate page with the notification header data in the first section. The notification is assigned the status "printed" (*NOPT*).

   If you try to print an item more than once, the system displays a warning message informing you that the item has already been printed. If you print the item again, the paper printout is labeled as a *Copy*.

Printing/Faxing Shop Papers for Several Notifs.

Procedure

1. Choose *Logistics → Quality management → Quality notification → Worklist → Notification → Change data*.

   A notification selection screen appears.

2. Generate a list of notifications by entering your selection criteria and then choosing *Execute*.

   For more information on how to select notifications, see Selecting Quality Notifications [Page 83].

3. In the resulting list of notifications, select the notifications for which you want to print shop papers and then choose *Notification → Print notification*.

   A dialog box with the printable shop papers appears.

4. Select the shop papers you want to print.

   Check the other settings in this dialog box and change them where necessary.

5. Choose *Print/fax*.

Result

The system prints or faxes the shop papers for the selected notifications. The notifications receive the status *Printed* (*NOPT*).

Faxing Shop Papers

Faxing Individual Shop Papers to Different Recipients

1. Call up the dialog box for printing shop papers (see also Printing a Quality Notification in Full [Page 67] or Printing a Quality Notification Item [Page 68]).

2. Select the desired shop papers in the dialog box.

3. Delete the printer destination if one has already been entered.

4. For each selected shop paper, enter the recipient's fax number and country key.

5. Choose *Print/fax*.

6. Save the notification.

    The fax is transmitted and the notification is assigned the status printed (*NOPT*).

    You cannot simultaneously print and fax the same shop paper. However, you can selectively print and fax different shop papers (for example, you can print the notification overview and send the item report by fax at the same time).

Faxing Several Shop Papers to a Particular Recipient

1. Call up the dialog box for printing shop papers (see also Printing a Quality Notification in Full [Page 67] or Printing a Quality Notification Item [Page 68]).

2. Select the desired shop papers in the dialog box.

3. Choose *Multiple fax*.

    Another dialog box is displayed.

4. Enter the recipient's fax number and country key.

5. Choose *Continue*.

6. Save the notification.

    The fax is transmitted and the notification is assigned the status printed (*NOPT*).

Viewing the Print Log

Use

When a quality notification or individual notification items have been printed out, the notification receives the status "printed." If you want to print a quality notification (or individual notification items) that has already been printed, you can check the print log to find out who printed what information when.

The destination in the print log shows you whether the shop paper was printed internally or sent by fax.

Procedure

1. Call up a quality notification in the change mode.

2. Choose *Notification* → *Print* → *Display log.*

    The print log is displayed.

    ⚠

    If you delete an item from a quality notification, it is automatically deleted from the print log as well. If another printout of the item exists within the company, this can lead to inconsistencies under certain circumstances.

Archiving Shop Papers in ArchiveLink

Archiving Shops Papers

1. Call up the dialog box for printing shop papers (see also Printing a Quality Notification in Full [Page 67] or Printing a Quality Notification Item [Page 68]).

2. Choose *Choose* to display the selection details for the shop papers.

3. Enter the desired value for the archiving mode and then choose *Continue*.

4. Choose *Print/fax*.

   The notification is saved and the selected shop papers are archived.

Displaying Objects Archived in ArchiveLink

1. Call up a notification in the display or change mode.

2. Choose *Environment* → *Object links*.

   A dialog box appears.

3. Select *Archived documents* and choose *Continue*.

   If archived documents are available, the system displays a selection list from which you can choose a document, or it displays the document directly if only one exists.

See also:

SAP ArchiveLink [Ext.]

Downloading Quality Notifications

Use

You can use this procedure to download notifications from the R/3 System into a PC application (for example, you can download a newly created quality notification from the R/3 System into a Microsoft Access® database for further processing).

> When you download a notification, the R/3 System supplies the notification data. The customer is responsible for supplying the target application in the PC.

Prerequisites

The following hardware and software requirements must be fulfilled in order to download notifications:

- Frontend running under Windows 3.1® or Windows NT®

- Microsoft Access®, version 2.0 or higher

Procedure

Downloading a List of Notifications

1. Choose *Logistics* → *Quality management* → *Quality notification* and then *Evaluation* → *Notification list*.

   The screen for selecting the quality notifications appears.

2. Create a list of notifications by entering your selection criteria and then choosing *Execute*.

   > For more information on how to select notifications, see Selecting Quality Notifications [Page 83].

3. In the generated list of notifications, select the notifications you want to download and then choose *List* → *Access.*

   A dialog box is displayed in which you must enter the destination and name of the Access database.

4. Choose *Copy*.

   The notifications are downloaded into the MS Access® database.

Downloading Individual Notifications

1. Call up the quality notification you want to download in the change mode.

2. Choose *Notification* → *Print* → *Download.*

   The quality notification is downloaded into the MS Access® database.

Putting Quality Notifications in Process

Use

Once you have created a quality notification and entered all of the facts of the problem, you can put the notification in process. When you put a notification in process, you are releasing the notification for processing.

Features

A quality notification can be put in process in the following ways:

- You can put a quality notification in process manually.

- The system puts a quality notification in process automatically when a QM order is created for the notification (for more information, see Assigning a QM Order to a Quality Notification [Page 75]).

When a notification is put in process, the system changes the status of the notification from "outstanding" (*OSNO*) to "notification in process" (*NOPR*).

Activities

Call up the notification in the create or change mode and then choose *Notification → Functions → Put in process.*

QM Orders in Notification Processing

Use

The correction and elimination of quality-related problems usually involve **nonconformity costs**. When you process a quality notification, you can use a **QM order** as a cost collector for nonconformity costs. Nonconformity costs can include:

- Internal failure costs (for example, costs for defects analyses, costs for reworking a defective product, costs for scrap, and so on)

- External failure costs (for example, warranty costs, costs for investigating customer complaints, costs for processing returned materials, and so on)

Integration

All costs accumulated in a QM order must be confirmed and settled in the *Controlling* (CO) component of the R/3 System.

Activities

In a quality notification, you can:

- Assign an existing QM order to the notification [Page 76]

- Create a new QM order and assign it to the notification [Page 77]

See also:

Quality-Related Costs [Ext.]

Assigning an Existing QM Order to a Notification

Procedure

1. Call up a quality notification in the create or change mode.

2. Choose *Notification → Functions → Order → Assign.*

    A dialog appears in which you can enter the existing QM order number.

3. Enter the QM order number and choose *Continue*.

4. Save the notification.

Result

When the QM order has been assigned, the notification receives the status "order assigned" (*ORAS*) and "notification in process" (*NOPR*). The QM order number is displayed in the *QM order* field.

Creating a QM Order for a Notification

Prerequisites

Before you can create a QM order, make sure the following conditions have been met:

- The *Controlling* (CO) component is active in your company.

- The following QM order parameters are defined in Customizing for *Notification Processing*:

    - Quality notification type*****

    - Plant number*****

    - Order type (*QN01* for nonconformity costs)

    - Business area (optional)

    - Account assignment (cost object for debiting the costs; for example, cost center, sales order)

        The parameters marked with an asterisk above **must** be maintained in Customizing for *Notification Processing*. If the remaining parameters are not defined in Customizing, you can enter them in a dialog box when you create a QM order for a quality notification.

        Before you create a QM order, you can specify that you want to change the default account assignment data. You do this by setting the *Spec. SR* indicator (special settlement rule) in the *Costs* block of the notification.

Procedure

3. Call up a quality notification in the create or change mode.

    If you want to change the default account assignment data, set the *Spec. SR* indicator. When you choose the menu option in step 2, the system branches to the screen for maintaining the settlement rule in the CO component before it creates the QM order.

4. Choose *Notification → Functions → Order → Create.*

    The system responds in one of the following ways:

    - If all of the required QM order parameters have been maintained in Customizing, the system creates the QM order directly.

    - If the QM order parameters were not completely maintained in Customizing, the system displays a dialog box in which you can enter the QM order parameters.

3. Save the notification.

Creating a QM Order for a Notification

Result

When the QM order has been created, the notification receives the status "order assigned" (*ORAS*) and "notification in process" (*NOPR*). The QM order number is displayed in the *QM order* field.

Postponement of Quality Notifications

Use

In some cases, it may be necessary to delay the processing of a quality notification (for example, because the assigned tasks cannot be performed yet or because the defects analysis has not been completed).

Using this function, you can postpone the processing of a notification. When you postpone a notification, the system sets the status *NOPO* (*notification postponed*).

You cannot postpone a notification that has already been put in process.

Activities

Call up a quality notification in the change mode and choose *Notification* $\rightarrow$ *Functions* $\rightarrow$ *Postpone* and save the notification.

Completion of Quality Notifications

Use

You complete a quality notification when the notification problem has been solved and no further processing is required. After you complete a notification, the data in the notification can no longer be changed. You can then only display the notification.

When a notification is completed, it receives the status *NOCO* (*notification completed*).

Integration

When you complete a quality notification for a complaint against a vendor (quality notification type Q2) and you specify that the problem cause was "external," the system uses this information to calculate a complaint factor for the "quality" criterion in the vendor evaluation. The resulting score evaluates the performance of the vendor with respect to nonconformity costs.

Prerequisites

You cannot complete a notification if outstanding tasks still exist in the notification.

Features

Categorizing a notification problem

When you complete a notification, the system displays a dialog box with the current date and time, which you can accept or edit as the time of completion. In this dialog box, you must also indicate whether the cause of the problem was **internal** or **external** (for example, if a defective product was delivered by a vendor, the cause is external).

Putting a notification back in process

If you determine that additional processing is necessary for a completed quality notification, you can put the notification back in process.

Archiving of completed notifications

Completed notifications are automatically archived and deleted from the database after a specific time interval has expired. This time interval is set in Customizing for *Quality Management* (*Quality Management → Environment → Central Functions → Organize Archiving*). Therefore, make sure all processing steps have been concluded for a notification before you complete the notification.

Activities

Call up a quality notification in the change mode and choose *Notification → Functions → Complete*.

Specify the completion date/time and the cause of the problem, then close the dialog box and save the notification.

See also:

Putting Quality Notifications in Process [Page 74]

Vendor Evaluation [Ext.]

Deletion of Quality Notifications

Use

In some cases, you may want to delete a notification for one reason or another. You cannot delete a notification directly in dialog mode. Instead, you must set a deletion flag for a notification, which informs the system that the notification can be deleted.

Typically, a company executes an archiving program at regular intervals. This program searches for the notifications with deletion flags, converts the deletion flags to deletion indicators, and copies them to an archive. Finally the system deletes the notifications from the database.

Before you delete a notification, you should make sure that it is no longer needed.

Features

You can no longer change a notification once it has a deletion flag. It is assigned the status *Deletion flag* and *Complete*. You can now only display it. For more information on notification statuses, see Status Management [Page 89].

The individual tasks for the notification are also flagged for deletion when you set the deletion flag in the notification header.

You can cancel the deletion flag as long as it has not been converted to a deletion indicator. You can then put the notification back in process and maintain the notification in the usual manner.

Activities

To set the deletion flag, call up the notification in change mode and choose *Notification* → *Functions* → *Deletion flag* → *Set*.

To reset the deletion flag, choose *Notification* → *Functions* → *Deletion flag* → *Deselect*.

See also:

Archiving Quality Notifications [Ext.]

Selecting and Evaluating Quality Notifications

Use

In certain cases, you may want to use the system's functions for selecting and displaying a list of notifications, tasks, items, or activities for evaluation purposes. For example:

- You want to change or display a particular notification, but do not know the number of the notification.

- You want to change or display several notifications with certain attributes.

- You want to perform certain functions simultaneously for several notifications that have particular attributes.

- You want to obtain an overview of all notification tasks, items, or activities that fulfill certain criteria.

Features

The following functions are available for selecting and evaluating quality notifications:

- Multi-level lists [Page 85]

    A multi-level list consists of a selection of notifications and notification objects that are displayed hierarchically in two levels. From this list, you can select an object and branch to a screen to display detailed information about the object. You cannot **change** data in a multi-level list. You can create multi-level lists for the following objects:

    − Notifications

    − Partners

    − Items

    − Tasks

    − Activities

- Single-level lists [Page 86]

    A single-level list contains of a list of selected notifications. From a single-level list, you can branch to **display** or **change** information in a quality notification. You can create a single-level list for the following objects using the **worklist** functions for quality notifications:

    − Notifications

    − Items

    − Tasks

    − Activities

- Time series analysis [Page 88]

    This function allows you to display the number of quality notifications that were created over a specified period of time in an SAP statistics graphic.

Selecting and Evaluating Quality Notifications

Defining Variants

For the various notification lists, you can define:

- Report variants for the initial screen (screen in which you enter the selection criteria)

- Display variants for the list screen (screen with the results of the selection)

You cannot define display variants for multi-level lists.

For more information about defining variants, see Types of Report Variants in QM [Ext.].

Selecting Notifications (Multi-Level List)

Procedure

1. Choose *Logistics → Quality management → Quality notification → Info system → Notification → Multi-level list*.

   The initial screen for selecting the notifications appears.

2. Enter the search criteria as required.

3. Choose one of the following options:

   − *Execute* if you only want to display the list

   − *Program → Execute + print* if you want to display and print the list

Result

The system displays a list of notifications that meet your selection criteria. You can use the functions described in the table below to process selected objects in the list further.

Function	Procedure
Display notification header	Select a notification number and choose *Display object*.
Display reference objects (for example, material, customer, sales order, and so on)	Select an object and choose *Display object*.

If you selected more than one object in the list, the system displays the first selected object in the list. When you have finished processing the first object, choose *Goto → Back*. The system automatically calls up the next selected object.

Selecting Notifications (Single-Level List)

Procedure

1. Choose *Logistics* → *Quality management* → *Quality notification* and then one of the following options under *Worklist*:

   − *Notification* → *Change data*

   − *Notification* → *Display data*

   − *Item* → *Change data*

   − *Item* → *Display data*

   − *Task* → *Change data*

   − *Task* → *Display data*

   − *Activity* → *Change data*

   − *Activity* → *Display data*

   The initial screen for entering the search criteria appears.

4. Enter the search criteria as required.

   If you want to activate the monitor function for a list, enter an appropriate value in the *Ref. field monitor* field. For example, if you want to monitor the notifications on the basis of the "notification priority," enter the value 1 in this field. The system will display a traffic light next to each notification for which a priority was specified (for example, a red light for "very high" priority, a yellow light for a "high" priority, and so on).

5. Choose one of the following options:

   − *Execute* if you only want to display the list

   − *Program* → *Execute + print* if you want to display and print the list

Result

The system displays a list of objects that meet your selection criteria. You can use the functions described in the table below to process selected objects in the list further.

Function	Procedure
Display or change notifications, items, tasks or activities (branch to notification header)	Select one or more objects in the list and then choose *Goto* → *Notification*.
Display or change tasks (branch to task detail screen)	Select one or more objects in the list and then choose *Goto* → *Tasks*.
Display a portfolio	Position the cursor on a column header and then choose *List* → *Portfolio*.

Display a graphic (for example, how many notifications were created on a particular date or for a specific material)	Position the cursor on a column header text, select the desired objects in the list, and then choose *Graphic*.
Print one or more notifications	Select one or more objects in the list and then choose *Notification → Print notification*.
Initiate an outgoing telephone call (*SAPphone* component must be active)	Select a notification and then choose the function for an outgoing telephone call.
Compare notification processing times (required start and end times)	Select one or more objects in the list and then choose *Goto → Schedule graphic*.
Export notification list to MS Excel	Choose *Spreadsheet*.
Display document flow for one or more notifications	Select one or more objects in the list and then choose *Display document flow*.
Display or change QM order	Select one or more objects in the list and then choose *Goto → Order*.
Display report documentation	Choose *Goto → Report documentation*

If you selected more than one object in the list, the system displays the first selected object in the list in the display or change mode. When you have finished processing the first object, choose *Goto → Back*. The system then automatically calls up the next selected object.

Displaying a Time Line of Notifications

Procedure

2. Choose *Logistics → Quality management → Quality notification → Info system → Notification → Time series analysis*.

    The screen for selecting the notifications appears.

6. Enter the search criteria for the notifications.

7. Choose one of the following options:

    –   *Execute* if you only want to display the list

    –   *Program → Execute + print* if you want to display and print the list

Result

The system displays the time series analysis in an SAP statistics graphic. The graphic shows the number of quality notifications (meeting your selection criteria) that were created over the specified time range.

Status Management

Use

Quality notifications are supported by the R/3 System's status management function. Whenever you create and process a quality notification, you execute certain business transactions for the notification. These business transactions are documented in the R/3 System by a status. The current status of a notification (or combination of active statuses) tells you which processing stages the notification has reached and which processing activities have yet to be completed.

Of the available statuses in the system, only a few need to be set at any given time. Typically, a notification must have a certain status before you can process the notification further. If a status is missing, the system displays a message to inform you of this.

A quality notification can have two types of statuses:

- **System statuses**

    System statuses are automatically set by the system when you execute a function for a quality notification. For example, if you print a notification, the systems sets the status "printed" (*NOPT*) for the notification. The system status informs you that a certain business transaction was performed for the notification.

    System statuses for quality notifications are predefined in the R/3 System and cannot be changed.

- **User statuses**

    User statuses are additional statuses that allow you to restrict the control of the business processes managed by the system statuses.

    Your system administrator defines user statuses in status profiles (see Customizing for *Notification Processing*). You can assign and delete user statuses that have been defined in your system, provided you have the necessary authorization.

Displaying Status Information

To call up the individual functions in the table, call up the notification in the change or display mode.

Function	Tab page / Pushbutton / Menu path	What you should know
Displaying status information in the notification header		The current system statuses for a notification are displayed in the *Status* field of the notification header. If a user status also exists, it is also displayed.
		The task status is also displayed in the *Status* field. If at least one notification task is still outstanding or has been released, the status "task outstanding" (*TSOS*) is displayed. As long as this status is set, you cannot complete the notification.
Displaying status information for individual tasks	Choose the *Task* tab.	The task overview contains the status of all recorded tasks.
Displaying system and user statuses with short text	Choose *Status detail*	All active system and user statuses for the notification are displayed on the *Status* tab page.
Displaying the general status overview	Choose *Status detail* and then *Extras → Overview*	You can see which processing steps have already been performed.
		All active and inactive system and user statuses for the notification are displayed.
Displaying statuses that can still be assigned	Choose *Status detail* and then the *Business processes* tab.	You can see which processing steps are currently allowed or not allowed.
		By choosing *Transaction analysis*, you can find out which business transactions can still be carried out for the notification (green traffic light), as well as those that cannot be assigned (red traffic light).

Assignment of System Statuses

Use

Whenever you execute a function for a notification that is subject to the R/3 System's status management facility, the system automatically assigns a corresponding system status to the notification. On the basis of the current system status, you can determine which additional functions can be executed for the notification.

Activities

The system assigns a system status to a notification when you:

- Create a notification

- Postpone a notification

- Put a notification in process

- Assign an order to a notification

- Complete a notification

- Print a notification

- Create a task

- Release a task

- Complete a task

- Complete a task successfully

- Complete all tasks

Assigning and Changing User Statuses

Prerequisites

To assign user statuses in a quality notification, your system administrator must have performed the following steps in Customizing for *Notification Processing*:

- Defined user statuses in a status profile

- Assigned the status profile to the notification type you intend to process

You can only change a user status if the **status order numbers** assigned to the user statuses in Customizing allow it:

- The status order numbers defined for individual user statuses in the status profile determine the sequence in which the user statuses can be activated.

- If a status order number was not assigned to a user status, the user status can always be set.

- Only one user status with a status order number may be active at one time.

- You cannot delete the initial user status that has been set for a notification.

Procedure

1. Call up a quality notification in the change mode.

2. In the notification header, choose *StatusDetail*.

    The status information is displayed.

3. In the column for user statuses (right column), activate the desired user status and then choose *Back*.

    The system displays the notification header with the chosen user status.

4. Save the notification.

Repairs Processing Using Quality Notifications (RMA)

Purpose

You can use the *Quality Notifications* component in QM to support the RMA (Return Material Authorization) process in your company. For example, if goods are returned by a customer for repair or replacement because of a technical defect, you can use a quality notification to process the return delivery. You record the problem in a quality notification for a customer complaint (notification type Q1) and then use the functions of the quality notification and integrated action box [Page 56] to:

- Create a repair order

- Initiate a technical check (analyzing the defects and determining what corrective action is needed)

- Post a goods movement to the appropriate stock so the returned items can be processed accordingly (for example, sales order stock, unrestricted-use stock, or scrap)

- Confirm the result of the technical check in the repair order and complete the notification

The goods can be processed further, depending on the results of the technical check. For example:

- If the goods need to be repaired, an authorized person working with the:

  – *Customer Service* (CS) component can create a service order to process the repairs and record the repair costs

  – *Sales and Distribution* (SD) component can send replacement parts to the customer

- If the technical check confirms that the goods are in proper working order and repairs are not necessary, the goods can be returned to the customer.

- If the goods have to be scrapped, an authorized person in *Sales and Distribution* (SD) can send replacement parts to the customer.

Prerequisites

If you intend to use the quality notifications for repairs processing, the inspection type assigned to the **inspection lot origin 05** in Customizing for *Inspection Lot Creation* **should not** be active for the material in the material master. If this inspection type is active, the system will automatically create an inspection lot when the goods are received (this is only necessary if you intend to process the return delivery via an inspection lot).

Process Flow

1. A customer files a complaint concerning the delivery of defective goods.

2. You create a quality notification for a customer complaint (notification type Q2).

3. You choose the function to create a repair order in the action box.

4. When the customer returns the goods, you post the goods receipt in reference to the repair order you created in the notification in step 3.

Repairs Processing Using Quality Notifications (RMA)

> If you specified the notification number when your created the repair order, you can search for the repair order using the notification number.

5. You perform a technical check for the received goods and record any confirmed defects in the notification.

    On the basis of the technical check, you reach one of the following conclusions:

    – The goods are defective and need to repaired

    – The goods are in proper working order and do not need to be repaired

    – The goods are beyond repair and need to be scrapped

6. You choose the function in the action box to create a goods movement.

    In doing so, you post the goods to the appropriate stock, based on the findings of the technical check (for example, to sales order stock if the goods must be repaired or to unrestricted-use stock if repairs are not necessary).

7. You confirm the stock postings in the repair order by choosing the corresponding function in the action box.

    The system sets a status in the repair order indicating that the notification has been completed.

See also:

Functions for Repairs Processing [Page 95]

Returns and Repairs Processing (Sales & Distribution) [Ext.]

Repairs Processing Using Inspection Lots in QM [Ext.]

Functions for Repairs Processing

Use

In a quality notification for a customer complaint, you can use the action box [Page 56] to execute the following functions for repairs processing:

Follow-up function in the Action Box	What you should know
Creating a repair order	When you choose this function, the system creates a repair order for repairs processing. The repair order serves as the object for: • Posting a goods receipt for the returned goods • Confirming stock postings after the completion of a technical check When you create a repair order, you can specify the following data: • Order type (for example, *RO* for repair order predefined in Customizing for *Sales Document Header*) • Sales-related organizational data • Sold-to party, material, and quantity The system also proposes the number of the current notification, which you later use to search for the repair order. If necessary, you can overwrite the notification number with the purchase order number specified in the sales order. You have several options for creating and saving the repair order and notification. You can also branch to the transaction to process the repair order.
Posting a goods movement	After you have completed a technical check and have determined what corrective action needs to be taken for the repair order, you can choose this function to post the goods to an appropriate stock. In doing so, the system exits the notification and calls up the transaction in *Inventory Management* (MM-IM) to create and post a goods movement.
Confirming a decision for the repair order	When you choose this function, you can confirm the stock postings for the repair order. The system then completes the notification and sets a corresponding status in the repair order.

Activities

To execute a follow-up function in the action box, you click the text or double-click the symbol for a follow-up function that is displayed in blue. A dialog box appears, in which you can enter the data that is required to execute the function.

The system executes the selected function and documents it as a task for the notification header.

Processing Return Deliveries to Vendors

Purpose

This process describes how you can use quality notifications and functions of the action box [Page 56] to:

- Record complaints against vendors for the delivery of nonconforming or defective goods

- Transfer these goods to an appropriate stock, depending on how you intend to process the goods

- Process return deliveries to vendors

The return delivery process is supported by the following components in the R/3 System:

- *Quality Management* (QM)

- *Materials Management* (MM)

- *Production Planning and Control* (PP)

- *Warehouse Management* (LE-WM)

- *Sales and Distribution* (SD)

Restrictions

When you process a return delivery:

- You can only process a **single** complaint in a notification. This means that the quality notification can only reference a **single vendor** and a **single material**.

- The goods to be returned must initially be located in unrestricted-use stock. You cannot process goods that have already been debited to an order or cost center.

- You cannot process materials with serial numbers or manufacturer part numbers.

- All goods to be returned must be located in a single storage location within the same plant. If the *Warehouse Management* component is in use in your company, the goods must be located in a single storage bin within the same plant.

Prerequisites

Customizing

Your system administrator has made all general and component-specific settings in Customizing for *Notification Use (Process Return Delivery to Vendor)*.

Basic data / master data

You have created and maintained the following basic and master data in the R/3 System:

Data	What you should know

Vendor master (MM)	Vendor master records exist for the vendors for whom you intend to process return deliveries. In the *Control data* of each vendor master, you have set the following indicators: • *GR-based invoice verification* • *Evaluated receipt settlement* • *Automatic evaluated receipt settlement for return items* • *Returns vendor*

Material master (MM)	The following data has been maintained for the returned material in the material master:
	
	• The key for the material type should allow you to maintain both purchasing and sales/distribution data (for example, trading goods).
	
	• A loading group is specified in the *Sales general/plant* view, so that the system can automatically determine the shipping point.
	
	• In the inspection settings *(Inspection set-up)*:
	
	   – Inspection type 08 is set for the material
	
	   – *Inspect with task list* indicator is active if you intend to inspect the material using an inspection plan

Inspection plan (QM)	If you intend to inspect a returned material using an inspection plan, a corresponding inspection plan exists and has been assigned to the material.
Catalogs (QM)	Code groups and codes have been maintained in catalog type 2 (Tasks) for the following functions in the action box: • Assign vendor • Assign purchasing document • Transfer posting: unrestricted-use stock to blocked stock • Transfer posting: unrestricted-use stock to inspection stock • Create transfer order • Scrap • Create return delivery • Record usage decision • Change outbound delivery

Process Flow

The process described below is supported by a process flow diagram [Ext.]. For detailed information about the functions in this process, refer to Functions for Processing Return Deliveries.

1. During a goods receipt or production, you determine that a vendor has delivered defective goods.

Processing Return Deliveries to Vendors

2. You create a quality notification to record a complaint against a vendor (notification type Q2).

3. You determine whether or not the goods need to be inspected. If the goods:

    − Need to be inspected, you post the goods from unrestricted-use stock to inspection stock

    − Do not need to be inspected, you post the goods from unrestricted-use stock to blocked stock

4. Depending on the stock you chose in step 3, you process the defective goods accordingly. For example, if you posted the goods to:

    − Inspection stock, you inspect the goods in a quality inspection

      After you have completed the inspection, you choose a function in the action box to make the usage decision for the inspection lot. When you make the usage decision, you determine whether the goods should be returned to the vendor or posted from inspection stock to unrestricted-use stock (for example, if the goods are OK). In this case the process is terminated.

    − Blocked stock, you decide whether the goods should be returned to the vendor in a return delivery or scrapped

5. If you decided to:

    − Return the goods to the vendor, you can choose function in the action box to create a return delivery (with or without reference to an original purchasing document)

    − Scrap the goods, you can choose a function in the action box to post the goods to scrap

6. You choose a function in the action box to branch from the quality notification to the delivery.

    Using the functions of the *Sales and Distribution* (SD) component, you can process the return delivery, prepare the shipping documents, and process the goods issue.

7. You debit the vendor with the costs of the returned goods and settle the costs in the *Materials Management* (MM) component. If the evaluated receipt settlement [Ext.] (ERS) procedure is used in MM, the system can debit the vendor automatically.

See also:

Functions for Processing Return Deliveries [Page 99]

Return Delivery (Materials Management) [Ext.]

Functions for Processing Return Deliveries

Use

The action box [Page 56] contains several follow-up functions for processing return deliveries. When you execute a function, the system documents the function as a task for the notification header.

The functions that are not preceded by the text "Action box" in the table below are not follow-up functions. These are functions that are also used in the return delivery process, but which you execute independently of the action box.

Function	What you should know
Creating the notification	The quality notification for a complaint against a vendor can be created as follows: • You can create the notification for a vendor complaint manually (notification type Q2). • If you recorded defects in an inspection, you can activate a defect record (notification type F2) manually as a quality notification (notification type Q2). • The system can automatically activate a defect record (notification type F2) as a quality notification (notification type Q2).
Action box: Assigning a vendor to the notification	You can display a list of vendors for your complaint material. From this list, you can select and assign a vendor to the notification which you are processing.
Action box: Posting goods from unrestricted-use stock to blocked stock	If you determine that the goods to be returned do not need to be inspected, you can use this function to post the goods to blocked stock (stock type *S*). While the goods are in blocked stock, you can decide whether to scrap the materials or return them to the vendor. The standard movement types for this stock posting are "344" in MM and "309" in WM. The system prints out a goods issue slip that contains the pertinent material data and that you can affix to the goods.

Functions for Processing Return Deliveries

Action box: Posting goods from unrestricted-use stock to inspection stock	If you determine that the goods need to be inspected, you can post the goods to inspection stock (stock type Q). The movement type for this stock posting is "322" in MM and "321" in WM. If inspection type 08 (inspection for a stock transfer) is active for this goods movement in the inspection data of the material master, the system automatically creates an inspection lot when you post the goods to inspection stock. The system prints out a goods issue slip that contains the pertinent material data and that you can affix to the goods.
Action box: Posting goods from blocked stock to unrestricted-use stock	If, for example, the materials in blocked stock are only slightly defective and you urgently need the materials in production, you post the goods from blocked stock back to unrestricted-use stock. The standard movement types for this stock posting are "343" in MM and "309" in WM. The system prints out a goods issue slip that contains the pertinent material data and that you can affix to the goods.
Action box: Posting goods to scrap	If you determine that the goods are no longer usable, you can post the goods to scrap.
Action box: Creating transfer orders	If the *Warehouse Management* (LE-WM) component is in use in your company, you can create a transfer order to move goods from one storage location to another.
Recording the usage decision (Inspection lot)	If you posted the goods to inspection stock and the system created an inspection lot, you can branch from the notification to the transaction for recording the usage decision.
Posting stocks while making the usage decision (Inspection lot)	When you make the usage decision, you can post the goods to unrestricted-use stock (if you determine that the goods are OK) or to blocked stock (if you intend to return the goods to the vendor). The standard movement types for the stock posting from inspection stock to blocked stock are "350" in MM and "309" in WM.

Action box:	
Assigning an original purchasing document to the notification	If you want to create a return delivery with reference to an original purchasing document, you must first assign this document to the notification. You can do this in one of the following ways: • Enter the document number and item in a dialog box when you create the notification. The system also automatically retrieves the associated data (for example, material, plant, and vendor) • Choose *Assign purchasing document* in the action box. • Enter the document number and item in the notification manually.

Functions for Processing Return Deliveries

Action box:
 	
Creating a return delivery
	To be able to create a return delivery, make sure the notification contains the following information: material, plant, vendor, complaint quantity, and if applicable, the batch.
	
	You have the following options for creating a return delivery:
	
	• Creating a return delivery with reference to an original purchasing document
	
	    − When you choose this function, the system displays a dialog box in which you enter various information for the return delivery.
	
	    − Make sure you set the indicator *Return delivery with reference to original purchase order* in the dialog box.
	
	    − If several goods receipts exist for the purchasing document, you must select the goods receipt for which you want to process the return delivery in another dialog box.
	
	• Creating a returns to vendor without referencing an original purchasing document
	
	    − The system creates a purchase order with a returns item and a return delivery in the background. The system displays a dialog box in which you enter various information for the return delivery.
	
	    − Make sure you do **not** set the indicator *Return delivery with reference to original purchase order*.
	
	    − The system displays a second dialog box in which you can enter additional information for the delivery.
	
	    − If a purchasing info record exists, the system proposes the settlement data contained in the info record. This information is then copied into the purchase order with the returns item.
	
	    − After creating the delivery, the system displays the log for the delivery run. When you exit the log, the system records the document flow between the notification, purchase order, and delivery. The system then exits the notification.

Action box: Changing the outbound delivery	The system saves the notification and branches to the delivery in the change mode. This allows you to add or change information in the delivery, pick the order, and post the goods issue.

Debiting the vendor	If the evaluated receipt settlement procedure/credit memo procedure is in use in your company, the vendor does not send an invoice to the customer. Instead, the recipient of the goods: • Creates the incoming invoice himself based on the quantity of delivered goods and the terms specified in the purchasing contracts • Sends the credit memo to the vendor by fax, as an EDI document or as a hard copy

Quality Notifications on the Internet (QM-QN-NT)

Use

In today's business world, a highly efficient and effective customer service is very important for both customer and vendor. Contact between vendor and customer must take place as quickly as possible. A customer should be able to notify a vendor of a problem as easily as possible, and the vendor must receive the notification as soon as possible.

The Internet Application Component *Quality Notifications* can considerably improve the processing of customer complaints.

In the R/3 System, complaints are recorded and processed via quality notifications. Notifications entered in the system via the Internet are treated in the same way as notifications entered directly in the R/3 application component *Quality Management* (QM).

Type of Internet Application Component

Consumer-to-Business

If you implement this Internet Application Component, you and your customers will benefit as follows:

Advantages for Your Customers

- Your customers can send quality notifications at any time.

- Your customers can enter the quality notifications directly on their Web server, that is, they do not need to phone or fax you.

- Using a list of predefined defect codes, your customers can select a problem and, if necessary, append a text to it.

- Your customers can check the process status of their notifications whenever they want.

Advantages for You as a Vendor

- You can design your Internet pages to enable your customers to record data quickly and easily.

- You receive the notification online, that is, shortly after it was recorded.

- You can react to a notification very quickly.

Prerequisites

Authorizations/Security

The customer contact person assigned the task of recording quality notifications requires authorization to access the following data:

Authorization object	Description
Q_QMEL	Notification type
Q_TCODE	Transaction authorization for QMW1

Q_MATERIAL	Material authorization
Q_GP_CODE	Use of group codes

Internet Users

To start this Internet Application Component, the customer contact person must log on using the contact person number and a password that you have assigned:

- Before you create the Internet user, you must specify a customer contact person in the *Sales and Distribution* component using transaction VD01 or VD02. On the detail screen for the contact person, enter a contact person number under the customer number.

- You use this number to create an Internet user with transaction SU05. With this transaction, you can create, change, and delete passwords for Internet users. To create a unique identifier for your contact person, enter the object type *BUS1006001*.

Standard Settings and Default Values

To ensure that the quality notifications that your customers send over the Internet have all the necessary data for the R/3 System, the notification type Q1 must be defined in the system.

> This Internet Application Component uses notification type **Q1**. When you create a notification, the system checks if all required partner functions have been entered. Since only the SP (sold-to-party) and CP (contact person) functions can be entered in this Internet Application Component, you cannot mark any other functions as required functions in the partner profile for notification type Q1 in **Customizing**. Otherwise, the notification is not created.

Features

Differences to the R/3 Transaction

The following functions, which are to be found in the R/3 transaction QM01, are not contained in this Internet Application Component:

- Creating several items

- Creating cause, task, and activity

- Navigation possibilities in the SAP environment (for example, you can go to the material display screen)

- Priorities, deadlines, internal processing

Modification Options

You can change the design of this Internet Application Component.

> Every change to any of the R/3 development objects used for the Internet Application Component counts as a modification.

Quality Notifications on the Internet (QM-QN-NT)

You should not, under any circumstances, change the development objects of the standard version.

R/3 Development Objects

In the R/3 System, data exchange on the Internet is carried out via transactions and function modules. The following development objects are required to create and process quality notifications:

Development class:	QQM
Transaction:	QMW1
Function group for screens:	SAPQMWWW
Function modules:	BAPI_QNOTIFICAT_CREATE
	BAPI_QNOTIFICAT_GETCATALPROFIL
	BAPI_QNOTIFICAT_GETLISTFORCUST
	BAPI_QNOTIFICAT_GETMATLISTFCUS
Business Application Programming Interface (BAPIs):	QualityNotification.CreateFromData
	QualityNotification.GetCatalogProfile
	QualityNotification.GetListForCustomer
	QualityNotification.GetMaterialListFCust

The R/3 Function Builder contains online documentation about each of these modules.

Data Output via the Internet Transaction Server

Data is output via the Internet Transaction Server (ITS). The layout sets are filled with data and made available in HTML format on the Internet/Intranet.

Service Name

The service name of this Internet Application Component is QMW1. You can find all the relevant data under this service name in the SAP@Web Studio.

The layout sets are to be found in subdirectory QMW1 of the TEMPLATES directory. The following layout sets are used:

SAPQMWWW_100.HTML

SAPQMWWW_200.HTML

SAPQMWWW_210.HTML

SAPQMWWW_220.HTML

SAPQMWWW_300.HTML

The numbers in the names of the layout sets correspond to the R/3 screen numbers.

Practical Application (QM-QN-NT Quality Notifications)

If you implement this Internet Application Component, the process is as follows:

> The process outlined below describes the Internet Application Component delivered with R/3. However, customers typically copy the delivered application and then change the copy in order to develop a customer-specific solution.

If a customer discovers a problem with a material that you delivered, he/she will want to inform you of this as soon as possible.

To do so, the customer contact person records a quality notification on the Internet. This requires the necessary authorization. The contact person selects the appropriate material from a list that only contains those materials for which you have created a customer-material information record. The contact person then describes the problem by making selections from a list of object-dependent codes. This person can also write a text describing the problem in more detail, if necessary.

As soon as the notification is sent, the R/3 System assigns a quality notification number to it, and informs the contact person of this number.

The person who processes the notifications receives the customer complaint online. It appears directly in his pool of new notifications, where it can be processed immediately.

See also:

Example (QM-QN-NT Quality Notifications) [Page 109]

Example (QM-QN-NT Quality Notifications)

Your company produces car radios that are supplied to the consumer via dealers. The dealers have Internet access as well as all the necessary authorizations for recording quality notifications on your Web site.

If the dealer discovers a radio to be defective, he/she sends you a quality notification informing you of the problem. After he/she records the notification, the system proposes a list of only those radios for which you have maintained a customer-material information record. When the dealer describes the problem, only defect codes that pertain to actual radio defects are proposed. This minimizes the time needed by the dealer to record a notification. It also minimizes the number of incorrect notifications sent. The dealer can send off a notification at any time, that is, he is not bound to the operating hours of your Hotline.

You receive the notification immediately online, and can begin to tackle the problem.