Quality Certificates (QM-CA)

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Copyright

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Quality Certificates (QM-CA)

Purpose

A quality certificate certifies the quality of goods. The chemical or physical properties of goods can be recorded as:

- Inspection results

- Characteristics for the batch

A customer may have specific demands for quality, which may take the form of customer-specific specifications (specification limits), or lead to additional quality inspections.

In addition to **customer-specific certificates** in which the contents and layout is tailored to the customer requirements, there are also **general certificates** that are suitable for use by a greater number of customers.

Generally, a quality certificate is created automatically or semi-automatically for a **delivery item**. In certain cases, a certificate may be requested ad hoc from a location for which no customer/vendor relationship exists. You can create a certificate directly for an **inspection lot** or a **batch,** when a delivery does not exist.

Integration

You can set up the system, so that certificates are automatically stored using the *SAP ArchiveLink* after printing. For more information, see:

- Retrieving Archived Certificates Using ArchiveLink [Page 63]

- Storage of Outgoing Certificates (QM-CA-CG) [Ext.]

Features

Using the *Quality Certificates* component you can:

- Automatically create certificates when materials are shipped

- Distribute certificates to a predefined list of recipients

- Print certificates, or send them by fax or EDI (For more information about sending certificates with EDI, see the CA documentation EDI Transmission of a Quality Certificate (QM-CA) [Page 84].)

- Create certificates in the language of each recipient

- Simulate certificates on the screen and create sample print outs

- Store certificates using *SAP ArchiveLink*

- Define the format, layout and contents of certificates to meet internal or customer specifications

The layout, format and contents of certificates are defined through the interaction of certificate profiles and SAPscript forms.

The certificate profile	Controls the selection of inspection lots, partial lots and characteristics

The form	Controls the page layout and format of the data on the certificate. A generally defined form can be linked to several certificate profiles.

Within the certificate profile, you determine the selection and sequence of the characteristics whose results are to be documented on the certificate. You can vary the origin and representation of the data for each characteristic. You can also withhold certain information from the certificate, if, for example, you do not want to reveal a certain measured value.

At the header level of the certificate profile, you can define restrictions for selecting inspection lots and partial lots. For example, you may want to specify that only lots with a quality score of at least 80 are considered. At certificate creation, the system selects all inspection lots and partial lots for the material (and batch, if necessary) that meet the selection criteria and have a usage decision. The characteristics are then retrieved from the most recent inspection lot or partial lot in this list. (The lot creation date is the determining factor.)

You assign objects, such as *material, material group,* or *material/customer* combinations to the certificate profiles. By doing so, you can plan certificates individually for specific customers. At the same time, you can define general certificate profiles that you can use, if you have not defined a special certificate profile for the customer.

The assignment of a profile to an object has a validity period. However, the profile itself does not have a validity period. The system can find the correct certificate profile using the assignment. The assignment and determination of a certificate profile is processed using the condition technique.

Certificate Type

Definition

A certificate type:

- Can describe the general features of a certificate

- Can be based on standards

- Can be linked to a user status profile for maintaining the certificate profile

- Contains control data for certificate processing in the procurement process (**not** relevant to the certificate creation process described here)

Certificate Planning

Purpose

During certificate planning, you determine:

- The layout and contents of the quality certificate using the *form* and *certificate profile*.

- Whether the certificate should be automatically created for the delivery

Certificate elements include headers, footers, order item and date, delivery item and date, material number, address, and inspection results.

Form

You can use a standard SAPscript form as a copy model to define the contents of a quality certificate. The SAP sample form uses standard texts that in part also contain program logic. Both the form and the standard texts are language-dependent and client-dependent.

You can use a form in more than one certificate profile, depending on your requirements and those of your customers.

Certificate Profiles

The certificate profile controls:

- Lot selection

- The selection and order of the characteristics displayed on the certificate

Prerequisites

The following prerequisites must be met for certificate planning:

- If you want to create a quality certificate automatically for a delivery item, elements for the certificate profile assignment and output control must be available. For more information, see Condition Technique [Page 12].

- If the quality certificate should contain characteristics, you can use the following data:

  - Class characteristics (batch classification)

  - Master inspection characteristics, inspection lots, and inspection characteristic results

    The system can transfer inspection results for inspection lots or partial lots to batches in order to classify the batches. As a result, inspection results are available for the batch determination (for example, in the Sales and Distribution component). The characteristic values for the batches can be used to create quality certificates.

    You need a material specification to transfer inspection results to the batch. A material specification provides the material-specific link between master inspection characteristics and class characteristics. It can also be used as a replacement inspection plan.

    The specification data (for example, limits) can originate either from the QM application component or be retrieved from the selection criteria after a batch has been found in the *Sales and Distribution* application component.

Customizing Settings

You must maintain the files listed below in Customizing for *Quality Certificates*.

Area: Certificate Profile

Customizing object	Required/optional
Status profile for certificate profile	Optional
Certificate type	Required
Data origins for characteristics	Required
Data for profile determination *Field catalog, condition tables, access sequence, condition types, procedure*	Required

Area: Output Determination

Customizing object	Required/optional
Field catalog, condition tables, access sequence, condition types, procedure	Required
Exclusion requirements	Optional
Assignment of *an output procedure* to a *delivery item category*.	Required (not maintained in the SAP standard client)
Partner/*Output*	Required

Area: Output Shipping

Customizing object	Required/optional
Print parameters	Required
Dispatching shipment: Variants for a selection report, definition for a batch requirement	Optional
Program assignment for an *output type* and *medium*	Required
Assignment of sender texts to a processing program (only relevant for inspection lot certificates and batch certificates)	Optional
Archive link for ArchiveLink	Optional

For information about using a bill of material for the transport (command file) to copy the settings from the standard client to your working client or clients, see the Implementation Guide.

Process Flow

Certificate planning involves the following steps:

1. Creating a form [Page 14], if necessary.

2. Creating a certificate profile [Page 31]

3. [Releasing the certificate profile [Page 35]](#)

4. [Assigning the certificate profile [Page 41]](#) (to a material, material group, or a combination of material and customer).

Condition Technique

Use

The condition technique is used in quality certificates for:

- Profile assignment and profile determination

- Certificate recipients and output determination

Profile Assignment and Profile Determination

For example, in profile assignment you assign a certificate profile to a material, material group, or combination of material and customer. In addition to these three key combinations, you can also define other objects and combinations to which profiles can be assigned. The assignment records have a validity period.

When you create a certificate, the system searches for a certificate profile. In the process, the system accesses the assignments (condition records) using the document data (ship-to party, delivered material, etc.). In the standard system, the sequence for accessing the condition records is such that the system searches progressively from specific to general entries, until it finds an appropriate data record.

Certificate Recipients and Output Determination

The output control for quality certificates involves:

- Defining whether and when a certificate must be created for a delivery

- The automatic output determination for a delivery item

A certificate recipient is identified by an output condition record for the delivery. In the standard system, two **output types** are predefined in Customizing:

- LQCA for a quality certificate to a ship-to party

- LQCB for a quality certificate to a sold-to party

Each output type has an **access sequence** assigned to it. The entries in the access sequence determine the possible key combinations for which you can store the recipient data (for example, sales organization/customer number). For each entry, you must specify the following data:

- The partner function to which the certificate is sent (for example, the contact person ["the quality certificate recipient"] at the customer site)

- The output form (print, fax, EDI)

- The language (if it differs from the language used in the master record)

- The time when the output is to be processed (for example, with a separate batch program, manually upon request or immediately after the document is saved)

- Print options

In Customizing, you define when the system can search **automatically** for the "Quality certificate" output using *Conditions* for the procedure. The following times are defined in the SAP standard system:

- After the goods issue (in this case, the data for the delivery cannot be changed)

- After picking has been completed

You can enter the output in the delivery item **manually** at any time.

See also:

CA Message Control [Ext.]

Forms for Quality Certificates

Use

The standard R/3 System contains the sample form QM_QCERT_01. You can link this form to a certificate profile or use it as a copy model to create other forms that meet your requirements or those of your customers.

Activities

If you use this sample form as a copy model, you copy the sample form into your own client under another name. To do this choose *Utilities → Copy from client* and specify a different name for the target document.

> Since the sample form uses several standard texts that in part contain program logic, you must also copy the four standard texts QM_QCERT* from client 000 in the standard R/3 System to your own client. To do this, choose *Utilities → Copy from client* on the screen for the standard text requirements.

Creating a Form

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Assignment → Process form*.

2. Enter a name and language for the form on the initial screen.

3. You can maintain the following sub-objects for a form:

    −   *Header*

    −   *Pages*

    −   Window [Page 16]

    −   *Page windows*

    −   *Paragraph formats*

    −   *Character format*

        For more information, see Text Elements for Characteristics in a Form [Page 17].

4. Select the required sub-object, and then choose *Create, Change* or *Display*.

    The appropriate change or display screen appears.

5. To maintain standard texts that are displayed on certificate profiles, choose *Environment → Standard text*.

    For more information, see Standard Texts in a Form [Page 19].

See also:

BC documentation about SAPscript.

Windows for Forms

Use

A **window** is a logical unit within a form. As such, it does not have a physical position on a page. In contrast, a **page window** is a specific rectangular area on a page in which text is displayed. A page window is created when you assign a window to a page.

A window type is assigned to each window. A form can have many different types of windows, but it **must** contain **one** window with the window category MAIN. The characteristic data is also displayed here.

Text Elements for Characteristics in a Form

Use

Text elements are used in all the windows of a form. They are addressed by the print program during printing. If the forms are to be compatible with the print program, you cannot choose any names for the text elements.

This function is only relevant for text elements that must be defined for characteristics in the main window.

Text elements for characteristics have the name CHAR_xxxx. They describe which data is to be printed for a characteristic (generally within a line).

You must assign a description of the text element to the characteristic (for example, 0001) in the certificate profile. The system adds this description to the "CHAR_" string (for example, "CHAR_0001"), and it expects a text element with this name when the form is processed. If you want to display several values for a characteristic (for example, original values), they can be arranged in columns to save space on the certificate. In this case, you need additional text elements of the type CHARCOL_xxxx. The CHARCOL_ and CHAR_ strings must have the same text element "xxxx".

For more information, see:

Standard Texts in a Form [Page 19]

Profile Characteristics [Page 23]

Features

The sample form QM_QCERT_01 contains six text elements for the output of characteristic-specific data:

Text element	Description
CHAR_0001	Value and 2 limits
CHAR_0002	Code short text
CHAR_0003	Value and lower limit
CHAR_0004	Value and lower limit
CHAR_0005	Accepted or rejected
CHAR_0006	Text valuation of a class characteristic

These six text elements are examples. You can create text elements [Page 18] in your forms.

Creating Text Elements

Use

The text elements of the sample form QM_QCERT_01 are provided as examples. You can maintain text elements in your forms.

Choose descriptions ("xxxx") that begin with "9" or a letter for text elements.

Procedure

1. Select *Window* or *Page window* on the initial screen for editing a form, and choose *Create/Change*.

2. In the list of windows, position the cursor on the line with *MAIN* and select this line. Then, choose *Text elements*.

3. Using the search function, position the cursor on the lines that contain the "CHAR_" string.

4. Change these lines as necessary. The comment lines or documentation in the form describe the structures that are available.

Standard Texts in a Form

Use

In addition to the sample form, the standard R/3 System also includes four standard SAPscript texts that are used in a form by means of an INCLUDE. Some standard texts contain program logic. This determines whether text will be printed on a certificate and if so, which text will be selected. To be able to use the standard texts, they must be available in the current client and in the respective recipient language.

The standard texts for the sample form QM_QCERT_01 are:

- QM_QCERT_GENERAL_TEXT

    This is a general sample text.

- QM_QCERT_INSPECTION_METHOD

    This text contains program logic for the printing a short text or long text for an inspection method.

- QM_QCERT_OFF_SPEC_TEXT

    This text contains program logic for printing an additional text if the characteristic result is outside the specifications. For quantitative characteristics, the system uses a limit instead of the QM characteristic valuation. For qualitative characteristics, the system uses the characteristic valuation.

- QM_QCERT_OUTPUT_FORMAT_TEXT

    This text contains program logic for printing a text for the characteristic valuation of quantitative values. To evaluate the characteristic valuation, the system uses a limit comparison, instead of the QM characteristic valuation.
    This text is evaluated, if the characteristic output format "05" (text) was selected for a characteristic in the certificate profile.

These four standard texts are examples that are used in the sample form. You can create your own standard texts and use them in forms.

For more information, see the SAPscript documentation.

Certificate Profiles

Use

A certificate profile controls inspection lot selection, the sequence of characteristics, and the characteristic data. It contains header data and characteristic data; the latter is optional.

See also:

Profile Header [Page 21]

Profile Characteristics [Page 23]

Characteristics for Materials in the Production Chain [Page 29]

Profile Header

Use

The header contains a variety of general data for the certificate. This data is independent of the characteristics.

- **Form**

    You assign a form that is used to create the certificate. The form determines the layout and some of the contents of the certificate.

    For more information, see Forms for Quality Certificates [Page 14].

    You use the indicator *No PDF* to specify that only formatted data is transferred during the exchange of electronic certificate data, and not the graphical display of the quality certificate. For more information, see Sending a Quality Certifcate via EDI with Access to Data (QM-CA) [Page 76].

- **Status**

    A certificate profile can have various statuses (for example, created, released, and blocked). In addition to the system status, you can also maintain the user status (controlled by the certificate type or the detail screen for the status). When you have assigned a status procedure, you can set the user status on the status detail screen or on the header screen for the certificate profile.

    For more information, see Status Management [Page 68].

- **Description**

    You can record a short text and a long text. The short text is only available in one language. The long text is language-dependent. The system proposes languages for the maintenance of long texts, which are allowed on the application server and for the set code page.

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    If long texts exist in languages that cannot be maintained on the current application server, you can call up a list of the available long texts using 👤 *Languages.*

    You can use a copy function to make it easier to maintain long texts in several languages.

- **Criteria for limiting the selection of inspection lots and partial lots**

    You can specify which inspection lots or partial lots the system considers when it creates a certificate. When a certificate is created, the system selects all inspection lots and partial lots for the material (and batch, if applicable) that meet the criteria and have a usage decision. The characteristics are retrieved from the most recent inspection lot or partial lot in this list. (The lot creation date is the determining factor.) You cannot choose an inspection lot online during certificate creation.

    These constraints apply to inspection lots and partial lots for the material or batch, for which the certificate is created. For constraints about lot selection for batches in the production chain, see Characteristics for Materials in the Production Chain [Page 29].

Profile Header

You can create additional constraints using customer-specific enhancements.

See also:

Creating Certificate Profiles [Page 31]

Profile Characteristics

Use

You define the following data for characteristics that you want to print on the certificate, in the certificate profile on the *Characteristic Data* screen or on the *Characteristic Details* screen:

- The order in which the characteristics are to be displayed

- The characteristic category

- The results selection level

- The data origins for results, specifications, and short text

- Additional data (for example, inspection method)

- The output format for the mean value associated with a quantitative characteristic (for example, actual value or relation to tolerance)

- The data for the output control (for example, column display, unit of measure, precision, exponential display)

- The output strategy in case of a skipped characteristic

Features

The detail data you define for each characteristic in the profile can be **required** data or **optional** data.

Make sure you consider the following points in this respect:

- You use the customer field selection to convert several data fields to required fields in your system.

- When you enter characteristics, the system proposes default values for the data origins and the characteristic text element.

- You can specify your own default values using a customer enhancement.

> The descriptions listed for the characteristic data correspond to the individual columns in the table on the *Characteristic Data* screen. The descriptions for the corresponding fields on the *Characteristic Details* screen can be different.

Required Data for a Characteristic

You must enter the following information for each characteristic:

Column	What you should know
Category	You can enter the following types of characteristics: • *Master inspection characteristic* • *Class characteristic*

Profile Characteristics

Results origin	The results data shown on the certificate can originate from: • Inspection results • Batch classification • Inspection/batch from the production chain • Material classification • Self-defined sources (for example, from your own function modules defined in Customizing)
Short text origin	The short text for a characteristic can originate from: • A master inspection characteristic • A class characteristic • Language-dependent text in the certificate profile itself • Self-defined sources (for example, from your own function modules defined in Customizing)
Origin of the specifications	The printed specification data (for example, tolerances) can originate from: • Inspection specifications from quality management • Batch specification • Material specification from the production chain • No specifications • Self-defined sources (for example, from your own function modules defined in Customizing)
Strategy for skipped characteristics	If you entered an origin for the results data for which inspection lots are selected, a skip may occur for the affected characteristic. You specify how the system should react in such a situation. The following data can be displayed in such a case: • A text that specifies no inspection occurred • The characteristic result from the batch • The specification limits from the inspection specification or batch • Self-defined data (for example, your own function modules defined in Customizing)

Text element	You must reference a text element in the form, which is assigned to the certificate profile. The text element describes the data displayed for a characteristic (generally, within a line).
	Make sure you consider the following points with regard to data origins:
	• The origin does not have to be the same as the characteristic category. For example, this means that you can specify a class characteristic and still display the data from the inspection; or, for example, you can specify a master inspection characteristic and still have the system read the specifications from customer-specific selection criteria for the batch determination.
	• You can mix the origins within a characteristic. For example, the results data can originate from an inspection and the specification data can originate from batch determination.
	In both cases, however, a link must exist between the master inspection characteristic and the class characteristic.
	Constraint:
	If you base the origin on the materials in the production chain [Page 30], the characteristic category defines which one of the two lists is used in the selection.
	For more information, see Text Elements for Characteristics in a Form [Page 17].

Optional Data for a Characteristic

Column	What you should know
Material sort number	Defines the order in which the system searches for characteristic data in the list of materials in the production chain [Page 30], when it creates a certificate.
By column	If you set this indicator, you define that characteristics are displayed in columns. For more information, see Text Elements for Characteristics in a Form [Page 17].
No. of columns	Defines the number of columns if you display the characteristics in columns.
Required	If you set this indicator, you define that the characteristic is so important that the data for the entire certificate may only be printed, provided **all** of the data for the characteristic can be found.

Profile Characteristics

Inspection method	You can indicate whether you want to print a short text, a long text, or no text for the inspection method.
Additional text when not OK	You can define that an additional text is printed, if the value for the characteristic lies outside the specifications. For quantitative characteristics, the system uses a limit comparison instead of the QM characteristic valuation. For qualitative characteristics, the system uses the characteristic valuation.
Characteristic ID	This description acts as the characteristic identification during the sending of a quality certificate via EDI [Page 76]. For more information, see Mapping Characteristics for the Transfer of Quality Data [Page 74].
Additional Information for Quantitative Data	
Output format	You can specify whether you want to print the actual value, a reference to the limits, or (depending on the comparison of the value with the values) a text. If you do not make an entry, the system prints the actual value. If you define a reference to a limit (for example, greater than the lower limit), but the result lies outside of the specifications (for example, below the lower limit), the system prints the actual value.
Unit of measurement	The unit of measurement is proposed from the corresponding master record (master inspection characteristic or class characteristic). You can specify a different (convertible) unit of measurement in this field. Note that you cannot convert non-dimensional units into one another. The unit conversion is based on the mean value, maximum and minimum values, and limits (tolerance limits, plausibility limits, and additional limits).

Output length	If this value is exceeded during the print sequence, the system prints asterisks on the certificate. This field relates to the output of all quantitative data. That is, the mean value, the minimum and maximum values, the limits and the statistical values (variance, 2nd and 3rd central moments, inner variance, standard deviation, range), but not the estimated share of nonconforming units. If you want to make sure that the desired data is printed out in all cases, even if certain output lengths are exceeded, do not make an entry in this field.
Decimal places	This field relates to the same quantitative data described under *Output length*. The estimated share of nonconforming units is printed out with six decimal places, regardless of the setting in this field.
Exponent	The system uses the exponential display automatically for very large values. If you anticipate very small values, you may want to set this indicator to prevent the system printing zeros. This indicator relates to the same quantitative data described under *Output length*.

User-Defined Functions for Characteristics

You can change the following columns using your own SAPscript standard texts:

- *Inspection method*

- *Additional text when not OK*

- *Output format* "Text" (Value "05") after comparing the value with the tolerances

You can define your own function modules for the following data origins:

- *Results origin*

- *Short text origin*

- *Origin of the specifications*

- *Strategy for skipped characteristics*

See also:

Customer Enhancements [Page 69]

Profile Characteristics

Characteristics for Materials in the Production Chain

Use

You can use this function to print characteristic data for materials on a certificate, which are the intermediate products of a final product in the production chain.

Prerequisites

You can use this function if:

- The material is maintained in batches.

- Function modules for the origin of values and specifications have been defined in Customizing for *Quality Management*.

- The batch where-used list is updated.

- Certificates are printed only after the goods movements have been posted (required for the updating of the batch where-used list).

- The required information for the materials (for example, inspection results) is available in the system when the certificates are created.

> If you do not set the *With stock transfer* indicator, the batch where-used list is only evaluated within a plant and for orders.
>
> If you set the indicator, stock transfers are taken into consideration for all plants. In this case, the batch where-used list is not only displayed for the batch of the final product during certificate creation. It also includes all batches that have been recorded without an existing order (for example, because of stock transfers).

Activities

- You must specify in the certificate profile (data origin for the characteristic), that the certificate is related to a material in the production chain.

- If you want to print the characteristic data for various materials in the production chain, you must first define these materials in the certificate profile.

See also:

Creating Certificate Profiles [Page 31]

Defining Materials in the Production Chain [Page 30]

Defining Materials in the Production Chain

Prerequisites

To print the characteristic values for materials in the production chain on a certificate, you must first create the desired materials in the certificate profile.

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Change.*

2. Choose *Materials* on the header data screen.

    The *Maintain Selection Criteria and Material Sequence* screen appears.

3. If the desired data originates from inspections, enter the material and the required data in the upper list.

    If the desired data originates from batch classification, enter the material in the lower list.

    You can use a function in conjunction with BOM explosion to choose several materials simultaneously for one (end) product.

    In the upper list (for data originating from inspections) you can enter a material several times, if you want to display data from different inspections.

Creating Certificate Profiles

Prerequisites

Before you can create a certificate profile, an appropriate SAPscript form must be available. You can also exchange the form when you change the profile.

The authorization for maintaining a certificate profile is linked to the certificate type and activity (for example, create, change, or display).

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Create.*

2. Enter a name and certificate type [Page 8] for the certificate profile. The system assigns a version number. The certificate profile is identified by a combination of the name, type, and version number. If a profile already exists with the same name and certificate type, you can copy the data from an earlier version.

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    > You can also use another certificate profile as a copy model. The system copies all the data for the chosen profile except for the administrative data and status. For example, you can continue processing the certificate profile directly while you add or delete characteristics.

3. Choose *Header data*.

    The system displays the header data screen.

4. You must assign a form to the profile. The form describes the layout and, in part, the contents of the certificate.

    For more information, see:

    Forms for Quality Certificates [Page 14]

    Profile Header [Page 21]

5. If necessary, limit the way in which the system finds inspection lots and partial lots for the certificate material.

To	The system only considers lots:
Set the *Accepted lots only* indicator	That were accepted with an OK usage decision
Set the indicator *Delivery in lot*	That contain the delivery number
Enter a value in the field *LSL for quality score*	Whose quality score is greater than the value entered
Enter an inspection lot origin	With this inspection lot origin
Enter an inspection type	With this inspection type

6. If you want to print characteristics for materials in the production chain, choose *Materials*. (For more information, see Defining Materials in the Production Chain [Page 30].)

Creating Certificate Profiles

7. Choose *Characteristics.*

   The characteristic data screen appears. (For more information, see Profile Characteristics [Page 23].)

8. Specify the characteristics that should be displayed on the certificate. The number determines the order of the characteristics. You can choose from the following two characteristic categories:

   – A master inspection characteristic

   – A class characteristic

9. Select the characteristic in the subsequent dialog box and then maintain the detail data.

10. Save the profile.

Result

At this point, you **cannot** use the certificate profile to create a certificate. However, you can carry out a simulation using real data. To create a certificate, you must first release the certificate profile and then make at least one assignment (for example, to a material, material group, or combination of material and customer).

For more information, see:

Releasing Certificate Profiles [Page 35]

Assigning Certificate Profiles [Page 41]

Using Additional Functions [Page 49]

Defining Characteristics

Use

There are several ways to define characteristics for the certificate profile.

Procedure

To define characteristics, choose *Characteristics* on the header data screen for the certificate profile.

The characteristic overview screen appears.

Defining Characteristics on the Characteristic Overview Screen

Enter all characteristic data on the characteristic overview screen.

Copying Characteristics from a Task List to a Certificate Profile

1. Choose *Extras → Characteristics from task list.*

    A dialog box appears for entering the selection criteria for the task list.

2. Enter the desired selection criteria.

    If your criteria for selecting a task list are not explicit enough, the system displays an additional dialog box for choosing a task list

    A dialog box appears with the list of characteristics for the task list, which reference master inspection characteristics.

3. Choose the desired characteristics.

    The characteristics are copied into the certificate profile with default values.

Defining Characteristics on the Detail Screen

1. Only specify the *material sort number* and the *category* for the characteristic on the characteristic overview screen and then choose *Continue*.

    Depending on the characteristic category, the appropriate selection window appears.

2. Make the required entries for your characteristic category.

Category	Selection window for	Enter the following:	What you should know

Defining Characteristics

1	Master inspection characteristics	*Plant Master inspection characteristic Version* (optional)	If you do not enter a version, the system chooses the version currently being used or the valid version, when the certificate is created. If only the results for a special version of the master inspection characteristic should be printed, enter a version.
2	Class characteristics	*Characteristic*	

3. To access the characteristic details screen, choose *Detail*.

4. Check the default values.

See also:

Master Inspection Characteristic [Ext.]

Profile Characteristics [Page 23]

Releasing Certificate Profiles

Use

After you have created and saved a certificate profile, it will still be in process (status CRTE). Before you assign a profile and create a certificate with it, you must first release the profile.

Procedure

1. Choose *Logistics* → *Quality management* → *Quality certificate* → *Output* → *Certificate profile* → *Change.*

2. Enter the name of the certificate profile and choose *Header data*.

3. From the header data screen, choose *Edit* → *Release profile*.

   Note that the system status in the *General data* section has changed to REL (released).

4. Save the change to the system status.

See also:

Blocking Certificate Profiles [Page 36]

Blocking Certificate Profiles

Use

You can **only** block a certificate profile if it has **no assignments** from the current date onwards. You can remove assignments from a profile by allowing the validity period to expire before the current date. If a profile is blocked, you cannot assign an object to it until you remove the block (that is, until you release the profile).

Procedure

1. Choose *Logistics* → *Quality management* → *Quality certificate* → *Output* → *Certificate profile* → *Change.*

2. Enter the name of the certificate profile and choose *Header data*.

3. Choose *Edit* → *Block profile* on the header data screen.

    Note that the system status in the *General data* section has changed to LKD (blocked).

4. Save the change to the system status.

See also:

Assignment of Certificate Profiles [Page 40]

Releasing Certificate Profiles [Page 35]

Deleting Certificate Profile Assignments [Page 44]

Deleting Unused Certificate Profiles

Prerequisites

To delete certificate profiles that are not used, you must make sure that the certificate profiles:

- Have not been released

- Are not locked

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Delete.*

    The screen for selecting unused certificate profiles for deletion appears.

2. Enter the selection criteria and then choose *Execute*.

3. Select the certificate profiles you want to delete and choose *Delete*.

Result

The selected certificate profiles are deleted.

Updating Change Documents for Certificate Profiles

Use

On the basis of this updating function for change documents, the user can determine what changes were made to a certificate profile and who made the changes. The system only updates change documents for certificate profiles when they have been released.

See also:

Displaying Change Documents [Page 39]

Displaying Change Documents

Prerequisites

The system only updates change documents for a certificate profile when it is released.

Procedure

To display change documents for a certificate profile, proceed as follows:

1. On the header data screen for the certificate profile, choose *Extras → Change documents.*

   The *Display Change Documentation* screen appears.

2. Display the individual change documents.

Assignment of Certificate Profiles

Use

Before a certificate can be created, the certificate profile must be assigned to at least one object. However, a certificate profile can be assigned to many different objects and object combinations. For example, you can assign a profile to:

- Two different materials

- Three different material groups

- Many material/customer combinations

However, an object combination can have only one profile assigned to it for a key date.

Material	Assignment to the profile	From	Till
ROH_MATL1	PROF ROH	04.07.1995	23.11.1995
ROH_MATL1	PROF NEW	24.11.1995	31.12.9999
SEMI_MATL2	PROF NEW	25.08.1995	24.10.1995
FERT_MATL2	PROF NEW	25.10.1995	31.12.9999

The above table shows that several materials are assigned to the PROF NEW profile. Each material has a different key date. The key date is the date from which the assignment is valid. This date can be in the future.

Material ROH_MATL1 has two assignments. Only one of these is valid. The first assignment for profile PROF ROH is valid from the 07/04/95 to 11/23/95 inclusive. A second assignment is made this time to profile PROF NEW. This second assignment is valid as of 11/24/1995. Depending on the current date, one of these 2 assignments is valid and will be used to create a certificate.

You can have gaps in the validity period.

In all of the transactions for making certificate profile assignments, you can change the validity period for an assignment using the *Change validity* function.

Assigning Certificate Profiles

Use

A certificate profile is assigned to one or more objects for a specific time period. You determine the level at which the assignment is made. For example, you can choose the following key combinations:

- Material and customer

- Material

- Material group

In addition, you can define other key combinations in Customizing to which certificate profiles can be assigned.

➡️

> You must release the certificate profile before it can be assigned.

Procedure

1. Choose *Logistics* → *Quality management* → *Quality certificate* → *Output* → *Certificate profile* → *Assignment* → *Create.*

   A dialog box with key combinations appears. In the background you see that the default assignment type (condition type) is QCA1.

2. Select one of the key combinations and then choose *Continue*.

   The fast entry screen for making multiple assignments appears.

3. Check the proposal for the validity period.

   It applies to all records that you enter here. You can change this validity period for each record by choosing *Edit* → *Change validity*.

4. Enter the object name for each assignment (for example, *material, material group, or material and customer*). Then enter the *certificate profile, certificate type,* and *version*.

   To display a list of available certificate profiles, move the cursor to the *Profile* or *Version* column and call up the possible entries help. When you choose a profile from this list, the system copies the entire identifier of the profile to the fast entry screen.

5. Save the assignments.

   ➡️

   > Make sure any existing assignment records are not displayed when you use the transaction to create a certificate profile assignment. As a result of the new assignment, the validity period of an existing assignment may be changed or an existing assignment overwritten in certain cases.

See also:

Assignment of Certificate Profiles [Page 40]

Assigning Certificate Profiles

Changing Certificate Profile Assignments

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Assignment → Change.*

    A dialog box with key combinations appears. In the background you see that the default assignment type (condition type) is QCA1.

2. Select one of the key combinations and then choose *Continue*.

3. Enter a key date (proposal: current date) and, if necessary, selection criteria on the selection screen. Then choose *Execute*.

    A list appears with all the assignments that correspond to your chosen key date and selection criteria. Object data, such as the material number, is displayed along with the certificate profile, certificate type, and version.

4. For example, you can make the following changes:

Change	Pushbutton/Menu path	What you should know
Assign another certificate profile		If you replace an existing profile with another profile, the validity period will **not** be reset. The old profile is replaced by the new profile, but the validity period remains the same if you do not change it.
Change the validity period for the assignment	*Edit → Change validity*	
Delete a certificate profile assignment	*Edit → Delete*	If you delete a certificate profile assignment [Page 44], the system deletes all validity periods for the entered key combination.

5. Save the changes that you made to the assignments.

See also:

Assignment of Certificate Profiles [Page 40]

Deleting Certificate Profile Assignments

Use

You can remove an assignment from a profile by deleting it.

⚠

All validity periods are deleted for the entered key combination.

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Assignment → Change.*

   A dialog box with key combinations appears. In the background you see that the default assignment type (condition type) is QCA1.

2. Select one of the key combinations and then choose *Continue*.

   A screen for entering selection criteria appears. The selection criteria are dependent on the key combination you selected.

3. Enter a key date (proposal: current date) and, if necessary, selection criteria on the selection screen. Then choose Execute.

   A list appears with all the assignments that correspond to your chosen key date and selection criteria. Object data, such as the material number, is displayed along with the certificate profile, certificate type, and version.

4. To delete the assignment, select the line with the assignment and then choose *Edit → Delete.*

5. Confirm that you want to delete the line.

6. Save the change that you made to the assignments.

See also:

Displaying Profile Assignments for an Object

Use

A profile can be assigned to different key combinations, such as materials, material groups, or combinations of material and customer. You can display certificate assignments in two ways. The following procedure describes how to display assignments for a **specific** object (key combinations) using the transactions for maintaining and displaying certificate profiles or the transactions for maintaining and displaying assignments.

> You can also display all assignments, independent of the object to which the profile is assigned. This list does not contain the same information as the one that is displayed when you select an object.
>
> For more information, see Displaying All Profile Assignments [Page 46].

Procedure

1.

To	Choose
Access the profile assignments using the display or change transaction for assignments	*Logistics → Quality management → Quality certificate → Output → Certificate profile → Assignment → Display*
Access the profile assignments using the display or change transaction for certificate profiles	*Assignments* in the header data or on the characteristic screen for the certificate profile

A dialog box with key combinations appears. In the background you see that the default assignment type (condition type) is QCA1.

2. Select one of the options and then choose *Continue*.

A screen for entering selection criteria appears. The selection criteria are dependent on the option you have chosen.

3. If necessary, enter selection criteria, check the proposed key date and then choose *Execute*.

A table appears with all the assignments that correspond to your selection criteria. Object data, such as the material number, is displayed along with the certificate profile, certificate type, and version.

4. To display the profile, select the line and then choose *Certificate profile*.

Displaying All Profile Assignments

Use

A profile can be assigned to different key combinations, such as materials, material groups, or combinations of material and customer. You can display the assignments for **all** objects or a selection of objects using the transaction for maintaining and displaying profiles or the transaction for maintaining and displaying assignments.

⇨

> You can display the assignments for a specific object. This list does not contain the same information as the one that appears when you display all profile assignments.

> For more information, see .

Procedure

1.

To	Choose	What you should know
Access the display or change transaction for certificate profiles	*Logistics → Quality management → Quality certificates → Output → Certificate profile → Display,* and then *Extras → Find*	Continue with step 4.
Access the profile assignments using the display or change transaction for assignments	*Logistics → Quality management → Quality certificate → Output → Certificate profile → Assignment → Display*	
Access the profile assignments using the display or change transaction for assignments	*Environment → Display assignments* (general) in the header data, or on the Characteristic screen for the certificate profile	

> A dialog box with key combinations appears. In the background, you see that the default assignment type (condition type) is QCA1.

2. If you want to close the object selection window, choose *Cancel*.

   The system closes the window and you return to the initial screen for displaying certificate profile assignments.

3. To access the selection screen, choose 🧍 *Overview*.

4. Enter the selection criteria for the *material, customer, material group*, and *key date* and choose *Execute*.

   The system displays all assignments that meet your selection criteria. The assignments are grouped according to material and customer, material, and material group. The

validity period for each assignment and the assigned certificate profile with its certificate type and version are also displayed.

➡

You can display an overview of all valid records (for example, for a material), if you do not specify a date in the overview on the selection screen.

You can print this list or save it in a file.

5. To access the certificate profile, position the cursor on the desired assignment line and choose *Edit → Choose*.

➡

The selection screen also appears if you choose a key combination after step 1, choose *Continue,* and then choose 🧗 *Overview* on the selection screen.

Creating a Certificate Profile Assignment with a Copy Model

Use

You can use this function to access a table with existing certificate profile assignments and create new assignment records.

Features

You can delete entries in this table for which you do not want to create any new assignments.

You can create new assignment records in the following ways:

- If you want to create a new assignment record for the same key (for example, *customer, material*), the validity of the existing record is limited to the day before the "valid-from date" of the new record.

- If you want to overwrite the key for an existing entry (for example, *customer, material*), a new entry is made.

Activities

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Assignment → Create with copy model.*

2. Choose the key combination for which you want to create new certificate profile assignments.

3. Limit the selection for the profile assignment according to your needs, and choose *Execute*.

4. You create new assignment records on the fast entry screen (as described above in the Features section), and save your entries.

Additional Functions

Use

In the transactions for maintaining and displaying certificate profiles, additional functions are available for use. You can access these functions on the header data screen or the characteristic screen.

Features

You can use the following functions:

Function	Menu path	What you should know
Display the certificate preview	(Master data screen) *Extras → Certificate view*	You can simulate the creation of a certificate using an existing delivery and actual data from the material, batch, and inspection lot, as well as the characteristic data from an inspection or batches. For the simulation, you can either create a test printout or display the certificate on screen.
		If not all the data can be found, the system documents this in a log. You can view the most recent log by choosing *Extras → Last log*. If the log contains only one message, it is displayed immediately as a system message.
Display profile assignments	*Environment → Display assignments*	Before you can use a certificate profile, it must be assigned to an object, such as a material, material group, or a combination of material/customer. All assignments are displayed that are valid as of the current date.
Display administrative data for the certificate profile	*Extras → Administrative data*	This data includes the name of the user who created or changed the certificate and the date on which the certificate was created or changed.

Additional Functions

Display profile versions	*Extras → Versions*	This list of profile versions contains the version number and the date on which the version was created.
Display a form	*Environment → Form → Display*	You can assign a new form [Page 52] to the profile by using the function to change a profile.
Display the available languages for the form	*Environment → Form → Languages*	The system displays one line for each available language in a window. In addition to the available languages, each line contains the description of the profile and language in which the form was created (original language).
Display text elements for the form	*Environment → Form → Text elements*	The system displays the following information for each text element: • The name of the window in which the element is used. • The number of lines used by the text element. The system also displays text elements that do not have a name (that is, those that were not explicitly defined in the form).
Display form variables	*Environment → Form → Variables*	You can access a list of all text variables used in the form. The variables serve as placeholders that are replaced with text when the certificate is created and the corresponding data is found.
Display change documents	*Extras → Change documents*	Changes to the data are documented in the change documents for released certificate profiles. You can switch to the list of the individual changes made to each field using *Choose*.

New Form Assignments for Certificate Profiles

Use

You can **assign a new form** to the profile by using the function to change a profile. You can choose a form from the *Form tree* using the input help.

Features

Function	Menu path	What you should know
Assign a form using input help		If there is no suitable form available, you can: • Integrate your own forms in the form tree • Use the search function
Integrate your own forms in the form tree	*Tools → SAPscript → Form,* and then *Utilities → Classify multiple forms*	The form tree appears. Choose *Quality management → Quality certificates*, and enter another node.
Find a form using the search function	*Environment → Form → Find*	You can limit the form selection by specifying a general character string (for example, QM_QCERT*) and a language. To find forms in all languages, enter a * in the language field. Follow this procedure: 1. Enter the desired selection criteria, and then choose *Find form*. 2. To assign a specific form, choose one line and then select *Choose*. The system copies the name of the form to the header data screen. 3. Save the change made to the profile.

Certificate Recipients

Use

The recipient of a certificate can be any person or address that has a function in the delivery item (for example, the customer, vendor, or contact person). The functions that are defined for the output (certificate) are defined in Customizing. When you define a recipient you determine:

- When the certificate should be created

- Who should receive the certificate

- In which language the certificate is created

- How the certificate should be distributed (printer, fax, or EDI)

Each recipient you define is a condition record for the output determination. You can use these records when you create or change a delivery to automatically find the corresponding output.

During output processing, the certificate can be printed automatically or semi-automatically for the delivery item. The system searches for the appropriate certificate profile only after output processing is triggered.

You define the partner function for the recipient in Customizing (for example, ship-to party or the sold-to party). You must define the partner function for each output type. Two output types have been defined for certificates.

Output type	Partner function
LQCA	Ship-to party
LQCA	Quality certificate recipient for ship-to party
LQCB	Quality certificate recipient for sold-to party
LQCB	Sold-to party

See also:

Creating Certificate Recipients [Page 54]

Transmission of a Quality Certificate using EDI (QM-CA) [Page 84]

Creating Certificate Recipients

Use

Each recipient you create is actually an output condition record that is used by output determination (using the condition technique [Page 12]) to determine whether a certificate should be created. If a recipient record is found, this means that the output "certificate" should be created for this recipient. No validity period is associated with the recipient.

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate recipient → Create.*

   The system switches to the screen for creating output condition records for shipping.

2. Enter an output type (either `LQCA` or `LQCB`) and then choose *Edit → Key combination*.

3. Choose one of the key combinations in the dialog box (for example, *Sales organization/Customer number* or *Sales organization/Distribution channel/Division/Customer*).

   The screen for entering certificate recipients appears.

   You define the key combinations that appear in the dialog box in Customizing. The key combinations referred to here are only examples.

4. Enter the required data on this screen (for example, a sales organization and a single customer or several customers). You can also leave the optional fields (for example, customer numbers) blank. Then choose *Execute*.

5. On the fast entry screen, you can enter the customers for which a certificate should be created. If you only enter the key data (for example, customer number), the system proposes certain data after you choose *Enter*.

   The default values for the following data originate from the condition type:

   − The output device for the certificate (print, fax, or EDI)

   − The time when the certificate is to be created

   − The language in which the certificate is created

   You can change these specifications for the certificate recipient.

   If you do not enter a language, the system automatically uses the language in the master record (for example, the customer master record).

   The system notifies you, if a record with the same key (for example, sales organization/distribution channel/customer) already exists.

6. To access detailed information about the output device, select the customer line and then choose *Communication*. You are not required to maintain this data.

   The data you can maintain depends on the output device you selected for the recipient. For example, if the certificate should be printed, specify an output device (printer) and the number of copies. If you do not enter this data, the system will find the printer

according to the procedure defined in Customizing. For the output types LQCA and LQCB defined in the SAP clients, printer determination, for example, is configured using the shipping point.

If the output medium is a fax, you can specify whether the fax should be sent immediately or overnight.

7. Save the data for the certificate recipient.

See also:

Controlling the Dispatch Time [Page 56]

Transmission of a Quality Certificate Using EDI (QM-CA) [Page 84]

Controlling the Dispatch Time

Use

You can specify when a certificate should be dispatched. When processing a delivery, this is the point in time when the output "certificate" is processed. At this point, you must have already found the output for the delivery item or entered it manually.

You must specify the dispatch time for each certificate recipient. A default value is defined in Customizing under the output type.

If you want to create a large number of certificates, you should not create them directly in conjunction with the delivery posting (time option 4). Instead, you should create the certificates by using a separate transaction (time option 3; you can call up the transaction by selecting *Certificate creation → For delivery* on the *Quality Certificates* screen). If necessary, you can use a selection program that can also be run in the background (time options 1 and 2). Report RSNAST00 is available in the standard system for time options 1 and 2.

The output occurs:	As a result of a:	Time option
During the next selection run	(Background) program	1
At a specific time	(Background) program	2
Only when requested	Separate transaction	3
Directly after saving	Saving the delivery	4

You can use the dispatch time to determine whether the certificate is dispatched automatically. For example, the certificate is dispatched directly after saving the delivery for time option **4**. For time option **2,** you specify the date and time when the certificate should be dispatched. A background program prints the certificate at the specified time. For time option **1**, the certificate is dispatched when this program next runs. This could be a batch run that is triggered every night. You can define such a background job in Customizing. For time option **3**, you must manually trigger certificate creation by manually calling up the corresponding transaction.

See also:

Creating Certificate Recipients [Page 54]

Dispatching a Certificate Manually [Page 60]

Certificate Creation

Use

In general, a certificate is generated automatically for a **delivery item** (see illustration) when the material is shipped to the customer or at another point in time that has been defined for the recipient. In addition, there are other options for creating a certificate. For example, you can create a certificate for an **inspection lot** or a **batch**.

- The delivery item certificate is dispatched to one or more recipients (partner functions).

- The data for a certificate can, for example, be obtained from the sales order, delivery note, material master, batch, and inspection lot.

- The system can transfer inspection results to a batch. The results can then be used in an order or delivery for batch determination.

- The characteristic results data originates from inspection lots and/or batches.
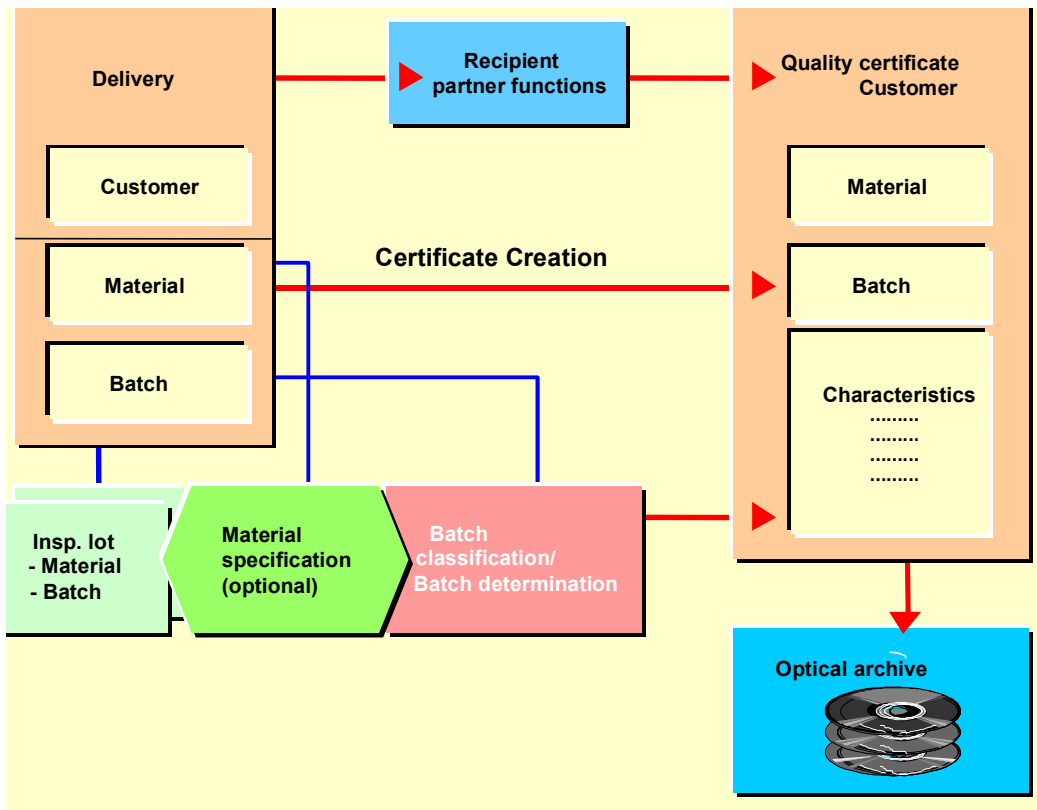
Prerequisites

You must release a certificate profile to create a certificate. If the certificate profile is to be found automatically, a valid assignment [Page 41] must be available.

Features

If the system creates a certificate for a delivery item successfully, it can automatically archive the certificate after it is printed out using SAP ArchiveLink. The certificate can be displayed at a later time. This is not possible if the certificate was faxed.

You can display the status of the certificate for a delivery item by using the functions for delivery in the *Sales and Distribution* (SD) application component. In the output for the delivery item, you can also display the processing log.

Before you generate a "real" certificate, you may want to preview the printout. You can do this by simulating certificate creation.

For example, you may want to recreate a certificate if one has been lost during shipment, or if the initial attempt to create the certificate was unsuccessful.

See also:

Simulating Certificate Creation

Use

You can trigger the simulation of a certificate from the certificate profile. When you simulate certificate creation, the system uses actual data. This means that you need a material master record, if necessary, a batch and an inspection lot, characteristics, and a delivery item for the material (and batch, if necessary). The system does not check the status of the certificate profile during simulation. Therefore, you can use a certificate profile that you have created, but not yet released. You can also use a certificate that is currently blocked.

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate profile → Display* or *Change.*

2. Enter the name of the certificate profile on the initial screen and choose *Header data*.

3. Choose *Extras → Certificate view* on the header data screen.

4. Enter the language key, delivery and item number in the dialog box.

   Before you start the simulation you may want to check the delivery. Choose *Delivery* to display the delivery.

5. Choose *Certificate view* to simulate certificate creation.

   The system selects the required data and then displays a window with the print parameters.

6. Confirm the output device, number of copies, and output options.

7. Choose *Print preview* to display the certificate online.

   Choose *Print* to print the certificate.

   The certificate is labeled as a test printout, so it is not mistaken for a valid certificate.

Dispatching a Certificate Manually

Use

You can trigger the dispatch of a certificate **for a delivery item** manually. You can create the same certificate several times, if, for example, the customer needs additional copies. You must also create a certificate manually, if dispatch time 3 is defined for the recipient (print only on request).

For more information, see:

- Controlling the Dispatch Time [Page 56]

- Creating Certificate Recipients [Page 54]

Procedure

1. Choose *Logistics → Quality management → Quality certificate → Output → Certificate creation → For delivery.*

    The *Quality Certificates for Deliveries* screen appears.

    There are 4 sections on this screen. You can specify *output data* in the first area, for example output type (LQCA and LQCB) and transmission medium (print, fax and EDI).

    You can specify whether you want to output a certificate repeatedly. Certificates that have already been dispatched successfully can then be reprocessed. You can also try to recreate a certificate that could not be created successfully before.

    In the second section, you limit the selection of the output records using *delivery data* (for example, shipping point, delivery, delivery date, route and ship-to party).

    In the third area, you control the printer for the certificates using a print profile.

    In the third area, you can change certificate profile determination. If you enter a key date for certificate profile determination, this is considered for all selected output during certificate creation. You can use the *Profile determination log* indicator to understand the procedure the system uses to find the certificate profile. If you set the indicator, the general log for *condition analysis* is displayed for selected output before the certificate is dispatched.

2. To start the selection process, choose *Program → Execute.*

    If the system was able to find at least one output that corresponds with the selection criteria, a list of the corresponding delivery items is displayed. This list contains the delivery and item numbers, output type, transmission medium, partner function, and recipient data.

3. In this list, you can display the output parameters by selecting the delivery item and then choosing *Goto → Communication.*

    The system displays the output parameters (for example, printer parameters) defined for the certificate recipient. You can change these parameters.

4. From this list you can see what the printed or faxed certificate will look like. Select a delivery item, and then choose *Goto → View*. If the system cannot find all of the data, it displays an appropriate message. If several messages are created, they will be summarized in a dialog box.

5. To start the certificate creation process, select the desired entries and then choose *Edit* →
    Process.

    The system issues a message confirming that the certificate was generated successfully.
    If the system detects a problem, it issues an error or warning message.

6. To display a log of the certificate creation process, choose *Goto* → *Log*.

    The log is updated continuously as long as you remain in this transaction. For example, if
    you create certificates for three different delivery items, there are three entries in the log.
    The information in this log is not identical to the system messages that you can call up by
    choosing *Goto* → *Preview*.

See also:

Logs for Certificate Creation [Page 65]

Archiving a Certificate with ArchiveLink

Use

If you installed the SAP ArchiveLink component, the certificate can be stored in an optical archive after being printed out. The certificate is archived automatically after it has been printed successfully.

Prerequisites

The archiving mode has been set accordingly for the output type(s).

Features

The system can only archive a certificate in the optical archive that was printed or faxed; it is not possible to archive a certificate that was sent via EDI.

You can view the archived certificate at a later time.

A certificate, which is not for a delivery item, but which is created directly for an inspection lot, can also be stored in the optical archive.

However, you cannot archive a certificate that was created for a batch in the optical archive.

See also:

Retrieving Archived Certificates Using ArchiveLink [Page 63]

Storage of Outgoing Certificates (QM-CA-CG) [Ext.]

Retrieving Archived Certificates Using ArchiveLink

Use

You can display a certificate that was archived using ArchiveLink. This is possible for certificates that were created for a delivery item or an inspection lot.

Procedure

1. Choose *Logistics → Quality management → Quality certificates,* and then:

   – For a **delivery item** certificate

      Output → Certificate creation → Display archive → For a delivery item

   – For an **inspection lot** certificate

      Output → Certificate creation → Display archive → For an inspection lot

2. Enter the *delivery*, *item* or *inspection lot*, and then choose *Execute*.

   ⇨

   You can also access this function by choosing *Office → Business Documents → Documents → Find*.

   The *Business Document Navigator* screen appears:

   - Enter object type `LIPS` in the *class name* field for a delivery item certificate.

   - Enter object type `BUS2045` in the *class name* field for an inspection lot certificate.

   - The class type is `OT` in both cases.

   - The document type is `QMOCERT` in both cases.

Additional Ways of Displaying Archived Certificates

You can use the following additional methods to display archived certificates:

Within the transactions for processing a delivery

1. Choose *Logistics → Sales and distribution → Shipping → Outbound delivery → Display* or *Change.*

2. Enter the delivery number on the initial screen for delivery processing, and choose *Continue*.

3. Select the relevant item, and choose *Extras → Delivery output → Item.*

4. Select the desired output(s) and then choose *Edit → Display facsimiles.*

5. If necessary, choose *Archived documents* in the dialog box for selecting object links, and then choose *Continue.*

   The system displays the archived certificate. If the system cannot find a data record in the optical archive, it issues an error message.

Retrieving Archived Certificates Using ArchiveLink

Within the list of deliveries

1. Choose *Logistics → Sales and distribution → Shipping → Outbound delivery → List → Outbound delivery monitor,* and then *List outbound deliveries.*

2. Enter the selection criteria (for example, *material, ship-to party* and a time period for the goods issue date) on the initial screen for the delivery list, and choose *Execute.*

3. Position the cursor on a delivery and choose *Environment → Display facsimiles*.

4. Choose *Archived documents* in the dialog box for selecting object links.

    If only **one certificate** was archived for the delivery item, the certificate is displayed immediately.

    If **several certificates** were created for the delivery item, the system displays a dialog box with a hit list. Select one or more entries, and then choose *Display facsimiles*. The system then displays the archived certificates.

    If the system cannot find a data record in the optical archive, it issues an error message.

Within the transactions for inspection lot processing

1. Choose *Logistics → Quality management → Quality inspection → Inspection lot → Display* or *Change,* or *Inspection lot processing → Usage decision → Display* or *Change.*

2. Choose *Environment → Object links.*

3. Choose *Archived documents* in the dialog box for selecting object links, and then choose *Continue*.

    If only **one certificate** was archived for the inspection lot, the certificate is displayed immediately.

    If **several certificates** were created for the delivery item, the system displays a dialog box with a hit list. Select one or more entries, and then choose *Display facsimiles*. The system then displays the archived certificates.

    If the system cannot find a data record in the optical archive, it issues an error message.

Logs for Certificate Creation

Use

Log for output processing

If you expected a certificate to be printed at the goods issue posting for example, but no output was issued, you can use functions in the SD module to determine the status of the certificate creation and to call up the output processing log.

Log for output determination

If you expected an output but there are no entries in the list on the output screen, you can call up the determination log. Choose *Goto → Determination analysis* (after step 3). The system displays all the steps taken to display the recipient record. Check whether the procedure is as you expected, and, if necessary, change the Customizing settings or supplement the recipient records.

Log for certificate profile determination

You can use this function to display the general condition analysis log for all selected outputs.

Activities

Function	Menu path	What you should know

Logs for Certificate Creation

Displaying the log for output processing	*Logistics → Sales and Distribution → Shipping and Transportation→ Outbound Delivery → Change → Single Document* Or *Logistics → Sales and Distribution → Shipping and Transportation→ Outbound Delivery → Display*	Follow this procedure: 1. Enter the delivery number on the initial screen, and choose *Continue*. 2. Select an item, and choose *Extras → Delivery output → Item* If output exists, the system displays information on the status of the output processing: • **Yellow traffic light** The output has not yet been processed. • **Green traffic light** The output was processed successfully. • **Red traffic light** The output was not processed successfully. It is possible that the system did not find all of the data and so could not create the certificate. To obtain more information about output processing, you can call up the log from the output screen. To do so, select the item and then choose *Goto → Processing log*. If the certificate was printed and archived successfully, you can call up the archived certificate from the output screen. Select the item, and then choose *Edit → Display facsimiles*.

Displaying the log for output determination	*Logistics → Sales and Distribution → Shipping and Transportation → Outbound Delivery → Change → Single Document*	Follow this procedure:
		
		1. Enter the delivery number on the initial screen, and choose *Continue*.
		
		2. Select an item and choose *Extras*
		  → Delivery output
		  → Item
		
		3. Choose *Goto → Determin. analysis.*
		
		The system displays all the steps taken to display the recipient record. Check whether you expected this procedure and, if necessary, change the settings in Customizing or supplement the recipient records.

Displaying the log for certificate profile determination		Set the *Profile determination log* indicator on the selection screen for *Quality certificates for deliveries*. You can also display this log for inspection lots or batches. For more information, see [Dispatching a Certificate Manually [Page 60]]().

Status Management

Use

The certificate profiles use the SAP status management function. This allows the system to continuously document the processing status of a profile. The status of a profile determines whether or not certain functions can be executed. Each individual status thereby fulfills two functions:

- It informs you that a particular stage has been reached (for example, "Profile has been released").

- It determines which activities may or may not be carried out next (for example: you can change the profile; you cannot assign the profile).

There are two status types:

- **System status**

    The system status is determined automatically by the activities you carry out. You cannot change a system status manually (Exception: You are blocking or releasing a profile).

- **User status**

    You can define in Customizing whether you want to work with or without user statuses for each certificate type. Individual user statuses are grouped together into status profiles. You can control the individual processing steps for a certificate profile using user statuses and their associated authorizations.

    For example, user statuses can be used to:

    - Release certificate profiles in stages (involving several people)

    - Stop the assignment of outdated certificate profiles

    - Delete locked certificate profiles

Customer Enhancements

You can implement company-specific enhancements (user exits) that will provide additional functions. Customer enhancements can be:

- The specification of conditions for shipping certificates (FORM routines as user exits)

- The definition of additional data origins for specifications, results and short text, and the strategy for when a characteristic is skipped in the certificate profile (customer-specific function modules as table entries)

- Defining and evaluating additional limitations for the selection of inspection lots and partial lots (SAP enhancement with menu function in the certificate profile and function modules, also available for a batch certificate)

- Changing the default values for the characteristic detail data in the certificate profile (SAP enhancement)

- Defining the layout (text elements from a SAPscript form, SAPscript standard text, SAPscript forms)

- Defining the layout and the output data for characteristics (special text elements in the SAPscript form for the characteristic output format, inspection method and supplementary text, if the result is outside of the tolerance; SAPscript standard texts)

- Adding new objects to which certificate profiles can be assigned (enhancement of a structure in the dictionary and an SAP enhancement with a function module)

- Using your own program to select the data and print the certificates (as a table entry)

Information About Enhancement Possibilities

To obtain information about additional enhancement possibilities, you can create a list:

1. Choose *Tools → ABAP Workbench → Utilities → Enhancements → Definition*.

2. Choose input help for *Enhancements* on the initial screen for SAP enhancements.

    The selection screen for finding SAP enhancements appears.

3. Enter 'QC*' in the *Enhancement* field on the selection screen.

4. Choose *Execute.*

Quality Certificate for Goods Receipt

Use

When you procure goods from a vendor, you can request that the vendor submit a quality certificate with the shipment of goods (in addition to meeting the requirements specified in the technical delivery terms and quality assurance agreement). If you request a quality certificate, you can monitor the receipt of the certificate independently of the goods receipt posting, regardless of whether an inspection lot is created or not. The certificate can be filed in the optical archive. If a certificate is yet to be delivered, a reminder can be created automatically.
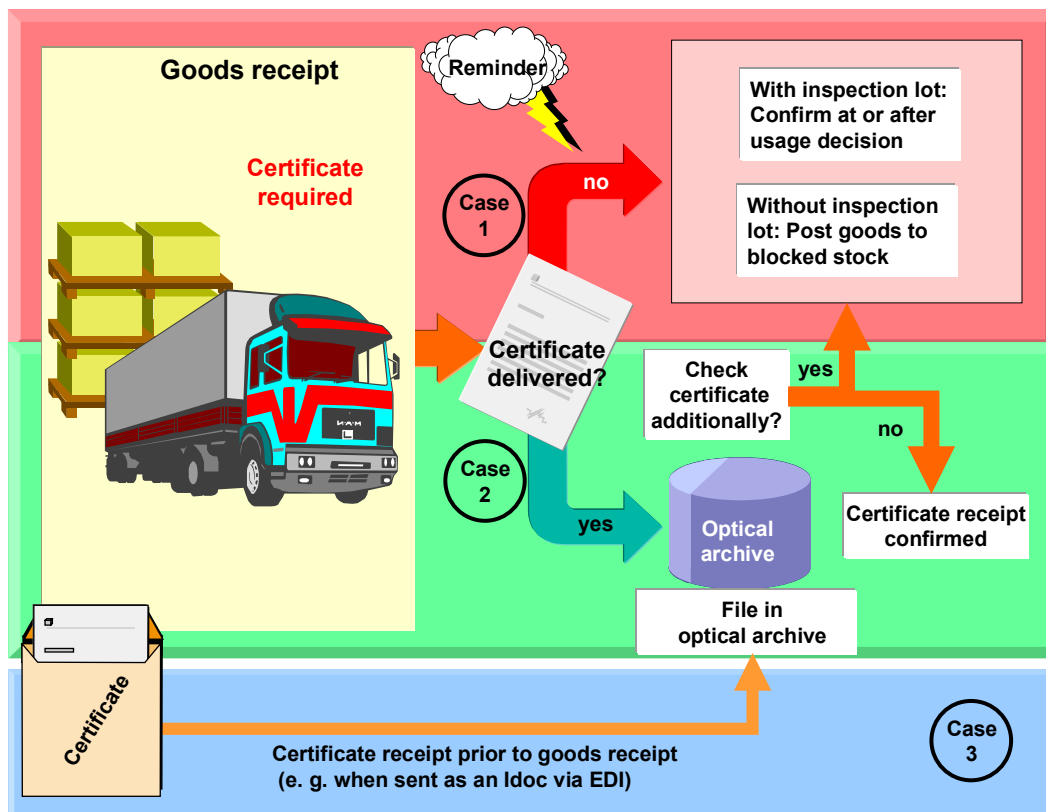
Case 3 The graphic refers to the inbox for a quality certificate in PDF format. For more information, see the:

- EDI documentation [EDI Inbox for a Quality Certificate in PDF Format [Page 86]](#)

- EDI documentation [EDI Inbox for Quality Certificates with Data Access [Page 81]](#)

- ArchiveLink documentation [Storing Incoming Certificates (QM-CA) [Ext.]](#)

The inbox for quality certificates as IDocs with data transfer to an inspection lot is described below in the section "Features".

Integration

This function is integrated with the *ArchiveLink* and the *SAP Business Workflow* component.

Prerequisites

In Customizing for *QM in Procurement*, the following conditions must be met:

- A QM control key with indicator *Certificate required* is set

- A certificate type has been defined and the indicator for enhanced certificate processing is set

- A number range for the certificate receipt is defined

In the material master, the following conditions must be met:

- *QM in procurement* is active

- A control key with certificate requirement is set

- A certificate type is specified

Features

This function covers the following scenarios for processing a certificate:

- **Certificate is received before the goods receipt**

    The receipt of the certificate is recorded with reference to the purchase order. You choose the transaction to record a certificate receipt, and enter the purchase order number, the purchase order item and, if known, the delivery number.

- **Certificate is received with the goods receipt**

    In goods receipt posting, certificate receipt can be monitored:

    – If you confirm the receipt of the certificate, the status *Certificate received* is set. If an inspection lot is created and no additional certificate check is required, the lot status *CROK* (certificate receipt confirmed) is set.

    – If you don't confirm the receipt, the status *Certificate requested* is set. If an inspection lot is created, the lot status *CTCM* (certificate confirmation missing) is set.

- **Certificate for a purchase order item received after the goods receipt (no inspection lot created)**

    You choose the transaction to change a certificate receipt, and enter the purchase order number, the purchase order item and, if known, the delivery number for which you want to confirm the receipt of the certificate.

- **Certificate for a purchase order item received after the goods receipt (inspection lot created)**

    If a certificate for a purchase order item is received after the good receipt, there are two possibilities:

    – Confirmation with the usage decision

    – Confirmation by using the transaction to change a certificate receipt.

        You enter either the purchase order number and purchase order item, or the material document number and material document for which you want to confirm the receipt of the certificate.
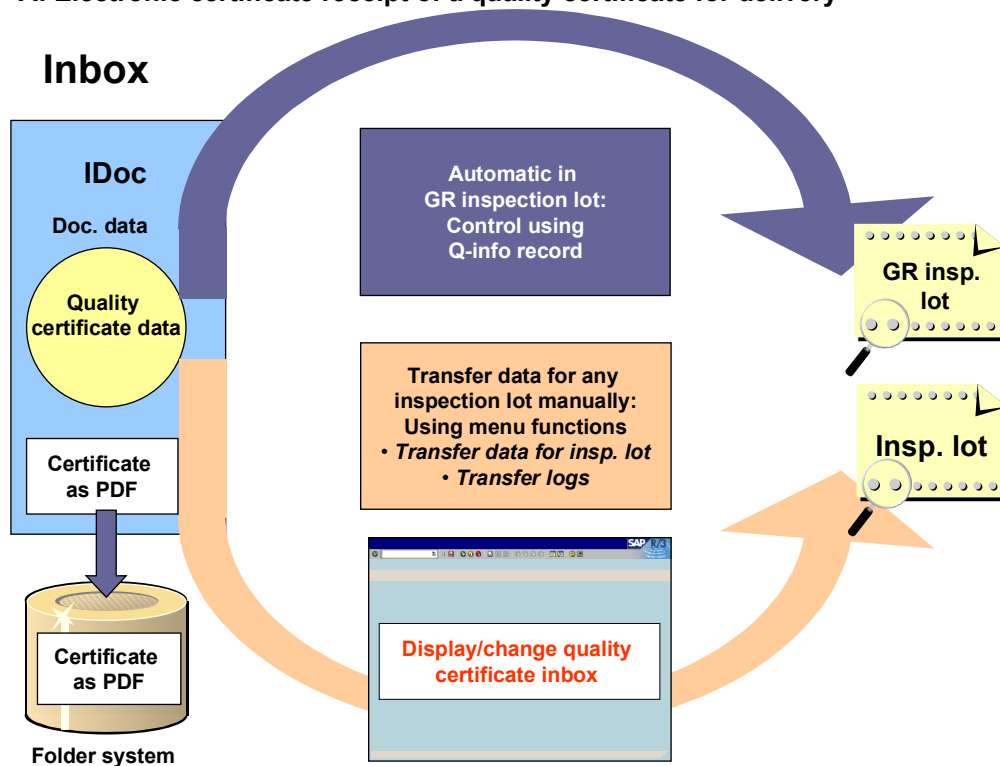
Use

- **Certificate for a purchase order item received when the usage decision is made for an inspection lot**

  – You confirm the receipt of the certificate as described under "Certificate for a purchase order item received after the goods receipt (no inspection lot created)"

- **Processing a reminder for missing certificates**

  You can display a list of certificates, which are yet to come, based on the status of the certificate receipt. A reminder can be processed once the date of the goods receipt plus reminder period is over. From this list, you can choose the items for which you want to print a reminder. The reminder will be created on a SAPscript form.

- **At the receipt of an electronic quality certificate as an IDoc with reference to delivery: Transfer of inspection results for the certificate to a GR inspection lot or another inspection lot (for example, source inspection)**

  If you receive an electronic quality certificate as an IDoc with reference to delivery, the data can be automatically transferred to an inspection lot for goods receipt using a background workflow. The prerequisite for this is that the IDoc has been received and the goods receipt has been posted.

  If you want to manually transfer data to another inspection lot (for example, a source inspection lot), you can use the menu function *Enter data for inspection lot* in the transaction for displaying or changing the certificate record. You can access the transfer log using *Transfer log*.

A: Electronic certificate receipt of a quality certificate for delivery

Inbox

IDoc

Doc. data

Quality certificate data

Certificate as PDF

Certificate as PDF

Folder system

Automatic in GR inspection lot: Control using Q-info record

Transfer data for any inspection lot manually: Using menu functions
• *Transfer data for insp. lot*
• *Transfer logs*

Display/change quality certificate inbox

GR insp. lot

Insp. lot

For more information see the:

- EDI documentation EDI Inbox for Quality Certificates with Data Access [Page 81]

- Workflow documentation Data Transfer from an IDoc to an Inspection Lot [Ext.]

Activities

To call up the transactions for a certificate receipt, you choose *Logistics* → *Quality management* → *Quality certificates* → *Receipt*.

Mapping Characteristics for the Transfer of Quality Data

Use

If you want to send or receive the quality data of a certificate using EDI, and the inspection characteristics to be sent have different descriptions in the vendor and the customer system, this function enables a partner-specific identification and assignment of the respective characteristics (characteristic mapping). Characteristic mapping is a prerequisite for the successful transfer of the quality data on a certificate.

Prerequisites

For the mapping of inspection characteristics, the following requirement must be met:

- In Customizing for *Quality certificates,* the communication partners for IDoc processing are defined by *Partner type* and *Partner number*.

Features

When mapping inspection characteristics, you determine the reference of the characteristic description on the electronic certificate to the characteristic fields maintained in the SAP system.

- For **outgoing** certificates you determine, for example, whether the characteristic description on the electronic certificate is the:

  - Internal characteristic ID of the certificate profile or characteristic mapping table

  - Characteristic name (master inspection characteristic name or class characteristic name)

  - Short text for the characteristic

- For **incoming** certificates you determine, for example, which characteristic fields in the SAP system should be used to find the characteristics on the electronic certificate:

  - Internal characteristic ID of the task list (or material specification), or the characteristic mapping table

  - Name of the master inspection characteristic

  - Short text for the characteristic

Activities

1. Choose *Logistics → Quality Management → Quality Certificate → Transfer Data → Edit.*

2. In the *Partner-Related Settings for Quality Data Exchange*, define the *Partner type*, the *Partner number,* and the mapping criteria.

3. In the characteristic mapping table, you assign the internal characteristic ID of the certificate profile to the partner-related characteristic ID.

See also:

Sending a Quality Certificate via EDI with Access to Data [Page 76]

Receiving a Quality Certificate via EDI with Access to Data [Page 81]

Sending a Quality Certificate via EDI with Access to Data (QM-CA)

Use

In this EDI scenario, you send inspection results that are issued on a certificate as formatted data to your customer. You can also send the certificate as a PDF file.

In general, a quality certificate is referenced to a delivery, inspection lot, or batch. Therefore, the transfer of the quality data on the certificate is not necessarily linked to a purchase order or delivery. Results of inspections that, from the recipient's point of view, were made externally, can also be sent to the recipient system for further processing. For more information, see Receiving a Quality Certificate via EDI with Access to Data (QM-CA) [Page 81].

The certificate as a PDF file automatically receives a digital signature to protect the data from being modified during transfer.

Prerequisites

Application

The following requirements must be met when sending quality data on a certificate:

- On the sender side (vendor)

    - Certificate profiles and class characteristics or master inspection characteristics are used

    - A clear assignment of the characteristics is ensured using the characteristic mapping table [Page 74], if the characteristic descriptions differ in the vendor and customer system

    - The address data of the customer is defined in the EDI partner profile

        ➡

        To ensure a correct assignment of the delivery to the purchase order on the customer site when transferring quality data on a certificate with reference to a delivery, the purchase order item or the customer material number must be entered on the delivery item detail screen in the sales order.

Output Control

The following condition components must be defined:

Condition component	Value
Output type	`LQCA`, `LQCB`
Application	`V2`
Procedure	`V20001`
Transmission medium	`6` (EDI)
Access sequence	`0003, 0008`
Partner function	`AG` (sold-to party) and `WE` (ship-to party)

Sending a Quality Certificate via EDI with Access to Data (QM-CA)

For more information, see *Quality Certificates* in Customizing for *Quality Management* (QM).

- *Output Determination*

- *Process Output*

IDoc Interface

You must maintain the following values for both the outbound partner profiles and the additional partner profiles for outbound processing using the output control:

Field	Value
Message type	`QCERT`
Partner type	`KU` (customer)
Partner function	`WE`, `AG`, `Q1` or `Q2`
Recipient port	e.g. `SUBSYSTEM`
Output mode	e.g. *Transmit IDocs immediately*
Basic type	`QALITY02`
Application	`V2`
Output type	`LQCA/LQCB`
Process code	`QCERT_OUT`

Features

Communication in R/3 is established using the IDoc interface. Outbound and inbound IDocs are saved on the database and later transferred to the storage system. Technical transmission can be determined for each partner. In general, communication is possible:

- Between two R/3 systems

- Between an external system on the vendor side and a R/3 System on the customer side

- Between a R/3 System on the vendor side and an external system on the customer side

Sending a Quality Certificate via EDI with Access to Data (QM-CA)

A: Communication Between Two R/3 Systems
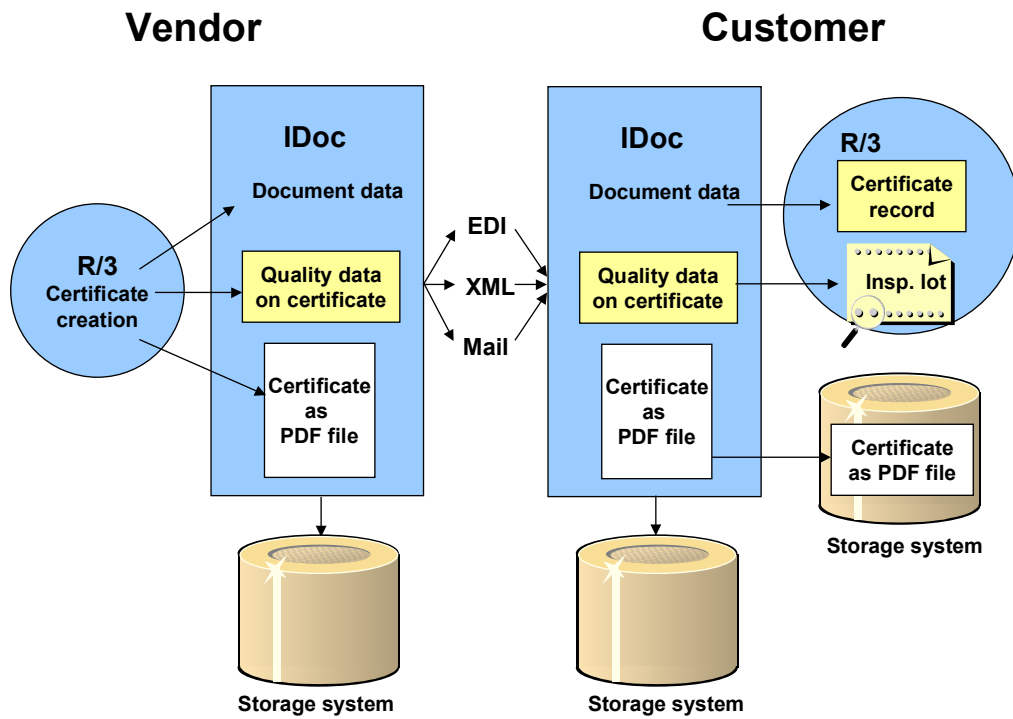
Vendor   Customer

B: Communication Between External System (Vendor) and R/3 System (Customer
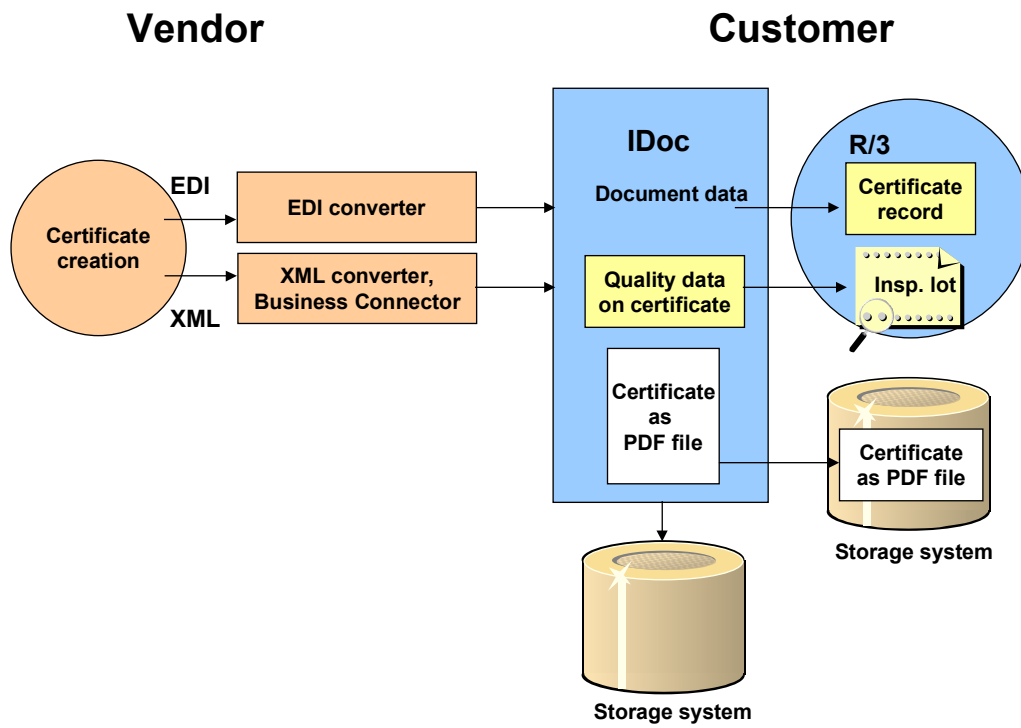
Vendor

Customer

Sending a Quality Certificate via EDI with Access to Data (QM-CA)

C: Communication Between R/3 System (Vendor) and External System (Customer
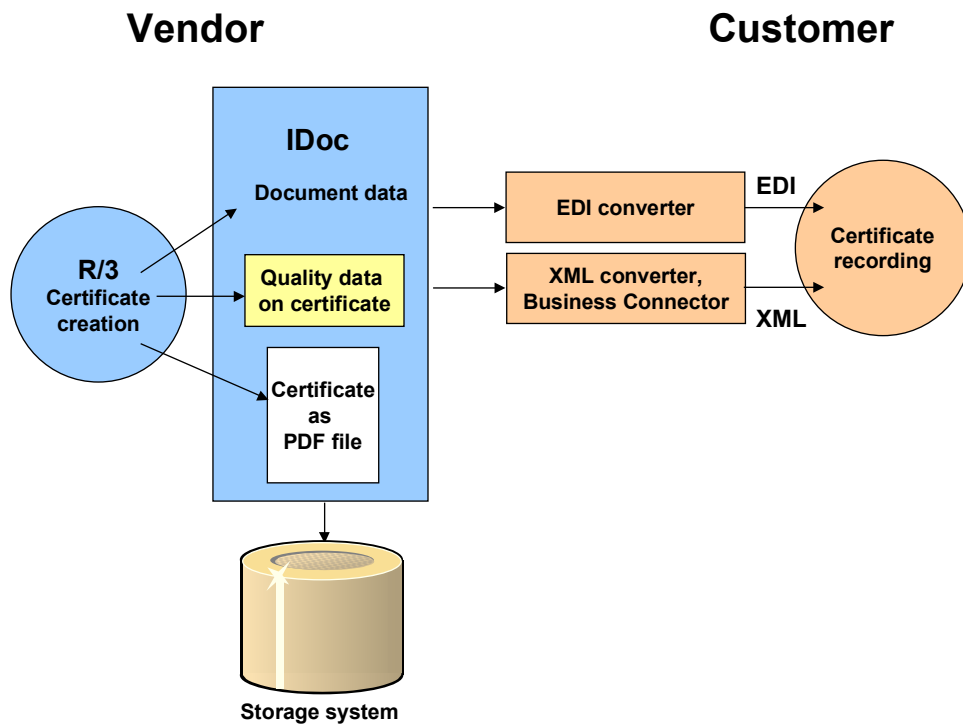
Vendor   Customer

IDoc

Document data

| R/3 Certificate creation |
| Quality data on certificate |
| Certificate as PDF file |

EDI converter   EDI

XML converter, Business Connector   XML

Certificate recording

Storage system

Receiving a Quality Certificate via EDI with Access to Data (QM-CA)

Use

In this EDI scenario, you receive and process:

- The inspection results issued on a quality certificate (quality data) which can be transferred to an existing inspection lot, and

- A quality certificate as a PDF file [Page 86], if required

In general, a quality certificate is referenced to a delivery, inspection lot, or batch. Therefore, the transfer of the quality data on the certificate is not necessarily linked to a purchase order or delivery. Results of inspections that, from the recipient's point of view, were made externally, can also be sent to the recipient system for further processing.

When transferring the quality data of a certificate with reference to a delivery or purchase order to the customer system, the data can be automatically uploaded to an inspection lot for a goods receipt (triggered by the goods receipt). Alternatively, you can use the functions for a certificate receipt [Page 70], to transfer data to any other desired inspection lot. Using the latter function, you can transfer the quality data prior to a good receipt to a source inspection lot and valuate the goods already at an early stage.

When transferring the quality data of a certificate with reference to an inspection lot or a batch to the customer system, the data can be automatically uploaded from the IDoc to any desired inspection lot using *SAP Business Workflow*. For more information, see workflow documentation Transfer Data from IDoc to Inspection Lot [Ext.].

The check of the digital signature ensures that the incoming certificate corresponds to the sent document. Then, the received certificate is stored via *SAP ArchiveLink*.

Prerequisites

Application: General

Function	Prerequisite	Remark
Checking the digital signature	The SSF-ID is created in the master data for the creditor under *Other communication*. The public key for the creditor is stored in your external security product under the SSF-ID.	
Identification and clear assignment of the quality data between the sender and the recipient system (characteristic mapping)	In the *Partner-Related Settings for Quality Data Exchange*, the characteristic mapping table is filled. For more information, see Mapping Characteristics for the Transfer of Quality Data [Page 74].	Characteristic mapping is necessary, if the characteristic descriptions are different in the sender and the recipient system.

Receiving a Quality Certificate via EDI with Access to Data (QM-CA)

Transfer of the quality data on the certificate	The *SAP Business Workflow* component is active.	For more information, see the workflow documentation Transfer Data From IDoc to Inspection Lot [Ext.].
	In the task list or material specification, you define that the results data origin is uploaded from the certificate.	For more information about upload of quality data, when using a material specification, see Values for the Master Inspection Characteristic [Ext.]; and when using a task list, see Functions in the Characteristic Overview [Ext.].

Application: Certificate for a Delivery

Function	Prerequisite	Remark
Processing the inbound quality certificate for a delivery (PDF file)	The delivery material, for which the quality certificate is sent, requires a certificate. The document data (*material number, purchase order item, batch)* allows the unique assignment to the purchase order.	If no purchase order item could be assigned to the document data or the delivery material does not require a certificate, the incoming certificate is stored centrally and forwarded to the responsible party by *SAP Business Workflow*. If the purchase order item is not given in the IDoc, you can assign the item using the customer enhancement *QCE10001*.
Uploading the quality data of a certificate to an inspection lot for a goods receipt	On the *Quality Info Record: Procurement* screen in *Insp. control,* an entry for *electronic certificate with access to data* or *electronic certificate (without PDF) with access to data* is set.	

IDoc Interface

The following values are maintained in the partner profiles (inbound):

Field	Value
Message type	`QCERT`
Partner type	`LS`
Partner	Logical system of the vendor
Recipient port	z.B. `SUBSYSTEM`

Basic type	`QALITY02`
Process code	`QCERT_IN`

Features

The following graphic illustrates the scenario for an incoming electronic certificate for a delivery with data transfer:

A: Electronic Receipt of a Certificate for a Delivery

Receipt

IDoc

Document data

Quality data on certificate

Certificate as PDF file

Certificate as PDF file

Storage system

Automatic transfer to GR inspection lot: Controlled by Quality Info Record

Manual transfer to any desired inspection: By menu function
- *Transfer quality data to inspection lot*
- *Transfer log*

Display/change certificate receipt

GR inspection lot

Inspection lot

When an electronic certificate is received that is not related to a purchase order (e.g. a certificate for an inspection lot or batch), a workflow is started that allows data transfer to any desired inspection lot.

Transmission of a Quality Certificate as a PDF File Using EDI (QM-CA)

Use

In this EDI scenario, you send a quality certificate as a PDF file to your customer using EDI. The created IDoc automatically receives a digital signature. This means that the certificate cannot be changed during transmission.

Prerequisites

Application

The following prerequisites must have been fulfilled to transmit the certificate:

➡

In the sales order, the purchase order item or customer material number must be entered on the delivery item detail screen. If the purchase order item has not been entered, you can assign this item at Certificate receipt [Page 86] using a customer enhancement.

Output Control

The following condition components must have been created:

Condition Component	Value
Output type	`LQCA`, `LQCB`
Application	`V2`
Procedure	`V20001`
Transmission medium	6 (EDI)
Access sequence	`0003, 0008`
Partner function	`AG` (sold-to party) and `WE` (ship-to party)

For more information, see *Quality certificates* in Customizing for *Quality Management* (QM).

- *Output Determination*
- *Process Output*

IDoc Interface

You must maintain the following values for both the outbound partner profiles and the additional partner profiles for outbound processing using output control:

Field	Value
Message type	`QCERT`
Partner type	`KU` (customer)
Partner function	`WE`, `AG`, `Q1` or `Q2`

Recipient port	e.g. **SUBSYSTEM**
Output mode	e.g. *Transmit IDocs immediately*
Basic type	**QALITY01**
Process code	**QCERT_OUT**

Activities

You pick a delivery for the certificate recipient. When the delivery is picked, the certificate is either sent immediately, or processed in the background at regular intervals.

Inbound EDI Message for a Quality Certificate as a PDF File (QM-CA)

Use

In this EDI scenario, you receive and process a quality certificate as a PDF file that has been sent to you by a vendor using an R/3 System. The system checks the document that has been sent against the digital signature to make sure that the certificate is authentic. The incoming certificate is then stored using *SAP ArchiveLink*.

> If no purchase order item could be assigned to the document data, or if the material does not require a certificate, the certificate is stored centrally and forwarded to the person responsible for its processing using the *Business Workflow.*

Prerequisites

Application

There are the following prerequisites for processing the inbound quality certificate:

- The delivery material, for which the quality certificate is sent, requires a certificate.

- The document data (*material number, purchase order item, batch)* allows the unique assignment to the purchase order.

> If the purchase order item is not given in the IDoc, you can assign the item using the customer enhancement *QCE10001.*

The following prerequisites must be fulfilled for the system to check the digital signature:

- The SSF-ID is created in the master data for the creditor under *Other communication.*

- The public key for the creditor is stored in your external security product under the SSF-ID.

To forward an inbound certificate to the department responsible using the *SAP Business Workflow* for assignment, the following prerequisite must be met:

- You assign one or more persons responsible for processing to the document type *QMICERTPDF* and make the required settings.

> To assign processors to the document type *QMICERTPDF* and to make the required settings, choose *Tools → Business Documents → Miscellaneous → Default settings.*

IDoc Interface

The following values are maintained in the partner profiles (inbound):

Field	Value
Message type	`QCERT`
Partner type	`LI` (vendor)
Partner function	`LF`
Recipient port	e.g. `SUBSYSTEM`
Basic type	`QALITY01`
Process code	`QCERT_IN`

Activities

The IDoc is received either over the Internet port as an attachment to an e-mail, or via the subsystem. The system uses the administrative data to find an existing certificate record and stores the related certificate in *SAP ArchiveLink*. If no certificate record exists, the system creates a new certificate record and then stores the related certificate.
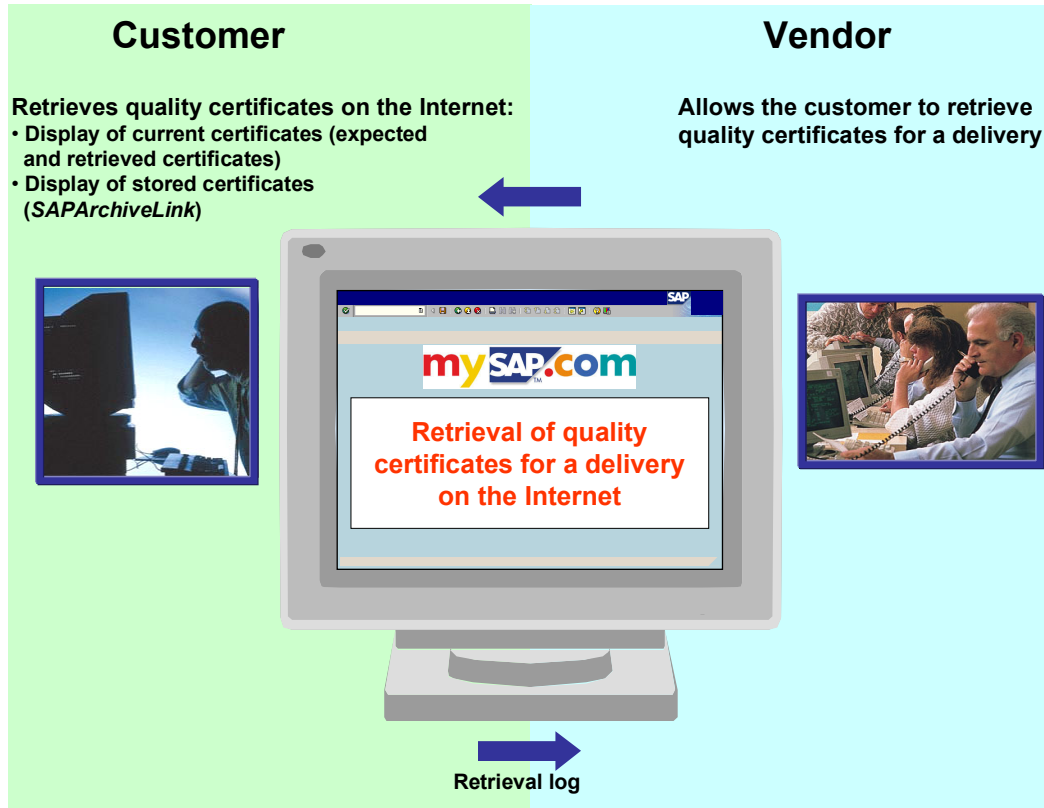
See also:

Storage of Incoming Certificates (QM-CA) [Ext.]

Inbound EDI Message for a Quality Certificate as a PDF File (QM-CA)

Internet Retrieval of a Certificate for a Delivery

Purpose

This function enables customers to retrieve quality certificates for their incoming deliveries on the Internet.

The internet user has two possibilities to retrieve a certificate:

Internet scenario	Meaning
Certificate Retrieval with Output Processing [Page 90] (Service [Ext.] *QC40*)	Selection of: • *Expected certificates* • *Retrieved certificates* • *Expected and retrieved certificates*
Retrieving a Certificate From the Storage System [Page 92] (Service *QC40*)	Selection of certificates that were stored by the sender (vendor) using *SAPArchiveLink*.

Prerequisites

To retrieve quality certificates for a delivery over the Internet, the following requirements must be met:

- On the vendor side (SAP System)

    - An internet transaction server is active.

    - In the *User maintenance* of the SAP system, an *alias* for an R/3 user has been created. (Using this alias, Internet users identify themselves as R/3 users). In addition, a reference to the contact person at the customer site is made. (*BUS1006001 - Business partner employee*).

    - In the SAP system, the role *Processing Certificates on the Web (SAP_QM_CA_CERTVIAWEB_EXT)* or a corresponding role is available. For more information, see the role documentation Processing Certificates on the Web [Ext.].

- On the customer side (internet user)

    - If the internet retrieval should be started using the SAP Workplace, the hyperlink to start the service must be available in the corresponding user role (for example, in the role *Link: Certificates on the Web* (*SAP_QM_CA_CERTVIAWEB_INT)*.

    - The MS Internet Explorer (from Release 4.0) is used as a browser.

    - Adobe Acrobat Reader® is used.

    For more information, see the role documentation Link: Certificates on the Web [Ext.]. If the service is started without using the SAP Workplace, it can be started in the Internet Browser when the required hyperlink is set.

Process Flow

1. Depending on what is supplied by the vendor, Internet users use the service *QC40* or *QC40A* in the Internet Browser to log on to the vendor system. (The vendor has an SAP system).

2. By entering a purchasing number, a date (desired delivery date), or a delivery, they create a list of certificates and call up the desired certificate as a PDF file.

3. The certificates can be displayed one after another using Adobe Acrobat Reader®, or be saved locally on the PC.

Certificate Retrieval with Output Processing

Use

When customers retrieve a certificate for a delivery that involves output processing on the Web, they can call up:

- *Expected certificates*

- *Retrieved certificates*

- *Expected and retrieved certificates*

Before the list of certificates is displayed, the system checks whether the contact person (the Internet user) corresponds to the certificate recipient. As a result, the partner number and partner role for the output are compared to the log-on data for the Internet user.

Prior to displaying all certificates for the customer, the system checks, if the contact person who is logged on is assigned to the customer master for which the certificate is destined.

Mr. Smith logs on to the system and wants to display all certificates for his company XY. The system displays:

- All certificates that are addressed to him personally

- All certificates that are addressed to the main address of the customer

- All certificates that are addressed to Mr. Miller, who is also assigned to the customer master XY as a contact person

Prerequisites

In Customizing for *Quality certificates,* the output type of the output to be processed is entered as "certificate output" with transmission medium 8, and the indicator *Internet certificate* is set.

Features

There are the following possibilities for output processing:

Status of output processing	Meaning
Yellow light for output for delivery item in the SAP system	The certificate output has not yet been processed in the sender system.
	There is an entry in the list for "expected certificates".
	The Internet user triggers output processing. If the Internet user has tried to retrieve the certificate on the Web, the output status is changed from *not processed* to *processed correctly* or *processed incorrectly*.

Green or red light for output of delivery item in the SAP system	The certificate output has already been processed (correctly or incorrectly) in the sender system.
	There is an entry in the list for "retrieved certificates".
	The Internet user triggers repeated output processing. (If this is not allowed, the hyperlink will be deactivated.)

Retrieving a Certificate from the Storage System

Use

The customer can use this function to retrieve certificates for delivery (located in the vendor storage system) over the Internet.

> When retrieving certificates from the storage system, it is guaranteed that the system always refers to the same certificate as long as no output is issued. Even when data is changed in the system.
>
> For customers with this requirement, the following procedure is recommended:
>
> - Printing the certificate directly in the storage system (storage mode 2 or 3)
>
> - Retrieval of the certificate by the customer only via the storage system

Prerequisites

To use this function, the following requirements must be met:

- The *SAPArchiveLink* component is active, and in the sender system the certificate output was transferred to the storage system.
  (The output has been processed successfully with storage mode "3" when the certificate was printed additionally, or with storage mode "2" when it was only stored in the storage system).

- In Customizing for *Quality certificates,* the output type of the output to be processed is entered as "certificate output" for the transmission medium (print or fax), and the indicator *Storage system* is set.

Quality Certificates for a Batch on the Internet (QM-CA-CG)

Use

When you ship products to a customer, you frequently need to certify the quality of certain products. You can do this using quality certificates. Quality certificates can be created in the R/3 System. For example, they can be created as papers to accompany a delivery. As a vendor, you can customize the contents and appearance of certificates to suit your customer's needs. Specification data, inspection data, documents, and all sorts of general data can appear on a certificate.

You may also need to create certificates for individual enquiries. You can print or fax a certificate for a batch upon request. With the Internet application component *Quality Certificates*, an authorized customer can access the vendor's R/3 System and dispatch a certificate for a batch.

This chapter contains all the necessary information for using **quality certificates on the Internet**. A prerequisite is a basic knowledge of the QM application component *Quality certificates*.

Type of Internet Application Component

Business-to-Business

Advantages for Your Customers

- Your customers can access real-time information whenever they need it.

- The information is always up-to-date because the data is taken directly from the SAP database.

- Your customers do not have to contact you by telephone to get a certificate (reduced administrative costs).

- Your customers can record data quickly and easily because of the predefined screen layout.

- Information you offer your customers corresponds to any agreements made with vendors.

Advantages for You as Vendor

- Your administrative costs are reduced.

- You can determine access authorization and information content for individual customers.

- You can design the screen layout so that customers can record data quickly and easily.

- When you update data, your customers can access it without any further action on your part.

- Depending on the agreement with your customers, you can include fewer standard certificates for deliveries, because customers can access these independently.

Quality Certificates for a Batch on the Internet (QM-CA-CG)

Prerequisites

Authorizations/Security

SAP Users

The R/3 System identifies you by your **customer number**.

As an SAP user, you require the following authorizations:

Authorization Object	Description
F_KNA1_APP	Customer: Application authorization (Activity: 03, Application authorization: F)
Q_TCODE	Transaction authorization for QC42

Internet Users

To start the Internet application component, your customer must log on using their SAP customer number and a password that you assign.

You can create, change, and delete passwords for Internet users with transaction SU05. To create a unique identifier for your customer, enter the object type *KNA1* next to your customer's number.

Data Access

Within the R/3 System, you can control access to your data in the following ways:

- **List of batches**

   You can influence the list of batches by implementing enhancements or by using a different combination of BAPIs.

- **Assignment of certificate profiles**

   You can assign certificate profiles, for example, at customer-material level. A certificate can only be created if a suitable certificate profile is found.

- **Limited view**

   You define a limited view by using certificate profiles in which only certain information is displayed.

   You can use customer-specific profiles if you want to withhold information from certain customers.

   You can use general profiles containing limited information (for example, at material group level with WWW authorization) if only a few of your customers can access detailed information.

Standard Settings and Default Values

Default Values in QM Customizing

In **Customizing** for *Quality Management*, the following settings are required for **sender texts**:

- View V_T001G_QM must contain entries for program SAPLQC07. All company codes must be maintained from plants where certificates can be created.

- The sender texts must exist in the work client.

  You can create sender texts with transaction SO10, or you can copy them from another client. Sender texts, as well the forms used, should be available in all the languages in which certificates are created.

Features

Modification Options

In addition to changing the layout, this Internet application component offers you additional modification options.

The following text describes the modification options available if you:

- Keep the standard transaction

- Create a new transaction

Modification Options for a Standard Transaction

If you keep the standard transaction, you can make the following modifications:

- **Output of program messages**

  Program messages are not usually displayed directly in this Internet application component. Instead, they are presented in a log.

  If no data is found, the standard program provides two options for displaying log messages in the template:

  – You can use field QCWW-PROTLINE (contains the first line of the log, or a "$" sign if no log exists). You can find this field on screen 0103.

  – You can use internal table G_LINES_TAB, which is transported via the mass data channel. This table contains the entire log.

- **Enhancements**

  You can use the following enhancements:

  – Enhancement QCPA0003:

  New component EXIT_SAPLQC07_001 for defining new fields for certificate profile determination

  – Enhancement QCPA0002:

  New component EXIT_SAPLQC07_002 for defining criteria to limit the inspection lot/ partial lot selection

  – Enhancement QCWA0001 for influencing the list of materials

  Components:

  ▪ EXIT_SAPLQC07_003 "Customer authorization for materials"

  You can use this component to prevent a list of materials being created for a customer.

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■ EXIT_SAPLQC07_004 "Own search for customer's materials"

You can use this component to carry out your own selection in addition to or as an alternative to the standard selection.

■ EXIT_SAPLQC07_005 "Limit materials for the customer"

You can use this component to change the table of materials.

The R/3 System contains online documentation describing the functionality of each of these enhancements.

- **Customizing**

  The sender texts used in view V_T001G_QM are maintained as program-specific for the corresponding company codes. For this reason, they can be quite different from the usual sender texts.

- **Additional modification options**

  You can use all the modification options that the R/3 System provides for creating certificates, such as your own forms, texts, and function modules for data selection at characteristic level.

Modification Options for a New Transaction

If you do not keep the standard transaction, you have the following options:

- You can display additional fields on your screen (e.g. the availability date field for batches).

  If you use this option, refer to the function modules and BAPIs listed below.

- You can allow for a time span when selecting batches.

  If you use this option, refer to the function modules and BAPIs listed below.

- You can use other BAPIs for the selection of materials (for example, from the Internet application component for the product catalog).

R/3 Development Objects

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

Development class:	QC
Transaction:	QC42
Function group for screens:	SAPMQCWA
Function modules:	SD_SELECT_MATERIAL_GROUPS_WWW
	BAPI_CUST_SAREAS_MATERIALS_GET
BAPIs:	Customer.ExistenceCheck
	Customer.CheckPassword
	Customer.GetSalesAreas
	Material.GetBatches

	Material.GetBatchCertificate

There is online documentation on each of these modules in the R/3 function library.

⚠️

Every change to an R/3 development object used for the Internet application component counts as a modification.

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

Data Output via the Internet Transaction Server

Data is output via the Internet Transaction Server. The output forms 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 QC42. You can find all the relevant data under this service name in the SAP@Web Studio.

The output forms are found in subdirectory QC42 of the TEMPLATES directory. The following forms are used:

SAPMQCWA_100.HTML

SAPMQCWA_101.HTML

SAPMQCWA_102.HTML

SAPMQCWA_103.HTML

SAPMQCWA_1999.HTML

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

Functions Not Covered in This Internet Application Component

This Internet application component does not cover **any** customer-specific tolerances from automatic batch determination. The corresponding standard function modules do not carry out renewed batch determination.

If the specification data (tolerances) should be read from the batch classification (specification origin 02 in standard Customizing), the data in a certificate for a delivery item is taken from the batch determination.

In the above case of **a certificate for a batch** (without batch determination), the permitted values from the batch classification of the material are included. If no material-specific values exist, the permitted values are printed from the class or characteristic itself.

If the system reads the specification data from customer-specific inspections, the customer-specific tolerances will also be included.

Differences to the R/3 Transaction

This Internet application component is different to the R/3 transaction QC22 in the following ways:

* You have **no** selection options on the initial screen:

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      − You log on with a customer number.

      − The language is the one set in the customer master record.

      − The certificate profile is selected automatically; you cannot select an alternative

- The sender texts at company code level (View V_T001G_QM) do not belong to program RQCAAP02, but to program SAPLQC07.

Process Flow (QM-CA-CG Quality Certificates)

Prerequisites

Your customer requires a certificate for a product in a certain situation. The customer must have authorization to do this. This means, you must assign them a **customer number** and a **password** for your R/3 System. The customer is thereby identified by your system.

Batch Selection

The customer has information to help select the correct product or batch. He can limit the **selection of batches** using the following criteria:

- Assignment of the product to a material group with WWW authorization.

- Specification of a search string.

    You can search for a material by entering an * or a +. The + represents a character and the * any character string.

    If the customer enters mat*, the system will find all materials beginning with "Mat".

    You can limit or re-sort the list of materials that is displayed by implementing customer enhancements.

    - Batch number

The result of the selection is a list of products with their batches. In addition to the batch identifier, the expiry date is also given. The customer selects a batch from this list.

Certificate Profile Determination and Certificate Creation

A certificate can be created on the Internet if you have maintained all the necessary data in your R/3 System. Most importantly, the system must determine a suitable certificate profile for this customer. The certificate is created in the language specified for the customer in the customer master record.

If the system can create a certificate, it is transferred in PDF format to the browser, where it can be displayed in a separate window using the Acrobat Reader™ from ADOBE.

The data printed on the certificate is taken directly from the R/3 System. This means that if, for example, the values of a batch change, the customer still receives the most up-to-date version.

The depth of the information that the customer sees on the certificate is specified by the certificate profile, which is found automatically. The following are predefined:

- Which form is used

- Which data and texts should appear

- Which characteristics are printed

- How much information should be divulged for the individual characteristics

The customer can print the certificate on a local printer. If required, he can create additional certificates or another list of batches.

Process Flow (QM-CA-CG Quality Certificates)

See also:

Application Examples (QM-CA-CG Quality Certificates) [Page 101]

Application Examples (QM-CA-CG Quality Certificates)

Example 1: Clarification of a Customer Complaint

The customer is using a product that does not generally have a certificate. A quality problem occurs. To determine the causes of the problem, the customer feels that it would be helpful to call up a certificate from the vendor for the batch concerned.

Example 2: Research and Development, New Areas of Use

The customer is using a product, but would like to use it, for example, in another chemical process. In order to evaluate whether the product is suitable, further physical-chemical values are required. For this reason, the customer calls up certificates for some of the batches currently in use.

Example 3: Comparison of Customer's and Vendor's Data

An unexpected result is produced in an inspection. The customer would like to compare results with the vendor.