

Characteristics (CA-CL-CHR)



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Characteristics (CA-CL-CHR)

Purpose

In the classification system, characteristics describe the properties of objects. The values of a characteristic specify these properties.



Characteristic **COLOR** has the values 'red', 'green', and 'blue'. When you classify an object, you use this characteristic to specify the color of the object.

You create characteristics centrally, then assign them to classes. When you assign a characteristic to a class, you can adapt (overwrite) the characteristic.

When you assign objects to a class, you assign values to the characteristics.

You can use characteristics in other SAP applications, as well as the classification system. Characteristics serve different purposes in different applications (see Integration).

Integration

Characteristics are used in the following application areas:

- PP-PI – Process Industries: To describe the PI-PCS interface in the process control station
- QM – Quality Management:
 - To transfer inspection values to batch classification. (The characteristics in the classification system are referred to as "general characteristics" in Quality Management.)
 - To produce quality certificates
- EHS – Environment Data: To describe the properties of substances
- PP-CAP: In formulas for determining standard values
- LO – Batches: Substance processing
- MM – Purchasing: In the procedure for releasing purchase orders and purchasing documents with classification
- LO – Variant Configuration: To configure complex products
- CA – Classification System:
 - For classification: To describe the properties of the objects you classify
 - For finding objects: As search criteria for finding objects that have been classified
- [Easy Cost Planning \[Ext.\]](#): To enter and assign values to costs incurred. For information on how to proceed, see [Creating and Assigning Characteristics \[Ext.\]](#).

Features

When you create or change a characteristic, you can define the following settings:

- Format

For example, numeric format is for figures, and character format is for alphanumeric characters.

- Unit of measure for numeric values
- Templates for entering values
- Required entries for a characteristic (required characteristics)
- Whether intervals are allowed as values
- Language-dependent descriptions and texts for characteristics and characteristic values
- Display options for characteristics on the value assignment screen
- Allowed values
- Default values that are set automatically on the value assignment screen

To describe how characteristics and characteristic values in classification influence each other, you can assign [dependencies \[Page 53\]](#) to them.

Creating, Changing, and Displaying Characteristics

Creating, Changing, and Displaying Characteristics

Procedure

To create a characteristic:

1. From the classification menu, choose *Characteristics*.
2. Enter your data on the initial screen:
 - In the *Characteristic* field, enter a name for your new characteristic. Use the [Naming Conventions \[Page 9\]](#) for characteristic names.
 - Enter a change number if you want to create the characteristic using engineering change management.
 - To do this, choose processing type  *Create characteristic*.
 - You can also copy the data of an existing characteristic. Use the pushbutton  *Create by copying*. Enter the name of a characteristic you want to copy.
 - Confirm your entries.
3. On the *Basic data* tab page enter the most important control data for the characteristic.
You must maintain the [basic data \[Page 10\]](#) for all characteristics. All other screens are optional.

To change a characteristic select the pushbutton  *Change* in characteristics after entering the characteristic. To display the characteristic choose the pushbutton  *Display*.

Naming conventions

Use the following naming conventions for characteristics. These naming conventions allow you to use your characteristics in dependencies.

- Only use letters from A - Z, figures from 0 - 9, and the underscore character
- The first character must be a letter
- Do not use umlauts or accents
- Characteristic names are not case sensitive
- You can use hyphens, but we advise you not to



As of release 3.0, you can no longer use characteristics with a hyphen in their names in object dependencies. This is because a hyphen is also used as a minus sign in arithmetical expressions. However, this only applies to the characteristics you create as of Release 3.0.

If you created characteristics with a hyphen in their names before Release 3.0:

- If you do not change the dependencies in which the characteristic is used, you do not need to change the characteristic name.
- However, if you want to create a new dependency referring to the characteristic, or if you want to change an existing dependency referring to the characteristic, the characteristic name with a hyphen is no longer accepted. However, you can use the special key SKEY to refer to the characteristic. You enter the characteristic name in quote marks:

– SKEY 'EXT-COLOR'

Entering Basic Data

Entering Basic Data

Use

You enter the main characteristics data on the *Basic data* tab page.

Features

This tab page contains the following fields for describing the characteristic:

Characteristic Description

Here you enter a language dependent description of the characteristic.



You must enter a description for your characteristic before you can leave the *Basic data* tab page.

Characteristics groups

You can group characteristics. Characteristics groups are defined in Customizing for the *Classification System*.

You can use the characteristics group to help you to find characteristics with a matchcode. For example, you can display a list of all characteristics in characteristics group BOLTS.

Status

The *Status* field shows which applications you can use the characteristic in, such as the classification of objects.

- You can only assign “**In preparation**” status when you first create a characteristic. You cannot use a characteristic with *In preparation* status in a class.
- You cannot use a characteristic with “**Locked**” status in a class. However, if you have used a characteristic in a class, and then set *Locked* status for the characteristic, this does not affect the characteristic in the class.
- You can use a characteristic with “**Released**” status in classes.

In Customizing for *Classification*, you define statuses for characteristics by choosing *Characteristics* → *Define characteristic statuses*. In Customizing for *Classification*, you also define the default status for creating a characteristic by choosing *Characteristics* → *Define default settings*.

Authorization Groups for Characteristics

You can use an authorization group to restrict access to certain characteristics.

For each characteristic, you can enter an authorization group with possible entries from 000 to ZZZ. Only a user that has this authorization group in their user master record can maintain the characteristic.



A characteristic has authorization group 100. Only a user that has authorization group 100 in their user master record can maintain the characteristic.

Entering Basic Data

The user master records of users must contain authorization object C_CABN_GRP with the relevant values.

Formatting

In this dataset, you enter the data type of a characteristic. The data type of the characteristic determines which values you can enter for the characteristic. The following data types are supported:

- [Data types: character format \[Page 15\]](#)
The value of the characteristic can contain any alphanumeric character.
- [Data types: numerical format \[Page 13\]](#)
The value can only contain numbers.
- [Data types: time format/date format \[Page 16\]](#)
These values can either be periods of time or concrete points in time.
- [Data types: currency \[Page 17\]](#)
The values of the characteristic contain the costs of the object for the given currency.
- [User-Defined Data Type \[Page 38\]](#)
This data type is a fixed link between the characteristic and a class. Instead of a format, you enter a class of class type **031, User-defined data type** as the data type. This allows you to group the characteristics of the class together to form a superior characteristic.



The maintenance of the screen area *Format entry* is necessary. You must enter a valid format before you change to the next tab page.

If you define a characteristic as having numeric format, you see an additional field on the screen. This field is called *Interval values allowed*.

Classification (of a position/budget) single level, multi level, restrictable

You define whether you can enter one value or multiple values for a characteristic when you define the characteristic format. You cannot overwrite this setting for a class. It applies wherever the characteristic is used. (For more information, see [Value Assignment \[Page 18\]](#).)

Interval Values Allowed

In this field, you define whether you are allowed to assign interval values to a numeric characteristic.



Dependencies can only process multiple-value characteristics that have interval values.

In classification, both single-value characteristics and multiple-value characteristics can have interval values.

Entering Basic Data

If you select this indicator, the *Unformatted entry* indicator on the *Additional data* tab page of interface control is set automatically, because the length of an interval entry will not conform to the format defined.

Entry Required

To make values for this characteristic a required entry, select this field. To make values for this characteristic an optional entry, deselect this field.

Characteristics with this indicator are referred to as required characteristics.

Data Types Numeric Format

If you want to enter numeric values, you select this data type. You can define the following format settings for data type NUM:

- Length of the characteristic value

Characteristics with numerical format (abbreviation NUM) can have a maximum of 15 characters.

You can enter the total length of the characteristic value and the number of decimal places. The decimal places are subtracted from the total length of the characteristic value. The decimal point is not counted as a character.

The system automatically produces a template (with a separator for thousands) from your entries.

- Template

In Customizing for the *Classification System*, you can define templates for characteristic values. You can then select a template when you define the formatting data of a characteristic. If you select a template, the system copies the formatting data, such as the number of characters and the unit of measure, from the template.

When you assign values to the characteristics, the values you assign must match the template.

- Exponents

The exponents convert the characteristic values to powers of 10.

- Standard: 1,... E-xx

Sets the values you enter according to the template _.____ (1 digit before and 3 digits after the decimal point). For example:

1000 = 1.000E+03
100 = 1.000E+02
0.001 = 1.000E-03



The system sets the number of characters for this type of exponent. Any entry you make is overwritten.

- User-defined exponent

Values are converted to the exponent you enter. For example:

E+05
100000 = 1.000E+05
100 = 0.001E+05

- Scientific format exponent

Exponents that can be divided by 3 to show, for example, milli, micro, kilo, mega, or giga. For example:

10000 Megawatt = 10.000E+03 MW

Data Types Numeric Format

- Negative values

You can define whether negative values are allowed for the characteristic.

- Units of measure

You can enter a unit for the values of a characteristic.

When you assign characteristic values to an object, you can only enter a different unit if values in the unit you want to enter can be converted to the unit defined in the characteristic. Only units that have the same dimension (for example, length or volume) can be converted to each other.

For example, the units MM, CM, and M have the dimension length. If you define the unit of measure CM for a characteristic, you can assign a value in MM or M, instead of CM, to an object. The units are converted automatically by the system.

Units of measure without a dimension, such as 'piece', cannot be converted to other units.

You maintain units of measure in Customizing for *Global settings* under *Check units of measurement*.



You cannot change the unit of measure once you have either defined allowed values for a characteristic or assigned values to the characteristic to classify an object.

Data Types Character Format

Characteristics with the data type character format abbreviation CHAR) can be entered as alphanumeric characters. You can define the following format settings for data type CHAR:

- Length of the characteristic value
An alphanumeric value can be up to 30 digits long.
- Template
If you choose character format for your characteristic, you can define the length of the values by entering a template. This allows you to determine that values for this characteristic must be entered in a specific form. You can define templates in Customizing for the *Classification System*.
If you select a template, the system copies the number of characters from the template.
- Case sensitive
You can also define whether values are case sensitive or whether all letters are automatically converted to upper case.

 - If you select the *Case sensitive* indicator, the values ABC and abc are not identical.
 - If you do not select the *Case sensitive* indicator, the value abc is automatically converted to ABC.

Data Types Time Format/Date Format.

Data Types Time Format/Date Format.

When you enter data type DATE or TIME, the system automatically finds a template for entering a date or a time. Any values you enter are automatically formatted according to this template.

Entering Values for DATE/TIME Format

Values	The system displays
DATE: 010199	01.01.1999
TIME: 2045	20:45:21

Intervals

You can enter an interval as allowed values. For example:

01/01/1997 - 12/31/1999

You can define that intervals are allowed as values

Data Type: Currency Format

If you choose data type CURR (currency), you can enter the following data:

- A currency value can be up to 15 digits long.
 You can change the number of places before the decimal point. However, you cannot change the number of places after the decimal point. The system automatically produces a template for entering the currency you select. You cannot change this template.
- If you choose data type CURR, you must enter a currency. You can use the possible entries function to display the currencies that are allowed.



The system cannot convert a value entered in one currency format to another currency format.

- You can define whether negative values are allowed.
- You can define the allowed values as an interval
- You can define that intervals are allowed as values

Value Assignment

Value Assignment

Use

In the formatting data for value assignment, you define whether a characteristic is single-value, multiple-value, or restrictable.



You cannot change the value assignment indicator once you have set it. It applies wherever the characteristic is used.

- Single-value

You can enter exactly one value for the characteristic.

- Multiple values

You can enter more than one value for the characteristic.

- Restrictable

This indicator is only relevant to variant configuration.

When you configure an object, the allowed values of restrictable characteristics can be restricted dynamically. This means that you can only assign a value from the restricted allowed values to your configurable object.

For more information on using restrictable characteristics, see the R/3 Library *Variant Configuration (LO-VC)*.

Integration

Special Features for Setting Up a Class Hierarchy

The *Single-value* indicator does not apply when you are setting up a class hierarchy. This indicator only takes effect when you assign an object that is not a node to a class.

- When you assign classes to classes, you can enter several values for a single-value characteristic. This allows you to systematically restrict the allowed values from level to level down the hierarchy. You are only limited to entering a single value when you assign an object to a class.



For example, characteristic WIDTH is defined as a single-value characteristic. However, if you use the characteristic in a class and assign another class to your class, you can still enter several values for the characteristic, because the single-value attribute of a characteristic does not apply to assignments between classes. You can then restrict the values further on a lower level of the hierarchy. However, as soon as you assign an object that is not a class to one of your classes, you must select one value only.

- However, in some cases, an object other than a class may be a node. This means that the object is treated as a class in assignment functions, so the *Single-value* indicator does not apply.



In a class of class type **023** for batches, you can classify both materials and batches. In Customizing for *Classification*, the *Sort position* field defines that batches inherit their classification from materials. In this case, a material is a node, so the single-value attribute of a characteristic does not apply.

For more information on class hierarchies, see the R/3 Library *Classification (CA-CL)*.

Entering Descriptions and Documentation for a Characteristic

Entering Descriptions and Documentation for a Characteristic

Procedure

Creating Language Dependent Descriptions for the Characteristic

1. Enter the languages in which you want to enter descriptions and headings.

On the characteristic value assignment screen, you see the characteristic description in your logon language. If there is no characteristic description in your logon language, you see the language-independent characteristic name.

Heading 1/ heading 2

In these fields, you can define a 2-line column heading for lists of characteristic values.

For example, the result of the find object function shows a list of characteristics. In this list, you see the column headings you defined.

The default length of the heading is the length of the characteristic value format, but you can enter up to 30 characters per line.



In lists, the column width for a characteristic is taken from either the characteristic format or the length of the heading, whichever is the longer.

If you do not enter heading lines, the entries in these fields are automatically copied from the characteristic description and split or cut off according to the characteristic format. However, check these entries.

Creating Language Dependent Documentation for the Characteristic

1. Select the line containing the language in which you want to enter documentation.
2. Choose the pushbutton  *Documentation for description*.

You see the text editor, where you can enter your text.

3. Save your text, and return to the *Descriptions* tab page.



Documentation for characteristics is not subject to engineering change management.

On the characteristic value assignment screen, you can display the documentation on a characteristic by displaying the possible entries.

Maintaining Values

Procedure

You can define a list of allowed values for a characteristic. You can then select one of these values when you classify an object.

1. Choose the tab page *Values*.
2. Enter values in the entry fields. Enter each value in a separate field.
 The values must match the format that you defined on the *Basic Data* screen. You can enter up to the number of characters that you defined in the format.
3. If your characteristic is an alphanumeric characteristic, enter a language-dependent value description. You can enter up to 30 characters.

You cannot enter a language-dependent description for numeric values.

Default values

You can define one allowed value as a default value. This value then appears as a default in characteristic value assignment functions. You can either accept the value or select another value.

To define a default value, select column *D*.

Additional values

If required, you can use the allowed values you define as possible entries, but still allow other values for your characteristic. This means that you can assign values that are not in the allowed values in characteristic value assignment functions.

To do this, select *Additional values*.

Sorting values

Choose the pushbutton  *Sort values in ascending order* or  *Sort values in descending order* to sort the values.

For characteristics with CHAR format, you can enter descriptions of individual values in several languages. This is not possible with characteristics with other formats.

Entering Descriptions

For characteristics with CHAR format, you can enter descriptions of individual values in several languages. This is not possible with characteristics with other formats.

1. On the *Allowed values* screen, choose *Extras* → *Change language*. You see a dialog box in which you select a language. Confirm your entry.
2. Choose the pushbutton  *Dependencies for the value*; in order to enter value descriptions.
3. You can define a source language for translating descriptions.
 - a) Choose *Extras* → *More functions* → *Copy from val. desc*.
 - b) You see a dialog box in which you enter the language that you want to use as a source language for translation. Confirm your entry.

Maintaining Values

- c) The descriptions in the language you chose are displayed for you to translate.

On the characteristic value assignment screen, you see the value description in your logon language. If there is no value description in your logon language, you see the language-independent value.

Entering Documentation

For values in character format CHAR or number format NUM, you can define language-dependent documentation:

1. On the *Allowed values* screen, choose *Extras* → *Change language*. Enter the language in which you want to write documentation.
2. Select the value with the cursor and choose the pushbutton  *Documentation for value*.
3. You see the text editor, where you can enter your documentation.
4. Save your text.

On the characteristic value assignment screen, you can display the documentation on a value by displaying the possible entries.

Linking Documents to a Characteristic value

You can link documents, such as drawings or brochures, to a value. This allows you to describe the value in more detail. Before you can link a document to a characteristic, you must create a document info record in the document management system.

1. Place the cursor on the value and choose  *Document for value*.
2. You see a dialog box. Enter the document key.

Once you have linked a document to a value, the possible entries show that the value has a document in the characteristic value assignment when you classify or find objects, and you can display the document.

Entering Intervals

Use

You can enter intervals for numeric characteristics. Other characteristics with the time format (TIME), date format (DATE) and currency format (CURR) can also be used.

Procedure

1. Choose the tab page *Values*.

You see the *Allowed Values* screen.

2. Enter the interval that is valid for the characteristic.

- Always enter intervals in the following format:
lower limit <blank> – <blank> upper limit



You must enter a blank (space character) before and after the hyphen, because otherwise the system reads the hyphen as a minus sign.

Use: 25 - 50

Do not use: 25-50

- The following entries are also allowed:
 - < 100
 - < = 100
 - > 100
 - >= 100
 - 100 -< 200
- You can also use a combination of intervals and constants.

3. Choose another tab page from the characteristic maintenance or save your entries.

Additional values

If required, you can use the allowed values you define as possible entries, but still allow other values for your characteristic. This means that you can assign values that are not in the allowed values in characteristic value assignment functions.

To do this, select *Additional values*.

Entering Value Hierarchies

Entering Value Hierarchies

Use

You can use a value hierarchy to structure characteristic values with CHAR format. This makes it easier for you to find a specific characteristic value.



A range of countries of origin of a product are entered as allowed values for the characteristic *Country*. You structure these countries by arranging them according to regions or continents. You assign countries in Asia to a value group called *Asia*. When you want to select a country in Asia as a characteristic value, you can limit your search to the value group *Asia*.

Considerations when Setting Up Value Hierarchies:

- Each value can occur only once in a value hierarchy
- You can only create a value hierarchy for characteristics with CHAR format
- If a value has a value hierarchy, you see the S indicator for subordinate values



Do not set up a value hierarchy for restrictable characteristics, because value hierarchies cannot be restricted dynamically.

You have the following options for setting up a value hierarchy:

- You can define subordinate values for a value
- You can define a superior value to summarize 2 or more values

Procedure

Defining Subordinate Values

1. Place the cursor on the value for which you want to create a value hierarchy.
2. Select the pushbutton  *Next hierarchy level*.
3. You see a dialog box in which you can enter subordinate values.



You can create any number of levels in your hierarchy.

Summarizing Values

1. Select the values you want to summarize.
2. Choose the pushbutton  *Inset into nodes*.
3. You see a dialog box in which you can enter a superior characteristic value.

You can summarize values on any level of your hierarchy.

Entering Value Hierarchies

On the value assignment screen, values that have a value hierarchy appear as a tree structure. If you select the top value, you see the next level of the hierarchy.

Displaying a Value Hierarchy

To display a value hierarchy, choose  *Display hierarchy*.

- You can navigate up or down a hierarchy by choosing *Collapse* and *Expand*.
 - You have the option of displaying only a section of a value hierarchy.
 - Select the node from which you want to display the hierarchy, and choose *Mark block*.
 - You see the hierarchy from the node you selected.
 - Above the section of the hierarchy, you see the path that leads to the node you selected. By selecting a node in the path, you can navigate up one or more levels of the hierarchy, or display the entire hierarchy again.

Entering a Check Table

Entering a Check Table

Use

You can use a table to check the allowed values of a characteristic. If you enter a check table in the characteristic, any values you assign to the characteristic must match entries in the table.

Prerequisites

The table can contain one key field and can contain the client, if required. Tables that are defined differently are not accepted as check tables.

Procedure

1. Choose the tab page *Values*.

You see the *Allowed Values* screen.

2. Choose *Other value check*. Select value check strategy *Check table*, and confirm.
3. Enter the name of the check table.

The format of the table entries must be the same as the format of the characteristic.

4. Choose other tab pages from the characteristic maintenance or save your entries.



If you use a check table to check values, only data that is stored in database tables is used in the check. If the allowed values are restricted due to inheritance or dependencies while you are classifying an object, these restrictions are not checked.

Entering a Function Module

Procedure

On the allowed *values* tab page in characteristics maintenance functions, you can enter the name of a function module for checking the values you enter when you classify an object.

Prerequisites

You have created the function module in the *ABAP Workbench*.

The program code must be based on the standard interfaces. If the function modules you create have different interfaces, the program may terminate with a short dump.

See [Function Module Interface \[Page 29\]](#)

When you create your function module:

- The function module can be created in any function group
- The name of the function module cannot contain more than 27 characters
 - The length of the name is restricted so that another function module name can be inferred for the possible entries function on the value assignment screen.
- You must define your own function module for displaying possible entries for the characteristic values. You create this function module in addition to the function module for checking values. The name of this function module is made up of the name of the function module for checking values, followed by '_F4'. In this function module, you specify the allowed values, so that you can display them.
 - To see how to display possible entries, see the function modules of function group SHL3 (for example, function module HELP_VALUES_GET_WITH_TABLE_EXT). For more information on these function modules, please refer to the online function module documentation.
- You can create an additional function module that transfers the language-dependent value descriptions to the value assignment screen. The name of this function module is made up of the name of the function module for checking values, followed by '_DC'.
 - If you enter a value manually on the value assignment screen, you must enter the language-independent value, to avoid ambiguity.

Procedure

1. Choose the tab page *Values*.
 - You see the *Allowed Values* screen.
2. Choose *Other value check*. Select value check strategy *Funct. module* and confirm.
3. Enter the name of the function module in the *Function* field.
4. Choose other tab pages from the characteristic maintenance or save your entries.

Entering a Function Module**Result**

When you assign values to your characteristic, the function module checks whether the value you enter is allowed. If you defined a function module for displaying possible entries, you can display the possible values and select one.



Any restrictions of the allowed values that arise from inheritance or dependencies when you classify an object are ignored, because the function module can only access data that is stored in database tables. This means that current user entries are ignored in the check.

Function Module Interface

Function Module Interface for Checking Values

Import Parameters

CHARACT_NO	CABN-ATINN	Internal characteristic number
CHARACT	CABN-ATNAM	Characteristic name
VALUE	CAWN-ATWRT	Value to be checked

Exceptions

NOT_FOUND	Value not found
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Function Module Interface for Possible Entries

Import Parameters

CHARACT_NO	CABN-ATINN	Internal characteristic number
CHARACT	CABN-ATNAM	Characteristic name
DISPLAY		Only display values if DISPLAY = X
ADDITIONAL_VALUES	CABN-ATSON	Additional values allowed If ADDITIONAL_VALUES = X, the dialog box for possible entries must contain an additional entry line
MULTIPLE_VALUES	RCTMV-ATLIS	Several values can be assigned
LANGUAGE	SY-LANGU	Language
DISPLAY_WITH_LANGUAGE		Display value with language-dependent description

Tables

VALUES RCTVALUES	Selected value
This table contains the values assigned so far. Deleted values get status <i>D</i> in the table. New values get status <i>I</i> in the table.	

Function Module Interface for Value Descriptions

Import Parameters

CHARACT_NO	CABN-ATINN	Internal characteristic number
CHARACT	CABN-ATNAM	Characteristic name

Function Module Interface

VALUE	CAWN-ATWRT	Value to be checked
LANGUAGE	SY-LANGU	Language

Export Parameters

DESCRIPTION	CAWNT-ATWTB	Language-dependent value description
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Exceptions

NOT_FOUND	Value not found
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Maintaining Additional Data

Use

You can define reference characteristics on the *Additional data* tab page. You can link documents with characteristics and define how the entry field looks in characteristic value assignment functions.

Features

References to Table Fields

More under: [Creating Reference characteristics \[Page 58\]](#)

Document

You can link documents, such as drawings or photographs, with characteristics. Before you can link a document to a characteristic, you must create a document info record in the document management system.

1. Enter the document number and the document type that identify your document. If you require a specific document part, enter the number of the document part. You can also enter a document version.

When you assign values to the characteristic, you can display the document.

1. Choose the pushbutton  *Document* that you find next to the description of the characteristic.

Procedure for value assignment

- No entry can be made
 You can use the *No entry can be made* indicator to define whether you can assign a value to the characteristic on the value assignment screen.
 For example, if you want the characteristic value to be set by dependencies, not assigned manually, select this field. This prevents you from entering a value manually.
- Hidden
 The *Hidden* indicator means that the characteristic is not displayed in functions for finding and classifying objects. You can display a hidden characteristic in the characteristic value assignment function by choosing *Hidden characteristics*.
- Display allowed values
 You can decide whether the allowed values for the characteristic are displayed on the characteristic value assignment screen. If you select the *Display allowed values* field, you see all the allowed values on the value assignment screen, and can select one.

Handling User Entries

- Unformatted entry
 This indicator is set automatically if you allow interval values for a numeric characteristic. The entry field for characteristic values is automatically extended to its maximum length of 15 characters.

Maintaining Additional Data

- Propose template

If you select the *Propose template* field, the template you defined for the characteristic is displayed to help you enter values.

For more information on displaying characteristics and values on the value assignment screen, see the R/3 Library under *Cross-Application Components, CA Classification Guide*.

How to Restrict Class Types

Use

If you only want your characteristic to be used for specific class types, you can enter these class types on the *Restrictions* tab page.

- If you enter class types here, you can only use the characteristic in classes of these class types.
- If you do not enter any class types here, you can use the characteristic in classes of any class type.

Classifying a Characteristic

Classifying a Characteristic

Use

On the *Classification* screen of a characteristic, you can classify a characteristic in the same way as you would classify any other classifiable object. This allows you to find suitable characteristics more easily.

Procedure

To classify a characteristic, choose *Goto* → *Classification*. The first time you call this function after you log on, you need to select a class type. You then see a screen on which you enter the classes for classifying your characteristic. In the standard system, class type 012 is defined for characteristics.



If you want to classify a characteristic, you must use the *Classification* screen of the characteristic. You cannot use the assignment functions in the classification menu to classify characteristics. This ensures that changes made with engineering change management are consistent.

For more information about classifying objects, see R/3 Library *Classification (CA-CL)*.

Allowed Changes to Characteristics

Use

When you change a characteristic, the following restrictions apply:

- You cannot change the format entries after a characteristic is used in a class. You can change the formats number and character at any time.
- You can increase the number of characters, but not reduce the number of characters, once the characteristic has been used in a class.



You cannot change the format entries in Engineering Change Management. This makes avoiding inconsistent data statuses difficult.

- You cannot delete a value that has been assigned to an object.

You can use the where-used list for characteristic values to find out which objects were assigned values you can then reset the value (see [Directory for Characteristic Value \[Page 62\]](#)).

You cannot physically delete the assignment from the database if the assignment was done in Engineering Change Management. The value itself can also not be deleted.

Renaming a Characteristic

Renaming a Characteristic

Use

To rename a characteristic, choose *Characteristic* → *Change* from the classification menu. On the *Basic data* tab page of the characteristic, choose *Characteristic* → *Rename*.

1. You see a dialog box. Enter the new name of the characteristic.
2. Confirm your entry. The system changes the name of the characteristic.

Note:

1. The new characteristic name is copied to tables and functions in variant configuration, and to classes. If you have used a characteristic in dependencies, you can only rename the characteristic if it was created before Release 3.0. You must manually change the name of the characteristic in dependencies.
2. You cannot rename characteristics that were created as of release 3.0 and are used in dependencies. The rename function is not active for these characteristics.

Please note the [Naming Conventions \[Page 9\]](#) for characteristics when renaming characteristics.

Deleting a Characteristic

Prerequisites

You can only delete a characteristic that has not yet been used in other objects.

You can use a characteristic in:

- Classes
- Dependencies
- Standard value determination in task lists
- Process instructions and messages in process manufacturing

Once you have used a characteristic in one of these ways, you can no longer delete it. To find out where a characteristic has been used, choose *Environment* → *Where-used list*.

Procedure

1. Choose *Characteristics* in the classification menu.
2. Enter the characteristic you want to delete from the class.
3. Select the pushbutton  *Delete*.
4. You see a dialog box in which you confirm that you want to delete the characteristic.
If you want to delete the characteristic using engineering change management, enter a valid change number .

Deleting a class with engineering change management

If you delete a characteristic using engineering change management, the characteristic is deleted on the valid-from date of the change number.

Once you have deleted a characteristic using a change number, you can reactivate the characteristic after the deletion date by using another change number.

If you delete a characteristic without using a change number, you cannot reactivate it. You have to create the characteristic again, if you need it.

Introduction to User-Defined Data Types

Introduction to User-Defined Data Types

Definition

A user-defined data type groups together several characteristics under one name. A characteristic that has a user-defined data type to define its format is made up of several separate characteristics.

A user-defined data type is a class of class type **031**. You define individual characteristics for the superior characteristic and assign them to your class. You then enter the class with the individual characteristics as the data type for your characteristic. This links the individual characteristics to the superior characteristic.

User-defined data types are intended for characteristics whose value depends on a number of contributory factors. These contributory factors are the individual characteristics. For example, the fuel consumption of a car cannot be an absolute figure, because it always depends on the speed.



You cannot use characteristics that have a user-defined data type in object dependencies

Creating a User-Defined Data Type

Procedure

User-defined data types allow you to create a characteristic that comprises several individual characteristics. You enter a class of class type **031** as the data type. This class contains the individual characteristics.

Creating a User-Defined Data Type in Characteristics Management

1. You can create the individual characteristics for the characteristic that has a user-defined data type first, but if you prefer, you can create them later. You assign the correct format to the characteristics: character format (CHAR), numerical format (NUM), date format (DATE), or time format (TIME).

You can use characteristics with different data types.
2. Create the characteristic for the user-defined data type, which will hold the individual characteristics together.
 - You do not need to enter any further format data for the user-defined data type. The format data and values are stored in the individual characteristics.
 - Enter a description for the characteristic.
 - You cannot enter any allowed values for a characteristic with a user-defined data type.
3. Choose *Extras* → *More functions* → *User-defined data type*. Enter a key (class number) for a new data type and choose  *Copy*. You can also enter an existing user-defined data type and choose a processing function.
4. You see the maintenance function. Enter a description for the user-defined data type, and enter the individual characteristics you defined earlier. If you enter a characteristic that you have not yet created, you see a dialog box for creating characteristics.

By entering the key and the description of the user-defined data type, you automatically create a class of class type **031**.
5. You can use the characteristic in the usual way and assign it to a class for classifying objects.
6. You see the characteristic with a user-defined data type on the characteristic value assignment screen. However, you cannot enter a value for it. Double-click on the characteristic to display the individual characteristics in a dialog box, where you can assign values to them.
7. On the search result screen of the find object function, the characteristic with a user-defined data type is broken down into the individual characteristics that it contains. You do not see the superior characteristic.



Restrictions

- You cannot use a characteristic that is part of a user-defined data type as an individual characteristic in a class where the user-defined data type is used.

Creating a User-Defined Data Type

- A characteristic can only be part of one user-defined data type for each class. In other words, you cannot assign two user-defined data types that contain the same characteristic to one class.
- You cannot use characteristics with user-defined data types in classes of class type **031**.
- A characteristic with a user-defined data type cannot be a reference characteristic.

Additional Information: Creating a User-Defined Data Type in Class Management

You can also create a user-defined data type in class management. However, this means that you must keep switching between class management and characteristics management. To do this, proceed as follows:

1. Create the individual characteristics in characteristics management.
2. Create a class of class type 031 in class management, and assign the individual characteristics to this class.
3. Create a characteristic, and enter your class of class type **031** as the data type for this characteristic. This links the new characteristic to the characteristics in the class.

The same procedure applies as for maintenance in characteristics management.

Creating User-Defined Data Types (Example)

In this example, we will create characteristic FUEL_CONSUMPTION, which has as its format a user-defined data type, a class of class type **031**. The example assumes knowledge of working with classes (for more information, see the SAP Library *CA Classification System*).

1. Fuel consumption depends on speed. For this reason, first create characteristics TOWN (town traffic), SPEED_50 (50 miles per hour), and SPEED_60 (60 miles per hour).

These characteristics have NUM format and the unit **liter**. Do not enter any allowed values, because the number of liters cannot be predefined.

2. Create a characteristic called FUEL_CONSUMPTION. Enter a description.
3. Choose *Extras* → *More functions* → *User-defined data type*.

- Enter the key (class number) of data type and choose  *Copy*. Enter a description. This automatically creates class FUEL_CONSUMPTION with class type 031.
- Enter the individual characteristics. If you enter a characteristic that you have not yet created, you see a dialog box for creating characteristics.
- Formatting data and values are taken from the individual characteristics in class FUEL_CONSUMPTION.
- Save your entries.

Class FUEL_CONSUMPTION now links characteristic FUEL_CONSUMPTION to characteristics TOWN, SPEED_50, and SPEED_60.

5. Assign characteristic FUEL_CONSUMPTION to class CAR, class type **001**.
6. Classify material CAR_1 in class CAR, by choosing *Assign objects/classes to a class* from the classification menu.
 - In characteristic value assignment you see characteristic FUEL_CONSUMPTION. You cannot assign a value to this characteristic. Double-click on the characteristic. You see a dialog box containing the individual characteristics, to which you can assign values.
 - Enter the following values for material CAR_1:

TOWN	7
SPEED_50	5.5
SPEED_60	6

- Save your assignment.
7. Look for material CAR_1 with the *Find objects in classes* function.
 - Enter class CAR, class type **001**.
 - Confirm your entries.
 - This starts the value assignment function. You see the individual characteristics of the user-defined data type, and you can assign values to them.

Creating User-Defined Data Types (Example)

- The individual characteristics are shown in the search result.

Engineering Change Management in the Classification System

Use

There are two types of engineering change management:

- Engineering change management by *Valid-from* date

In the change master record for a change number, you enter a valid-from date on which changes made with the change number become effective.



You create a change number that has January 1, 2002 as the valid-from date. All changes made with the change number become effective on this date.

- Engineering change management with effectivity

In the change master record for a change number, you enter an effectivity type and the effectivity parameters.



You define effectivity type CUSTOMER for a change number, and enter the customers for which the changes apply as parameters.

Prerequisites

You have created a change master record in the engineering change management menu.

- If you want to work with validity periods, the change master record must have a valid-from date.
- If you want to work with effectivity, the change master record must have the effectivity type, effectivity parameters, and parameter values (for example, parameter CUSTOMER with value CUSTOMER = 'Smith').

For each change master record, you must specify the object types that can be processed using this change number. For the classification system, object types *Characteristic*, *Characteristics of class*, and *Classification* are supported.

The change master record is identified by a unique change number.

Features

You can process the following classification system objects with engineering change management:

Objects	Activity
Characteristics	Create, change, delete
Characteristics of class	Assign, delete from class, overwrite for class
Classification	Create, change, delete classification

Engineering Change Management in the Classification System

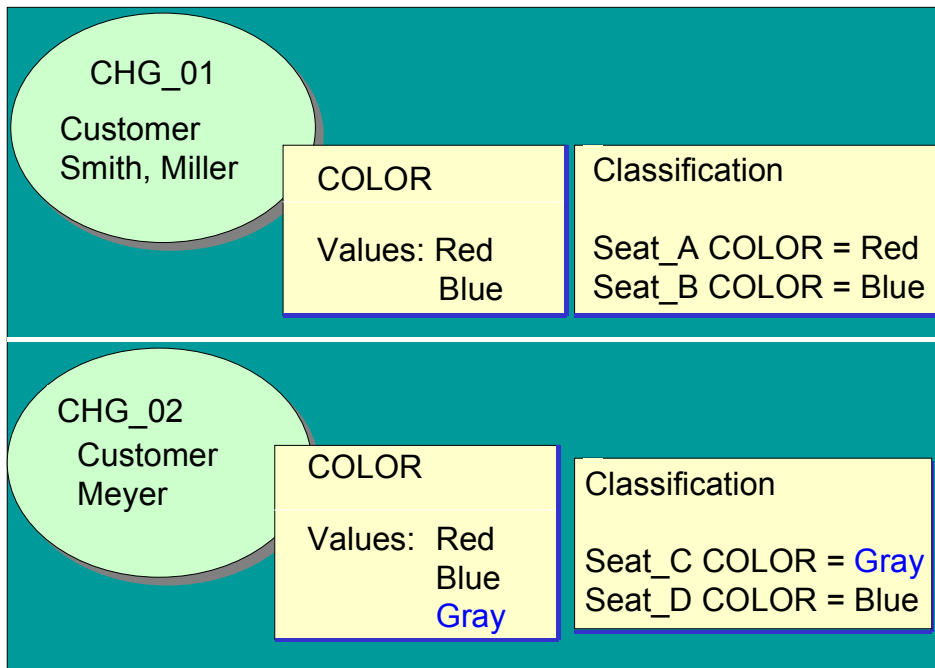
The following restrictions apply:

- Once you have used engineering change management to process characteristics, characteristics of a class, or classifications, you must use engineering change management for all further changes.
- Documentation for characteristics and characteristic values is not subject to engineering change management.

Changes with Effectivity

Use

You can use change numbers that have effectivity to make changes that depend on specific parameters, such as customer or serial number, to characteristics, the characteristics of a class, and classifications. You can define effectivity types in Customizing for *Engineering Change Management*.



Maintenance Values

In the change master record, you define the status on the basis of which changes are made with this change number. For example, changes made to characteristic COLOR with change number CHG_02 are based on the status for customer SMITH. This status determines which “maintenance values” apply.

You must enter a parameter value, because parameter effectivity does not provide a chronological sequence for determining the effective status.

Validity Periods

You can use either valid-from dates or effectivity type DATE to define validity periods for objects.

- Only use effectivity type DATE in combination with other effectivity types, such as CUSTOMER.
- If you want to work with validity periods only, use valid-from dates.

Changes with Effectivity

Changing Objects with Effectivity

If you work with change numbers that have effectivity in the classification system, you can enter a change number and a date.



The date you can enter in addition to the change number is a **selection date**. The effective status is selected according to the change number and date you enter – for example, the status for customer SMITH on January 1, 1999.

Any changes you make are stored for the change number, not the date.

The system uses the change number and selection date you enter to determine the effective status of objects.

- If the objects have only been processed with change numbers that have date effectivity, you see the change status that is effective on the date you entered.
- If the objects have been processed with change numbers that have date effectivity and change numbers that have parameter effectivity, the parameter effectivity has a higher priority than the date effectivity. If no effective status with parameter effectivity is found, the system uses the date to find an effective status.



When you use the date to search, change numbers that have effectivity type DATE (time period) have a higher priority than change numbers that have time effectivity (*valid-from* date). This still applies if the change number that has effectivity type DATE represents an older change status than the change status with a *Valid-from* date.

Creating Characteristics, Classes, and Classifications with Effectivity

Do not create master data such as characteristics and classes with a change number that has an effectivity type, because it may not be possible to determine the effective status if you call the object with another change number (see [Characteristics \(Example\) \[Page 48\]](#)).

For this reason, only use engineering change management to change existing master records.

Displaying Characteristics, Classes, and Classifications

When you display characteristics, classes, and classifications, you can choose *Parameters* to enter parameters for selecting the relevant status of objects. For each parameter, you can only enter a single value, not multiple values or intervals.



You want to display the status of a classification for customer SMITH. When you display the classification, enter customer SMITH as a parameter.

You cannot display the status for customers SMITH and MEYER at the same time.

Finding Objects

When you search for classified objects, you enter parameters to determine the status of objects that you want to see. You can enter a date as well as parameters.

Prerequisites

You can only use change numbers with effectivity to process classifications if the *ECH (parameter)* indicator is set in Customizing for the class type.

Before you can set this indicator for an existing class type, you must use report program RCLAUSPT to prepare classification table A USP for **each class type**.

Once you have run the report program, the *ECH (parameter)* indicator is available for entry for the class type in Customizing for the *Classification System*. You can only set this indicator if the *ECH (time)* indicator is set.

See also:

SAP Library *LO Engineering Change Management*

Characteristics (Example)

Characteristics (Example)

Characteristic COLOR is created without a change number. It is then changed with the following change numbers.



For change numbers, the rank was activated in Customizing for engineering change management, under the control parameters.

Change no.	Validity	Maint. Value	Rank	Maintenance
CHG_01	Miller, Smith	Miller, Smith	10	Values 'Red' and 'Blue' maintained
CHG_02	Meyer	Smith	20	Value 'Gray' maintained

Change number CHG_01 is only effective for customers SMITH and MILLER. This change number was used to assign values 'Red' and 'Blue' to characteristic COLOR. If you classify an object with change number CHG_01, values 'Red' and 'Blue' are active.

Characteristic COLOR is changed with another change number, CHG_02. The change is made on the basis of effectivity for customer SMITH, so the maintenance value SMITH is entered. The changes are for customer MEYER. When you call the characteristic with change number CHG_02, you see characteristic COLOR with values 'Red' and 'Blue'. You maintain another value, 'Gray' for customer MEYER. If you classify an object with change number CHG_02, values 'Red', 'Blue', and 'Gray' are active.

Under the following circumstances, no valid status of a characteristic can be found:

- Characteristic COLOR is created with a change number. The a change number has a higher rank than the change number you want to use to change the characteristic.

Priority of change numbers:

Change no.	Rank	Maintenance
CHG_01	20	Characteristic COLOR created
CHG_02	30	Value 'Gray' maintained
CHG_03	10	Change statuses of CHG_01 and CHG_02 are not found, because these change numbers have a higher rank. You see a message telling you that the characteristic does not exist or is not valid.

- Characteristic COLOR is created with a change number. The change number contains a parameter value that is not for one of the effectivity parameters that were created when the change number was created.

Change no.	Maint. Value	Rank	Validity	Maintenance
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Characteristics (Example)

CHG_01	Miller, Smith	10	Miller, Smith	Characteristic COLOR created
CHG_02	Smith	20	Meyer	Characteristic changed and value 'Gray' maintained
CHG_04	Cohen	40	Cruz	The initial status with change number CHG_01 cannot be found, because the parameter value COHEN is not one of the parameters values of CHG_01. Characteristic COLOR is not known in this context.

See also:

R/3 Library *LO Engineering Change Management*

- [Rank for Same Effectivity Type \[Ext.\]](#)
- [Defining the Rank of a Change \[Ext.\]](#)

Assigning Characteristics to a Class (Example)**Assigning Characteristics to a Class (Example)**

Class SEATS has the following change statuses:

Change Statuses:

Change no.	Change Master Record	Validity	Maintenance
CHG_01	Effectivity type CUSTOMER Rank 10	Miller, Smith	Assign characteristic COLOR
CHG_DATE	Valid-from dates	01.01.1998	Assign characteristic EXTRAS
CHG_05	Effectivity type CUSTOMER Maint. Value Miller Rank 20	Cohen	Assign characteristic SPECIAL

Selected Change Status

- If you display the class with change number CHG_01 on January 1, 1998, you see characteristics COLOR and EXTRAS.
- If you display the class with change number CHG_05 on January 1, 1998, you see characteristics COLOR, EXTRAS, and SPECIAL.
- If you display the class with change number CHG_DATE, you ONLY see characteristic EXTRAS.
- If you display the class with another change number, CHG_06, which has rank 15, characteristic SPECIAL is not displayed, because the rank of CHG_06 is lower than the rank of CHG_05. Only change numbers whose rank is lower than the selected change number are selected.

Classification (Example)

Displaying the Valid Characteristics and Values

On the value assignment screen, you only see the characteristics of the class that are valid in the context you are working in.

- The rank of the change number cannot be lower than the rank of the change number with which characteristics are assigned to the class.
- The parameter values entered must be defined in the effectivity parameters of the change number used to assign characteristics to the class.

Determining the Valid Change Status

The change status of the characteristics of the class and their values is determined by the change number and the date you enter.

Change no.	Maint. Value	Rank	Validity	Classification of material M_01 in class SEATS
CHG_02	Smith	30	Meyer	COLOR = Gray

The assignment of material M_01 is maintained with change number CHG_02. The changes made with this change number are only valid for customer MEYER. This change number was used to assign value 'Gray' to characteristic COLOR. Value 'Gray' is assigned when classifying material M_01.

Characteristic EXTRAS was assigned to the class with change number CHG_DATE, which has valid-from date January 1, 1999. However, the classification function was called on May 4, 1998. This means that the characteristic is not yet effective in the class.

Characteristic SPECIAL is not displayed either, because it was assigned to the class with change number CHG_05. Change number CHG_05 is only effective for customer COHEN. Change number CHG_02 is based on the status for customer SMITH.

Changes with a Valid-From Date

Changes with a Valid-From Date

Use

If you enter a change number that has a valid-from date on the initial screen of characteristics maintenance, class maintenance, or classification, the valid-from date is copied from the change master record. Changes become effective on this date.

Initial status:

- If the objects have already been processed with other change numbers that have valid-from dates, you see the change status that is effective on the date of this change number.
- If the objects have already been processed with change numbers that have effectivity, no valid change status can be determined.



Example: You create a characteristic with the valid-from date January 1, 2000. To do this, you enter change number CHG_01, which has valid-from date January 1, 2000. You can change the characteristic with another change number – CHG_02, with valid-from date January 1, 2001 – and enter another allowed value.

You use change number CHG_01 to assign the characteristic to a class, then use this change number to classify a material in the class. When you classify the material, you see the characteristic as effective on January 1, 2000.

If you change the classification with change number CHG_02, you see the characteristic as effective on January 1, 2001, so you can assign the additional value to the material.

Prerequisites

You have activated engineering change management for the class type in Customizing for the *Classification System*.

Engineering change management is always active for characteristics and characteristics of a class.

Features

- You cannot assign characteristics to a class if they are not yet effective or no longer effective on the date you enter.
- You cannot classify an object in a class if the class is not yet effective or no longer effective on the date you enter.
- If engineering change management is activated for a class type, you can enter a date for your search in the *Find Objects* function.
- You can only use one change number to change characteristics, the characteristics of a class, or classifications on any one date.

Dependencies

Definition

You can assign object dependencies to a characteristic or a characteristic value. You can use the dependencies in classification and variant configuration to describe the relationships between characteristics and characteristic values. You can use dependencies to:

- Exclude a characteristic or characteristic value from the value assignment process
- Determine that a value must be assigned to a characteristic
- Set a value for a characteristic

For more information on object dependencies, see the R/3 Library, under *LO Variant Configuration* and *CA Classification*.

There are 2 options for creating dependencies:

- Global dependencies

You can use global dependencies several times over for different objects. If you change a global dependency, the change affects all objects to which the dependency is assigned. You cannot change the dependency locally for a specific object. To identify a global object dependency, you assign a name.

- Local dependencies

You create local dependencies specifically for one object, and cannot assign them to several objects. You can only change the dependency by changing this object. To identify a local dependency, the system assigns an internal number.

See also:

[Object Dependencies for Characteristics \[Ext.\]](#)

[Object Dependencies for Characteristic Values \[Ext.\]](#)

Reference Characteristics

Reference Characteristics

Definition

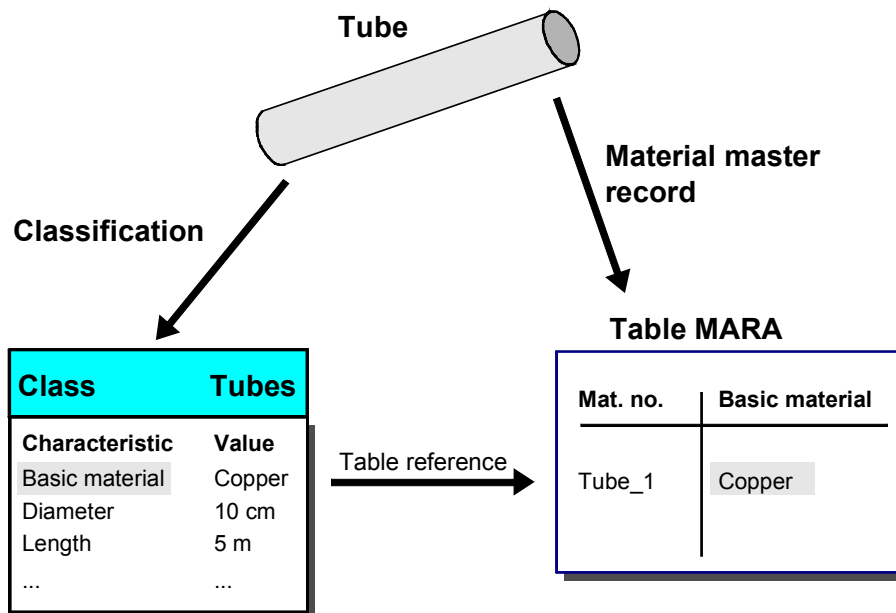
Reference characteristics are characteristics that refer to table fields.

Characteristics such as basic material and weight are already defined in the material master record. However, it is often precisely these fields that you require to classify your objects. If you create a characteristic that refers to a master data table in the R/3 Repository, you do not need to enter values redundantly - once in the *Basic material* field in the object maintenance function and once by assigning a value to characteristic **Basic_material** in the classification function. Essential data (such as format and length) is copied from the table field in the R/3 Repository to the characteristic. Characteristics that refer to a master data field in this way are called **reference characteristics** in the R/3 System.



You create a reference characteristic with reference to table MARA (material master) and field *Basic material*. You assign this characteristic to a class. When you use this class to classify a material, you cannot enter a value for reference characteristic BASIC_MATERIAL. The value for the basic material that was entered in the material master record – copper, for example – is copied.

Reference characteristics



Allowed Table References for Reference Characteristics

Allowed Table References for Reference Characteristics

Reference to fields in primary tables and text tables only

In the standard system, you can only refer to the fields in the primary table and text table of an object in classification and in the object find function. The primary table is the object table that you enter to define object types for classification when you configure your system.

Classification

For a material, you can display fields in table MARA and text table MAKT in the classification system.

You cannot access the field values in other material tables in the classification system.

Finding Objects

The redundancy indicator is not set in the find object function. **Exception** The table A USP is not read for batches (MCHA or MCH1) rather the table MARA.



Other applications (for example, variant configuration, standard value determination, and process manufacturing) may have their own access strategies, allowing you to use additional tables.

Using Reference Characteristics

Use

In Classification

When you classify an object, reference characteristics are not usually available for entry, because the value is taken from the object table and displayed. This ensures that the characteristic values are consistent.

Exception

If a reference characteristic is used in a class and the reference is to another object type that is different than the current classified object then this object loses its status as a reference characteristic. This means that you can assign a value to the characteristic. You can also use the value you assign to find the classified object.



You use reference characteristic **BASIC_MATERIAL**, which refers to table MARA for material master data, in class type 002 for classifying equipment.
BASIC_MATERIAL no longer behaves like a reference characteristic.

When Finding Objects

Reference characteristics can also be used for finding objects. When you enter your search criteria, reference characteristics are available for entry. The values you enter are compared against the entries in the tables.

You can use reference characteristics that are not assigned to your class to find objects. By setting the indicator *Additional characteristics* you can display all the reference characteristics that were defined for the object type of the class type. You can use any of these reference characteristics to find objects.

In Variant Configuration

You can also use reference characteristics in variant configuration. You can use reference characteristics to change the content of fields that refer to master data. For more information, please refer to the R/3 Library under *LO Variant Configuration Guide*.

Creating Reference Characteristics

Creating Reference Characteristics

Procedure

When you create a reference characteristic, choose the *Additional data* tab page in characteristics. You do not have to maintain the tab page *Basic data* first for reference characteristics.

If you want to create a reference characteristic:

- You can create several reference characteristics that refer to one table field. However, we advise you to create only one reference characteristic for each table field.
- Once you have defined a reference to a table field, you can no longer delete the reference. For example, you cannot delete the reference to table field *Basic material* after you have saved the characteristic.

How to Create a Reference Characteristic:

1. Choose *Characteristics* in the classification menu. Enter a name for the reference characteristic and choose  *Create*.
2. You can define table references on the *Additional data* tab page.
3. Enter the name of the table that contains the field you want to refer to.
4. Enter the field in this table that you want to refer to. You can display a list of the fields in the table you entered and select one.
5. Confirm your entries.
6. The system copies the formatting data from the object master to the characteristic. Any basic data and allowed values you already entered are overwritten by this data.

You can change the characteristic description and the headings. You cannot change the data type or format of a reference characteristic.

Once you have created a reference characteristic, you can assign it to a class and use it to classify and find objects.



You can change the table and the field that references it as long as the reference characteristic is not in use.

Referring to Multiple Tables

If a table field is used in different tables, you can choose the arrow key next to the field name and enter other table references for a field. However, the field must have the same format in all the tables you enter.

Updating Changes to the R/3 Repository

Procedure

The data of the field to which the reference characteristic refers may be changed in the R/3 Repository at a later date. These changes are not automatically transferred to the reference characteristic.

Choose the pushbutton  on the tab page *Additional data* or the path *Extras* → *Other functions* → *refresh* to update the format entries of a reference characteristic.

The system copies the formatting data from the R/3 Repository (data dictionary) to the characteristic.



When you execute this function, any descriptions and values that you entered manually are overwritten.

Reporting Functions for Characteristics

Purpose

The classification system supports the following reporting functions for obtaining information on the characteristics you create:

- You can find information about characteristics in the classification menu *Environment* → *Value assignment* → [Characteristics list \[Page 61\]](#).
- For information on where values are used in classification, choose *Environment* → [Char. values list \[Page 62\]](#).
- Information on how to use characteristics can be found in Characteristics *Environment* → [Where-used list \[Page 63\]](#)
- Information about characteristics changes can be found in Characteristics under the menu *Environment* → [Change documents \[Page 64\]](#)
- For information on how characteristics have been processed with a change number, choose *Environment* → [Change overview \[Page 65\]](#).

Calling a Characteristic Directory

Use

To find information on characteristics, choose *Environment* → *Reporting* → *Characteristics* list in the class screen menu.

- You can produce a list for a specific range of characteristics.
- You can restrict the list by entering a characteristics group, a data type, a status, the user who created the characteristic, or the user who last changed the characteristic.
- You can define whether you see the characteristic description, the allowed values, the administrative data, and whether a characteristic is used in classes or other objects. You can also enter the language in which you want the descriptions displayed.
- You can enter a date for producing the list. The default is today's date.
- If you have processed a characteristic using change numbers with parameter effectivity, you can set the *Parameter effectivity* indicator. You see a dialog box where you enter the parameters used to define effectivity. The system determines the status of the characteristics that is effective for these parameters.

Procedure

To display a list of characteristics:

1. Enter the range of characteristics you want to see.
2. Enter the date for which you want to produce the list. If you do not enter a date, the list is produced for today's date.
3. Enter further selection criteria as required.
4. Select the scope of data you want to display.
5. Choose  *Execute*. You see a list of characteristics that match your selection criteria, with the information you require.

Calling Characteristic Directory

Calling Characteristic Directory

Use

This function produces a list of objects that have a specific characteristic value. For example, you may want to delete a value, but you are not allowed, because the value has already been assigned to objects.

Procedure

1. From the classification menu, choose *Environment* → *Reporting* → *Char. values list*.
2. Enter the characteristic to which the value belongs, and the value.

If allowed values are defined for the characteristic, you can display them.

You can enter the maximum number of hits. The default setting in the standard system is 10.

If there are more than the maximum number of hits, not all hits are displayed.

3. Choose  *Execute*.

Result

You see a list of all the objects that have your characteristic value.

If you have used engineering change management to classify an object, you see the effectivity type for parameter effectivity and the valid-from date for time effectivity.

You do not see the classes in which the objects are classified. To find the classes, choose *Environment* → *Reporting* → *Object list*, or *Assignment* → *Assign object to classes* from the classification menu.

Displaying a Where-Used List for Characteristics

Use

To see a list of objects, in which a characteristic is used, choose *Environment* → *Where-used list* from the initial screen for characteristics.

In the standard system, you can find out where characteristics are used in the following object types:

- Classes
- Dependencies
- Standard value calculation in task lists
- Process instructions and messages in process manufacturing

Procedure

To see where a characteristic is used:

1. On the initial screen of a characteristic, enter the name of a characteristic.
2. Choose *Environment* → *Where-used list*.
3. You see a dialog box, in which you select the object types you require. Choose *Continue*.

You see a list of objects of the selected object types in which the characteristic is used.

Displaying Change Documents

Displaying Change Documents

Use

In the R/3 System, changes made to a characteristic are stored in change documents. You can display these change documents at any time.

Procedure

1. To display changes to characteristics, choose *Environment* → *Change documents* from one of the tab pages of a characteristic.
2. You see a list of the change documents that have been generated for changes to your characteristic.

To see details of a change, select a line containing a change document.



Change documents are generated for changes that are made without engineering change management. You see information on the change, but you can no longer restore the status of the characteristic before the change.

Displaying a Change overview

Use

If you have processed a characteristic using engineering change management, you can display a list of the change numbers that have been used to change your characteristic.

Procedure

1. On the characteristic screen, enter the name of the characteristic for which you want to see a change overview.
2. To display a list of change numbers, choose *Environment* → *Change overview on one of the tab pages*.

You see a list of the change numbers that have been used to process your characteristic. If a change number has parameter effectivity, you see the effectivity type. If a change number has a *Valid-from* date, you see this date.

3. You can select a line and display details of the changes made with the change number.