

# Editor for Personnel Calculation Rules (PY-XX-TL)



**Release 4.6C**



## Copyright

© Copyright 2001 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft<sup>®</sup>, WINDOWS<sup>®</sup>, NT<sup>®</sup>, EXCEL<sup>®</sup>, Word<sup>®</sup>, PowerPoint<sup>®</sup> and SQL Server<sup>®</sup> are registered trademarks of Microsoft Corporation.

IBM<sup>®</sup>, DB2<sup>®</sup>, OS/2<sup>®</sup>, DB2/6000<sup>®</sup>, Parallel Sysplex<sup>®</sup>, MVS/ESA<sup>®</sup>, RS/6000<sup>®</sup>, AIX<sup>®</sup>, S/390<sup>®</sup>, AS/400<sup>®</sup>, OS/390<sup>®</sup>, and OS/400<sup>®</sup> are registered trademarks of IBM Corporation.

ORACLE<sup>®</sup> is a registered trademark of ORACLE Corporation.

INFORMIX<sup>®</sup>-OnLine for SAP and Informix<sup>®</sup> Dynamic Server<sup>™</sup> are registered trademarks of Informix Software Incorporated.

UNIX<sup>®</sup>, X/Open<sup>®</sup>, OSF/1<sup>®</sup>, and Motif<sup>®</sup> are registered trademarks of the Open Group.







HTML, DHTML, XML, XHTML are trademarks or registered trademarks of W3C<sup>®</sup>, World Wide Web Consortium, Massachusetts Institute of Technology.

JAVA<sup>®</sup> is a registered trademark of Sun Microsystems, Inc.

JAVASCRIPT<sup>®</sup> is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

SAP, SAP Logo, R/2, RIVA, R/3, ABAP, SAP ArchiveLink, SAP Business Workflow, WebFlow, SAP EarlyWatch, BAPI, SAPPHIRE, Management Cockpit, mySAP.com Logo and mySAP.com are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other products mentioned are trademarks or registered trademarks of their respective companies.

## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax
	Tip

## Contents

<b>Editor for Personnel Calculation Rules (PY-XX-TL)</b> .....	<b>6</b>
Personnel calculation rule .....	7
Example of a Personnel Calculation Rule.....	8
Modification Concept for Personnel Calculation Rules .....	9
Name Assignment for Standard and Customer Rules.....	10
Calling the Editor for Personnel Calculation Rules .....	12
Displaying the Rule Directory.....	13
Displaying a Where-Used List .....	14
Switching the Current Rule.....	15
Navigating Between Rule Elements.....	16
Graphical Display .....	17
Table Display.....	19
Personnel Calculation Rule Attributes .....	20
Displaying Attributes.....	21
Source Text of a Rule .....	22
Variable Key .....	23
Rule Type.....	24
Operation .....	25
Example of Rule Source Text .....	26
Displaying the Source Text of the Current Rule.....	28
Displaying the Navigation Path (Stack).....	29
Full Text Search in the Source Text.....	30
Comparing the Source Text of Two Rules .....	31
Printing the Displayed Rule Source Text .....	33
Documentation on a Personnel Calculation Rule .....	34
Displaying Documentation .....	35
Editing Rules .....	36
<b>Creating Rules .....</b>	<b>37</b>
Copying a Rule .....	38
Creating Attributes.....	39
Creating Rule Source Text .....	40
Creating Rule Documentation .....	41
<b>Changing Rules .....</b>	<b>42</b>
Changing the Attributes of the Current Rule .....	43
Changing Rule Source Text .....	44
Selecting Source Text Areas .....	45
Editing Source Text Areas.....	47
Creating a Source Text Node .....	48
Changing Lines in the Source Text.....	49
Changing the Source Text From the Rule Comparison .....	50
Checking and Saving Changes in the Source Text.....	51
Changing the Documentation of the Current Rule .....	52
<b>Deleting a Rule .....</b>	<b>53</b>

Transport Connection (Rules).....	54
Displaying a User's Transport Requests in the Rule Editor.....	55
Including a Rule in a Transport Request.....	56
Displaying Objects in a Transport Request.....	57
Deleting a Rule from Transport Request.....	58

## Editor for Personnel Calculation Rules (PY-XX-TL)

### Purpose

The personnel calculation rule editor is a tool for customizing the HR components *Payroll* and *Time Management*. The editor provides numerous functions that enable you to display and edit a [personnel calculation rule \[Page 7\]](#) (in short, **rule**).

### Integration

In addition to the editor for personnel calculation rules, the following additional tools are also available in the *Personnel Administration* component:

Required Function:	Tool
Edit a calculation schema	<a href="#">Editor for Personnel Calculation Schemas [Ext.]</a>
Edit a function or operation	<a href="#">Editor for Functions and Operations [Ext.]</a>
Delete a feature	<a href="#">Features Editor [Ext.]</a>
Edit the documentation	<a href="#">Internal Documentation Maintenance [Ext.]</a>

### Features

The rule editor enables you to

- Display and print rule directories
- Display, change, and print rule elements
- Navigate between rules and rule elements
- Create, copy, and delete rules
- Compare rule source texts
- Check the syntax of the schema source text
- Display, create, and change documentation for a schema
- Transport rules to different clients
- Access personnel calculation rules

You can display the source text in a [graphic \[Page 17\]](#) or [table display \[Page 19\]](#).

## Personnel calculation rule

### Definition

Statement for the execution of defined tasks in Time Management and Payroll. Personnel calculation rules (or **rules**) consist of one or more operations. They consist of statements for calculating values in the payroll run and define the sequence of these statements. Rules have a decision tree structure. A rule is called within a [personnel calculation schema \[Ext.\]](#) to process special subtasks.



If you are in a personnel calculation rule and want to create an overview of all operations, choose the *Maintain Functions and Operations* transaction (PE04), and then choose F4 on the *Name* field.

### Structure

Each step within a rule corresponds to one operation. Further rules can be accessed via special operations. These are known as **subrules**.

A rule can consist of several subareas. The subareas are defined for a specific combination of *employee subgroup groupings for personnel calculation rules* and *wage types* or *time wage types*. A subarea has the same attributes as the complete rule.



A subarea is not the same as a subrule.

A personnel calculation rule has the following elements:

- [Attributes \[Page 20\]](#)
- [Source text \[Page 22\]](#)
- [Documentation \[Page 34\]](#)

#### See also:

[Example of a Personnel Calculation Rule \[Page 8\]](#)

Example of a Personnel Calculation Rule

## Example of a Personnel Calculation Rule

The international calculation rule *Recurring Payments and Deductions and Supplementary Payments (X011)* reads the *Recurring Payments /Deductions (0014)* and *Supplementary Payments (0015)* infotypes. The rule places the wage types included in these infotypes in the wage type table (OT) for further processing.

**Source Text in Table Display: Personnel Calculation Rule X011**

	VarKey	NL	T	Operatio n	Operati on	Operatio n	Operation	Operati on	Operati on
00001 0				AMT=BETR G	NUM=ANZ HL	NEXTR			
00002 0		1	D	VAKZEI NH					
00003 0	***		D	VWTCL 47					
00004 0	*** *			OPIND	ADDWT *				
00005 0	*** A			OPIND	ADDWT *		FORCE BANK TRANSFER		
00006 0	*** Q			ELIMI *	ADDWTE *	ADDWT&MY 10			
00007 0	010		D	VWTCL 47				<DAYS>	
00008 0	010 *			OPIND	ADDWT *				
00009 0	012		D	VWTCL 47				<MONTHS >	
00010 0	012 *			OPIND	ADDWT *				



## Modification Concept for Personnel Calculation Rules

### Use

Personnel calculation rules are subdivided into **standard rules** and **customer rules**. Unlike personnel calculation schemas, there is also a name range for rules in the SAP standard client. All rules whose names begin with a special character & ( ) / : ; < > = or with the letter Z are customer rules. If a rule starts with a question mark (?), it is a standard rule. In the SAP standard-client, the system differentiates between standard and customer rules using the first character in the rule name. You should not create a rule under a name from the SAP name range.

The information on rules is stored in **client-specific** tables, irrespective of whether the rule is a standard rule or a customer rule. The corresponding table entries for the standard rules are automatically transported to the non-standard clients after a transport to the standard client. This means that a rule that exists in the standard client is always available in the current client. However, if you create or change a rule in the standard client, these changes are not automatically available in the non-standard client.

### Activities

- You can change rules in a non-standard client even if it is a rule from the SAP name range. In this case, the rule (of the same name) in the standard client remains unaffected by these changes. The system saves the changed rule as a customer rule.
- You can delete any rule, even if it is in the SAP name range. Before deleting a rule, make absolutely sure that the rule will not be used again. The [Where-Used-List \[Page 14\]](#) in the editor for personnel calculation rules is available for this purpose.

### See also:

[Name Assignment for Standard and Customer Rules \[Page 10\]](#)

[Name Assignment for Standard and Customer Schemas \[Ext.\]](#)

[Modification Concept for Personnel Calculation Schemas \[Ext.\]](#)

## Name Assignment for Standard and Customer Rules

### Use

You can create your own personnel calculation rules or change existing rules to adjust them to meet individual requirements. The assignment of names for standard and customer rules describes how you should call your newly created or changed rules.



If you give a rule a name that does not match the name of the standard rule, you must change the rule access point accordingly in the corresponding calculation schema.

### Name Assignment

Personnel calculation rules that **already exist** can, in principle, contain all available characters as part of their name. However, if you want to **newly create** rules, special characters are no longer permitted. Whether a rule name may contain a certain special character or not is only relevant if you want to create a new rule.

If you process a rule with a non-permitted special character in the name, the system shows a warning message. You do not need to change this name, however, we do recommend that, in the long term, you modify your schema names in line with the name assignment rules described here.

### Permitted and Non-Permitted Special Characters

You should bear the following in mind when assigning names:

- We recommend that you use the following characters at the start of the rule name if you newly create a rule or want to save a changed rule under a new name:
  - Round parentheses
  - The number 9
  - The letter z
- The special character ! You should **not** use % \$ \* + and # or any of the other special characters not listed here when you create a rule or want to save a changed rule under a new name:
- You can create a rule with a question mark (?) as part of the rule name. In any case, rules whose names contain a question mark are assigned to the SAP name range. For this reason, we recommend that you avoid using this character.
- It is technically possible to use the special characters & - / : ; < > and = when assigning names, however, we recommend that you do not use the characters.
- A space is only permitted at the end of the name.



---

**Calling the Editor for Personnel Calculation Rules**

## Calling the Editor for Personnel Calculation Rules

### Procedure

You can call up the editor for personnel calculation rules as follows:

- From the *SAP Easy Access* screen, choose *Human Resources* → *Payroll* → <country> → *Tools* → *Customizing Tools* → *Calculation Rule*.
- From the *SAP Easy Access* screen, choose *Human Resources* → *Time Management* → *Administration* → *Tools* → *Maintain Personnel Calculation Rules*.

The *Personnel Calculation Rules: Initial Screen* appears (in short, **initial screen**).

## Displaying the Rule Directory

You can search for rules in the system using specific criteria. You can then display the search results in a list, the rule directory.


### Prerequisites

You are in the [initial screen of the rule editor \[Page 12\]](#).

### Procedure


1. Choose .

You access the *Directory of Personnel Calculation Rules* screen. The selection criteria available for the rule directory correspond to the [attributes \[Page 20\]](#) for a personnel calculation rule. It also contains the *Version* fields, in which you can enter selection criteria regarding the standard and customer schemas.


2. Enter the selection criteria and choose .

### Result

You see a list of rules that meet your selection criteria. Each entry includes the name, version type, and short text of the rule. If you want to edit or display a particular rule from this list in the rule editor, select the entry for the required schema and choose *Edit* → *Choose*.

To print out the displayed rule directory, choose . You access the *Print Screen List* screen. If necessary, change the displayed default settings.

To display the attributes for the selected rules, choose *Attributes* on the *Calculation Rule Directory* screen.

To print the displayed attributes for one or more rules, choose  from the rule directory. From the *Print Screen List* screen, you can change the default settings if necessary:



You can only print rule attributes from the rule directory.

## Displaying a Where-Used List

# Displaying a Where-Used List



## Use

The where-used list enables you to check which schemas, subschemas, rules, or subrules a particular rule is used in.

## Prerequisites

You are in the [initial screen of the rule editor \[Page 12\]](#).

## Procedure

1. In the *Rule* field, enter the name of the required rule and choose .  
The *Where-Used List* dialog box appears.
2. Specify where the system should look for an occurrence of the rule.
  - SAP standard schemas
  - Customer schemas
  - SAP standard rules
  - Customer rules
3. Choose .  
The *Use of Rule* <current rule> *in* <search area> dialog box appears.

## Result

The system displays a table showing the lines of the corresponding schemas or rules in which the rule is used. To access the display function for the schema or rule source text, double click a line.

## Switching the Current Rule

### Use

You can switch from the attributes or source text of the current schema to any main rule or subrule that you require.

### Prerequisites

You are working with one of the following editor functions:

- [Display function for attributes \[Page 21\]](#)
- [Change function for attributes \[Page 43\]](#)
- [Display function for source text \[Page 28\]](#)
- [Change function for source text \[Page 44\]](#)

### Procedure

1. Choose *Rule* → *Different rule*.  
You access the *Other pers. calc. rule* dialog box.
2. In the *Rule* field, enter the name of the required rule and choose *Continue*.  
The specified rule is shown in the editor function that you were using at the start of this step.

---

## Navigating Between Rule Elements

# Navigating Between Rule Elements

## Use

In the rule editor, you can switch between the three rule elements (attribute, source text, or documentation) for the current rule at any time. This is only valid when displaying tables.

## Prerequisites

You are working with one of the following editor functions:

- [Display function for source text \[Page 28\]](#)
- [Change function for source text \[Page 44\]](#)
- [Display function for attributes \[Page 21\]](#)

## Procedure

Choose *Goto* → <rule element>.

## Result

This accesses the same editor function as the one in which you started, except that you are now working with a different rule element.



## Graphical Display

### Use

In the graphical display, the structure of a rule is displayed as a tree structure (structural graphics). You can use the graphical display in both the display and change functions for source text.

### Scope of Functions

#### Source text levels

The graphical display shows the source text for a rule as a node in the tree. In a personnel calculation rule, the individual nodes represent different source text elements depending on which level they are found.

- Level 1: Personnel calculation rule
- Level 2: Employee subgroup grouping for personnel calculation rule
- Level 3: Wage type
- Level 4: Operation
- Level 5: Variable key and its refinements

#### Source text display

The source text elements have unique colors. To display the meaning of the colors, choose *Utilities* → *Color legend*. Decision operations are represented by different colors than the other operations.

The source text can be shown in two layout forms in the graphical display. These two layout forms differ in the size of the intervals between the individual nodes. You can switch between a display with wide or narrow intervals. Choose *Utilities* → *Switch layout*.

#### Comments in the source text

Rules have different source text comments that can be shown or hidden in the [display function \[Page 28\]](#) or [change function for source text \[Page 44\]](#). To display the different options, choose *Utilities* → *Display options*.

- You can choose *Display description of operation*. The short texts for the operation are displayed. These are defined when an operation is created and are automatically available when an operation is inserted into rule source text.
- You can choose *Display user-specific comments*. This option displays the short texts that are entered by the creator or the person changing a rule. This person can comment on the operation access in the source text.

---

**Graphical Display****Additional special editor functions in the graphical display**

The following editor functions are only available if you have chosen the graphical display to display or change the source text:

[Full text search in source text \[Page 30\]](#)

[Select source text areas \[Page 45\]](#)

[Editing Source Text Areas \[Page 47\]](#)

## Table Display

### Use

In the table display, you can edit the source text for a rule using a sequence of line and editor commands. For example, you can use these commands to execute the following editor functions for the source text:

- Copy a specific line area
- Search and replace a character string
- Syntax check for source text

### Features

#### Source text display

The table display shows the source text for a specific combination of the *Employee subgroup grouping* and *Wage type* attributes. If you want to display a different combination, you can specify this under *Other selection/new record*. The table display shows the operations belonging to this combination as well as the variable key and accompanying refinements.

#### Special functions in the table display

The following editor functions are only available if you have chosen the table display to display or change the source text:

[Compare source text \[Page 31\]](#)

[Print attributes \[Page 33\]](#)

---

**Personnel Calculation Rule Attributes**

## Personnel Calculation Rule Attributes

### Definition

Rule attributes determine where and how the rule is used in the system.

### Structure

#### Modifiable attributes

When you create a personnel calculation rule, you must maintain the following attributes:

- Short text to describe the rule
- Program class
  - With the *Program class* attribute, you specify whether the rule is used in Payroll (c) or in Time Management (T).
- Country grouping
  - With the *Country grouping* attribute, you specify the country assignment for the rule. If you use country grouping \*, the rule is assigned to all countries. It is only possible to assign a rule to a particular country if it has the program class Payroll. For rules with the Time Management program class, you can only assign the country grouping *All countries*.
  - The assignment of the country grouping also effects how the options and their accompanying parameters are used. You can only use the options and parameters that are permitted for this country grouping.
- Person responsible for the rule
- Change authorization for the rule
  - With the *Changes only by person responsible* attribute, you specify whether the rule can only be changed by the person(s) responsible.

You can change these attributes at any time.

#### Administrative information

When you create a rule, the system also creates the following administrative data:

- The date on which the rule was created
- Last person to change rule
- Date on and time at which the last change was made

## Displaying Attributes


### Use

You can use the rule editor to display or change the attributes for both the current rule and for other rules.


### Procedure

#### Attributes of Current Rule

There are different procedures, depending on the editor function you have accessed:

- From the [initial screen of the rule editor \[Page 12\]](#)
  - a. In the *Rule* field, enter the name of the rule you require.
  - b. In the *Subobjects* group box, select *Attributes*.
  - c. Choose  *Display*.
- From the [display function for source text \[Page 28\]](#)

Choose *Goto* → *Attributes*.
- From the [change function for attributes \[Page 43\]](#)


Choose .

Irrespective of the procedure that you choose, you access the *Display Rule: Attributes* screen.

#### Attributes of Other Rules

##### In the [rule directory \[Page 13\]](#)

Choose *Attributes*.

The attributes for all rules in the directory are displayed. To print the displayed attributes for one or more rules, choose  from the rule directory. From the *Print Screen List* screen, you can change the default settings if necessary:



You can only print rule attributes from the rule directory.

---

**Source Text of a Rule**

## Source Text of a Rule

### Definition

The source text for a rule consists of operations that perform specific tasks and send the results back to the schema that called up the rule.

### Structure

#### Source text levels

The separate elements in the source text for a personnel calculation rule are assigned to different levels:

- Personnel calculation rule  
Characterizes a special subtask in payroll. All possible outcomes are represented.
- Employee subgroup grouping for personnel calculation rule  
Used to group employees according to the process flow of the payroll programs. The same source text is processed for employees who are assigned to the same group.
- Wage/time type  
This key defines the wage or time type for which a rule is executed, depending on the employee subgroup grouping for the personnel calculation rule. The employee subgroup grouping for personnel calculation rules and the wage/time type together form the subarea for a rule.
- [Operation \[Page 25\]](#)  
Specific commands and statements within a rule. They are the individual steps in a rule.
- [Variable key \[Page 23\]](#) and its refinements.  
If an operation is marked as a decision operation with rule type D in field T ([rule type \[Page 24\]](#)), the possible specifications of this decision operation are shown here.

### Subsequent lines

In this field of the source text, you can specify that a line is evaluated as a subsequent line. If an operation or comment is continued from a previous line, the sequence of the subsequent lines is defined in column NL. This only applies to the table display for the source text.

## Variable Key

### Definition

Used to create the decision tree. The variable key is used to define decision operations. Decision operations are marked in the table display with rule type D in column T (rule type).

### Use

In the operation field, you define the decision operation that you want to query. In the next line, you then enter the required specification for the decision operation in the *VarKey* column. (Variable key). In addition to the explicit specifications, you can also enter an asterisk (\*) for all specifications that are unequal to the specifications already entered.

## Rule Type

# Rule Type

## Definition

Defines the type of processing to be carried out. If no rule type is specified, the operations are carried out sequentially.

## Structure

The following rule types are available:

- Rule type D  
Rule type D is followed by a decision operation. The result of the decision operation is placed in the variable key.
- Rule type S  
Rule type S is followed by a decision operation. The result of the decision operation is stored in table ES and not in the variable key.
- Rule type P  
Rule type P is followed by an operation which carries out a further rule. If this next calculation rule is processed, a return occurs and the next operation is processed.
- Rule type Z  
Rule type Z is followed by an operation which carries out a further rule. No return occurs after this additional calculation rule is executed.
- Rule type \*  
Rule type \* is followed by a comment line.



## Operation

### Definition

Smallest element of a calculation rule.

### Structure

Several operations can form a rule. Each operation can be up to ten characters long and, in the table display, it begins directly under the addition sign (+) in the header for the source text. If an asterisk (\*) is entered in the last field of the source text line, the sequence of operations is extended to the next line.

Operation GCY calls a subrule, in other words, another rule.

### See also:

[Editor for Functions and Operations \[Ext.\]](#)

Example of Rule Source Text

## Example of Rule Source Text

Each workday an employee works one hour longer than specified in the collective agreement. For each paid work day that he is present he receives one hour as time credit. This time credit is placed in the *compensation time* time type. To reproduce this in a rule, use the following operations:

- VARST
 

This operation is only used as a decision operation. General status fields can be queried (values from tables, infotypes, weekday data, and so on) or placed in the *Variable key* in the rule.
- HRS
 

Operation HRS allows you to edit a field containing the number of hours from table TIP. A particular value can be placed in the number of hours field and/or values from tables, infotypes, the results from the SALDO table, or the results from TES can be retrieved. The operation HRS can be used as a decision operation and can also introduce an action.
- ADDDB
 

Operation ADDDB introduces an action. It cumulates the value from the number of hours field in the specified time type in the TES table (daily balances)



All possible outcomes for an operation must always be considered. Errors can occur if the decision tree is not created correctly!

Var. Key	NL	T	Operation	Operation	Legend
		D	VARSTFREE		Decision operation: Is the daily work schedule for the day/employee to be evaluated OFF ?
N		D	VARSTPRSNT		The daily work schedule is not OFF. Decision operation: Is the employee present?
N	Y	D	VARSTDAYTY		The daily work schedule is not OFF. The employee is present. Decision operation: Which day type is the day to be evaluated ?
N	Y *		HRS=1.00	ADDDDB2000	The operation HRS retrieves one hour. The hour retrieved by HRS is added via the operation ADDDB in time type 2000.  The daily work schedule is not OFF. The employee is present. The day type is either 0 or BLANK (work/paid) or 3 (off/special day).



Example of Rule Source Text

N	Y 1				The daily work schedule is not OFF. The employee is present. The day to be evaluated has the day type 1 (off/paid). Since the employee does not have to work on days of this type, no time is credited. No processing takes place.
N	Y 2				The daily work schedule is not OFF. The employee is present. The day to be evaluated has the day type 2 (off/unpaid). Since the employee does not have to work on days of this type, no time is credited. No processing takes place.
N	N				The daily work schedule is not OFF. The employee is not present. He/she receives no time credit.
Y					The daily work schedule is OFF. This is not a workday for the employee. He/she receives no time credit.

## Displaying the Source Text of the Current Rule


# Displaying the Source Text of the Current Rule

## Use

You can display the source text of a rule in a graphic or tabular display. To display the source text as a graphic, choose . To display the source text as a table, choose .

## Procedure

Depending on the situation, you can proceed as follows:

- From the [initial screen of the rule editor \[Page 12\]](#)
  - a. In the *Rule* field, enter the name of the required personnel calculation rule.
  - b. In the *Subobjects* group box, select *Source text*.
  - c. Choose  *Display*.
- From the [display function for attributes \[Page 21\]](#)
  - Choose *Goto* → *Source text*.

## Result

The source text is displayed according to the display type that you have chosen, or that you used before.

- If you have chosen the **table display** or were previously in the table display:
  - The *Display Rule: <current rule>* screen appears.
  - To display the source text of subrules for the current rule, select the required subrule and choose *Edit* → *Choose object*.
- If you have chosen the **structural graphics display** or were previously in the structural graphics display:
  - The *Display Rule: <current rule>* screen appears.
  - To display the source text of subrules for the current rule, select the required subrule and choose *Edit* → *Choose object*.

If you go to the subrule, the system displays a list showing the subrules that you have displayed since accessing the display or change function. You can retrace this **navigation path** using the [stack function \[Page 29\]](#).

## Displaying the Navigation Path (Stack)

### Use

A rule can consist of several subrules, which can in turn consist of other subrules. You can navigate through these different levels of the source text.

The *Stack* editor function lists the subrules that you have accessed since calling up the current rule. You can use the stack function in the graphical display and also in the table display.



If you switch from displaying graphics to displaying tables, the stack is deleted.

### Prerequisites

- You are already in the [display function \[Page 28\]](#) or [change function for source text \[Page 44\]](#).
- You have displayed the source text of a subrule once or more than once.

### Procedure

1. If you are in the table display, choose *Goto* → *Stack*. If you are in the graphical display, choose .

You access the *Navigation stack* dialog box. It contains a list of all rules that you have accessed. The first entry in the list is the object you last accessed.

2. Select an entry in the list and choose .

### Result

You access the source text of the selected object.

## Full Text Search in the Source Text

# Full Text Search in the Source Text

You can run a full text search on the source text of a rule to find a specific character string. The search direction is from top to bottom.


## Prerequisites

You are already using the [display function \[Page 28\]](#) or [change function for the source text \[Page 44\]](#) and have selected the [graphical display \[Page 17\]](#).


## Procedure

You can search in the following ways:

### First Find a Character String


1. Choose .

You access the *Find Node* dialog box

2. In the *Find* field, enter the required character string.
3. Select either *in the displayed hierarchy* or *in whole hierarchy*.
4. Choose  *Search*.

In the source text you see the first line in which the specified character string appears. It is highlighted.

### Continue Search

To search for the next occurrence of the character string, choose .

## Result

In the source text you see the next line containing the character string. It is highlighted.

## Comparing the Source Text of Two Rules


### Use

The comparison function enables you to compare the source texts of two rules. Differences can occur in the functions, in the parameters, and in the commented text. The rules are compared line by line. The comparison function displays all lines that differ from the current rule.

### Prerequisites

- You are already in the [display function \[Page 28\]](#) or [change function for source text \[Page 44\]](#). The rule displayed here is referred to as the **current rule** from now on. This rule is compared with a second rule (known as the **comparison rule**).
- You have selected the [table display \[Page 19\]](#).

### Procedure

1. Choose *Rule* → *Compare*.  
You access the *Compare* dialog box.
2. Enter the rule that you wish to compare with the current rule.
3. Select the required options. You can choose between the following comparison options:
  - *Compare comments*  
This option includes the line texts (comments) in the comparison.
  - *Display differences only*  
After the comparison, the system only displays the differences between the two rules. If you do not choose this function, both the differences and unchanged sections are displayed.
4. Choose .

### Result

You access the *Compare Rules* screen. You see the attributes and administrative data of both schemas as well as the results of the comparison. The results are shown under the following headers:

- *Content unchanged:*  
If you do not flag *Display differences only*, the lines that are the same in both rules are displayed under this header.
- *Following lines were changed:*  
The lines from the current rule and comparison rule that show differences are listed under each other.
- *Following lines were added:*

### Comparing the Source Text of Two Rules

If the current rule contains lines that do not exist in the comparison rule, they are displayed under this header.

- *Following lines were deleted:*

If the comparison rule contains lines that do not exist in the current rule, they are displayed under this header.



If you have called this comparison function from the change function for source text, you can change the source text of the current schema directly from the *Comparison of Schemas* screen. For more information, see [Changing the Source Text from the Rule Comparison Function \[Page 50\]](#).



## Printing the Displayed Rule Source Text

You can print displayed source text. If you also want to print the source text for a subarea, you must specify this.


### Prerequisites

You are in the [display function \[Page 28\]](#) or [change function for source text \[Page 44\]](#) .



### Procedure

The type of procedure depends on the type of display.

#### From the Graphical Display

1. Use the display functions in the [graphical display \[Page 17\]](#) to give the source text the format that you require.
2. Choose .  
You access the *Print Screen List* screen.
3. If necessary, change the settings so they meet your requirements.
4. Choose *Continue*.

#### From the Table Display

1. Choose .  
You access the *Print Rule* screen. You can see the source text with comments for all subareas belonging to the current rule.
2. If necessary, choose *Edit* → *Compressed display*.  
The source text is moved a few characters to the right.
3. Choose .  
You access the *Print Screen List* screen.
4. If necessary, change the settings so they meet your requirements.
5. Choose *Continue*.

### Result

The source text of the current rule is output to the specified printer.

## Documentation on a Personnel Calculation Rule

### Definition

Additional information on a rule and the individual elements in a rule.

### Use

Each standard SAP rule has documentation. Documentation also exists on operations and their parameters.


If you copy or change rules, you should adapt the copied documentation so that it reflects the changes you have made. If you create new rules, you should also create new documentation.

You can either create, change, or print documentation.

## Displaying Documentation

### Procedure

There are different procedures for calling up the documentation function and displaying or changing the documentation on the current rule, depending on which editor function you are using:

- From the [initial screen of the rule editor \[Page 12\]](#)
  - a. In the *Rule* field, enter the name of the required rule.
  - b. In the *Subobjects* group box, select *Documentation*.
  - c. Choose  *Display*.
- In the [display function for attributes \[Page 21\]](#) or the [display function for source text \[Page 28\]](#)

Choose *Goto* → *Documentation*.
- In the [rule directory \[Page 13\]](#)
  - a. Select the required entry in the directory.
  - b. Choose *Documentation*.

### Result

Irrespective of the procedure you choose, you access the *Documentation* <current rule> screen, which contains the documentation of the current or selected rule.

---

**Editing Rules**

## Editing Rules

### Use

You can copy the standard SAP rules to a customer rule and then make any required modifications. If you have written your own rules, you can change these as required.

If there is no point in copying an existing rule and then changing it to meet your requirements, you can create a new rule instead. See the notes on [the assignment of names for standard and customer rules \[Page 10\]](#).

### Activities

- You can change the attributes, source text, and documentation of a rule.
- The system can check the changed attribute or source text for errors in the content or in the syntax.
- If you do not have an automatic transport connection to your live clients, write the rule to a [transport request \[Page 56\]](#).



You should take extreme care when changing personnel calculation rules. Do not make any changes to the standard calculation rules delivered by SAP. There is one exception: you can make changes to personnel calculation rules if the rule is incorrect and SAP has given guidelines on how to modify the rule to remove the error.

## Creating Rules

### Use

We recommend that you create a new rule by copying an existing rule. This ensures that all rule elements are also copied. However, if there is no point in copying an existing rule and then changing it to meet your requirements, you can create a new rule instead.

### Prerequisites

A rule can only be created under a particular name if no standard rule already exists with this name. When creating a new rule, see the notes on [the assignment of names for standard rules and customer rules \[Page 10\]](#).

### Activities

Perform the following steps in the specified order:

1. [Create the rule attributes \[Page 39\]](#)
2. [Create the source text for the rule \[Page 40\]](#)
3. [Create documentation for the rule \[Page 41\]](#)

If you do not have an automatic transport connection to your live clients, write the rule to a transport request. For more information, see [Transport Connection \(Rules\) \[Page 54\]](#).

## Copying a Rule

# Copying a Rule

## Use

We recommend that you create a new rule by copying an existing rule. The attributes, source text, and documentation of the original rule are copied. The original schema and copied schema are identical apart from the **administration information**.




If changes made in your customizing client are not written automatically to a transport, note that you must include the copied rule in a transport request.

## Prerequisites

You are in the [initial screen of the rule editor \[Page 12\]](#).

## Procedure

1. In the *Rule* field, enter the name of the required rule.
2. Choose .

You access the *Copy* dialog box. The rule that you have entered is displayed in the *From* and *To* fields.

3. In the *To* field, enter the name of the rule to which you want to copy.



If you enter a changed name for the copied rule, see the notes on [the assignment of names for standard and customer rules \[Page 10\]](#).

4. Choose .

The status line now contains a system message stating the results of the copy procedure.

## Result


A new rule now exists. The attributes, source text, and documentation of this rule are identical to the template.

## Creating Attributes

### Prerequisites

You are in the [initial screen of the rule editor \[Page 12\]](#).

### Procedure

1. In the *Rule* field, enter the name of the new rule.  
Enter a name from the customer name range. See the notes on [the assignment of names for standard and customer rules \[Page 10\]](#).
2. Choose  Create.  
You access the *Edit Rule: Attributes* screen.
3. Make the required entries and save your entries.  
The system automatically sets the administrative data. Both dates are the same since you are saving the schema for the first time.

### Result

You edit the rule attributes.

---


## Creating Rule Source Text

# Creating Rule Source Text

## Prerequisites

You have already created the attributes for a rule and are in the [initial screen of the rule editor \[Page 12\]](#).

## Procedure

1. In the *Rule* field, enter the name of the required rule.
2. In the *Subobjects* group box, select *Source text*.
3. If you want to create the source text of a subarea, enter the corresponding values in the *Grpg* fields in the *Subobjects* box. *Employee subgroup* and *Wage/time type*.
4. Choose  *Change*.  
The *Edit Rule: <current rule>* screen appears.
5. Enter the required source text.  
Different editing functions are available, depending on whether you are working with the [graphic display \[Page 17\]](#) or with the [table display \[Page 19\]](#).
6. [Check and save \[Page 51\]](#) the source text.

## Result

You have created the source text for a rule.




## Creating Rule Documentation

### Prerequisites

- You have created a new rule by choosing *Create* and not by choosing *Copy*. No documentation exists.
- You have already created and saved the attributes for the rule in question.
- You are in the [initial screen of the rule editor \[Page 12\]](#).

### Procedure

1. Enter the name of the new rule to be documented.
2. In the *Subobjects* group, select *Documentation*. Choose  *Change*.
3. Enter the documentation for the rule.
4. Save your entries.

The system automatically writes the documentation to a transport request.

### Result

The rule documentation is created.

## Changing Rules

# Changing Rules

## Use

The standard system contains a number of rules that you can modify in one of your customer clients. The modified version of a rule is the version with which you actually work.



If a customer rule exists with the same name as a standard rule and you display or change this schema in the customer client, you only access the modified version. The standard rule with the same name is not affected by any changes you make. For more information, refer to the [modification concept for personnel calculation rules \[Page 9\]](#) and [assigning names for standard and customer rules \[Page 10\]](#)

## Activities

You can change the attributes, source text, and documentation of a schema. Note that you must always check the changed attribute or source text for errors in the content or in the syntax. For more information, see [checking and saving changes to the source text \[Page 51\]](#).

The schema editor includes the following change functions:

[Change function for attributes \[Page 43\]](#)

[Change function for source text \[Page 44\]](#)

[Change function for documentation \[Page 52\]](#)

## Changing the Attributes of the Current Rule



### Use

You can use the rule editor to change the attributes of the current rule. If necessary, the administration information is automatically updated.

### Prerequisites

You are authorized to change the rule.

### Procedure

1. Depending on which editor function you are using, there are different procedures for calling up the change function for attributes:
  - If you are in the [initial screen of the rule editor \[Page 12\]](#), proceed as follows:
    - i. In the *Rule* field, enter the name of the required personnel calculation rule.
    - ii. In the *Subobjects* group box, select *Attributes*.
    - iii. Choose  *Change*.
  - If you are in the [change function for source text \[Page 44\]](#), choose *Goto* → *Attributes*.
  - If you are in the [display function for attributes \[Page 21\]](#), choose .Irrespective of the procedure that you choose, you access the *Edit Rule: Attributes* screen.
2. Make the required changes to the rule attributes.
3. Save the modified attributes.

### Result


The date, time, and user ID under the *Last change by* header are modified.

---


## Changing Rule Source Text

# Changing Rule Source Text

## Procedure

1. There are different procedures for calling up the change function for attributes, depending on which editor function you are using:
  - From the [initial screen of the rule editor \[Page 12\]](#)
    - i. In the *Rule* field, enter the name of the required rule.
    - ii. In the *Subobjects* group, select *Source text*. Choose  *Change*.
  - From the [change function for attributes \[Page 43\]](#)

Choose *Goto* → *Source text*.
  - From the [display function for source text \[Page 28\]](#)

Choose .

Irrespective of the procedure that you choose, you access the *Edit Personnel Calculation Rule: <current schema>* screen.
2. Change the source text of the current rule.

Different editing functions are available, depending on whether you are working with the [graphic display \[Page 17\]](#) or with the [table display \[Page 19\]](#).
3. Save the source text.

## Result

You have changed the source text for the rule.

## Selecting Source Text Areas

You can select a source text area to

- Copy
- Cut
- Paste
- Move
- Delete

### Prerequisites

You are already using the [change function for source text \[Page 44\]](#) and have selected the [graphical display \[Page 17\]](#).

### Procedure

You can select several source text areas as follows:

#### Node

1. Place the cursor on the required node.
2. Choose *Edit* → *Select* → *Select nodes +/-*.

The selected node is highlighted.



You can reverse the action by repeating the step.

#### Subtree

1. Place the cursor on the node you wish to select with all lines and nodes lower in the hierarchy.
2. Choose *Edit* → *Select* → *Select/deselect subtree*.

The selected subtree is highlighted.



You can reverse the action by repeating the step.

#### Block

1. Place the cursor on the first line of the required block.
2. Choose *Edit* → *Select* → *Select block*  
The selected line is highlighted.
3. Place the cursor on the last line of the required block.
4. Choose *Edit* → *Select* → *Select block*

### Selecting Source Text Areas

All lines between the start of the block and the end of the block are highlighted. This means that they are all selected.

### See also:

[Editing Source Text Areas \[Page 47\]](#)

## Editing Source Text Areas

### Use

You can select a source text area in the graphical display of the rule editor. Data is sent to the buffer via the actions *Copy source text area* or *Cut source text area*. You can then insert the contents of the buffer at any point with the step *Insert source text area*. Each new action overwrites the old content of the buffer.

### Prerequisites

- You are in the [change function for source text \[Page 44\]](#).
- You have selected the [graphical display \[Page 17\]](#).
- You have [selected a source text area \[Page 45\]](#).

### Procedure

Function	Menu Path	What you should know
Copy a source text area	<i>Edit → Copy to buffer.</i>	The selected source text area is stored in an temporary buffer.
Cut a source text area	<i>Edit → Cut</i>	The selected source text area is removed from the source text and stored in a temporary buffer.
Paste a source text area	<i>Edit → Paste</i>	To paste a source text area, you must first copy or cut the source text. Select the line under which you want to paste the copied or cut source text.
Move a source text area	<i>Edit → Reassign</i>	Select the line under which you want to move the selected source text area.
Delete a source text area	<i>Edit → Delete</i>	The deleted source text area is <b>not</b> stored in an temporary buffer.
Display the buffer	Utilities → Display buffer	The source text you have previously copied or cut is displayed in the buffer.

---




**Creating a Source Text Node**

## Creating a Source Text Node

### Prerequisites

You are using the [change function for source text \[Page 44\]](#) and have selected the graphical display.

### Procedure

1. Select the nodes for which you want to create new source text.
2. Choose .  
Depending on the node level, you access a dialog box, whose title informs you which type of source text element you can insert at this point.
3. In the dialog box input field, enter the required source text. Choose .  
You see the newly created source text.
4. Choose .



## Changing Lines in the Source Text

### Prerequisites


You are using the [change function for source text \[Page 44\]](#) and have selected the [graphical display \[Page 17\]](#).

### Procedure

1. Select the required line.

2. Choose .

You access the *Maintain Pers. Calc. Rule* screen. The current entry appears in the input field.

3. Change the entry in the input field if required. Choose .

If the entry is syntactically correct, the change will appear in the source text. Otherwise, an error message will appear in the status bar.

4. Choose .

You have changed a line in the source text.

---

## Changing the Source Text From the Rule Comparison

# Changing the Source Text From the Rule Comparison

## Use


When you use the compare function to compare a rule you have created or changed against another rule, you can use the change function to copy changes from the comparison rule to your displayed rule.

This editor function is particularly useful if you want to compare your customer rule with a standard rule. In this way, you can keep track of changes you have made to a rule.

## Prerequisites

- You have called the [comparison function \[Page 31\]](#) from the change function for source text.
- You have compared the rule to be modified with a comparison schema and are in the *Compare Rules* screen.

## Procedure

1. In the result of the comparison on the *Compare Rules* screen, the administrative data for both rules is displayed along with information under the following headers:
  - *The following lines were changed:*
  - *The following lines were added:*
  - *The following lines were deleted:*
2. Select the lines for which you want to copy changes from the comparison rule. To select all lines that have been changed in comparison to the other rule, choose .
3. Choose *Perform adjustment*.

## Result

The selected changes are carried out. The lines for which you want to copy changes from the comparison rule are changed.

## Checking and Saving Changes in the Source Text

### Use



If you have changed or created a rule, there are different ways of checking and saving the changes.

The rule editor includes a check function for the syntax of operation names and their keys. In the table display, this is the only syntax check function. The system does not check whether the accessed subrules exist.

### Prerequisites

You are in the [change function for source text \[Page 44\]](#).

### Procedure

1. You can check or save a rule as follows:
  - If you want the changed rule to be checked and then saved, choose .
  - If you only want the changed rule to be checked, choose .
  - If you do not want a syntax check to be performed, choose *Rule* → *Save without check*.  
The result of the check is displayed in the status bar. If an error occurs, the check program is canceled, and the point within the source text that contains the error is highlighted.
2. If errors occur, correct them.
3. If an error has occurred, go back to step 1 and repeat the check.
4. When the syntax check does not identify any more errors, save your entries.

### Result

The source text of the rule is now syntactically correct.

---


**Changing the Documentation of the Current Rule**


## Changing the Documentation of the Current Rule

### Use

If you have copied a rule and changed the source text, you can modify the documentation for the current rule.

### Procedure

1. Depending on which editor function you are using, there are different procedures for calling up the change function for attributes:
  - If you are in the [initial screen of the rule editor \[Page 12\]](#), proceed as follows:
    - i. In the *Rule* field, enter the name of the required calculation rule.
    - ii. In the *Subobjects* group box, select *Documentation*.
    - iii. Choose  *Change*.
  - If you are in the [change function for attributes \[Page 43\]](#) or the [change function for source text \[Page 44\]](#), choose *Goto* → *Documentation*.

The *Change Docu: <current rule>* screen appears.
2. Change the existing documentation and choose .

### Result

You have changed the documentation for the current rule.

## Deleting a Rule



You should exercise extreme caution when deleting a rule. Make absolutely sure that the rule will not be used again. Make absolutely sure that the schema will not be used again.


### Use

It is not possible to delete the attributes, source text, or documentation for a rule separately. You can only delete the complete rule.

### Prerequisites

You are in the [initial screen of the rule editor \[Page 12\]](#).

### Procedure

1. In the *Rule* field, enter the name of the required rule.
2. Choose .

You access the *Delete* dialog box. The *Rule* field contains the rule that you specified.

3. Choose .

The result of the action is displayed in the status bar.

### Result

The source text, attributes, and documentation for the rule are deleted.



Any rule can be deleted, even if it is in the SAP name range.

---

**Transport Connection (Rules)**

## Transport Connection (Rules)

All changes you make to a calculation rule must be transported from your Customizing client into the other clients for your SAP System. If your Customizing client has been set up accordingly, the system can automatically include all changes in a transport request. If this is not the case, you must include each rule that you have changed in a transport request to ensure they are transported.



For more information on setting up the transport system and transport requests, refer to the SAP Library under [Transport Organizer \[Ext.\]](#).

## Displaying a User's Transport Requests in the Rule Editor

### Use

You can display an overview of the transport requests available for your user.

### Prerequisites

You are in the change function or display function for source text.

### Procedure

Choose *Utilities* → *Change requests (Organizer)*.

### Result

You access the *Transport Organizer: Requests* screen. All current transport requests are displayed for your user.

## Including a Rule in a Transport Request

### Including a Rule in a Transport Request

If you have changed a rule or created a new rule in the Customizing client, you can use the rule editor to set up the transport to the live client.



Please note that the transport is not complete until you have released the transport request.

### Prerequisites

You are in the change function for source text.

### Procedure

1. Choose *Rule* → *Transport* → *Include in request*.  
The *Prompt for Customizing Request* dialog box is displayed.
2. Specify the transport request. You have several options:
  - If a transport request exists for the user name with which you logged onto the system, the appropriate entry is displayed in the *Request* field.
  - If there is more than one transport request for your user name choose the one that you require.
  - If no transport request exists, choose .
3. Choose .

### Result

The rule is included in the specified transport request.



## Displaying Objects in a Transport Request

You can use the rule editor to display the objects assigned to a transport request.

### Prerequisites

You are in the change function or display function for source text.

### Procedure

1. Choose *Rule* → *Transport* → *Display request*.

You access the *Prompt for Customizing Request* dialog box.

2. If a transport request exists for the user ID with which you logged onto the system, the appropriate key is displayed in the *Request* field.

3. Choose .

You access the *Display Entries Broken Down in TLOGO* screen.



If the above screen does not appear, the transport request contains no objects to be transported.

### Result

The displayed list contains all of the objects that you included in the transport request. For more information, choose *Goto*.

---


## Deleting a Rule from Transport Request

# Deleting a Rule from Transport Request

## Prerequisites

You are in the change function for source text and are authorized to delete a rule from the transport request.

## Procedure

1. Choose *Rule* → *Transport* → *Delete from request*.  
The *Prompt for Transportable Change Request* dialog box is displayed.
2. If a transport request exists for the user ID with which you logged onto the system, the appropriate key is displayed in the *Request* field.
3. Choose .
4. Confirm by choosing *Yes*.

## Result

You have deleted the current rule from the transport request.