Selection/Formula Properties: Enhancements

ADDON.NDBWRE

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Copyright

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Typographic Conventions

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options. Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.
`EXAMPLE TEXT`	Keys on the keyboard, for example, function keys (such as `F2`) or the `ENTER` key.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Please note: New sections in the documentation are highlighted in red.

The enhancements of the function *Hiding* are also available in the Ad-hoc Query Designer.

Selection/Formula Properties

Use

In the dialog box *Selection/Formula Properties* for a structural component, you can set a range of functions. This setting is valid for the structural component, irrespective of whether the structural component is in the rows or columns.

Features

Technical Name

You can enter a technical name for the structural component. However, this is optional.

Note that the technical name must be unique across all queries.

Access from external interfaces (such as Crystal Reports, from URLs or using OLE DB for OLAP), a technical name is necessary for structural components, since the structural component is considered a table field and has to be uniquely accessible. If you do not enter a technical name, the unique ID (UID) is used for access from external interfaces for uniquely identifying the structural component. However, the UID has 25 characters, which can lead to problems when you change queries.

You can change the technical name. When you do so, a warning appears that tells you that when you use the structural component in external interfaces, the references can be destroyed.

Description

The name of the key figure, the restricted key figure (selection) or the formula appears here automatically. You can change the description here.

In contrast to characteristics and attributes, structural components can contain several rows as the description.

The total number of all characters in all rows, including the line-end character is restricted to 60 characters.

You can use Text Variables [Extern] in the description.

Layout

Highlighting

Here you can choose whether you want to highlight the selection or formula. The type of highlighting depends on the style used in the BEx Analyzer or in the Web application.

Hiding

Here you can adopt the following settings to hide the selection or formula:

- If you choose *Always Show* then the selection or formula is always visible.
- If you chose *Hide (can be shown)* then the selection or formula is hidden in the report executed, but can be shown there again in future.

  This setting is useful for displaying only the necessary information in the start view of the report. You can show additional details if required.

  You can show the selection or formula in the report executed in the following ways:

  - in Web applications under Select Filter Value [Extern]
  - in the BEx Analyzer under Choosing Filter Values [Extern] and Changing Queries [Extern] (local view)
- If you choose *Always Hide*, the selection or formula is not displayed.

  You can use this setting for help columns that are not visible in the report executed and can also not be shown.

Selecting Constants

Moreover, you can mark a selection as constant here. This means that the selection cannot be changed by navigation or filtering for the runtime and can therefore be used as a reference size. For more information, see Selecting Constants [Extern].

Number Display

You can set a **scaling factor** of 1 to a billion. If, for example, you set 1,000, the value 3,000 is shown in the report as 3.

You can set the **number of decimal places**. The number can have either no decimal places or up to nine decimal places (0, 0.0, 0.00... to 0.000000000).

The standard settings for the scaling factor and the number of decimal places correspond to settings that you have made in the InfoObject maintenance under Tab Page: Additional Properties [Extern] Also see Priority Rule With Formatting Settings [Extern]

Select ***Reverse +/- Signs*** if you want to display the numbers as negative values. A positive number receives a minus as a sign (for example, 85 becomes –85) or a negative number receives a plus (for example, -38 becomes +38).

The reversal of plus and minus signs is purely a display function. If, for example, the key figure is added to a formula, it is calculated with its correct values.

See also:

Priority Rule With Formatting Settings [Extern]

Calculations

You use this function to recalculate the results rows and single values that are displayed in the query according to particular criteria.

Calculate Results As... [Extern]

Calculate Single Values As... [Extern]

Cumulated

You use this function to cumulate the individual cells in an area. The first value is added to the second value, the result is added to the third value, and so on. In the columns, the cells are cumulated from top to bottom, and in the rows, the cells are cumulated from left to right. With

blocks of single values, that is, a drilldown in both the rows and the columns, the values are cumulated from top to bottom and from left to right.

Be careful that cumulating only operates with characteristic values and not with the structural elements of a characteristic structure. The *Cumulated* function is only effective if you have a characteristic instead of a characteristic structure in the drilldown. However if you have two structures – the key figure structure and a characteristic structure – then you cumulate using cell-specific definitions. See Defining Exception Cells [Extern]

Calculation Direction

Default calculation directions are not always as expected. You can change the calculation direction as required:

- Use the default direction (from top to bottom and from left to right)
- Calculate along the rows (from top to bottom)
- Calculate along the columns (from left to right)

The *Calculate along the columns* setting is useful, for instance, for all queries for which a time dimension is drilled down in the columns, and a cumulated output is to be created. This is shown in the following example query:

Key Figure in Column

		Amount			
Region	**Bus.Year/Period**	May 1999	June 1999	September 1999	**Overall Result**
AUS/NRD	AUS/NRD			49.996,60 DM	**49.996,60 DM**
DE/BAW	Baden-Württemberg	561.176,72 DM	1.102.729,84 DM	1.102.729,84 DM	**1.102.729,84 DM**
DE/BAY	Bayern	529.412,00 DM	1.068.745,64 DM	1.068.745,64 DM	**1.068.745,64 DM**
DE/SAC	Sachsen	709.412,08 DM	1.428.523,60 DM	1.428.523,60 DM	**1.428.523,60 DM**
Overall Result		**1.800.000,80 DM**	**3.599.999,08 DM**	**3.649.995,68 DM**	**3.649.995,68 DM**

Cumulate along columns

Also Apply to Results

You can also use the chosen recalculation on the results rows under *Calculate Results as...* or *Calculate Single Values as...*

Note that you **cannot** use the following functions for hierarchy lists (for active display hierarchies), and they do not work for the characteristic with the hierarchy.

- Calculate → Result as
- Calculate → Single Value as → Ranked list / Ranked list (Olympic)
- Calculate → Cumulated

Currency Translation

The *Currency Translation* function is not offered in the formula properties dialog box.

You create translation keys for Currency Translation [Extern] under *SAP Menu → Administration → Settings → Translation Keys.* For more information, see Creating Currency Translation Keys [Extern].

You can set a target currency for a structural component in the Query Designer.

Select a translation key in the *Translation Key* dropdown box. According to how the currency translation key has been created in the Administrator Workbench, you have the following options:

- Select the target currency when translating

  The target currency is not fixed in the translation key in the Administrator Workbench but can be determined when translating. Select the required translation key and enter the *Target Currency* in the dropdown box. You can also select a currency from the dropdown box.

  Moreover, you can also select, create or change a variable target currency.

  Select *Variables Entry.*

  The variable target currencies appear in a dropdown box. Select a variable. You can change the variable using . The *Variables Editor* dialog box appears. For more information, see Changing Variables in the Variable Editor [Extern].

  Choose if you want to create a new variable target currency. The Variables Wizard dialog box appears. For more information, see Defining Variables with the Variable Wizard [Extern].

  When you execute the query, the variable dialog box appears, in which you can choose the target currency.

- Fixed target currency

  The target currency is determined in the translation key in the Administrator Workbench. Select the required translation key with the fixed target currency. In the *Target Currency* dropdown box, the fixed target currency for this translation key appears.

- InfoObject determines target currency

  The target currency is determined in the translation key in the Administrator Workbench so that it is determined from an InfoObject. Select the required translation key with the target currency from the InfoObject.

Formula Collision

The *Formula Collision* function is offered ONLY in the formulas property window.

When you define two structures, which both contain formulas, it is unclear to the system how to calculate the formulas at the point where both formulas intersect.

The following example clarifies the concept of formula collision:

	Column 1	**Column 2**	**Column 1 x Column 2**
Row 1	Value A	Value B	A x B
Row 2	Value C	Value D	C x D
Row 1 + Row 2	A + C	B + D	? Formula Collision?

In this example, there are two rows and two columns with simple values, the third row is a simple summation formula and the third column is a simple multiplication. In the cell in which the row and column formulas meet, it is not clear which calculation should be made.

If you calculate according to the column formula in this cell, the cell contains (A+C)x(B+D). If you calculate according to the rows formula in this cell, the cell contains (AxB)+(CxD). The result gives a different value.

If a formula collision occurs, as described in the example above, you can determine which formula is used in the calculation. You can make the following settings in the *Formula Collision* field:

- Nothing defined

  If you do not make a definition, the formula that was set last takes priority in a formula collision. Setting means that you defined and saved the formula.

- Result of this formula

  The result of this formula has priority in a collision

- Result of competing formula

  The result of a competing formula has priority in a collision

  

  Collisions always occur when point and dash calculations or functions are mixed in competing formulas. If there is only dash calculation or point calculation in both formulas, both calculation directions give the same result. Therefore, no settings are required for formula collision.

Activities

Select the structural component and choose *Properties* from the context menu (right mouse click). The *Selection/Formula Properties* dialog box appears.