TimeRangeDefinition

Description

The TimeRangeDefinition allows you to create custom time ranges that can be used in Active tools (dynamic report generation, history export, etc.). A TimeRangeDefinition is created from the TimeRangeDefinitionFolder of the BtibService and becomes accessible in all properties of Active objects that use a time period.

⚠ The TimeRangeDefinition is used to define a "structure", a schema that allows a time period to be built. The time period is not saved as it is, if a TimeRangeDefinition defines a period of one month from "now", then the period will be recreated each time it is called and the "now" is not set when the TimeRangeDefinition is created.

Implementation

Creating a TimeRangeDefinition

Creating a TimeRangeDefinition involves four steps:

• Definition of a reference date

This is one of the two extremes of the period; it can be the start date or the end date (depending on the direction defined, see more below).

Reference date	Additional parameter	Meaning
Now	-	One of the extremes will be the moment the period is called
Beginning Of / End Of	Minute / Hour / Day / Week / Month / Year	The beginning or the end of the current month (1st at midnight), the current day (midnight), the year (midnight January 1st), etc.
Last / Next	Custom Schedule	Displays the lists of a CustomSchedule. Four lists are then available: Today's date Month Week of the month Day of the week Allows you to select the last (or next) Wednesday of June for example, or the last September 1st. The date sought must not be more than 3 years before or after the current date.
Fixed	Date	A fixed date (i.e. not relative to when the period is called)
None	-	The time range will start at the beginning of the history

• €€ Definition of an offset

Allows the reference date defined previously to be offset. Not available when the reference date is "none".

Offset	Number of times the period must be offset
None	-
Minute / Hour / Day / Week / Month / Year	Positive or negative number:€
	 Positive, shifts the reference date to the future Negative, shifts the reference date to the past

Sets the duration of the period from the reference date defined in the first two steps.

Additional parameter	Duration	Meaning
-	To Now	The time range runs from the reference date to "now" (i.e. the moment the period is called)
Number of items to add to define the duration. Cannot be negative	Minute / Hour / Day / Week / Month / Year	The duration of the time range is fixed; it will always count the same number of items (5 minutes, 8 hours, 10 days, etc.).
-	To End Of History	The time range is from the reference date to the end of the history.

• €€ Definition of a direction

Defines in which direction the duration will be applied in relation to the reference date. Not available when the duration has been set to "toNow" or "toEndOfHistory".

Direction	Meaning
Forward / Backward	 Forward: duration of the period will be applied forward from the reference date Backward: duration of the period will be applied backward from the reference date

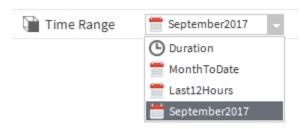
Example:

Reference date: November 1st and duration: 1 month.

- Direction: forward, the time range will be from November 1st to December 1st
- Direction: backward, the time range will be from October 1st to November 1st (in this case, the date of reference becomes the end date of the period).

Selecting a TimeRangeDefinition

The created time ranges can then be called from most B.tib objects that need to define a period. For all these objects, the selection of the time range is as follows:



A drop-down list shows all the time ranges created from the TimeRangeDefinition defined by name. In addition, the list offers the option "Duration", which allows direct definition of a fixed period.

