03 What-If Scenario Display - EOL 2022.02

Note: What-If functionality will be obsolete from 2023.01. Thew new WhatIf template based WhatIf Editor will take over. More information on converting old what-if to new what-if with modifiers will follow

What-If scenario display

What-If scenarios can be applied in DELFT-FEWS to explore the influence of uncertainties in input data, module structure and module parameters. When running a forecast, a what-if scenario may be selected from a list of available scenarios. A display plug-in is available to define what-if scenarios.

The configuration of the display defines only what time series what-if scenarios may be applied to. The layout of the display cannot be configured.

The Id of the what-if scenario display is identified in the DisplayInstanceDescriptors. When available on the file system, the name of the XML file for configuring the display with an Id of e.g. WhatIFScenarioFilters is for example:

WhatIFScenarioFilters 1.00 default.xml

WhatIFScenarioFilters	File name for the WhatIFScenarioFilters configuration
1.00	Version number
default	Flag to indicate the version is the default configuration (otherwise omitted).

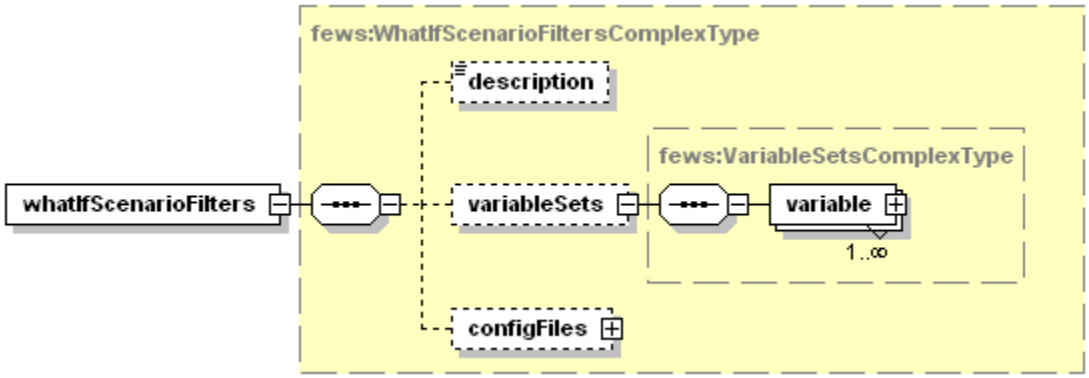

Figure 150 Elements of the What-if scenario display configuration

description

Optional description of the configuration. Used for reference purposes only.

variableSets

Definition of variables (time series) of what-if scenarios may be applied to.

Attributes;

- **variableId** : ID of the variable (group). Appears in list of variable to be selected in defining a what-if scenario in the display.
- **variableType** : Optional type definition of variable (default to "any")
- **convertDatum** : Optional Boolean flag to indicate if datum is to be converted for the what-if scenario defined. This may be required when defining a typical profile what-if scenario.

configFiles

Template for defining what-if scenario applied to module parameters and module datasets. These templates are used when creating the what-if scenario. Should be defined using optional/required elements if what-if scenarios for module parameters and module datasets are to be supported.

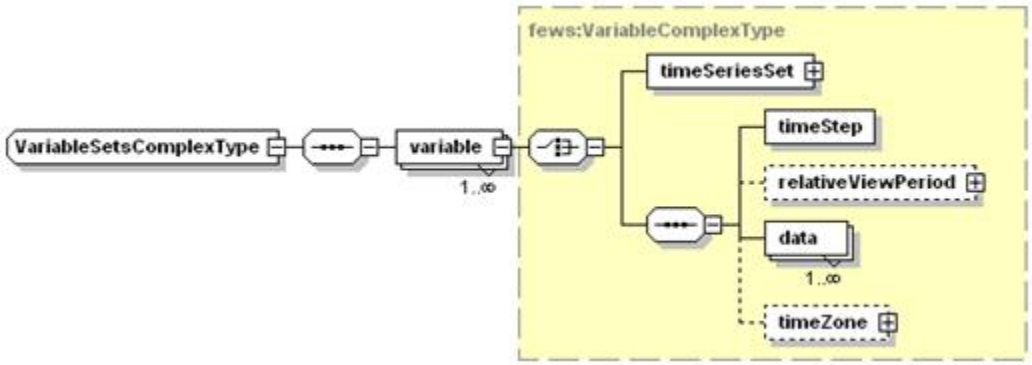

Figure 151 Elements of the variable element definition in the What-if display configuration.

timeSeriesSet

Time series set the what-if scenario is to be defined for. The relative view period over which the what-if scenario applies changes to the data is defined in the TimeSeriesSet. startOverrulable or endOverrulable are ignored, thus only the hard-coded relative view period will be applied.

When a locationSetId is defined in the timeSeriesSet, the what-if display allows the user to define a what-if scenario that applies to all locations in the locationSet, or to an individual location selected from those on the locationSet..

relativeT0DateFormat

The scenario editors by default show times where T0 is based on the current system time.To only show relative times to T0, the relativeT0DateFormat can be used by configuring the following:

```
<relativeT0DateFormat>true</relativeT0DateFormat>
```

Dates will be presented for example as follows:

T0 - 1d : One day before T0
T0 : At T0
T0 + 1d : One day after T0
T0 + 1y : One year after T0
T0 + 1y 1d 1h : One year, one day and one hour after T0
T0 + 1y 1d 1h 3m : One year, one day, one hour and 3 minutes after T0
T0 + 1y 1d 1h 3m 2s : One year, one day, one hour, 3 minutes and 2 seconds after T0