



# Talsim-NG - River Basin and Water Management Model

# **Operation Rules in Talsim-NG**

Dr. Hubert Lohr, Felix Froehlich



## Running the software



The Talsim-NG Server must be started first before you start the client software



Startmenu and look up Talsim-NG Server



Or

Create a shortcut on your desktop





## Content

#### Operation Rules in Talsim-NG – The concept

Define releases

Create state variables

Define rules by means of functions

Combine states and build clusters





Managing water with operation rules in Talsim-NG is simple and consists of four principles:

1. Define releases at a reservoir as a function of the storage of that reservoir





Managing water with operation rules in Talsim-NG is simple and consists of four principles:

- 1. Define releases at a reservoir as a function of the storage of that reservoir
- 2. If other states than simple storage-release functions are needed these states must be created first before they can be used





Managing water with operation rules in Talsim-NG is simple and consists of four principles:

- 1. Define releases at a reservoir as a function of the storage of that reservoir
- 2. If other states than simple storage-release functions are needed these states must be created first before they can be used
- 3. All rules are described by means of functions (x-y functions or derivates thereof)





Managing water with operation rules in Talsim-NG is simple and consists of four principles:

- 1. Define releases at a reservoir as a function of the storage of that reservoir
- 2. If other states than simple storage-release functions are needed these states must be created first before they can be used
- 3. All rules are described by means of functions (x-y functions or derivates thereof)
- 4. States can be combined to control clusters





Create releases at reservoirs				
Releases are located at a reservoir. Releases require functions	Create states if nee All state variables can be used Create functions if needed	ded Combine states to o Combine states as you like No limitation in combining states and clusters	clusters Link states/clusters with releases Link a rule to a release Scaling of releases	eration rules
			-	

8





Create a logical network of rules