# 11. Connect large sewer model with large river model

## Summary

Pre condition: The user has two schematizations

- a InfoWorks CS schematization for Mexico city that offers flow, water level in 100000 locations and accepts flow and water level in 20000 locations. Each quantity offered can be modified by two operations.
- a MIKE 11 schematization for the Rio Grande river system that offers flow, water level, velocity, flow area and flow with in 50000 locations and accepts inflow in 50000 locations. Each quantity offered can be modified by two operations.

Target: The user wants to create a linked configuration where the two models are bi-directionally linked in 4 locations.

Succes criterea: User creates the configuration with 8 links in total in less than 2 minutes.

Steps:

1) Start OmiEd
2) Add model "InfoWorks, Mexico City"
3) Add model "MIKE 11, Rio Grande"
4) Add link (InfoWorks, Flow, Location 1, linear tranformation -1*x + 0) -> (MIKE 11, Inflow, Location 1)
5) Add link (MIKE 11, Water Level, Location 1, linear transformation x-10) -> (InfoWorks, Stage, Location 1)
6-11) Repeat 4-5 for Location 2, Location 3, Location 4.
12) Save the configuration

## How to address in Version 1

Step 4) Choosing Add link will populate the link dialog. This will propulate two tree-views.

- On left-handside the output exchange item list contains 400000 (InfoWorks) elements (2 quantities * 100000 locations * 2 operations).
- On the right handside the input exchange item list contains 50000 (MIKE 11) elements (1 quantity * 50000 locations)
  After the population of the lists the user have to pick 1 out of 400000 and 1 out of 50000.

Step 5) Choosing Add link will populate the link dialog. This will propulate two tree-views.

- On left-handside the output exchange item list contains 500000 (MIKE 11) elements (5 quantities * 50000 locations * 2 operations).
- On the right handside the input exchange item list contains 40000 (InfoWorks) elements (2 quantity * 20000 locations)
  After the population of the lists the user have to pick 1 out of 500000 and 1 out of 40000.

### Drawbacks

After step 11) OmiEd will have poulated (400000 + 50000 + 500000 + 40000)*4 = 3960000 treview elements and MIKE 11 and InfoWorks will together have generated all these.

Hardly doable in 2 minutes?

## How to address in Version 2

*Present ideas in any form how you'd expect it to work in the OpenMI 2.0*