Multiple Run Management (MRM) Enhancements

Overview

Bill Oakley

MRM Enhancements

- Motivated by requests and modelling requirements of users
- Near-term (Release 4.6) and mid-term enhancements

Near-Term Enhancements

- Multiple named configurations
- Output DMI invoked after each run
- Trace number provided to input and output DMIs
- Multiple output (RDF) files
- Fully portable MRM configurations
- "Apply / Cancel" paradigm in run control dialog
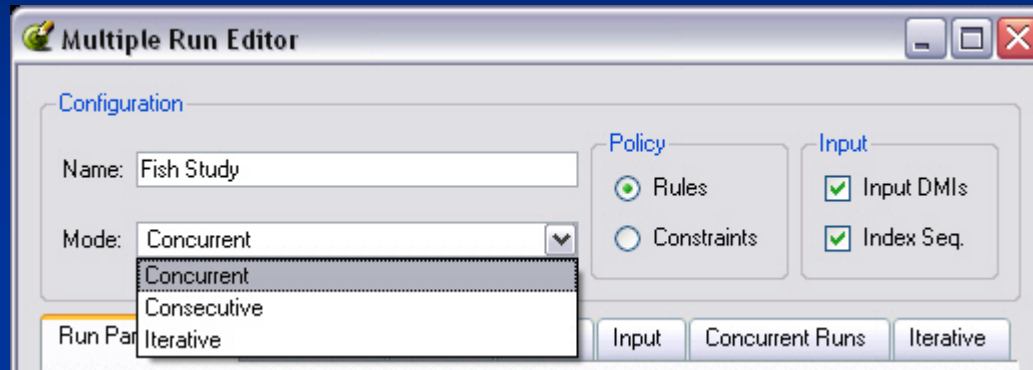- User interface ported to Qt

Multiple Run Control Dialog

Multiple named configurations

Run parameters no longer edited in run control dialog
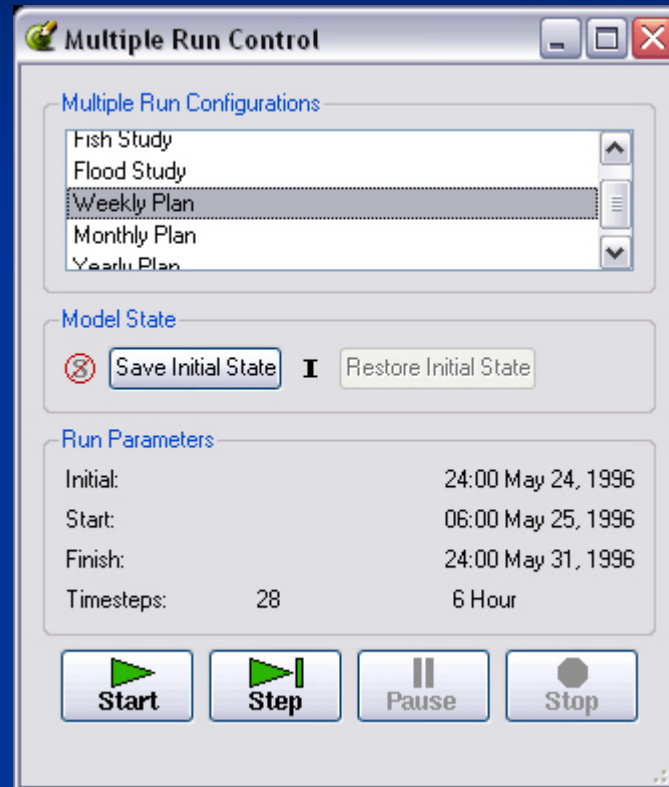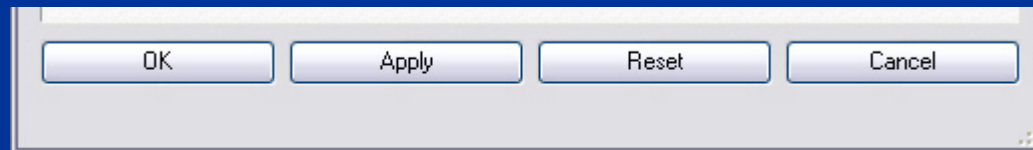
Multiple Run Editor Dialog

Specify "top-level" configuration

Edit with Apply/Reset/Cancel

Multiple Run Editor Dialog

Run Parameters	Description	Output	Policy	Input	Concurrent Runs	Iterative

Initial: 0

Start: 24:00 May 25, 1997 — These are really date/time spinners

Finish: 0

Timesteps: 4 — 6 Hour
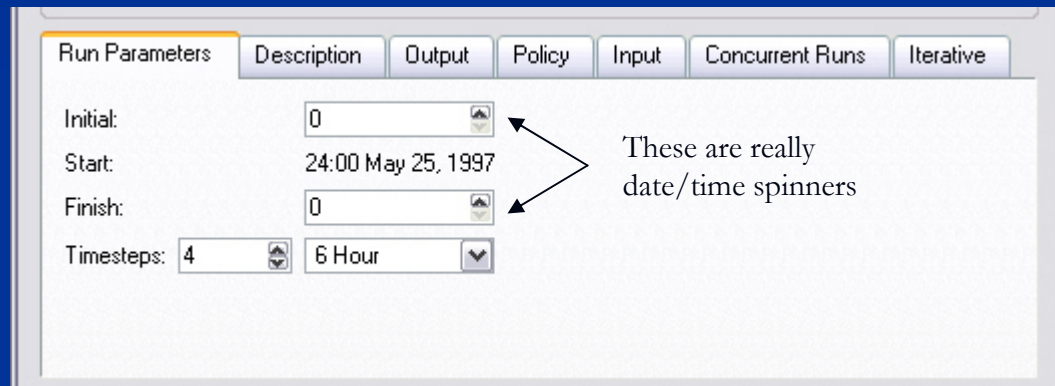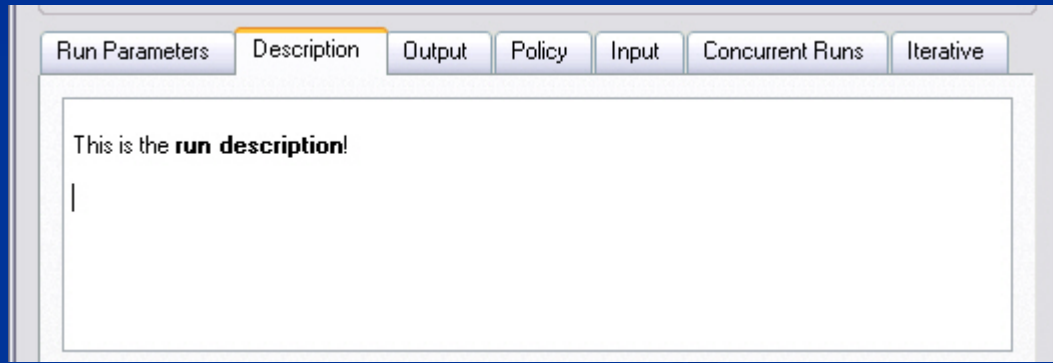
•Not editable for consecutive runs
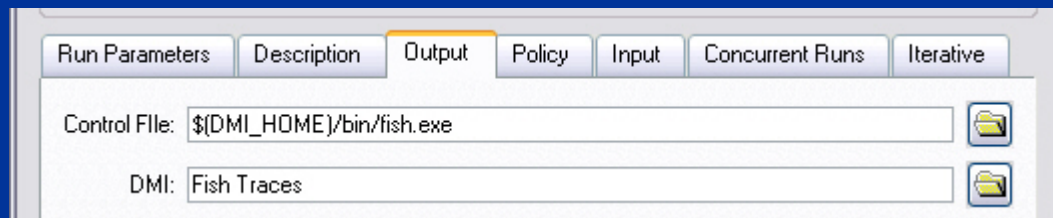
Multiple Run Editor Dialog

- Multiple line description
- Can contain rich text

Multiple Run Editor Dialog

Control file containing multiple slot and output file specifications:
LevelPowerReservoir.Storage: file=~/…
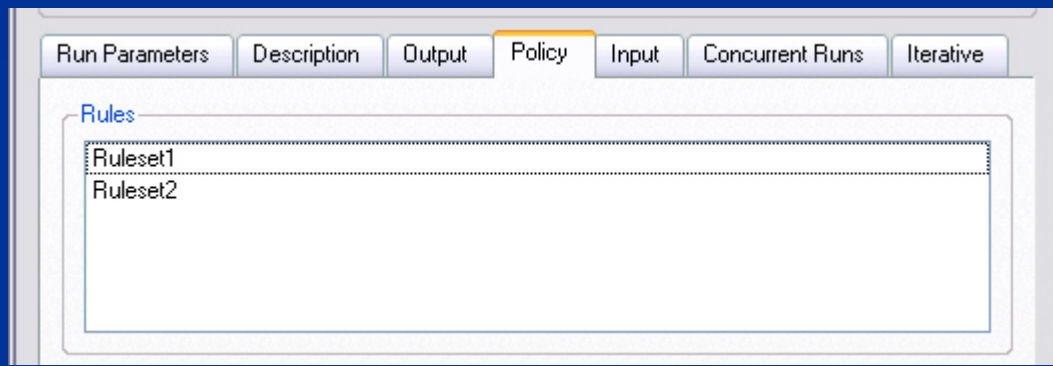Reach.Inflow: file=~/…

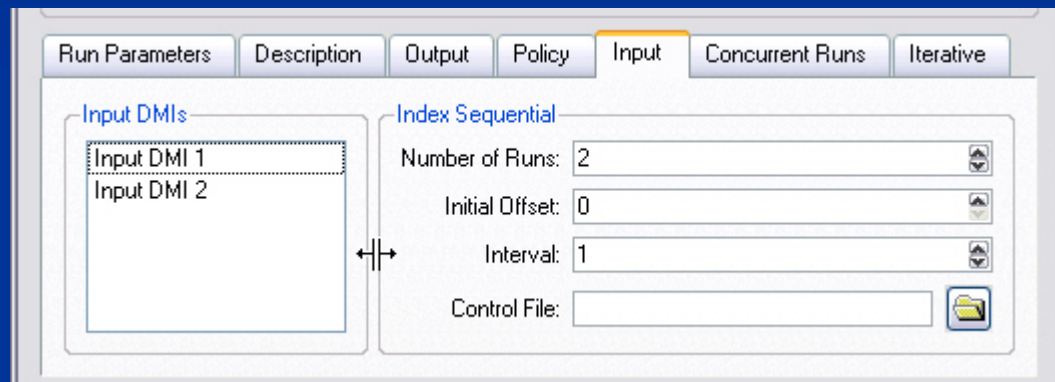| Run Parameters	Description	Output	Policy	Input	Concurrent Runs	Iterative

Control File: $(DMI_HOME)/bin/fish.exe

DMI: Fish Traces

Optional output DMI invoked after each run
(with trace number provided)

Multiple Run Editor Dialog

Multiple Run Editor Dialog

| Run Parameters | Description | Output | Policy | Input | Concurrent Runs | Iterative |

Input DMIs
- Input DMI 1
- Input DMI 2

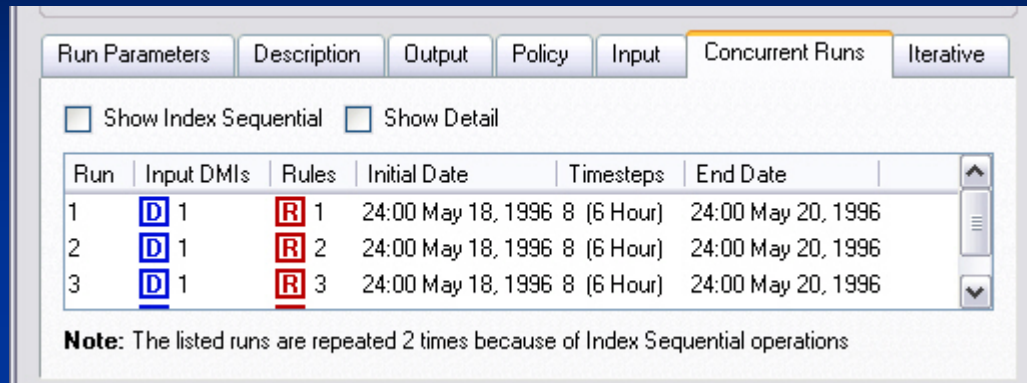**Index Sequential**

Number of Runs: 2

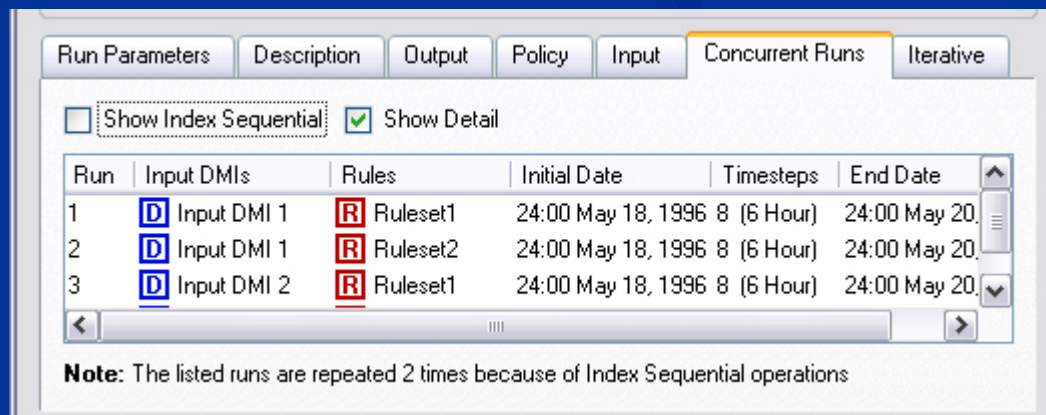Initial Offset: 0

Interval: 1

Control File:

Splitter to adjust view

Multiple Run Editor Dialog

• Two views, without and with details shown

Mid-Term MRM Enhancements

- Rpl-based iterative mode:
  - User provides a Rpl block to be executed after each run
  - Rpl block examines the state of the system; if it sets values the MRM controller performs another run
  - Built in max-iterations checking

Mid-Term MRM Enhancements

- ■ Elimination of control files
  - • Bring specification of output slots and index sequential slots into the user interface