Scripts and Model Reports

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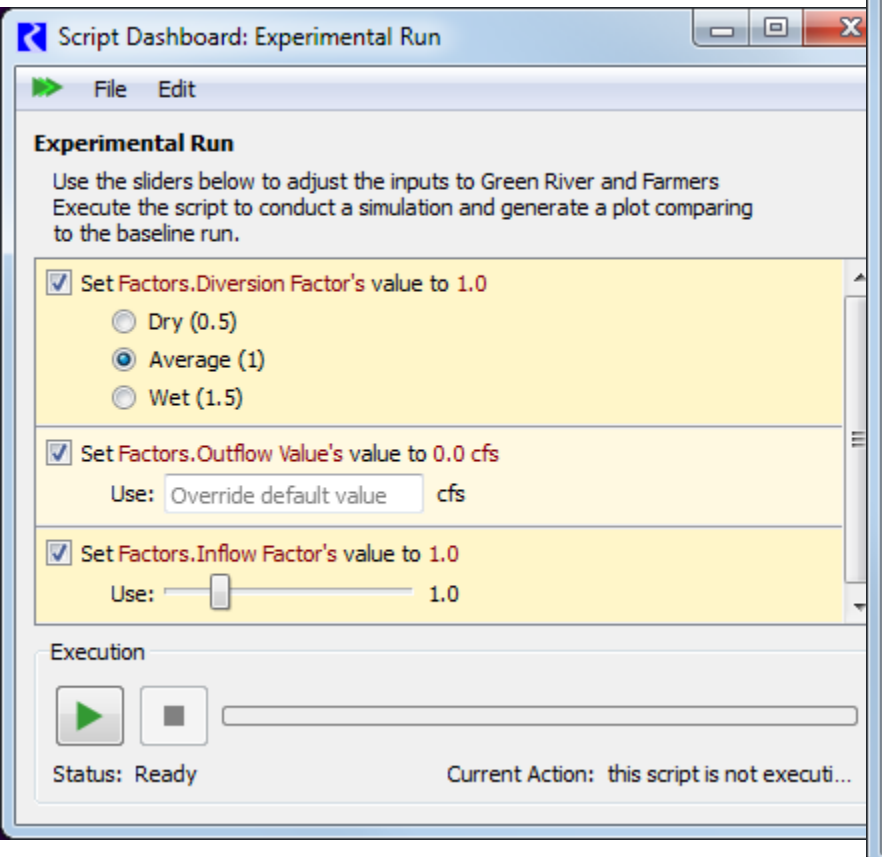
Scripts

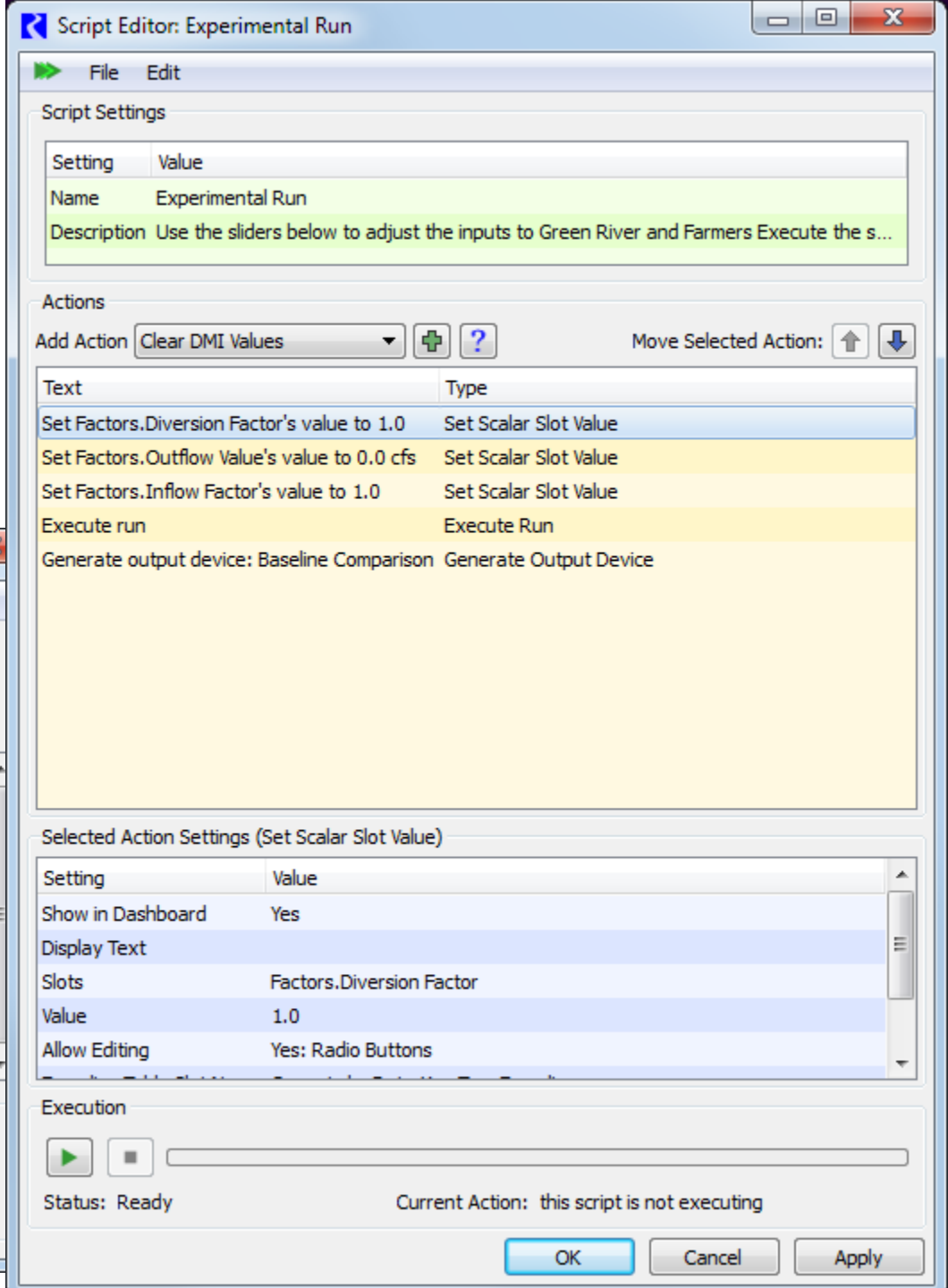
- Organize and run sequences of actions.
- Automate many of the tasks involved in operating a model.
- Addresses the following requirements:
  - Complexity
  - Repetition
  - Opacity
  - Repeatability

Dialogs

Editor

Dashboard





Enhancements

- Implemented for 6.9
  - Set Dataset File Action

Enhancements for 7.0

- New Actions:
  - Evaluate Expression Slots
  - Open Object
- Set Slot actions:
  - Set NaN
  - Symbolically specified Datetimes
- Enabled/Disabled state is preserved
- Show Ruleset when opened

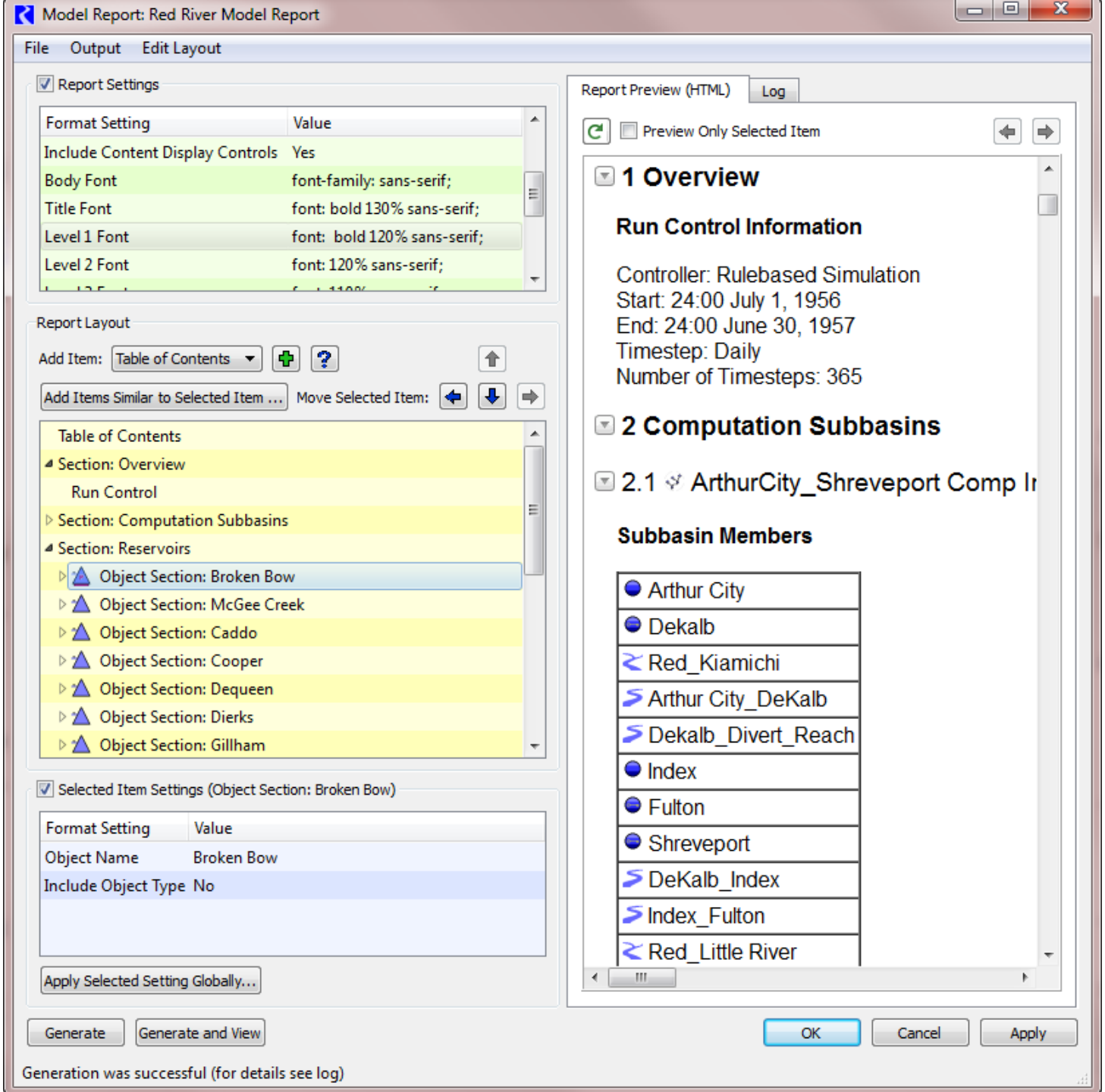
Upcoming Enhancements

- Improve usability to help novice users:
  - Open Script Manager when model opens
  - Show Script Descriptions
  - Group Scripts together
- Create Action Groups
- Import/Export Multiple Scripts
- Action to Change the run timestep

Model Reports

Create a customized HTML file describing various aspects of a model including the configuration, RPL policy, slots, outputs and plots.

“The RiverWare utility is ideal” – Shane Coors 2016


Model Report: Red River Model Report
File
Output
Edit Layout
Report Settings
Format Setting
Value
Include Content Display Controls
Yes
Body Font
font-family: sans-serif;
Title Font
font: bold 130% sans-serif;
Level 1 Font
font: bold 120% sans-serif;
Level 2 Font
font: 120% sans-serif;
Report Layout
Add Item:
Table of Contents
Add Items Similar to Selected Item ...
Move Selected Item:
Table of Contents
Section: Overview
Run Control
Section: Computation Subbasins
Section: Reservoirs
Object Section: Broken Bow
Object Section: McGee Creek
Object Section: Caddo
Object Section: Cooper
Object Section: Dequeen
Object Section: Dierks
Object Section: Gillham
Selected Item Settings (Object Section: Broken Bow)
Format Setting
Value
Object Name
Broken Bow
Include Object Type
No
Apply Selected Setting Globally...
Report Preview (HTML)
Log
Preview Only Selected Item
1 Overview
Run Control Information
Controller: Rulebased Simulation
Start: 24:00 July 1, 1956
End: 24:00 June 30, 1957
Timestep: Daily
Number of Timesteps: 365
2 Computation Subbasins
2.1 ArthurCity_Shreveport Comp Ir
Subbasin Members
Arthur City
Dekalb
Red_Kiamichi
Arthur City_DeKalb
Dekalb_Divert_Reach
Index
Fulton
Shreveport
DeKalb_Index
Index_Fulton
Red_Little River
Generate
Generate and View
OK
Cancel
Apply
Generation was successful (for details see log)

Enhancements for 6.9

- Scalar Slot Grid
- Periodic Slot Table
- Expression Slot RPL display
- Link Table
- Individual RPL Rule/Goal items

- Demo

Upcoming Enhancements

- Show top level RPL statements
- Enhanced Rich Text Editing (sub/super script and tabs)