



# New Capabilities and Features

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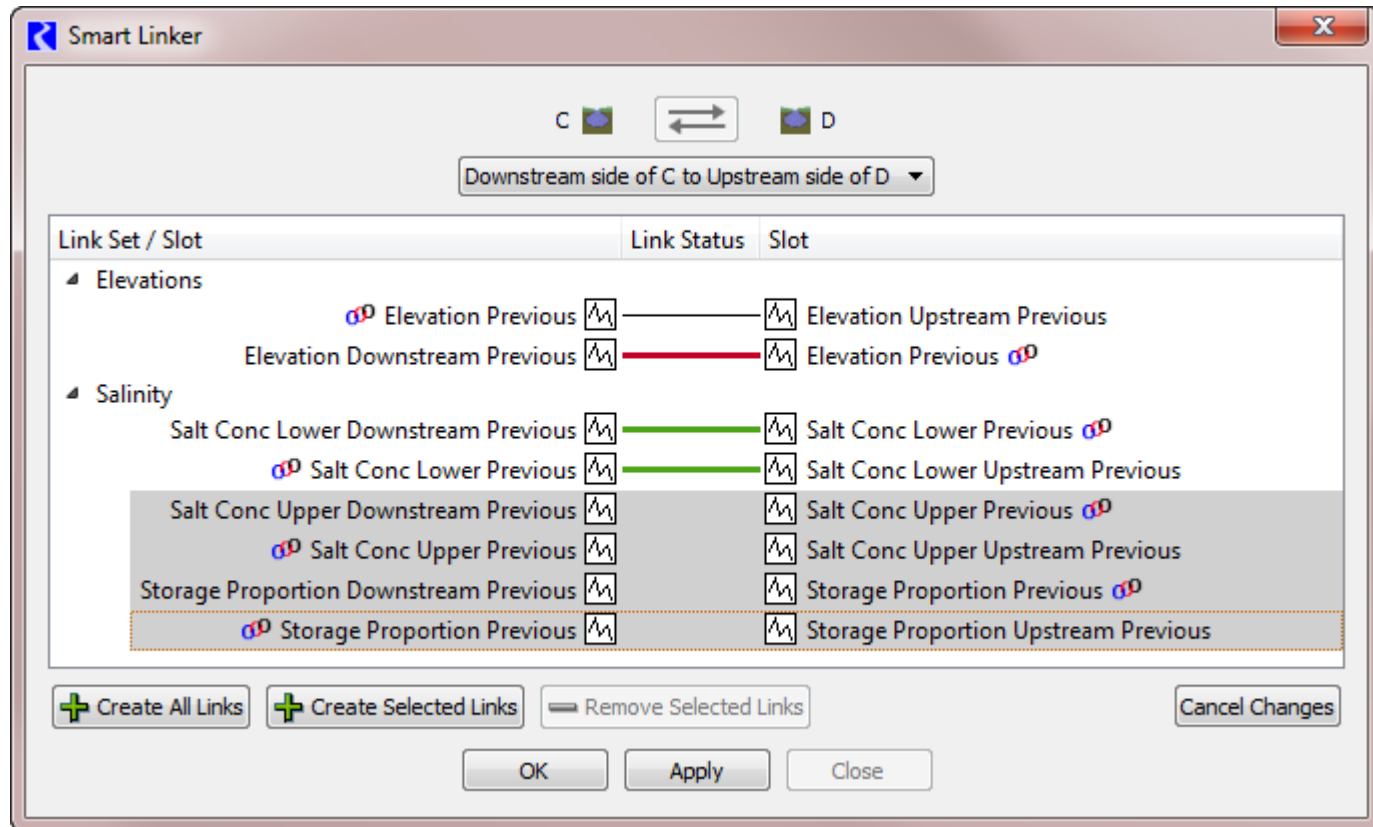
Presenter: David Neumann

2013 RiverWare User Group Meeting  
August 27, 2013

# Outline

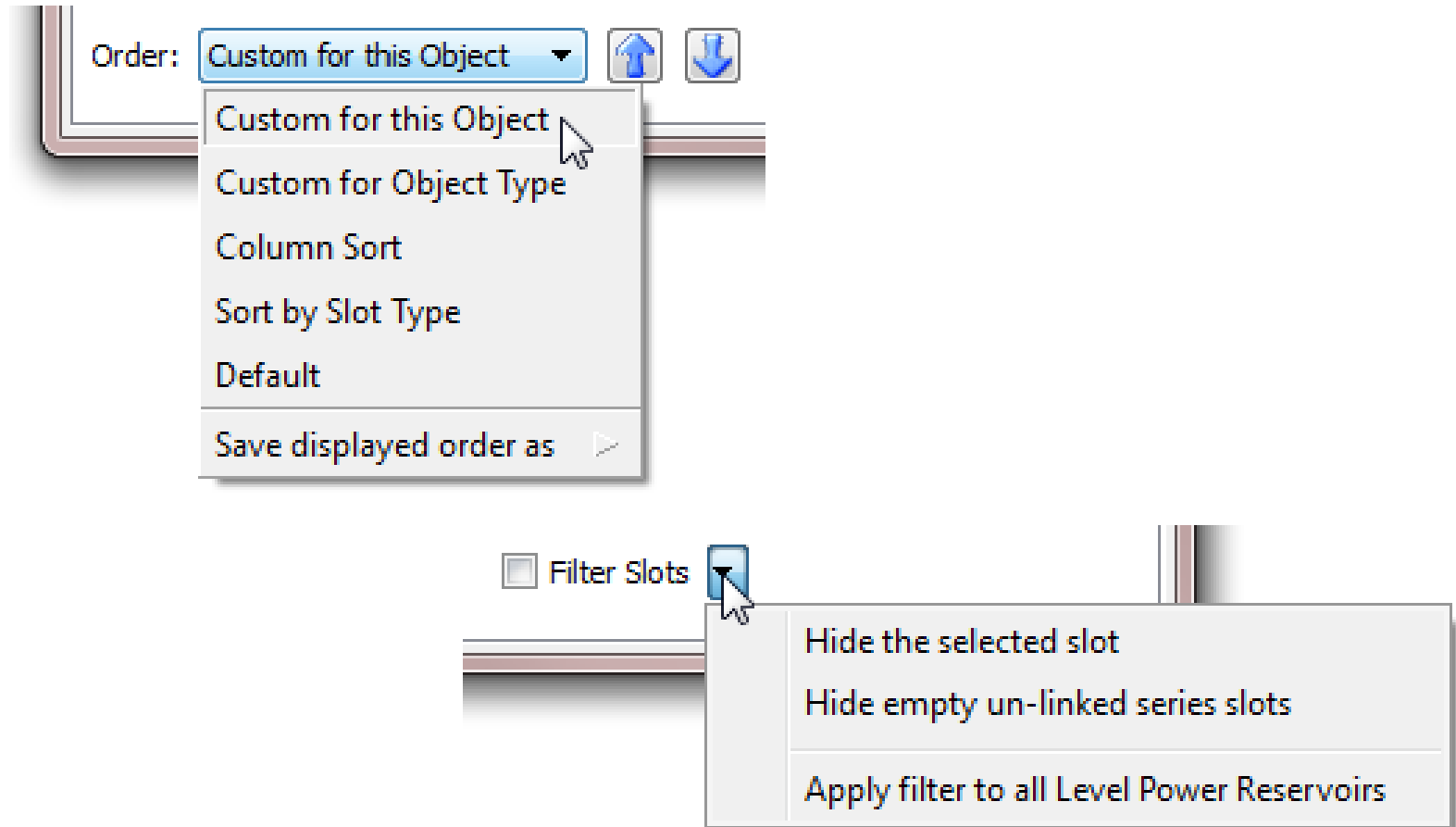
- New features in 6.3
- Upcoming features in 6.4

# Smart Linker



- Demonstration

# Open Object – Slot Sorting/Filtering



- Demonstration

# New Slot Types

- Time Aggregation Series
- Series With Periodic

The screenshot shows the 'Muddy Data.Monthly...' window. The title bar includes 'File Edit View TimeStep I/O Adjust'. The main area displays 'MonthlyGageInflows' with a value of 178.8818 and units 'cfs'. Below this is a 'Monthly Aggregation' section with a 'Slot' dropdown set to 'Upstream Gage.Gage Inflow' and a 'Function' dropdown set to 'Ave'. A 'Scroll:' field shows 'Dec 1995'. At the bottom, there is a table of data for the year 1996.

	cfs	
12-1995	178.9	O
01-1996	138.3	O
02-1996	168.5	O
03-1996	106.4	O
04-1996	129.3	O
05-1996	327.7	O

The screenshot shows the 'Reservoir Data.Pan Evaporation' window. The title bar includes 'File Edit Row View TimeStep I/O Adjust'. The main area displays 'Pan Evaporation' with a value of 0.04 and units 'in/day'. Below this is an 'Input Mode' section with 'Series' and 'Periodic' radio buttons, where 'Periodic' is selected. A 'Scroll:' field shows 'Dec 10, 2012'. At the bottom, there is a table of daily data and a monthly summary table.

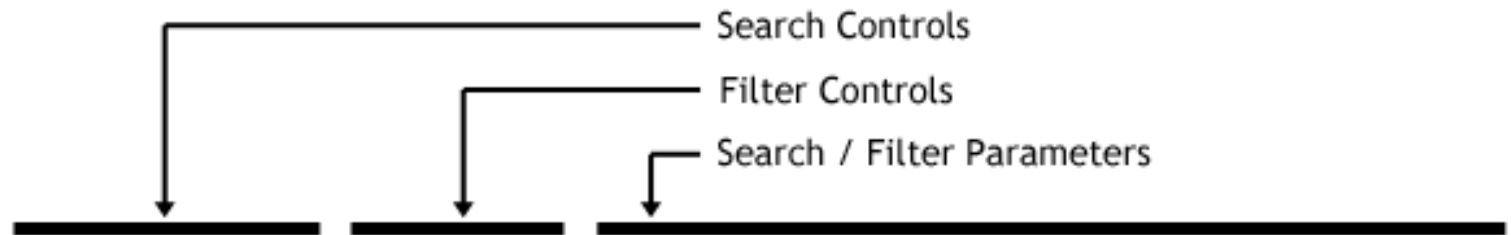
	in/day	
12-10-2012 Mon	0.04	I
12-11-2012 Tue	0.04	I
12-12-2012 Wed	0.04	I
12-13-2012 Thu	0.04	I
12-14-2012 Fri	0.04	I
12-15-2012 Sat	0.04	I
12-16-2012 Sun	0.04	I
12-17-2012 Mon	0.04	I
12-18-2012 Tue	0.04	I
12-19-2012 Wed	0.04	I
12-20-2012 Thu	0.04	I
12-21-2012 Fri	0.04	I
12-22-2012 Sat	0.04	I
12-23-2012 Sun	0.04	I

	in/day
Jan	0.09
Feb	0.08
Mar	0.36
Apr	0.56
May	0.85
Jun	0.23
Jul	0.28
Aug	0.45
Sep	0.27
Oct	0.25
Nov	0.17
Dec	0.04

## Demonstration

# Diagnostics Filtering

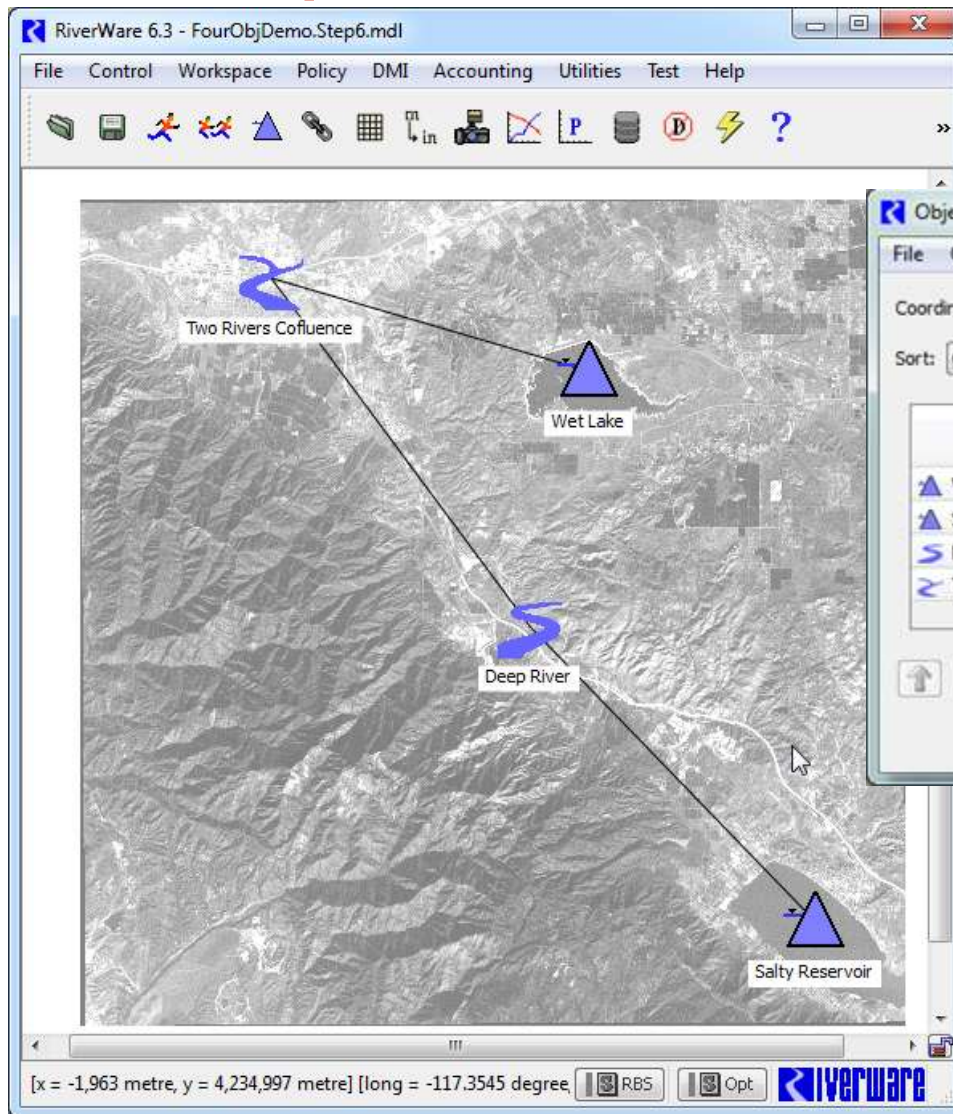


File Edit Settings Search: [ ] [v] [^] Filter: [refresh] [x] Reconciliation [v]  Ignore Case  RegEx

Context	Diagnostics Message
61: SLOT: Thirsty State Diversion:M and I.Incoming Available Water	Trying to convert former slot type ("AggSeriesSlot") to new slot type ("Se
62: SLOT: Thirsty State Diversion:M and I.Diversion	Trying to convert former slot type ("AggSeriesSlot") to new slot type ("Se
63: SLOT: Thirsty State Diversion:M and I.Depletion	Trying to convert former slot type ("AggSeriesSlot") to new slot type ("Se
64: OBJECT: Thirsty State Diversion:Western ID	Replacing old category name (Water User Reconciliation) with new (Wate
65: SLOT: Thirsty State Diversion:Western ID.Incoming Available Water	Trying to convert former slot type ("AggSeriesSlot") to new slot type ("Se
66: SLOT: Thirsty State Diversion:Western ID.Diversion	Trying to convert former slot type ("AggSeriesSlot") to new slot type ("Se

- Demonstration

# Geospatial View and Map Formats



Object Coordinate Manager

File Operations Configure View

Coordinate System:  Projected  Geographic

Sort: Custom

Enable Editing:  Display  Actual

		Display x [metre]	Display y [metre]	Actual x [metre]	Actual y [metre]
▲	Wet Lake	1	-12,227	4,249,942	-9,766 4,248,982
▲	Salty Reservoir	2	-4,424	4,230,615	-1,903 4,229,355
⤵	Deep River	3	-13,127	4,240,219	-13,127 4,240,219
⤵	Two Rivers Confluence	4	-20,330	4,252,823	-20,330 4,252,823

↑ ↓ Set Custom Order  Show Data Objects

Close

Demonstration

# Mass Balance Summary Tool

The screenshot shows the 'Mass Balance Summary' window for 'MassBalObj: CentralToIsleta'. The interface includes a menu bar (File, Edit, View), a toolbar with a grid icon, and a text field containing 'CentralToIsleta' with a 'Recompute' button. Below this, there are three buttons: '2 Water Balances', '12 Slot Sums', and '35 Slots'. The 'Timestep' is set to 'Apr 29, 1992', and the 'Flow' unit is 'cfs'. The main data area is a table with columns for 'Slot Groups', 'Value', and 'Units'. The table lists various water balance components with their respective values and units. At the bottom, there are buttons for 'New', 'Delete', and 'Set' (with '+' and '-' options), and a checkbox for 'Dependent Expression Slots (11)'.

Slot Groups	Value	Units
River SW Budget	-0.000	cfs
+ Reach Inflow	5167.665	cfs
Central.Gage Outflow	5167.665	cfs
+ SWreturns	153.792	cfs
- RiverSeepage	184.855	cfs
CentralToIsletaSeepageArea2.Seepage	99.082	cfs
CentralToIsletaSeepageArea1.Seepage	85.773	cfs
+ SW Inflow	78.600	cfs
- Reach Outflow	5215.203	cfs
- OpenWaterEvap	0.000	cfs
GW Budget	0.000	cfs



# Database DMI Usability

Database DMI - Update Daily Ops Model

Database DMI Name: Update Daily Ops Model

Type:  Input  Output  Confirm Warnings  Record Invocations

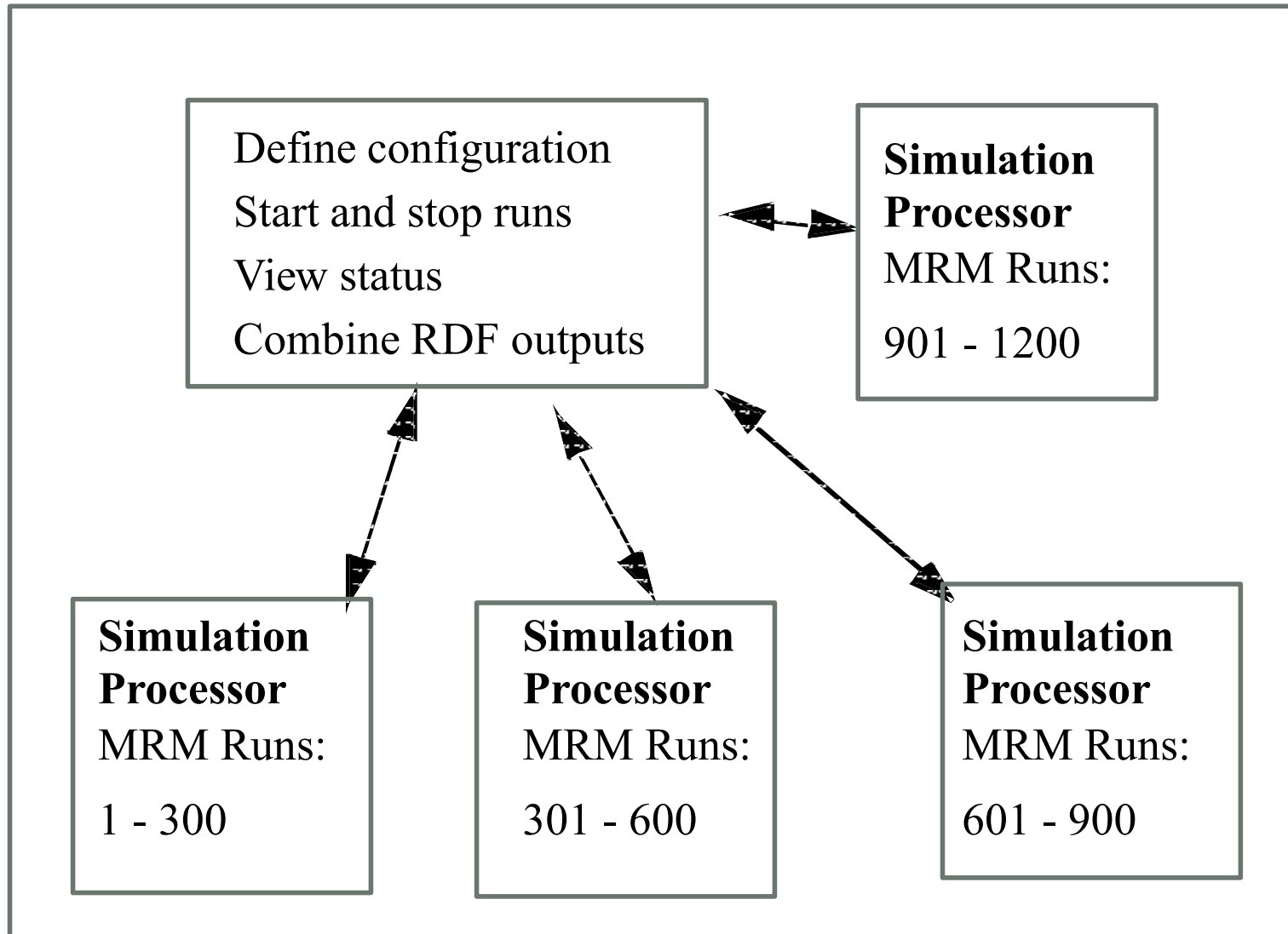
DMI Configuration

Show:  DSS Part Information  DSS Configuration  Unused Slot Selections Column Widths:  Auto Fit  Manual

Dataset	On	A Part	B Part	C Part	D Part	E Part	F Part	Begin	End	Units	D
Upper Basin Inflows	1	✓									
Flat River.Inflow	✓										
Flat River.Inflow								11-14-1996	12-31-1996		
Evaporation Data	2	✓									
Reservoir.Slot[Name=E...	✓							24:00:00 Start ...			
Barker Dam.Eva...											
Flat Res.Evapor...											
Initial Conditions	3	✓	Wide Basin	<Object>	<Slot>		%Run_Name%				
Reservoir.Slot[Name=P...	✓							Start Timeste...	Start Time...		
Reservoir.Slot[Name=E...	✓							Start Timestep	Finish Tim...		
Barker Dam.Eva...			Wide Basin	BARKER	Evap...	1DAY	DNR99X	21 Nov 1996 ...	31 Dec 199...		
Flat Res.Evapor...			Wide Basin	FLATRES	Evap...	1DAY	DNR99X	21 Nov 1996 ...	31 Dec 199...		

Reset OK Cancel Apply

# Distributed MRM



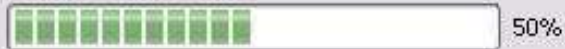
Process Status

Host: 127.0.0.1

State: Running



Multiple Run Status (Traces 1 - 2)



Execution State: Running

Current Run: 2 of 2

Single Run Status



Execution State: Running

Current Timestep: February, 2010

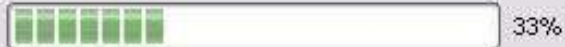
Process Status

Host: 127.0.0.1

State: Running



Multiple Run Status (Traces 3 - 5)



Execution State: Running

Current Run: 2 of 3

Single Run Status



Execution State: Running

Current Timestep: April, 2010

Estimated Time Remaining: 00:00:26



# Miscellaneous Features in 6.3

- Description tab on all Objects

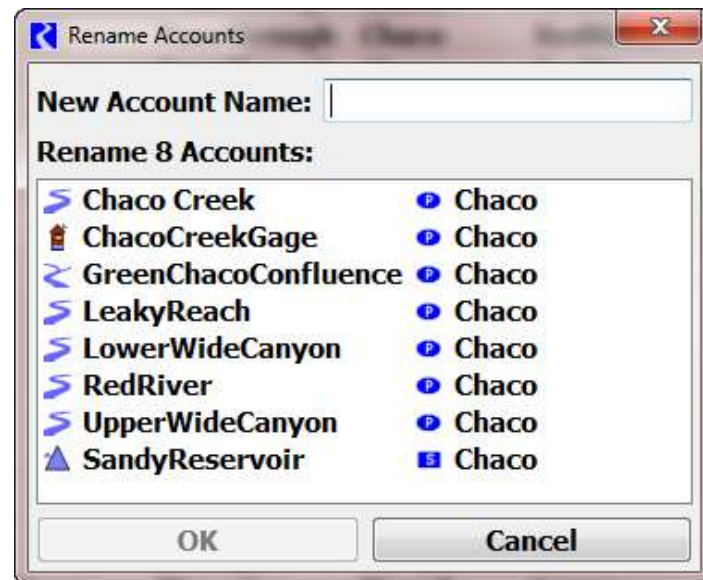
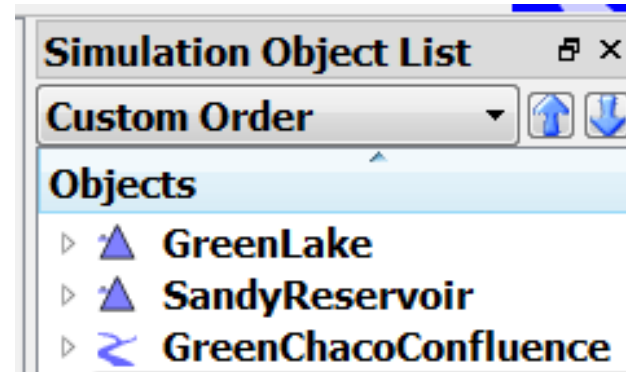


- ACROREAD\_PATH environment variable removed
- Save/Load Progress on Workspace

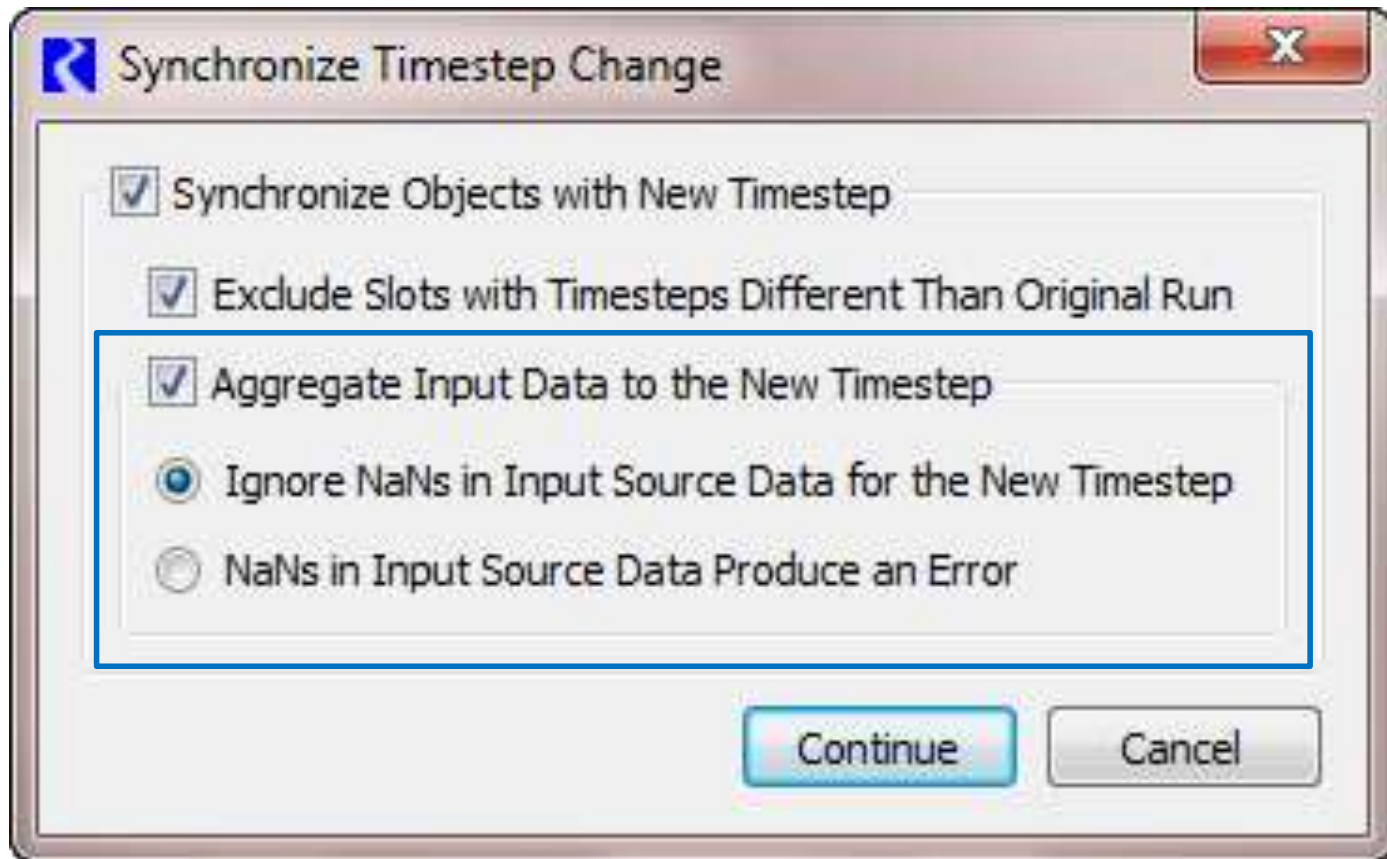


# Upcoming in 6.4

- Workspace Object list custom sort
- Rename many Accounts
- Subbasin Manager Usability



# Input Aggregation



## Demonstration

# Miscellaneous Features upcoming in 6.4

- Improved Copy/Paste of Slots
- Global Function Sets can be saved in model file
- DMI Date Mapping – Import data to a slot from a different time period in the database
- RPL usability: E.g. change  
Res.Outflow[ ] to  
Res.Outflow[<expr>]

