



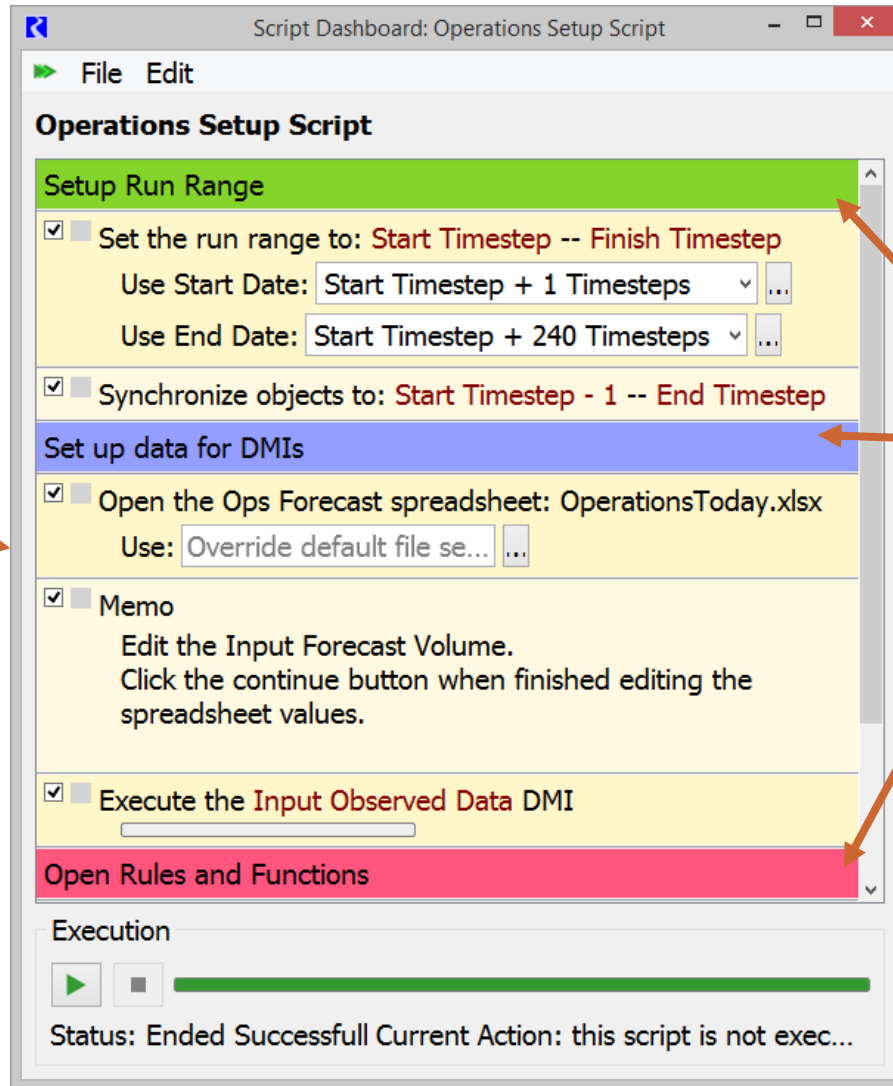
Center for Advanced Decision Support for  
Water and Environmental Systems (CADSWES)

UNIVERSITY OF COLORADO **BOULDER**

# **Scripts, Accounting, and Performance Improvements**

**2019 RiverWare User Group Meeting  
David Neumann**

# Scripts – New Actions



Open  
File

Dividers

# Scripts – Modified Set Slot Values

Actions

Add Action **Set Series Slot Values** + ?

Text	Type
<input checked="" type="checkbox"/> Set multiple slots' values to GetSlotOffAno...	Set Series Slot

Selected Action Settings (Set Series Slot Values)

Setting	Value
Show in Dashboard	Yes
Display Text	
Slots	DataObj.Series5, DataObj.Series4, DataO
Column	
Set by	Function
RPL Global Function	GetSlotOffAnotherObject
Start Date	Start Timestep
End Date	Finish Timestep

Set a slot value by calling a Global RPL Function

Script Actions	Arguments
Set Scalar Slot Value	SLOT
Set Series Slot Values	SLOT DATETIME
Set Table Slot Value	SLOT NUMERIC row NUMERIC column

GetSlotOffAnotherObject ✕

**S** **F** **⊙** GetSlotOffAnotherObject ⚡

Arguments: SLOT mySlot, DATETIME date 📄 Return Type: NUMERIC ▼

```
AnotherDataObject . GetSlotName ( mySlot ) [ date ]
```

# Accounting

- Empty Storage (E) flag

Value: 0 cfs Flow Dec 31, 20

	Inflow Total cfs		Outflow Total cfs		Gain Loss cfs		Slot Inflow cfs		Storage acre-ft		Accrual acre-ft	
01-04-2017 Wed	0.00	P	98.00	I	-0.02	m	0.00	m	617.09	A	0.00	A
01-05-2017 Thu	0.00	P	100.00	I	0.05	m	0.00	m	418.84	A	0.00	A
01-06-2017 Fri	0.00	P	99.00	I	0.17	m	0.00	m	222.81	A	0.00	A
01-07-2017 Sat	0.00	P	98.00	I	-0.00	m	0.00	m	28.41	A	0.00	A
01-08-2017 Sun	0.00	P	14.32	E	-0.00	m	0.00	m	0.00	A	0.00	A
01-09-2017 Mon	0.00	P		O	0.00	m	0.00	m	0.00	A	0.00	A

# Performance

- Passthrough and Storage Account solution improvement
- Water Rights Solver performance
  - 57% improvement in one model
- Modified internal algorithms (7.6)
  - ~15% improvement