Optimization

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What’s New?

- Improved Numerical Stability
- Scaling for “Summation” goals
  - (Repeated Minimax scaling years ago)
- Solution analysis
  - Improved tabs and % satisfaction
- Selectively generate LP files
  - Ability to change when run is paused
- Impulse Response on reaches
- Faster shrinking → Faster runs
- Many bugs filed and closed
- Iterative MRM with Sim/Opt/Rules
Optimization Model Improvements

- TVA
- BPA
- Mid-Columbia Models
  - 5 dams operated by 3 PUDS with “slices”
  - Between BPA dams, small storage
  - Optimization and Rules Models
  - Coordinated and Uncoordinated
  - Operational and Studies
What’s Next?

- New timesteps: 5 and 15 minutes
  - Power, esp. markets
  - Ramping benefit
- Improved co-optimization of hydropower and thermal generation
  - Unit commitment
  - Outages
  - Hydro-thermal
- Perhaps, Predefined Rule:
  - NUMERIC Optimize (STRING RPLSetSetName)
  - Interest?