



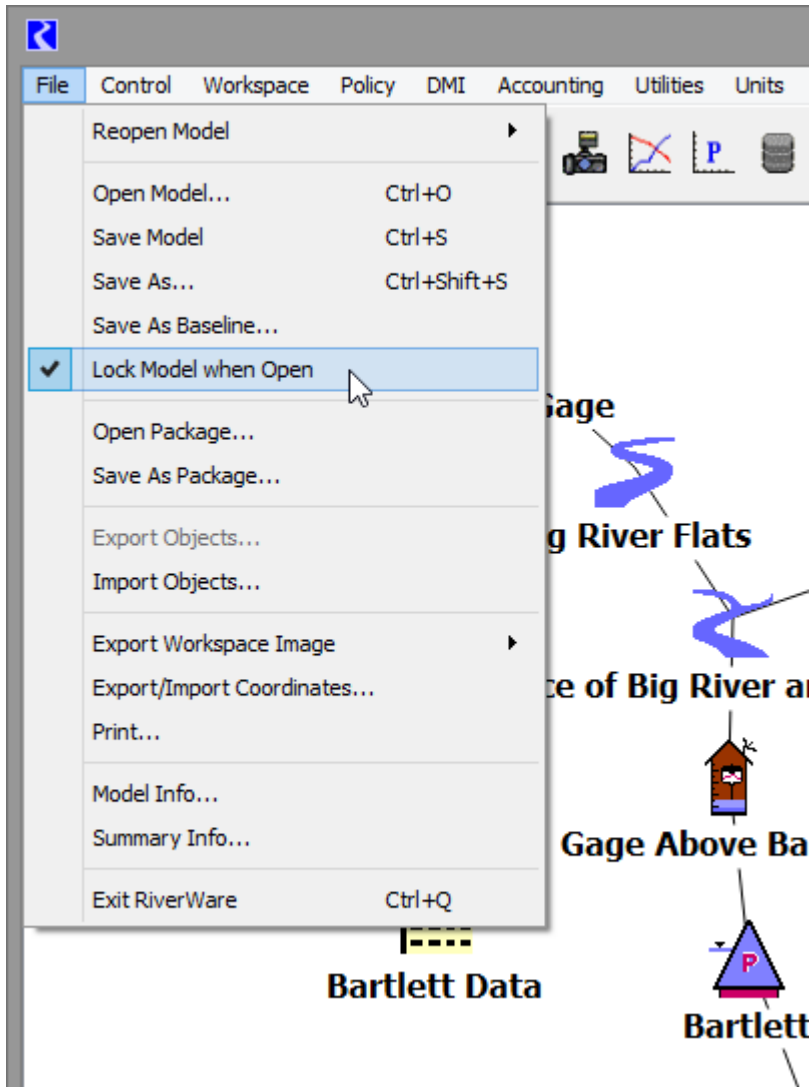
# New and Upcoming Features

Presenters: Patrick Lynn and David Neumann

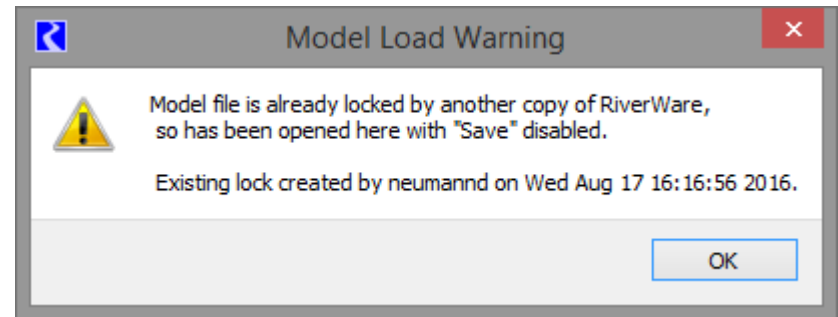
2016 RiverWare User Group Meeting

August 23-24, 2016

# Model File Locking



- Lock file is created
- When another user/session opens the model, a warning is posted:



- That user is prevented from saving but can still view model

# Model Versioning

## Complex models

Evolve in time + Collaborative



## Challenges

- Reproducibility
- Recovery
- Change tracking
- Behavior attribution
- Parallel development
- Tandem models

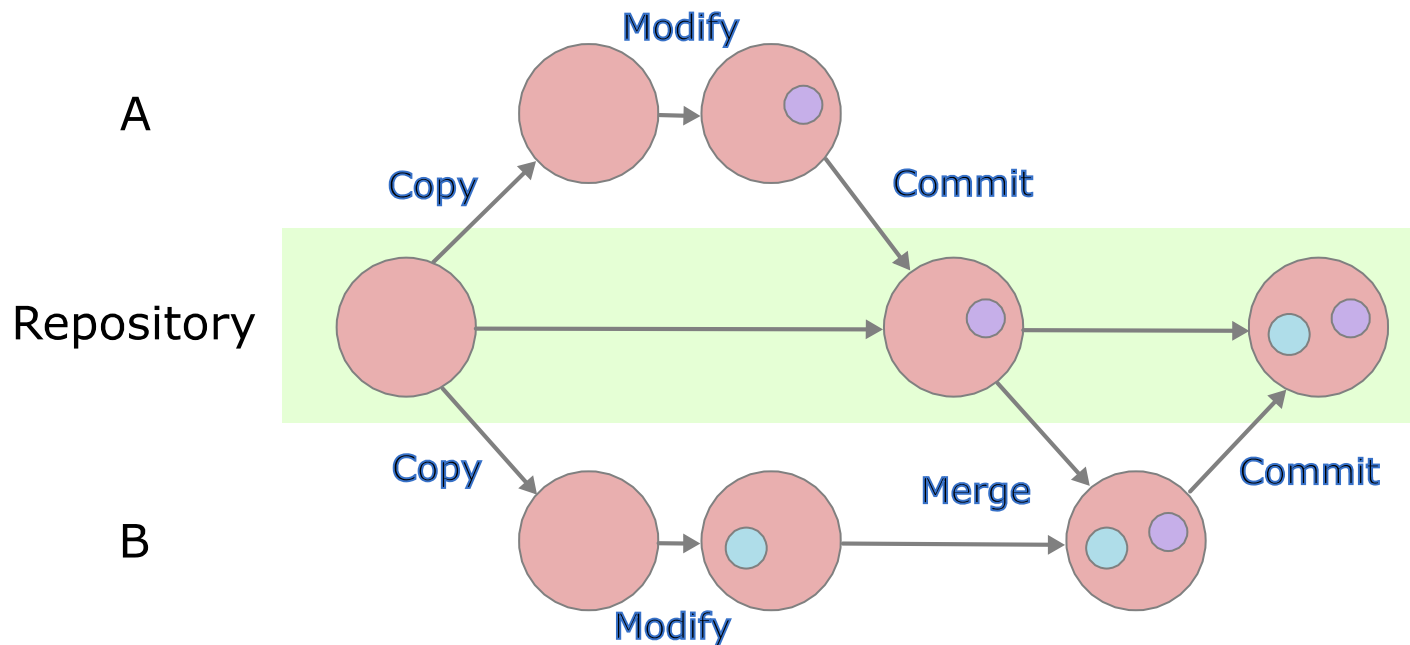
# Version Control Systems (VCS)

Database containing all versions of a file

- Versioning
  - Timestamp, comments, attribution
  - View/recovery any version
- Comparison
  - View differences between two versions

# Support for collaboration

- Locking: one person at a time
- Merging: Copy-modify-merge



# Challenges for VCS with RiverWare files

- VCS Complexity
  - Setting up a server
  - Possibly unfamiliar concepts, terminology
- Comparing model files
  - Format designed for machines not humans
  - File size, number of differences, cascading
  - Content (e.g., configuration & data)
- Merging model files

# What can CADSWES do?

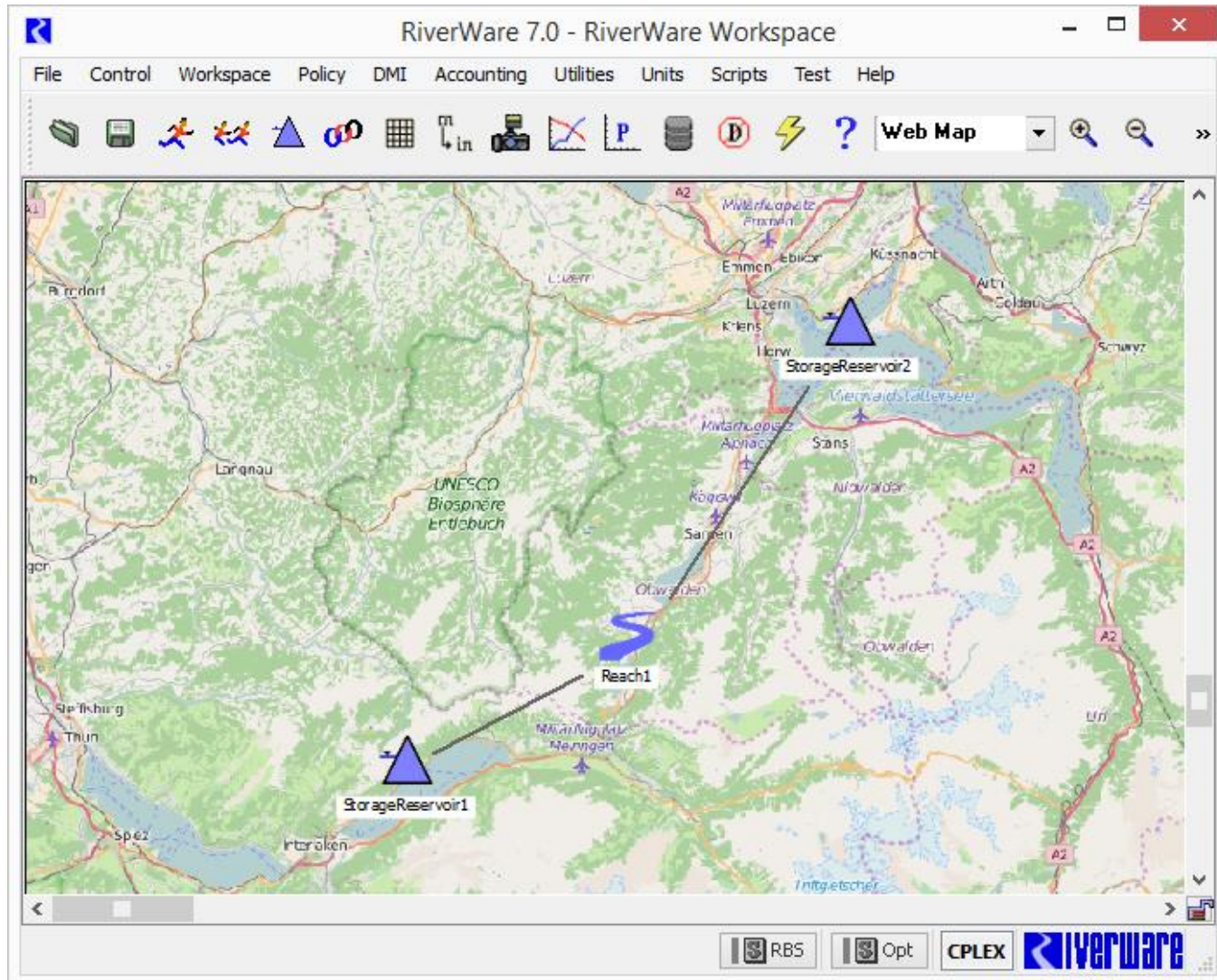
- Versioning: Incorporate basic version control into RiverWare
- Comparison: Create new model formats that better support generic comparison tools
- Merging: Create special-purpose merge functionality within RiverWare for critical content

# Proposed: Auto-save Model File

- Auto save temporary backup file(s)
- Specify directory
- Specify interval
- Never automatically overwrite original model

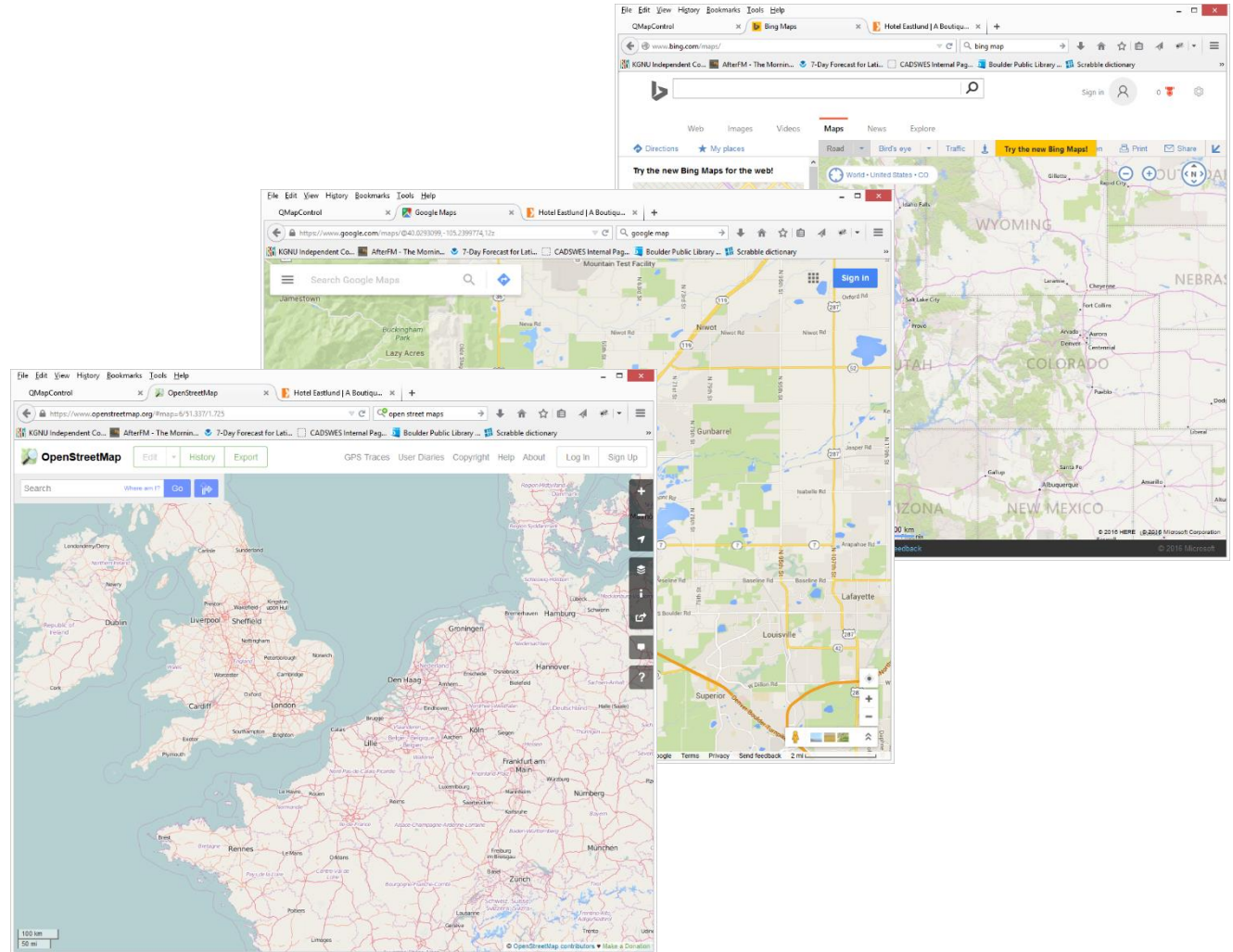


# Proposal: New Web Map View



# Why web maps?

- Dynamic
- Flexible
- Fast
- Familiar





# Future Enhancements and Open Mic

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