

# Ot Migration

RiverWare User Group Meeting February 6 - 7, 2007

Status of our Galactic Exodus

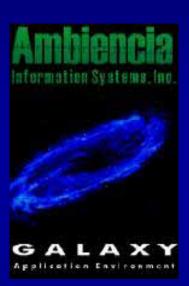
#### Replacing Galaxy with Qt

#### Galaxy has no future

- Visix bankruptcy / Ambiencia purchase
- No updates or maintenance
- Shrinking user-base
- No Support for new OS versions

#### Ot (selected after extensive study)

- Platform independent (Windows, Solaris, Linux, Mac)
- Substantial user-base
- Reasonable cost and licensing
- Commercial and non-commercial Open Source
- Object-oriented
- GUI builder tool
- Integration with Galaxy





#### Benefits of Qt over Galaxy

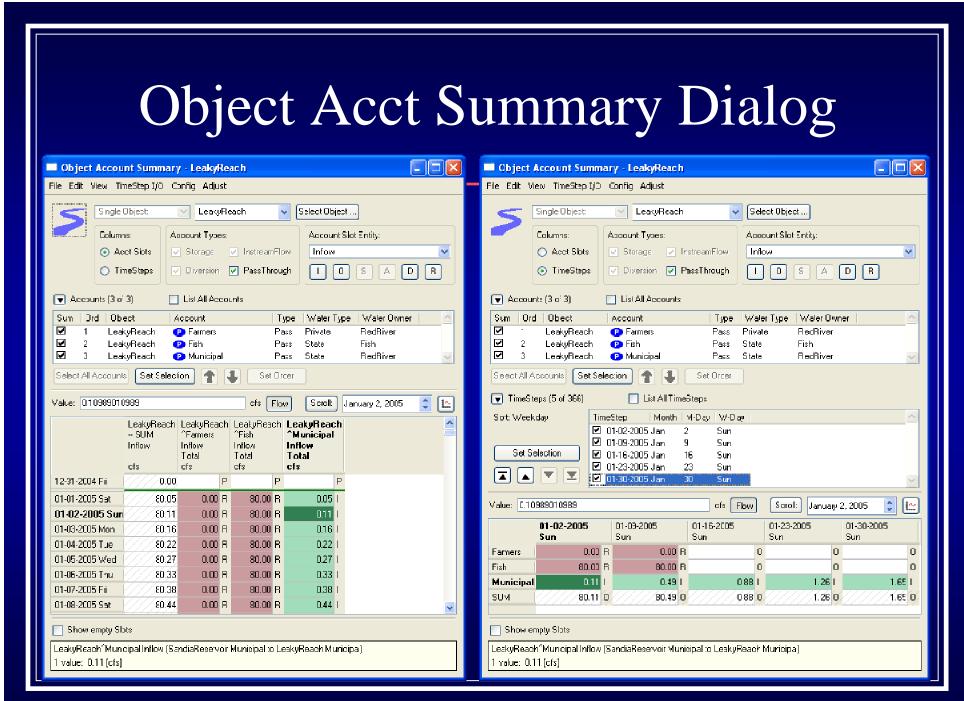
- More advanced GUI components ... e.g. support for integrated icons, tool tips, status bars, context menus.
- Faster development
- Better maintainability
  ... due to object oriented software structure
- Migration path to Linux and 64-bit computing

#### Prior Completed Qt Development

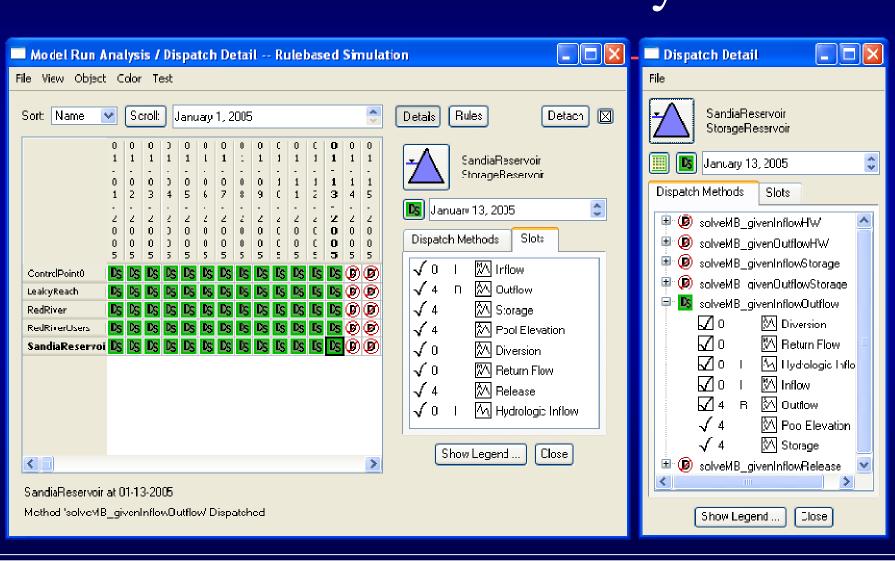
- Workspace and new Accounting View
- Open Object and Open Slot Dialogs
- > SCT 2.0
- DMI Dialogs
- Output Manager & Plot Dialog
- Run Control and MRM and Run Progress
- RPL interface and Rules Analysis Dialog
- Diagnostics Window
- Scenario Manager
- Selectors
- Account and Supply Managers

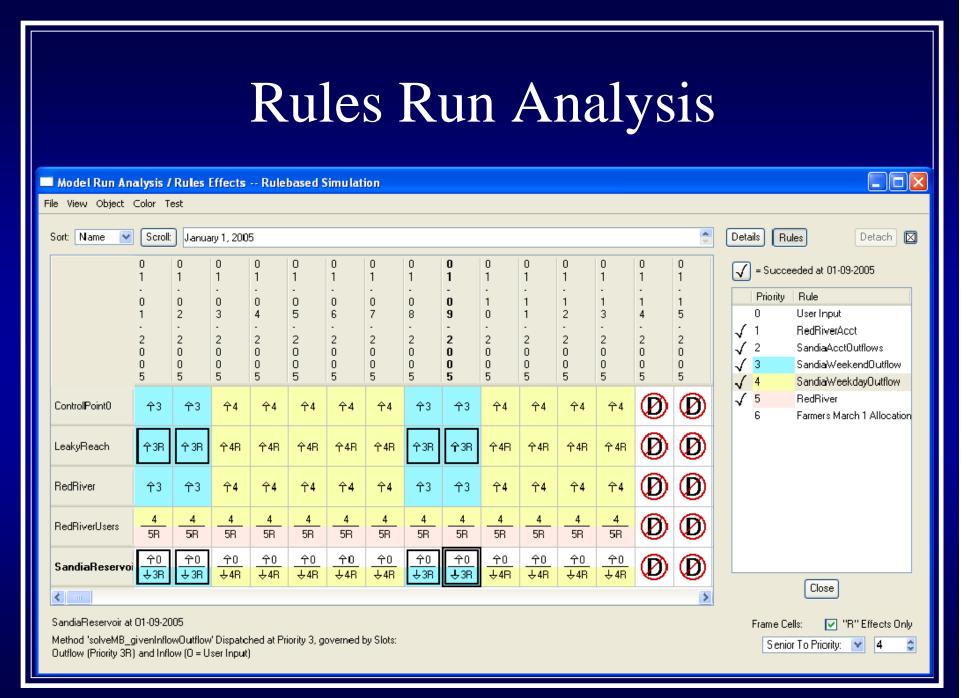
### Recent Completed Qt Ported Dialogs

- Accounting
  - Open Account Dialog (slot list and configuration)
  - Account Editor (series data editor)
  - Object Account Summary Dialog
- Run Analysis Dialogs
  - Simulation / SimObj Dispatch & Solution Detail
  - Rulebased Simulation









## Remaining Galaxy Dialogs to be Ported to Qt

- Exchange Dialogs (Accounting)
- Diagnostics Configuration
- Snapshot Manager
- Multi-Object Method Selector
- SubBasin Management Dialog
- SimObj Synchronization Control
- Unit Converter
- File Selectors (switch to use of Qt File Dlg)

#### Benefits of Full Qt Migration

- > Linux
  - 64-bit OS
  - Unix on Intel hardware
- > 64-bit Windows
- ➤ No Future Galaxy OS Conflicts
- Remove Integration Mechanism

## Other Migration Tasks

- Removal of Rogue Wave Library
  - Needed for Linux and for 64-bit
     ... to avoid unreasonable licensing cost.
  - Very limited use in RiverWare:
     String class and Regular Expression processing
- Port from Qt 3 to Qt 4
  - Non-trivial effort, but well supported migration.
  - Short term Qt 3 development can be optimized to ease transition to Qt 4.

### Goal for Galaxy to Qt Port Completion

- Percent complete: Approx 90% +
- Goal for completion: FY2008
- ... depending on funding, competing work and staffing.