

Qt Migration

Status of our Galactic Exodus

Replacing Galaxy with Qt

■ Galaxy has no future

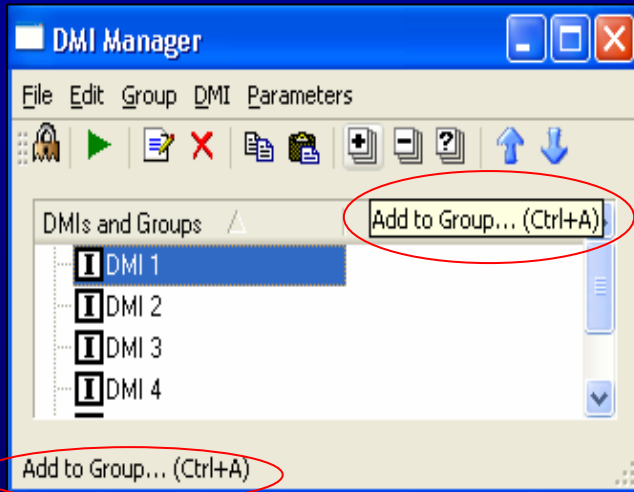
- Visix bankruptcy and Ambiencia purchase
- No updates or maintenance
- Shrinking user-base
- No Support for new OS versions

■ Qt (*selected after extensive study*)

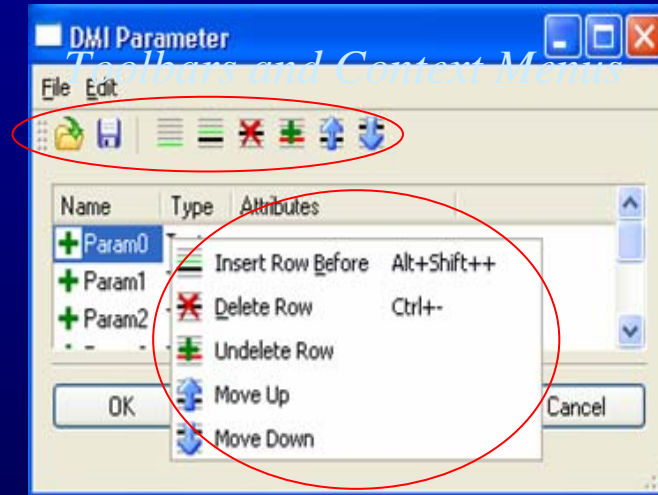
- Platform independent (Windows, Solaris, Linux, Mac)
- Substantial user-base
- Reasonable cost and licensing
- Commercial and non-commercial Open Source
- Object-oriented
- GUI builder tool
- Integration with Galaxy



Benefits of Each Qt Dialog



Tooltips and Status Bar Help



- Less development effort
- Maintainability

Qt Migration Philosophy

New GUI development

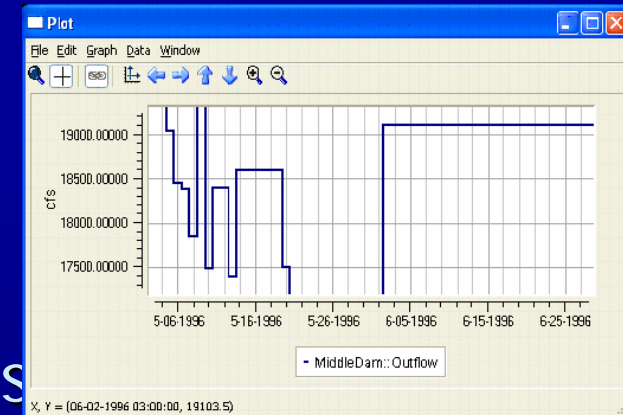
- Developed in Qt exclusively

Work done to existing Galaxy GUI

- Favor redesign over straight ports
- Qt migration dependent on:
 - Level of effort
 - License fee revenues / Maintenance
 - Sponsor funding

Completed Qt Development

- Workspace and new Acct 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



The Edit Slot dialog shows a table of data for a 'PeriodicSlot' with units of 'NONE'. The table has columns for time, and two numerical values. The data is as follows:

Time	Value 1	Value 2
0:00 January 1	90.00	100.00
0:00 February 1	95.00	120.00
0:00 March 1	98.00	110.00
0:00 April 1	102.00	190.00
0:00 May 1	109.00	160.00
0:00 June 1	111.00	90.00

Below the table, there are radio buttons for 'Interpolate' and 'Lookup', and a label 'Annual Period, Monthly Interval'.

The ruleLanguage.rls - Analysis Dialog window shows a table of rule analysis results. The table has columns for Name, Active, In Degree, Eval Time, and Evaluations. The data is as follows:

Name	Active	In Degree	Eval Time	Evaluations
NotEqual3	✓	1	0	0
Conversion Functions	✓	1	0	0
Date/Time Functions	✓	1	0	0
Flag Tests	✓	1	0	0
Flow Control	✓	1	0	0
Aborted Rule	✓	1	0	0
Aborted Run	✗	0	0	0
Early Termination	✓	1	0	0
For 1	✓	1	0	0

To Do

- Accounting System Dialogs (in progress)
- Optimization (in progress)
- Model Run Analysis (Sim, Rules, Opt) dialogs
- Diagnostic configuration
- Snapshot dialogs
- Multi-Object Method Selector dialog
- SubBasin Management dialogs
- Many small utility dialogs (file selection, unit converter, etc.)

Benefits of Full Migration

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

Goal for Completion

Percent complete: Approx 70% -80%

Goal for completion: 2006

Depends on funding, competing work and staffing