Aperi GUI Directions

Ted Slupesky
(slupesky@us.ibm.com)

Current (Legacy) GUI

- Based on Java Swing using its own "console framework"
- Closely coupled to current Data Server implementation
- Much of current GUI consists of (hand-coded) panels for generating various reports
- Not extensible
  - Plan A: retrofit extensibility into existing (legacy) GUI
  - Plan B: start over

Eclipse UI Technology

- Eclipse projects must extend the Eclipse platform
  - Therefore we need to construct a GUI that uses the Eclipse Platform ("Plan B")

- For the GUI that specifically means the Eclipse Rich Client Platform (RCP)

- RCP provides plug-in model, extension points, and concepts like "perspectives" and "views"

- Eclipse also provides a widget library called SWT, which is not Swing
  - But it's OK to use Swing in RCP applications

What We're Doing

- Have begun construction of Eclipse RCP GUI for Aperi
- Initial target has two main components:
  - A port of the topology viewer from the current GUI framework to Eclipse RCP
  - Integration of BIRT report design tool
- Target: 4Q06
- Remaining features would be added later

BIRT

- An interactive report design tool (for user-designed reports)
- Plus a report viewer
  - For reports that are designed by the user
  - Or provided by the system
  - Reports can be generated in the Java GUI, as HTML, or PDF
  - Charting is included
  - Initial contribution of Aperi GUI uses chart engine from BIRT
- Much more productive than hand-coding reports!
- http://www.eclipse.org/birt

BIRT Screenshot

New GUI Design

- It's a big effort
- We are starting small, concentrating on two "solid" areas: topology and reporting
- Our initial thinking is to have several perspectives available (in the complete GUI):
  - Topology
  - Reporting
  - Data Collection
  - Server Administration
  - Alerting
  - And then structure our existing functions within those perspectives
  - New plug-ins could, of course, either add functions to existing perspectives and views, or add new perspectives and views of their own (or both)

Timeline

- "New GUI" will not be feature complete in 4Q06
  - Primarily missing product configuration and data collection items
- "Old GUI" will be maintained so that it continues to function as underlying server code changes
  - Will be retired when "New GUI" is complete
- Extenders would need to make a choice about which GUI to extend
  - Ideally use new GUI, which has extensibility APIs and a longer lifespan

Other GUIs

- Constructing other GUIs is certainly possible
- IBM Research has prototyped a Web UI for the TPC product
- Constructing other GUIs is not something the IBM team intends to do, but it could be done by other committers on the project

CLI

- TPC 3.1 includes two CLIs
  - tpctool – documented for customers; limited function
  - srmcp – undocumented, developer-only tool, which provides access to device server functions
- IBM initial contribution does not have a CLI (except for srmcp)
- Aperi should have a (user-visible) CLI
- IBM team has no immediate plans to provide one – opportunity for community involvement?