GEC 19 Instrumentation and Measurement

GENI Desktop (Update)

Jim Griffioen, Zongming Fei, Hussamuddin Nasir Laboratory for Advanced Networking University of Kentucky Lexington, KY

Types of Enhancements

- Backend Enhancements
- Interoperability Enhancements
- O Performance Enhancements
- OGUI Enhancements

Backend Enhancements

- O(RSPEC) Parser Service Enhancements
 - Several new API calls to better support GENI Desktop tools
 - Support for color extensions in RSPECs
 - Several bugs fixes and enhancements
- Enhanced support for cross-aggregate experiments
- Fixed various CF setup errors and corner -cases

Interoperability Enhancements

- Improved support for iRods
 - Support for slice sharing between users
 - Data owned by creator
 - Dynamic creation of short-lived proxy certs
- Improved interoperability with FLACK
 - □ RSPEC color extension support

Performance Enhancements

- Much-improved AM management
 - Auto detection of AMs for slices
 - Queries limited to slice-specific AMs
 - Improved startup times and status update times
- Various GUI changes to improve responsiveness of the GENI Desktop

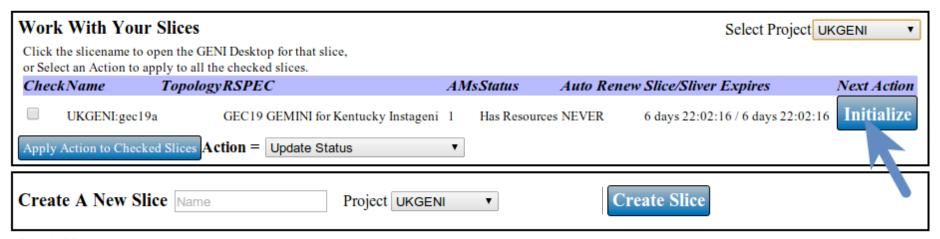
GUI Enhancements

- Completely reworked the "Work with your Slices" page
 - Can now upload, search, and browse RSPECs (public and private)
 - Can create slices using predefined RSPECs
 - Logic to prevent RSPEC/AM mismatch errors
 - Can select AMs if necessary
 - Can draw and save thumbnails of RSPECs
 - Fully "clickable" slice list page
- Support for slice sharing
- Several new logging/error reporting enhancements
- Display of slice and sliver expiration times with the ability to auto-renew
- New drop-down functions to apply to slices
- Hide/Show slices
- Support for user preferences
- New passive graphs module as default, but still support for old-style passive graphs
- New feedback and FAQ links on the GENI Desktop

Slice List Page



gec17dem ch_geni_net account | log off | Feedback/Bug Report



Show/Hide Log

Future Directions

- Multiuser slice creation support (key distribution)
- Move toward speaks-for support
- Integration with evolving Flack/Jack
- Enhanced user account/preferences settings
- Better error checking and reporting to help users debug problems.
- Better cross-aggregate/stitching support