GENI Meta-Operations Center Service Desk

Project Status Report

Spiral 5, Post GEC21

Period: 10/1/2014-3/1/2015

Marianne Chitwood – Principal Investigator

Summary

- *Operating within Budget*
- *Completed all remaining Service Desk Statement of Work milestones*
- *Continuing to work on current and consistently improving support for the GENI Community*
- *Performed an LLR Request Exercise with ExoGENI*
- *Continuing GENI Racks and Regionals turn-ups*

Major Accomplishments

Milestones Achieved

- **S4.g** *Complete revisions of processes and documentation and begin production operation of support desk. Plan to report on efforts and successes at subsequent GECs. (August, 2012)*

Continued training for the Service Desk 24/7 staff and Co-SST (Vince Neil) of GMOC tools and current support – Emergency Stop, GENI Integrated Backbone Outages/Maintenances, I2/Indiana/MOXI FOAM workflow, Disruptive Experiments Reservation and Maintenance Freeze workflows, GMOC Database training, GENI Racks Outage/Maintenance tracking, etc...

Service Desk performed another GENI LLR Request exercise; this time with ExoGENI. Service Desk continues to work with upcoming Regionals and GENI Racks to setup Emergency Stop contacts in the GMOC database for Aggregates and making sure they're sending data to GMOC and other operational-ready tasks via a stream-lined GENI Aggregate GMOC Turn-up Process.

Deliverables Made

- GENI support processes and documentation updates and improvements
- Continued event tracking support of GENI Racks
- Continued database UI and functionality updates for Emergency Stop and LLR Process
- Continued to provide turn-up for GENI Racks and other aggregates via the GENI Aggregate GMOC Turn-up Process.
- Performed LLR Exercise with ExoGENI.
- Created Experimenters List
- GENI Stitching Computing Services implemented

Description of Work Performed During Last Quarter
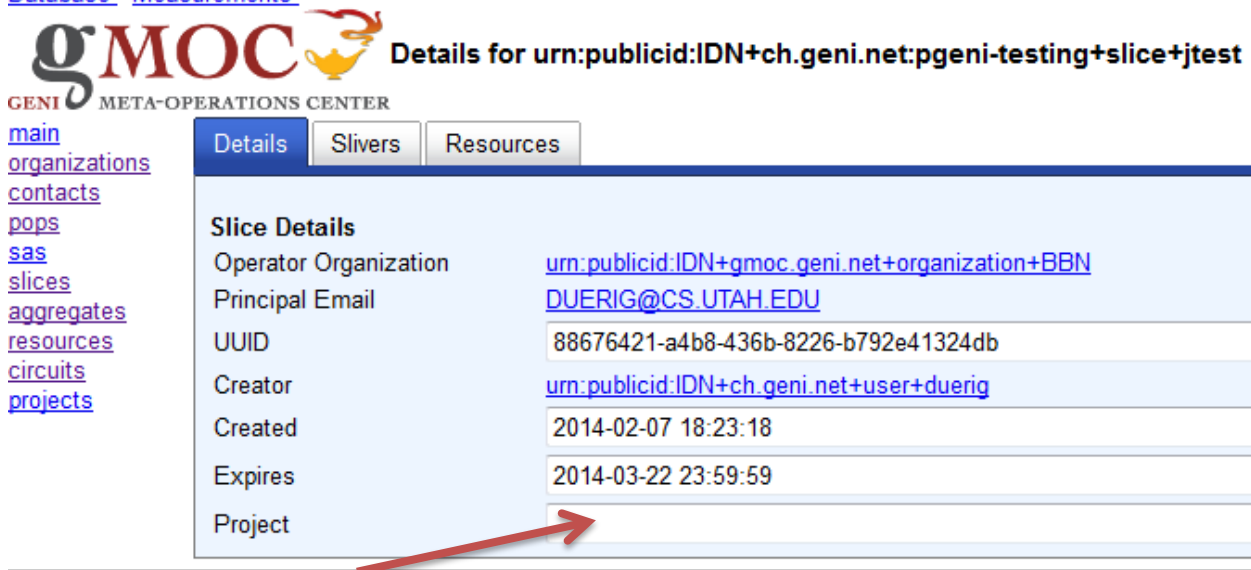
Activities and Findings

The GMOC Service Desk continues to operate by providing following areas of support for the GENI Community:

- **GENI Experimenter List:** Created an new list to be used by GENI experimenters. This list is maintained by the GMOC and is used to notify experimenters about outages and maintenances. The list is setup so that experimenters can opt in and out on their own without the need to send requests to the GMOC.
- **GENI Emergency Stop:** GMOC continues to maintain operational list of Emergency Stop contacts for all GENI Aggregates and the process for performing an Emergency Stop.
- **GENI LLR Request Exercise with ExoGENI:** GMOC continues to maintain and support operational process and procedure for LLR requests as they are received.
- **GENI Stitching Computing Services (SCS):**Allows experimenters to reserve GENI resources across multiple domains (I2 ION/AL2S). SCS service is actively monitored by the GMOC and supported by GlobalNOC Systems Support 24x7x365. A standing maintenance window has

been reserved daily at 10:00 AM Eastern for any required updates.

- **GMOC-DB** now has built-in functionality for looking up Project Owner as well as slice owner contact information, however Clearing House and Slice Authorities will need to begin sending this data to GMOC.

Lessoned learned from the first test were incorporated. GMOC provided a phone bridge and used a chat room and IRC channel for communication.

LLR representative had consistent access to the GMOC-DB, GMOC ticketing systems and other GENI tools. GMOC will continue to make sure LLR is well represented as one of the Operational Monitoring use cases and tools and data is available to support LLR and Emergency stop as operational monitoring efforts progress.

- **GENI Integrated OpenFlow Backbone network support update:** GMOC Service Desk worked with GPO network engineers to get GENI resources/aggregates, racks and regionals onto the new AL2S and other services supported by Internet2.

Project Participants

During this time, key participants in GMOC Service Desk included:

- Marianne Chitwood, PI
- Jeremy Oakes, GENI SST
- Adam Williamson, GlobalNOC Service Desk Supervisor

Outreach Activities

GMOC web site: GENI GMOC web site is continuing to be updated to provide up-to-date information on GENI Service Desk support including ticketing system, documents, tools and operations calendars.

Jeremy Oakes presented about GMOC updates at GEC21 during the GENI Operations session. Adam Williamson and Jeremy Oakes provided tours and live presentation of the GlobalNOC Service Desk work area and daily workflow.

GMOC continues to collaborate with the GENI Rack teams, Regionals and Operational Monitoring project representatives to help in GENI's transition to Operations.

Collaborations

GMOC continues to collaborate with the GENI Rack teams, Regionals and Operational Monitoring project representatives to help in GENI's transition to Operations.

Planned Activities for Spiral 5

GMOC Service Desk will continue to provide full range of existing support as well as reach out into new areas of improved support including:

- Work on improving overall visibility and reporting in GENI by taking active role in operational monitoring efforts and development.
  1. Continue performing LLR Requests dry-runs.
  2. GMOC-DB UI and schema supporting LLR requests by easily identifying GENI resources. Making sure all Campuses are sending IP data to GMOC and GMOC is able to lookup Project Owner data from Clearing House and Slice Authorities.
  3. Continue to feed monitoring use-cases for future GENI Operations.
- Continue to keep current the GMOC website home page and the GENI Meta Ops page on GENI Wiki to include current support features for experimenters and the GENI community as a whole.