



## **GENI Meta-Operations Center Service Desk**

### **Project Status Report**

*Spiral 5, Post GEC21*

*Period: 7/01/2013-09/31/2014*

**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

## *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:

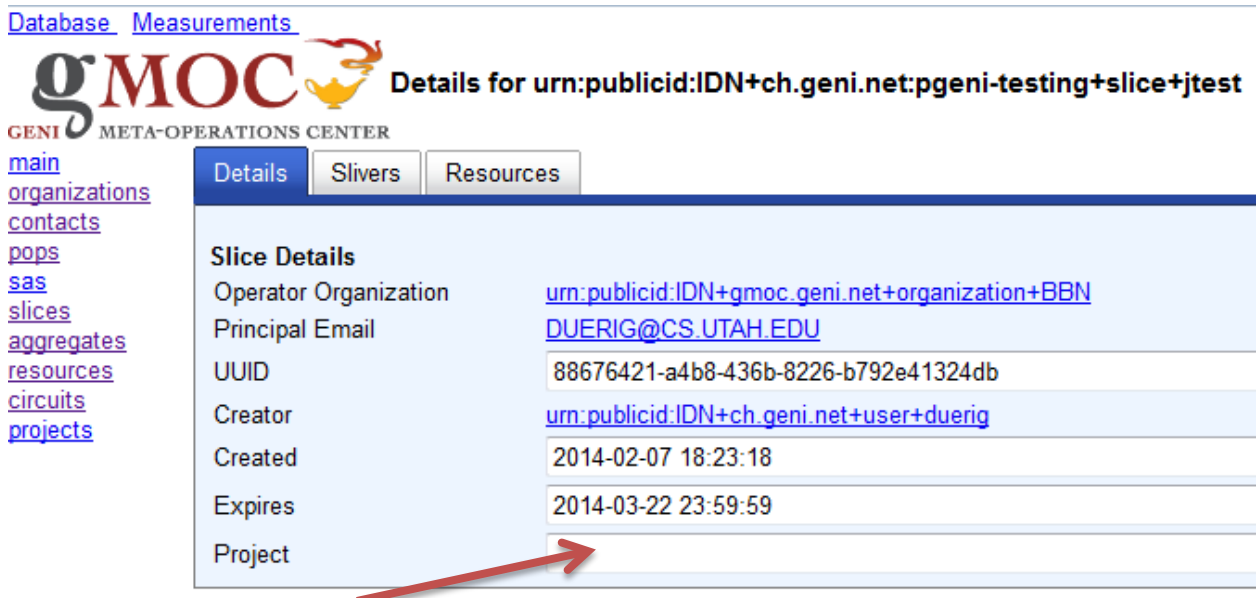
- **GENI Experimenter List:** Created an new list to be used by GENI experimenters. This list is maintained by the GMOC and is used to notify experimenters about outages and maintenances. The list is setup so that experimenters can opt in and out on their own without the need to send requests to the 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 along with currently designated GENI LLR representative, Stephen Schwab, a GPO representative, Ilya Baldin RENC, ExoGENI admin, conducted an exercise of an LLR Request test scenario based on the GMOC's LLR Request Process - [GENI LLR Procedure Workflow](#).

The finding of the exercise confirm that the over-all GMOC LLR Request Process works with 3<sup>rd</sup> party, such as an Aggregate Operator, however further tools development is needed and

assuring proper data is submitted into the GMOC-DB in order to be able to find GENI resources and parties responsible for them. It remains clear that historical data of GENI resources linked to their slice owners, etc... is needed to properly handle the LLR requests as slices expire and often LLR requests can often come in with significant delay and it would be difficult to track an offending party/entity if slice ownership has change/expired. Related to this, it is also important for GENI to determine a policy of how long historical data is kept. Without this policy, GENI can be at risk of having LLR requests to look up and turn over arbitrary amounts past data. GPO should think about incorporating this as a policy going forward and as operational monitoring architecture is developed.

- **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.

[Database](#) [Measurements](#)



**gMOC** GENI META-OPERATIONS CENTER

**Details for urn:publicid:IDN+ch.geni.net:p geni-testing+slice+jtest**

main organizations contacts pops sas slices aggregates resources circuits projects

Details Slivers Resources

Slice Details	
Operator Organization	<a href="urn:publicid:IDN+gmoc.geni.net+organization+BBN">urn:publicid:IDN+gmoc.geni.net+organization+BBN</a>
Principal Email	<a href="mailto:DUERIG@CS.UTAH.EDU">DUERIG@CS.UTAH.EDU</a>
UUID	88676421-a4b8-436b-8226-b792e41324db
Creator	<a href="urn:publicid:IDN+ch.geni.net+user+duerig">urn:publicid:IDN+ch.geni.net+user+duerig</a>
Created	2014-02-07 18:23:18
Expires	2014-03-22 23:59:59
Project	

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.