

GMOC: Background & Update

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GEC14

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Who are we?



GlobalNOC
Global Research Network Operations Center

GlobalNOC Supported Projects



Supported Projects: Internet2

- Provider of Internet2
NOC services
- Innovation Platform
- NDDI / OE-SS



GENI: MOXI

- Regional Openflow deployment
- CIC
- Covering 7 midwestern states

The logo consists of the text "GENI:" on the top line and "MOXI" on the bottom line, both in a bold, blue, sans-serif font. The text is centered within a white rectangular box that has a thin white border and a subtle drop shadow against the dark blue background.

GENI:
MOXI

GENI: GMOC

- Aggregator of Operational Data
- Coordinator of Operational activities



GMOC in a Nutshell

- Emergency Stop
- “What’s my slice doing? Is it working?”
- “What’s going in with GENI?”



GMOCC Expectations for Racks

- **Who should get the call in an emergency?**
 - Primary Contact
 - Escalation Contact



GMOC Expectations for Racks

- **Relational data**
 - what slivers exist on the rack?
 - what slices are these slivers part of?
 - what resources are in the slivers
 - what's stitched to what

GMOC Expectations for Racks

- **Measurements**
 - traffic
 - errors
 - cpu
 - vm count
 - control traffic
 - what's up/what's not

Steps for new racks (once built and connected)

1. Contact us: gmoc@grnoc.iu.edu
2. We'll give software to install and and work on custom bits to start data sharing
3. Provide Operational Contact info
4. Test



GENI Service Desk



Indianapolis Service Desk



Bloomington Service Desk



The GMOC Service Desk

- **Monitor the GENI backbone**
- **Manage network/systems alarms, outages, maintenance, provisioning, maintenance freezes and disruptive experiment reservations**
- **Notifications, Escalation and Reporting**
- **Engineering configuration and new site, regional and GENI rack turn-up**
- **GMOC Measurement API for aggregates**
- **Develop new tools for network monitoring and measurement**

Monitor and Manage

Current Network Status
 Last updated: Tue May 11 11:42:50 UTC 2012
 Submitted by: 58 records
 Reported Core™ 122: 0000000000
 Logged in as: monitor

Host	Up	Down	Partial	Unknown
0	0	0	0	0

Service	Up	Down	Partial	Unknown
0	0	0	0	0

Status Summary For All Host Groups

Host Group	Host Status Summary	Service Status Summary
WhiteLabel_1 (WhiteLabel_1)	■	■
WhiteLabel_2 (WhiteLabel_2)	■	■
WhiteLabel_3 (WhiteLabel_3)	■	■
WhiteLabel_4 (WhiteLabel_4)	■	■
WhiteLabel_5 (WhiteLabel_5)	■	■
WhiteLabel_6 (WhiteLabel_6)	■	■
WhiteLabel_7 (WhiteLabel_7)	■	■
WhiteLabel_8 (WhiteLabel_8)	■	■
WhiteLabel_9 (WhiteLabel_9)	■	■
WhiteLabel_10 (WhiteLabel_10)	■	■

GlobalNOC AlertMon

Current Alerts
 Last Updated: 20:49:23 UTC

Unacknowledged Alerts
 There are no active unacknowledged alerts.

2011-08-04 21:46:05 I-Light: I-Light bbsw ipiu Nagios Testing
 2011-06-24 13:45:57 I-Light: I-Light TDM Member DOH Scott

- AMPATH
- FutureGrid
- I-Light
- NJ Regionals
- Internet2 Network
- MAX GigaPOP
- Playground
- TransPAC
- CIC OmniPoP
- GRNOC Internal
- F Grid
- Indiana GigaPOP
- Internet2 TR-CPS
- National LambdaRail
- REN-ISAC
- other

gmoc GENI META-OPERATIONS CENTER

Project: GMOC
 User: Eldar Urumbaev

My Dashboard

Active	8	Service_Desk	7
Engineering	0	Customer	1
Vendor	0	Resolved	0
Request	0	Closed	199

Numara FootPrints 9
 Welcome to Numara FootPrints 9
 Now Featuring:
 - Mobile interface
 - Saved searches in Dashboard
 - Drill down on graphical charts
 - Multi-browser Description editor
 - Click to see [What's new in 9](#)

Display	Current search results	Refresh	Global Tickets
Displaying 1 - 8 of 8 Tickets	Report		There are no Global Tickets at this time

Ticket #	Customer Impact	Assignees	Last Edited On	Status	Title
203	4-Normal	GMOC NOC Service	07/06/2012	Service Desk	GENI credential Registration Inquiry
194	4-Normal	GMOC NOC Service	07/06/2012	Service Desk	GENI ExoGENI Racks Contact Info and Measurement Turn-up
185	4-Normal	GMOC NOC Service	07/05/2012	Service Desk	GMOC - University of Alaska Fairbanks Publishing Status of Resources Inquiry
170	3-Elevated	GMOC NOC Service	07/02/2012	Customer	GENI ES Contacts and Measurement API for Regional SoX
167	4-Normal	Eldar Urumbaev	07/05/2012	Service Desk	GENI Credentials and Ping monitoring Silvers for GMOC Request
165	4-Normal	GMOC NOC Service	07/06/2012	Service Desk	GENI Maintenance Freeze for GEC14
151	4-Normal	Eldar Urumbaev	07/03/2012	Service Desk	GENI Monthly Experimenters List Update
128	4-Normal	GMOC NOC Service	06/28/2012	Service Desk	GENI OpenFlow Backbone Redesign Master Ticket

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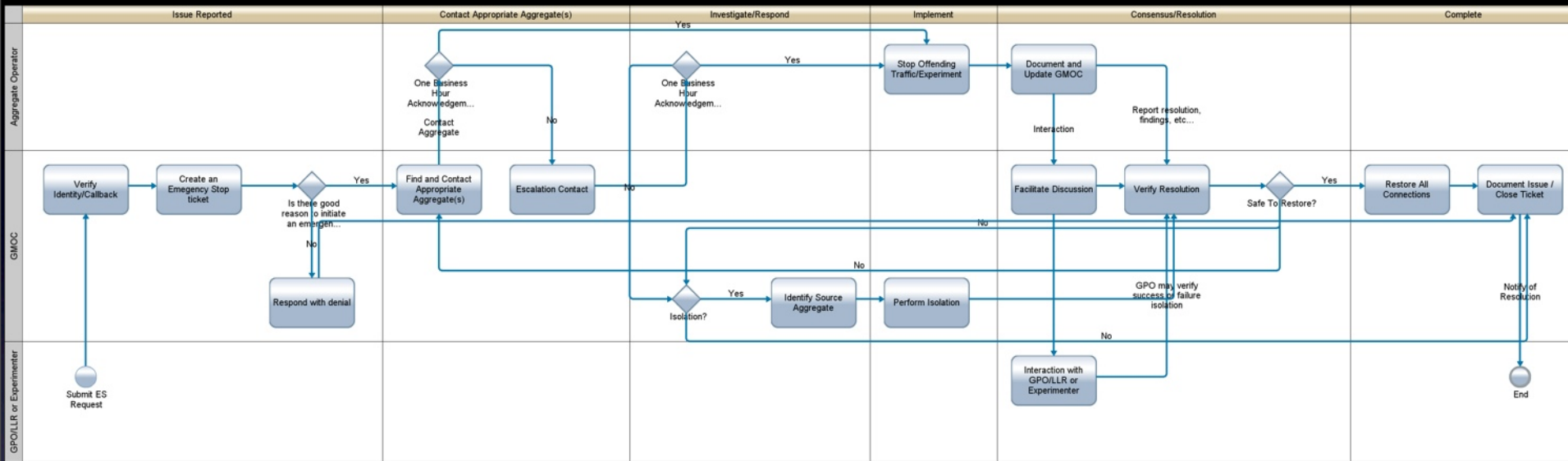
New GENI Regionals

- SoX
- MOXI
- CIC and Indiana GigaPOP (Merit soon)
- CENIC

New GENI Racks

- **ExoGENI**
- **BBN – GPO Lab Rack**
- **RENCI –**
- **FIU-SCIS - Florida International University School of Computer and Information Sciences**
- **UH - University of Houston**

New GENI Emergency Stop process



Thank you



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Contact Us
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<http://gmoc.grnoc.iu.edu>
317-274-7783

