### OSG Area Coordinators

Network Monitoring Update: August 2013 Shawn McKee



# Key Initiatives in Network Area

- OSG modular dashboard service / OSG network service
  - Progressing in GitHub: <a href="https://github.com/PerfModDash">https://github.com/PerfModDash</a>
    - GUI needs work. Example at <a href="http://perfsonar.racf.bnl.gov:8080/PsDisplay-1.0-SNAPSHOT/clouds.jsp?id=27">http://perfsonar.racf.bnl.gov:8080/PsDisplay-1.0-SNAPSHOT/clouds.jsp?id=27</a>
  - OSG has network service up. (More info later)
    - Matrix View <a href="http://myosg.grid.iu.edu/vopfmatrix?vo=on&vo\_35=on&vo\_3=on&active\_value=1&oasis\_value=1&sort\_key=name">http://myosg.grid.iu.edu/vopfmatrix?vo=on&vo\_35=on&vo\_3=on&active\_value=1&oasis\_value=1&sort\_key=name</a>
    - Host Status <a href="http://tinyurl.com/adbhv6n">http://tinyurl.com/adbhv6n</a>
- Improving perfSONAR-PS toolkit for OSG
  - We had 3.3 released at the end of July. Minor fix to v3.3 perfSONAR-PS required. Version 3.3.1 should be announced TODAY.
  - May require minor repackaging for OSG:Add integration with OSG services and coupling to OSG via registration automation
  - Advocating/supporting deployment at OSG sites begun. Need 3.3.1 broadly deployed before it makes sense to push non-LHC OSG sites
- Documentation updates: network tools & troubleshooting
  - Troubleshooting link created to guide OSG users with "network" issues: <a href="https://twiki.opensciencegrid.org/bin/view/Documentation/NetworkingTrouble-Shooting">https://twiki.opensciencegrid.org/bin/view/Documentation/NetworkingTrouble-Shooting</a>
  - Installation guide for perfSONAR-PS Toolkit in place
  - Have engaged Michael Blodgett/Morgridge to start testing/providing feedback



# Top Concerns

- Getting an OSG Network Service into "production"
  - Have quite a bit in place now. See nice docs from Soichi at <a href="http://confluence.grid.iu.edu/display/CENTRAL/Perfsonar+Mesh+Configs">http://confluence.grid.iu.edu/display/CENTRAL/Perfsonar+Mesh+Configs</a>
  - The OSG installation will eventually be the source for OSG AND WLCG configs (assuming hosting WLCG net-monitoring works out) but this needs work to create WLCG meshes (access to WLCG DBs). Doable...
  - Need testing of "client" data access for clients outside OSG
- The modular dashboard effort needs more effort
  - Currently have Tom Wlodek and Soichi. Input from Andy Lake
  - Recruited Jorge/UMICH to work on traceroute and pinger plugins
  - Lucy (Liu Si) at FNAL starting to work on revising the GUI
- How to get PS deployed in OSG where its not already...
  - For OSG sites with perfSONAR-PS it should be easy to get them upgraded and registered. Doing this now as 3.3.1 is released.
  - For OSG sites <u>without</u> perfSONAR-PS how best to "encourage" its deployment?
    - Costs \$\$ for two systems (users need to see this as a requirement & benefit )
      - Document low-cost options, explore VM possibilities. (Something better than nothing)
    - Costs some effort to install and register (we can help minimize this cost)



## Recent Accomplishments

- Testing of perfSONAR-PS v3.3 has led to 3.3.1
  - Found issues in scaling and operation for mesh-configs
  - Tested at Michigan, INFN, MWT2 (Chicago/Illinois/Indiana), OU
  - http://psps.perfsonar.net/toolkit/releasenotes/pspt-3\_3\_1.html
- perfSONAR-PS "Mesh" configuration for WLCG available
  - Uses "include" to define common items once. Tested and working.
  - Will be integrated with OIM/GOCDB to automate mesh creation
- Support letter campaign for perfSONAR-PS Toolkit
  - Successful!? There is a 2-day meeting in Washington Sep 17-18 between ESnet and Internet2 on perfSONAR-PS. I will be giving a keynote from the "user" community on behalf of OSG & WLCG.
- Updated docs on installing PS, troubleshooting issues
  - Michael Blodgett ramping up on installing and using PS, reviewing docs and providing perspective.
- Had joint discussion about OSG and WLCG use and plans for perfSONAR-PS. Useful and we have consensus
  - Have "normalized" OSG vs WLCG tests with Soichi



### Near term items

- Get existing sites updated to perfSONAR-PS 3.3.1
  - TBD whether any repacking by OSG is needed/useful at that point
- Using the OSG network service
  - As sites upgrade and use the mesh, verify data, displays
  - Begin testing "clients" of OSG network metrics
    - Will require some API changes to get certain typical queries
- Expand creation of "mesh-configs" to WLCG
  - Prototype and test creation of WLCG meshes. Needs interaction between Soichi and CERN/GOCDB experts.
  - May require additional information to provide complete JSON.
- Modular Dashboard updates to support 'disjoint/star' mesh types and traceroute/pinger tests
  - Jorge Batista working on plugins to gather traceroute/pinger tests from MAs
  - Tom Wlodek adding new mesh types to modular dashboard. Will need OSG instance update when ready.
- Documentation updates and additions
  - Publish documented procedures, How-Tos and (eventually) tools provided by OSG. Mike Blodgett starting on this.



### **URLs** of Relevance

- Network Documentation
   https://www.opensciencegrid.org/bin/view/Documentation/NetworkingInOSG
- Initial OSG mesh details <u>http://confluence.grid.iu.edu/display/CENTRAL/Perfsonar</u> <u>+Mesh+Configs</u>
- perfSONAR-PS OSG Installation Instructions
   https://twiki.opensciencegrid.org/bin/view/Documentation/PerfSONARToolKit
- Modular Dashboard Development <u>https://www.opensciencegrid.org/bin/view/Documentation/NetworkingModularDashboard</u>
- perfSONAR-PS WLCG Installation Instructions https://twiki.cern.ch/twiki/bin/view/LCG/PerfsonarDeploy ment



# Questions or Suggestions?

#### **Thanks**

