



# OSG Area Coordinators

Network Monitoring Update: **November 2013**

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# Key Initiatives in Network Area

- OSG modular dashboard service / OSG network service
  - In GitHub: <https://github.com/PerfModDash> BUT not (yet) converging for our needs
    - Problems with functionality and coverage (see later slide)
    - GUI still needs work. Example at <http://perfsonar.racf.bnl.gov:8080/PsDisplay-1.0-SNAPSHOT/clouds.jsp?id=27>
  - OSG has basic network service up, but really needs new capabilities
    - GitHub project needs specific features before we “upgrade” OSG instance
    - Will require Operations help to upgrade service to utilize new version when ready
- Improving perfSONAR-PS toolkit for OSG
  - We had 3.3.1 released in September. Fixed all known issues (at the time)
  - Additional testing in scope of OSG and WLCG showed a few issues
  - Push within OSG is starting to get ALL OSG sites to install (Rob/Shawn)
- Documentation updates: network tools & troubleshooting
  - New “WhyPerfSONAR” page setup to encourage adoption/installation.
  - Troubleshooting link updated for OSG users with “network” issues:  
<https://twiki.opensciencegrid.org/bin/view/Documentation/NetworkingTroubleShooting>
    - Need to get more input from both users and network engineer perspective
  - Installation guide for perfSONAR-PS Toolkit in place  
<https://twiki.grid.iu.edu/bin/view/Documentation/PerfSONARToolKit>

# Top Concerns

- The modular dashboard effort still needs more effort
  - Currently have Tom Wlodek. Minimal effort from elsewhere.
    - Tom may be unable to continue working on this longer term
  - Lucy (Liu Si/FNAL) unable to continue work on revising the GUI
  - The list of dashboard code issues below need resolution ASAP.
  - New “Spring” framework needs testing; impact on migration to OSG?
  - Recruited Jorge/UMICH to work on traceroute and pinger plugins
- Getting the OSG Network Service into “production”
  - **Current service in OSG works and gathers data**
  - **Dashboard code has multiple issues:**
    - Collectors missing for PingER and traceroute tests along with associated storage schema
    - New “disjoint” and “star” meshes not yet supported
    - Data collection for throughput is averaging results: we need “raw” data
    - Scaling not yet verified
    - API must support bulk queries (request from ATLAS, ANSE and BigPANDA)
    - Mesh URLs with “include” statements not correctly supported
  - **The above must be resolved before we migrate/consolidate in OSG**
- Breadth of deployment: Basically we have only WLCG-OSG sites with deployments. Need to pursue the rest.
- Not getting much engagement from Mike Blodgett yet

# Recent Accomplishments

- Dedicated perfSONAR-PS Meeting in Washington DC on September 17-18 with ESnet, Internet2 and PS users
  - **Very Successful:** I presented a keynote from the “user” community on behalf of OSG & WLCG. One from NIH as well.
  - User viewpoints (OSG/WLCG and NIH) very influential
  - **Result:** Internet2 (re)committed 1.5 FTE to the perfSONAR-PS project for the next 3 years (had fallen to 0.1 FTE recently)
- Testing of perfSONAR-PS 3.3.1 identified three issues:
  - The LiveCD has some configuration data persistence issues
  - An XML file (pinger-landmarks.xml) is getting corrupted in some rare circumstances (3 sites reported). Traceroute/pinger stop
  - **EGI identified a medium security risk in some services**
  - **Issues should be addressed in the 3.3.2 release in 1-2 weeks**
- New page setup to encourage OSG sites to deploy PS:
  - <https://twiki.grid.iu.edu/bin/view/Networking/WhyPerfSNOAR>
- Updated docs on installing PS, troubleshooting issues

# Near term items

- Complete upgrades for sites with perfSONAR-PS versions prior to 3.3.1 and ensure mesh-config use
  - Once 3.3.2 is out we will need all sites to upgrade again.
- Complete Modular Dashboard updates
  - This is the prerequisite to allowing us to migrate/merge the existing other dashboards instances into OSG
- **Migrate new code and dashboards into OSG?**
  - **Goal is one service/dashboard for OSG (and WLCG)**
- Expand automated creation of “mesh-configs”
  - Prototype and test creation of WLCG meshes.
  - Needs interaction between Soichi and CERN/GOCDDB experts.
- Using and improving 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
- **Engage ESnet in OSG Networking?**
- Documentation updates and additions
  - Maintain/update documented procedures

# URLs of Relevance

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

# Questions or Comments?

Thanks!