



OSG Area Coordinators

Network Monitoring Update: **October 29, 2014**

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Key Initiatives in Network Area

- Improving perfSONAR-PS toolkit for OSG
 - Shellshock and POODLE issues quickly addressed. We got special notice from CERN security for being very fast, responsive and effective regarding these.
 - perfSONAR 3.4.1 out yesterday
- OSG modular dashboard service / OSG network service
 - MaDDash (metrics GUI) and OMD (service checks) on OSG VM.
 - “Datastore” ready. RSV probes to load DB will need verification
 - Mesh-creation automation ready modulo final checks
- Documentation updates: network tools & troubleshooting
 - Special page on Shellshock created
 - Documentation on upgrade/reinstall completed and tested
- Outreach and community interaction
 - Have held two operational meetings for “Networking and Transfer Metrics WVG”
 - Need to reschedule “Metrics” focused subgroup meeting
 - Meeting with perfSONAR developers tomorrow

Top Concerns

- OSG Network Service into “production” and fully functional
 - Still need OSG monitoring subnet on LHCONE
 - Getting all installations upgraded and properly configured
 - Process of loading DB from perfSONAR 3.4 instances still to be tested and validated
- Testing and validating our OSG mesh-configuration/creation capabilities
 - Looks to be in good shape. Need to determine how to include hosts not part of WLCG/OSG (LHCONE network instances)
- Verifying and tuning our service monitoring and metrics dashboard (MaDDash)
- Getting clients for our OSG network service data
 - As soon as we have a populated datastore in OSG we need to begin providing **user access** to the data.
 - Will need iteration to get this right. WLCG, ANSE and PuNDIT are all ready to start using this.

Recent Accomplishments

- Worked with OSG Operations (Soichi) on Mesh-config+Monitoring
 - Soichi has implemented a cron script to download WLCG sites / endpoints from GOCDB and ingest to OIM's wlcg tables (upsert/remove).
 - Implemented mesh config administration GUI on OIM.
 - Mesh-config is functional and generates JSON configs based upon GOCDB/OIM
 - Auto-mesh URL works and allows better central management of testing
 - perfSONAR endpoint crawler" runs in OIM testing all OIM/WLCG toolkit instances and storing MA endpoints.
 - For sites that are behind the firewall, this module can't discover the MA URLs and generated mesh config will contain empty URLs because of it.
- Responded quickly to security issues: Shellshock and POODLE
 - Sites all advised to turn-off instances unless they were patched by Sept 25th
 - Details coordinated with CERN/WLCG/OSG security
- Final deployment documentation installed in OSG, replacing documentation at CERN
 - Instructions vetted/tested by WLCG working group
 - Some policy issues still TBD (IPv6 and Tier-3 recommendations)

Near/Mid term items

- **Reinstall/upgrade announcement to be sent Nov 1**
- **Working Network Datastore using Esmond**
 - Main issue is testing the gathering/loading of metrics via RSV
 - **Not sure of the status of the RSV probe....**
- **Automated creation of “mesh-configs” into production**
 - **Finish testing and verification.**
 - **Plan “cut-over” from existing mesh URLs to OSG**

=====Mid Term=====

- **Identify and lobby non WLCG OSG sites to install PS**
- **Coordinate activities with PuNDIT and WLCG WG**
 - **Use-cases for creating the API are important and need iteration**
- **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**
- **Continued documentation updates and additions**
 - **Maintain/update documented procedures**

URLs of Relevance

- Network Documentation
<https://www.opensciencegrid.org/bin/view/Documentation/NetworkingInOSG>
- New Deployment documentation for both OSG and WLCG hosted in OSG (migrated from CERN)
<https://twiki.opensciencegrid.org/bin/view/Documentation/DeployperfSONAR>
- New 3.4 MA guide <https://code.google.com/p/perfsonar-ps/wiki/MeasurementArchiveClientGuide>
- Modular Dashboard Replacement Prototypes
 - <http://maddash.aglt2.org/maddash-webui>
https://maddash.aglt2.org/WLCGperfSONAR/check_mk
- perfSONAR-PS Installation Motivation:
<https://twiki.grid.iu.edu/bin/view/Networking/WhyPerfSNOAR>
- Initial test OSG mesh details
<http://confluence.grid.iu.edu/display/CENTRAL/Perfsonar+Mesh+Configs>
- Esmond install info http://antg-dev.es.net/esmond-docs/rpm_install.html
- Mesh-config in OSG <https://oim.grid.iu.edu/oim/meshconfig>

Questions or Comments?

Thanks!