OSG Resource and Service Validation publishing to WLCG SAM
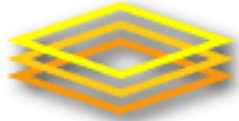
Rob Quick

OSG Operations Coordinator

WLCG Management Board Meeting

January 8th 2008

Goals

- OSG sites will publish results of resource tests to the WLCG SAM repository through
    - running RSV probes,
    - collecting the information at the Grid Operations center RSV-Gratia repository
    - publishing selected information from this repository to the WLCG SAM repository.
- This information will be used by WLCG to generate site availability plots for OSG resources.
- Probes and transport follow specifications from Grid Monitoring Working Group.
    - Many thanks to James and Piotr for much collaboration and help.

Schedule and Status

- RSV V1.0 available as part of OSG 0.8.0 released Nov 1st 2007.
  - Provides mechanisms for scheduling, status probes, and collection
  - Focus on putting infrastructure in place that could be easily expanded
- ~18 (out of 70) OSG resources now reporting to the central RSV repository.
- Discussions on RSV deployment and experience to OSG Tier-2s in next couple of weeks.
- RSV V2.0 targeted for OSG 1.0 end of February.
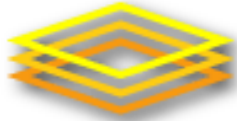
Local Resource Display

OSG RSV Status - Main
01-05-2008 06:58:06

Archived HTML pages

nest.phys.uwm.edu

Probe	Metric	Last Executed	Status
gridftp-simple-probe	org.osg.globus.gridftp-simple	2008-01-03 10:08:03 CST	OK
jobmanagers-status-probe	org.osg.batch.jobmanager-fork-status	2008-01-04 06:21:31 CST	OK
osg-version-probe	org.osg.general.osg-version	2008-01-04 06:21:11 CST	OK
cacert-crl-expiry-probe	org.osg.certificates.crl-expiry	2008-01-03 08:31:21 CST	OK
gram-authentication-probe	org.osg.globus.gram-authentication	2008-01-03 11:31:02 CST	OK
classad-valid-probe	org.osg.general.classad-valid	2008-01-03 08:46:01 CST	OK
jobmanagers-status-probe	org.osg.batch.jobmanager-condor-status	2008-01-03 08:44:26 CST	OK
osg-directories-probe	org.osg.general.osg-directories-CE-permissions	2008-01-03 10:07:08 CST	OK
certificate-expiry-local-probe	org.osg.local.httpcert-expiry	2008-01-03 06:06:00 CST	OK
certificate-expiry-local-probe	org.osg.local.containercert-expiry	2008-01-03 06:29:00 CST	OK
certificate-expiry-local-probe	org.osg.local.hostcert-expiry	2008-01-03 06:43:00 CST	OK
cacert-expiry-local-probe	org.osg.local.cacerts-expiry	2008-01-05 06:58:04 CST	OK
jobmanagers-available-probe	org.osg.batch.jobmanagers-available	2008-01-03 06:59:11 CST	OK
cacert-crl-expiry-probe	org.osg.certificates.cacert-expiry	2008-01-03 07:48:21 CST	OK

- HTML output that is easily viewable by administrators
- Drilldown for details of failures, if any.
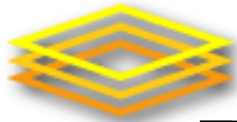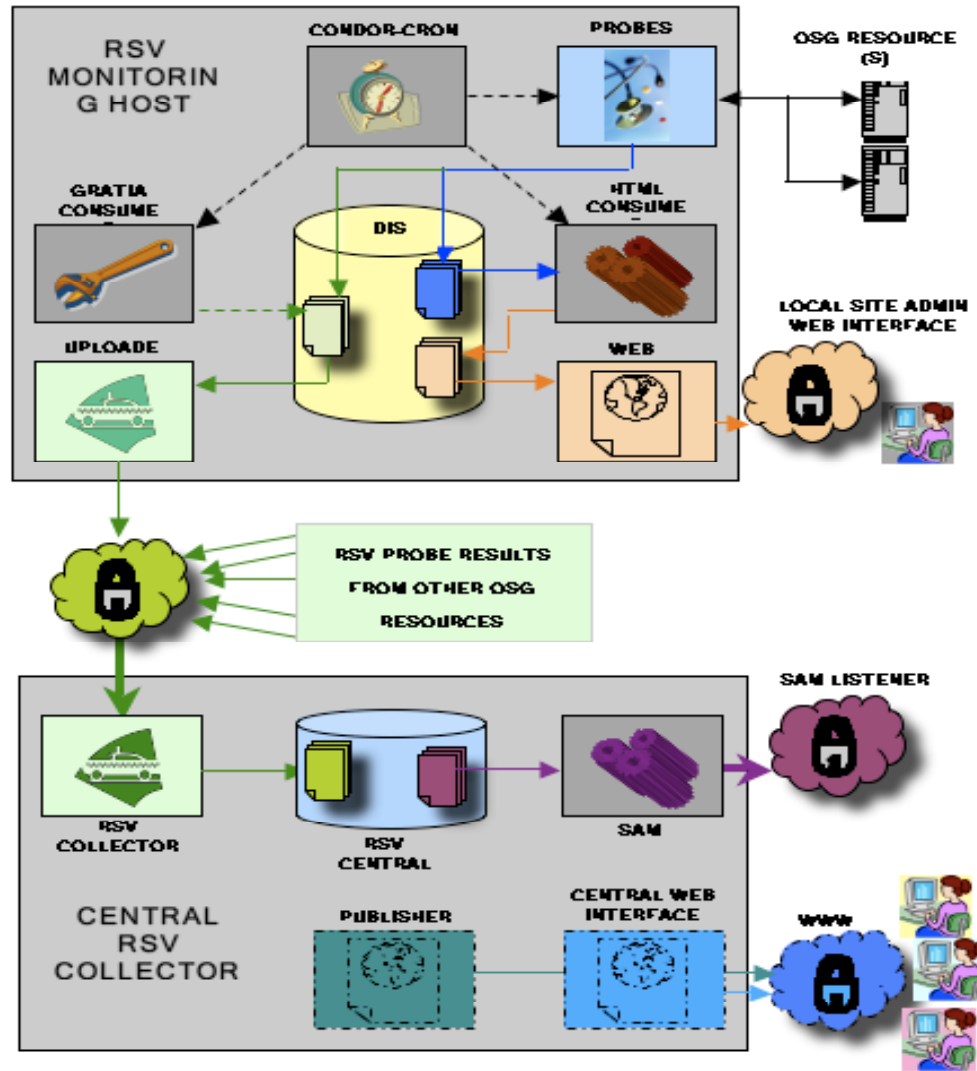
RSV Architecture Schmatic

Fig 1: Schematic of RSV. (Future work shown in dotted-dashed)

Publishing to the WLCG SAM

- Several months of OSG Integration TestBed data transported to WLCG SAM and analysed.

- Records from OSG Production Resources now being published.
    - This was delayed by holidays and some minor technical issues on both ends.
    - Select test results (not all) will be sent as needed.

- Test set comparison between OSG and EGEE
    - Evaluated and reported in Aug by David Collados (did Jeff Templon check also?)
    - https://twiki.cern.ch/twiki/bin/view/LCG/OSGCriticalProbes
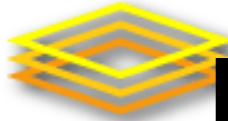
Publishing to the WLCG SAM (continued)

- SAM will display OSG Resource Availability based on OSG tests

  - Display on SAM end is up to the SAM developers

  - We are very interested in the end to end validation.

Probes (V1) mapped to WLCG Availability Criteria

- Gram Authentication - Critical

- OSG Version - Critical

- Job Managers Available - Critical

- Job Manager Status - Critical

- GridFTP - Critical

- CACert CRL Expiry - Critical

- OSG Directories and Permissions - Critical

- Certificate Expiry Host - Non Critical

- Certificate Expiry Services - Non Critical

OSG RSV Version 2

- Proxy handling
- Ease of configuration
- Extending Probe Set
- Include SE Probes
- Web Interface to data
- Probe software Cache
- Enhanced Documentation

Questions?