

Enabling Grids for E-sciencE

OSG RSV Tests for T2 Reliability

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What is needed to produce OSG T2 reliability metrics:

- List of OSG resources.
- List of critical tests for OSG resources.
- Reporting OSG downtimes.
- Availability/Reliability algorithm.



List of OSG resources

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- URL in place from where resources are pulled by SAM:
 http://oim.grid.iu.edu/publisher/get_osg_interop_monitoring_list.php
- Only OSG CEs published. Soon SRMs too.

Issues:

- Indiana collector not able to publish only one name for several publishing sources (impact in SAM & GridView). Example: cmsosgce.fnal.gov -> uscms-fnal-wc1-ce cmsosgce2.fnal.gov -> uscms-fnal-wc1-ce2 cmsosgce4.fnal.gov -> uscms-fnal-wc1-ce4
- OSG sites publishing in GOCDB. Example: USCMS-FNAL-WC1
- SAM script was ignoring resources of new sites in above URL (now fixed).



Critical tests for OSG resources

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Described at:

https://twiki.cern.ch/twiki/bin/view/LCG/OSGCriticalProbes

- Existing list of critical tests (for OSG CEs only):
 - certificates crl expiry
 - general osg directories CE permissions
 - general osg version
 - globus gridftp simple



Critical tests for OSG resources

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- Requested approval of new list of critical tests (for OSG CEs):
 - certificates crl expiry (check if host cert is still valid)
 - general osg directories CE permissions
 - general osg version
 - certificates cacert expiry (check if CA certs are still valid)
 - general ping host (check if CE responds to pings)
 - globus gram authentication (authenticate to remote CE using Globus)
 - batch jobmanagers available (get job managers running on remote site)



Critical tests for OSG resources

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Issues

- Remove 'globus gridftp simple' test or modify the test?
 - Not all OSG CEs run gridftp.
 - SAM does not accept critical tests defined per Service, VO, Site.
 - Make the test succeed in CEs that are not supposed to run gridftp?
- SRM tests in next OSG 1.0.0 release (2nd of June).
 - Full set of probes equivalent to the EGEE CE & SRM tests.
 - Check if EGEE SRM tests could be used instead.



Reporting OSG downtimes

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- First OSG SAM submission tests successful.
- Missing:
 - Script for automatic downtimes submission (OSG)
 - DB trigger in GridView database to store the downtimes (GridView).
 - Time scale: in 2 weeks in Production.



Availability/Reliability calculation

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Issues

- OSG Sites in grey color (N/A) in GridView
 - Solutions:
 - Remove all OSG resources for OPS not coming from interoperability resources URL.
 - Modify availability calculation algorithm to group flavors of CEs (CE, OSG-CE), SRMs (SRMv1, SRMv2, OSG-SRM) and Site Info systems (SBDII, CE-MON). Count them as a single site service availability metric.
 - Time scale: in 2 weeks in Production.
 - We can implement the above solutions and generate May reports in early June.

- SAM and GridView designed for EGEE infrastructure.
 We want them now to integrate/support other Grid infrastructures.
 - This does not scale with present implementation and is main reason of most of our problems.
 - Fixing this implies redesign of the DB
 - profit from the Grid Monitoring Topology Database work
 - to provide more flexibility (like critical tests per site, node X belonging to several sites, etc)
 - As a consequence, software changes in the core of SAM and GridView portals, and related data consumers (APIs, GridMaps, Dashboards, etc) will be needed.
 - A lot of work from here to the end of 2008.

SAM Priorities

- The SAM team needs to define priorities for the next months:
 - OSG interoperability?
 - New DB schema for scalability?
 - Integration with Nagios site monitoring?
 - Redefine some sensors (e.g. Data management)?
 - And of course we need to continue giving support.

Lack of manpower in SAM

- Moved from 6 people (Jan 2008) to 4 at present time (hiring ongoing).
- Time spent supporting EGEE sites, LHC experiments, WLCG MB requirements (reports, OSG, metrics, etc.)
 - Not enough time to cover all priorities.