

SAM to Nagios migration for the LHC Experiments

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Overview of SAM & Nagios in WLCG Department

- At current moment
 - OPS VO: Sites monitored by NGIs using Nagios and OSG RSV
 - LHC Experiments' monitoring still using SAM
 - Availability computation based on these
- Aim is to move testing of resources to Nagios
 - For the LHC Experiments
 - Availability based on Nagios tests
 - Stop old SAM infrastructure
- Here we present the various stages of the migration and their implications for WLCG

CERN IT Department CH-1211 Geneva 23 Switzerland **www.cern.ch/it** SAM to Nagios migration in collaboration between GT & ES groups

Status in October



- Old SAM still in production executing LHC Experiments' tests
 - Official availability reports in 2010 will have no change
- In parallel, VO Nagios instances deployed
 - Monitoring T0/T1 Sites
 - Running equivalent SAM VO probes written by IT/ES group in collaboration with IT/GT

- Unofficial Nagios based availability reports
 - To validate them in the next three months and stopping SAM submissions



October – WLCG reports



- Performed availability computations
 - Parallel reports based on SAM & Nagios probes
 - Using equivalent metrics for CE & SRM at T0/T1 sites
 - And the same well-known algorithm
 - Starting on the last week of October
- October availability reports for WLCG
 - Official SAM reports:

http://gvdev.cern.ch/GRIDVIEW/downloads/Reports/201010/wlcg/

Unofficial Nagios reports:

http://gvdev.cern.ch/GRIDVIEW/downloads/Reports/201010-nagios/wlcg/





October – WLCG reports

- Sites whose availability changed $\geq 5\%$
- ALICE
 - DE-KIT (100% in SAM, N/A in Nagios)
 - Site was not monitored during the computed period
 - UK-T1-RAL (91% in SAM, 1% in Nagios)
 - Random failures on wms201.cern.ch while job-submit to lcgce07 CE. 330 min timeout for job exceeded.

– ATLAS

- FR-CCIN2P3 (74% in SAM, 94% in Nagios)
 - Failing SAM SRMv2 tests due to differences in timeouts
- TW-ASGC (87% in SAM, 0% in Nagios)
 - Group disk in SRM removed in SAM test but not in Nagios
- CMS & LHCb: None (≤ 3% differences)



Department



Next steps



- November
 - Repeat the same process
 - Comparing SAM official report with Nagios based one
 - Considering full month data
 - Present results to MB
- December
 - Same as November to get Nagios results validated to generate the official VOs' reports.
 - So we aim at stopping submissions through SAM within Q1 2011 after validating Dashboards' apps with Nagios tests



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ACE Schedule



- December
 - Validate computation of standard single availability for OPS
- January
 - Computation of standard availabilities for LHC experiments (one profile per VO)
- February
 - Multiple availabilities (different profiles, same algorithm) per VO
- March
- Multiple availabilities (different profiles and algorithms: CREAM CE use case) per VO



7/7





Questions?