



Enabling Grids for E-sciencE

Migrating the WLCG grid monitoring infrastructure from SAM to Nagios

James Casey, David Collados

www.eu-egee.org







Overview of SAM and Nagios in

Enabling Grids for E-sciencE

- At Current Moment
 - Calculation of site availability for WLCG Sites done in SAM
- Aim is to move testing of resources to Nagios
 - For OPS testing
 - And then for VO testing
 - Availability will eventually be based on these tests
- SAM to Nagios migration started March 1st
 - EGEE operations now using Nagios to follow up alarms (based on test failures) and open tickets to sites
- Here we present the various stages of the migration and their implications for WLCG
 - Note: This process will not affect OSG sites at all

Nagios is deployed in production

- 11 Regional Nagios instances deployed at CERN
 - Monitoring all EGEE Sites
- Running OPS probes
- Equivalency of Nagios results has been shown to existing SAM probes
- EGEE Regional Operations team and sites following alarms based on Nagios
- SAM is also in production, and still executes OPS tests
 - But these will not raise alarms on failure and will not be followed up by operators



March - Availability

Enabling Grids for E-sciencE

- Availability computations
 - Parallel computations based on SAM & Nagios probes
 - Equivalent metrics for CE, SRMv2 & sBDII
 - Using same algorithm
- Official availability reports for March will have no change
 - Still calculated based on SAM probe results
- We will also generate availability reports based on Nagios results
 - These will be used for validation of Nagios for availability by sites and MB



March - Regionalization

Enabling Grids for E-sciencE

- In parallel we will start validation of Nagios at regions
 - ROCs are deploying their Nagios instance
 - This is being validated against regional instance running at CERN
 - Once validation is complete, official tests for that region will come from the ROC Nagios
- CERN continues to maintain role of running central databases and availability calculation
 - This is also maintained during EGI



- Availability reports for April could be based on Nagios
 - Depending on results, after MB sign-off on the Nagios reports for March
- SAM will continue to run OPS tests
 - As a fallback in case of major problems
- We plan to turn off SAM for OPS at the end of May
 - If everything goes to plan
 - We will continue to run SAM for VO tests as long as necessary

- EGEE operations now using Nagios to follow up alarms
- WLCG Availability stays unchanged
 - Until validated and approved by MB
- VOs migration to Nagios testing in parallel
 - Active participation in this is needed from VO SAM contacts
 - First VO availability reports for evaluation in May/June



Questions?

EGEE-III INFSO-RI-222667