



Enabling Grids for E-science

Operations automation team

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- “Reduce the level of effort required for operations by improving automation of operational procedures”
- “Prepare for a NGI structured environment by devolving the operations and management fully to the ROCs within EGEE-III”
- **Membership**
 - Representation from all EGEE regions
 - Members represent ROC, COD, sites, tools developers
 - Some people wear more than one hat...

- **Define evolution strategy for operational tools**
 - Key is devolution of tools to ROCs where appropriate
 - If, when, how, ...
- **Define work plan for operational tools development**
- **Ensure work on new operational tools is within the agreed strategy**
 - Bring into the mainstream existing effort which is on the periphery
- **Manage the deployment process of tools**

- **Current tools in scope**
 - GOCDB
 - SAM
 - Accounting (APEL, DGAS)
 - Site Monitoring (Nagios)
 - gStat
 - CIC Portal
 - COD Dashboard
 - In collaboration with COD
 - SLA compliance monitoring
 - In collaboration with SLA team
- **Usage Monitoring**
 - Gridview (Job state, Data Transfer)
 - Data Storage (?)
- **Reporting**
 - Availability Reports (Gridview)
 - Accounting Reports (CESGA Portal)
- **Not in Scope**
 - GGUS
 - Covered by USAG
 - Monitoring tools for middleware
 - FTSmon, WMSmon, ...

* Not EGEE funded

- **Deployment of site monitoring tools to EGEE sites**
 - Based on Nagios
- **Devolve central monitoring tools to regional instances**
 - Where appropriate
 - Prime candidate is SAM
- **Create architecture for new shared infrastructure to support operational tools**
 - Messaging system
 - Standard mechanisms for failover, robustness
- **‘Topology Database’**
 - Improvement of schema in GOCDB
 - Integration with VO/ROC topology sources
 - Standards to interoperate (SEE-GRID-SCI, OSG, NGIs)

- **Resource Allocation / SLA Portal**
 - How do we report on SLAs, resources provided, ...
- **Configuration Information**
 - VOs + operational management poll sites for configuration info
 - Which version of lcg_utils is deployed?, how many specints ?
 - Currently gathered via SAM tests...
 - But no real way to query, plot, report
- **Infrastructure**
 - Failover best-practices/procedures
 - Monitoring of operational tools
 - Common Infrastructure – e.g. Messaging
- **Involvement/Effort welcome ...**

Note : These might not be new systems, but features added to existing systems

- **ROCs**

- General agreement that ROCs (and we believe NGIs) want regional autonomy as a principle
- Tools should support this:
 - Regional SAM
 - Regional COD Dashboard (1st Line support, ROC on duty)
 - Regional Accounting
- Packaging of these (currently) single deployment tools is an issue
- Integration with non-EGEE operations at ROC is important

- **Sites**

- “Automation is good, but only if it provides benefit”
- Nagios already widely used to good effect
 - What about LEMON?

- **GOCDDB is Key**
 - All tools build upon it
 - And defining the schema is important
 - Interoperation and devolution
 - Research needed to see what is there already
 - SEE-GRID HGSM, OSG Registration DB, ...
- **Why Regional distribution, not central?**
 - Meta-question
 - Perhaps it's just 'political'
 - What are the technical reasons/ benefits
 - Mostly technical problems – caching, connectivity, ...
 - Possible answers:
 - Autonomy of region is a main driver
 - Scaling of operations also important
 - *e.g. Operational load at single point for central SAM*

- **Milestone for end PM1**
 - Architecture and roadmap for operational tools in EGEE-III
- **Implementation plans per-tool by end PM2**
 - Including deployment plan to ROCs