



Enabling Grids for E-sciencE

Operations in EGEE-3 and EGI

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- EGEE 3
 - Operations model evolution of EGEE-II
 - Issues
- EGI
 - Evolution of operations what is anticipated?
- Transition
 - **-** ???



Grid Operations in EGEE-3

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- No major changes consolidation of existing activities
- Will continue with the 5 major tasks that we currently have:
 - Grid management
 - Grid operations & support
 - User support
 - Operational security
 - General and admin tasks
- Emphasis on improving reliability, robustness, usability, support



Operations

SA1.1: Grid Management

- OCC overall coordination of ROC & ops tasks
- ROC management All regions
- Run services for production and pre-production All regions
- CA Management where needed
- Accounting
- OAG + regional resource coordination
- Interoperation Coordination other grid projects, and national grids
- Coordination w/other activities
 - TCG, JRA1, SA3, NA4 via various bodies/boards All regions; but fractional effort
- 1488 PMs (5 FTE per region, 2 in Asia), 5 for OCC, 5 coordination with technical bodies



Operations

SA1.2: Operations and support

- Middleware deployment and support All regions
- Grid Operator on Duty All regions (no exceptions this time)
- Operations support All regions
- Regional cert --> should move into Integration & Cert
- Monitoring tools
 - SFT/SAM, Gstat, COD tools, dashboards, etc, NPM
- 1944PMs (6.5 FTE for each region, 2 Asia, 12 tools, 2 interoperations

SA1.3: User support

- GGUS coordination and GGUS tools
- Support personnel for helpdesk (TPM, supporters) All regions no exceptions
- VO specific support discussed under applications
- 918PMs (3.5 FTE per region, 1 Asia) + 2 FTE GGUS



Operations Cont'd

SA1.4: Grid Security

- EGEE security officer
- Operational Security Coordination Team All regions;
- Security Vulnerability group All regions; coord UK
- Joint Security Policy Group All regions; coord UK
- EUGridPMA Regions with CA's; NL for GridPMA
- Security Assessment All regions
- 324 PMs (1 FTE per region, 0.5 Asia) OSCT, JSPG, GSVG participation; 1 FTE OSCT leadership,1 FTE GSVG leadership, 0.5 each JSPG, EUGridPMA

SA1.5: Overhead tasks

- Deliverables, reviews, etc. All regions 0.5 FTE each (0.25 Asia)
- 126 PMs



Some changes

- All ROCs must do all key operational tasks
 - Operator on Duty
 - TPMs and GGUS support effort
 - Security coordination OSCT
- For key tasks will not accept small fractions of FTEs spread across many partners
- No regional certification unless explicitly justified
 - Should be part of SA3 if needed
 - Have seen no justified case for real regional certification
- Porting tasks
 - Should also be part of SA3
- Interoperation/ other grid projects
 - Middleware interoperability is responsibility of JRA1/SA3
 - Effort for EGEE to work with other projects (but not support for other projects)



Level of SA1 funding

- Project will probably be 10% less effort than EGEE-II
- Anticipate SA1 will reduce by at least 10% in effort
- Need to ensure that we focus on the essential tasks and do not take on peripheral tasks
 - Some proposals for work by some partners is likely to be rejected
- We need to be more efficient



Specific areas to address

- Monitoring and oversight should evolve towards automation
- Service Level Agreements
- Integration of operations with existing and embryonic National Grid Infrastructures
- Partner reviews will be formal part of the project
- QA integrated in each activity
- Integrating new VOs into the infrastructure



Issues to resolve

- Support for new VOs
 - Define what the OAG should be now, TNA-fund
- Transitional model to EGI but this requires that EGI is defined
 - Blueprint available mid-2008; we will have a milestone to comment on it
- SA4 proposes support for GILDA in parallel to SA1 huge request
 - SA1 cannot do it with current funding but the current proposal is a duplication
- NE-Benelux split. Proposal is now to keep a single ROC.
- Automation:
 - Between EGEE-3 and EGI must reduce operations effort (by factor 2?)
 - Need to have a plan for automation, alarms, etc
- SLA's
 - Categorization of sites; different deployment scenarios
- WBS how should it look and at what level?



Improving support for new VOs

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Issues:

- Process to find host sites for new VOs central services and resources
- Speed of implementation
- Technical issue of enabling a new VO at a site
- Resources for VOs to use to try out before deciding to join the project

Ideas:

- NA4 propose a fund to provide hardware dedicated to the initial trials
 - Few hundred CPU, small amount of disk, few machines for central services
 - To be run at a few (3 5?) sites
- Should SA1 set aside a pot of money to fund sites to support new VOs?
 - General feeling seems to be that not a good or workable idea
- Rather commit each JRU to provide percentage of resources to official VOs
 - (but need simple way to enable them)

- It is far from clear what this will look like:
 - The EGI design project should produce draft blueprint mid-2008
- Need to clarify:
 - What the NGIs do
 - What the National operational models are
 - What overall coordination is needed
 - What general services need to be provided
 - What level of funding the National bodies are prepared to provide
- Only then can we define what EGI will be
- Ideally we need to know this now in order to design the transition during EGEE-3
 - Must prepare for a likely transition scenario during EGEE-3



Some guesses

- Overall level of operational effort will be greatly reduced
 - Need to assume factor 2 reduction
 - Implies that automation has to be a foundation of work in EGEE-3



Proposed deliverables

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- Assessment of infrastructure status, support, ENOC, etc (x2)
- Transition plan to EGI/NGI model(s)
- Report on ROC status and NGI integration
- **Operations Cookbook**
- **Report on SLA progress**

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Milestones

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- Report on outstanding mw issues blocking progress to reliable, automatable service operation and management
- SLA implementation plan
- Plan for monitoring tools development goal of reducing ops effort, verification of SLAs, etc.
- User Support assessment (across SA1 and NA4)
- Assessment of reliability of infrastructure with requirements for other activities
- Report on interoperation with other infrastructures
- JSPG policy integration across related projects
- OSCT: report on issues blocking better operational security
- -GSVG ??

- Based on discussions this week:
 - Add milestone on operations manual?
- Any others?
 - Having formal milestones can be very useful
 - But don't forget who has to do the work ...



Summary

- EGEE-3 will be consolidation of EGEE-II for operations
 - Focus on usability, reliability, manageability, etc.
- Need to understand, plan, and start the transition to longer term models
 - Requires input from EGI project and the NGIs

... all this with less money