



Enabling Grids for E-sciencE

EGI Operations

Tiziana Ferrari EGEE User Forum, Uppsala, Apr 14 2010

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- Objectives
- SA1: Operations
- JRA1: Operational tools
- Managerial structure and boards
- Conclusions



Objectives

3

from INFRA-2010-1.2.1: Distributed computing infrastructure (DCI)

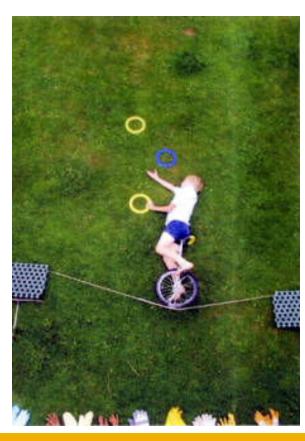
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- Continued operation and expansion of todays' production infrastructure
- "Set up an organisation that will enable the sustainable provision of grid services to the European scientific community" ->
 - EGI global operations services
 - NGI/EIRO operations services
- "The EGI should ensure a seamless and progressive transition in service provision from the current arrangements to a new scheme that is more sustainable organisationally and financially" ->
 - Extension of accounting to support different business models
- "The EGI should promote close collaboration and interoperability with similar infrastructures in other parts of the world." ->
 - Extension of operational procedures and policies
 - Enhancement of monitoring and accounting tools



SA1: Operations

- NGI International Tasks
- EGI Global Tasks



JRA1: Operational Tools

- Maintenance of the currently deployed operational tools.
- Development of the operational toolset for further automation and national deployment scenarios.
- Regionalization of tools
- Support of new service charging models once defined





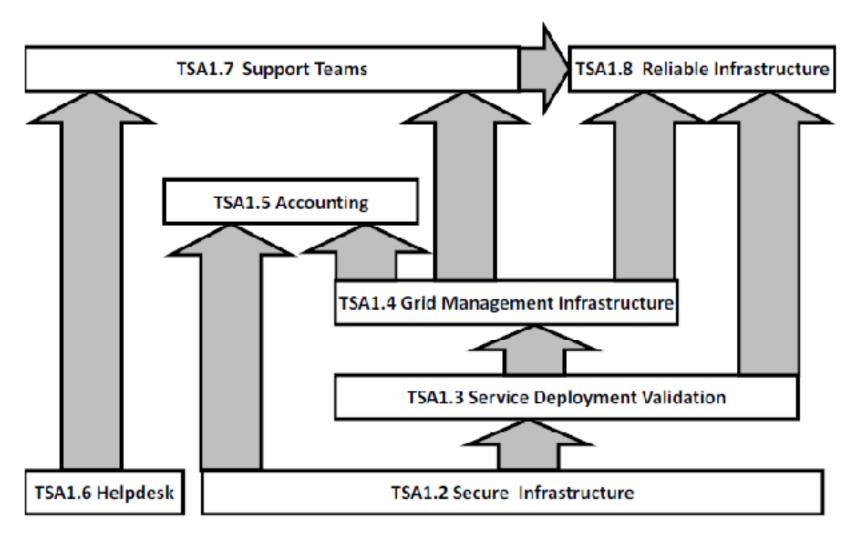
SA1: Operations

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Objectives

- Operation of a secure, reliable European-wide production grid infrastructure federated from national grid initiatives and EIROs (European International Research Organizations), that is integrated and interoperates with other grids worldwide. It will:
- Provide users with a secure infrastructure through the establishment of the operational security teams
- Validate new releases of the middleware and operational tools through a coordinated staged roll-out to sites
- Establish the monitoring services needed to manage the production grid infrastructure
- Provide a central accounting infrastructure
- Operate the EGI Helpdesk, integrated with national instances, to provide support to users and Grid operators

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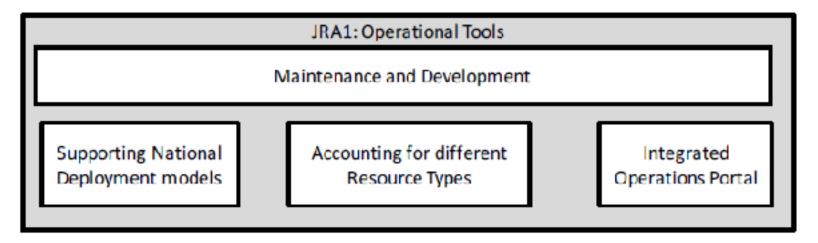


JRA1: Operational tools

Objectives: evolution of the operational tools used by the production infrastructure, including:

- ongoing maintenance and further development of the deployed operational tools
- development of the operational tools to support a national deployment model (tool regionalisation)
- Accounting for the use of different resources within the production infrastructure
- Providing an integrated operations portal for the staff running the production infrastructure

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Partners

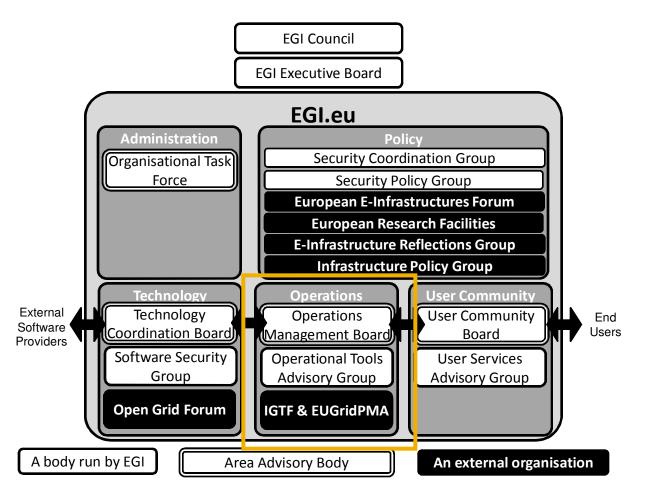
 CERN, CNRS (France), CSIC (Spain), GRNET (Greece), INFN (Italy), KIT (Germany), SRCE (Croatia), STFC (UK)

Tools

 Operations portal, helpdesk (GGUS), configuration repository (GOCDB), accounting repository and portal, Nagios-based monitoring infrastructure



Relationship with EGI management boards



Operations Management Board (OMB) for the policies needed to provide a reliable transparent infrastructure composed of multiple national infrastructure providers.



Internal groups and boards

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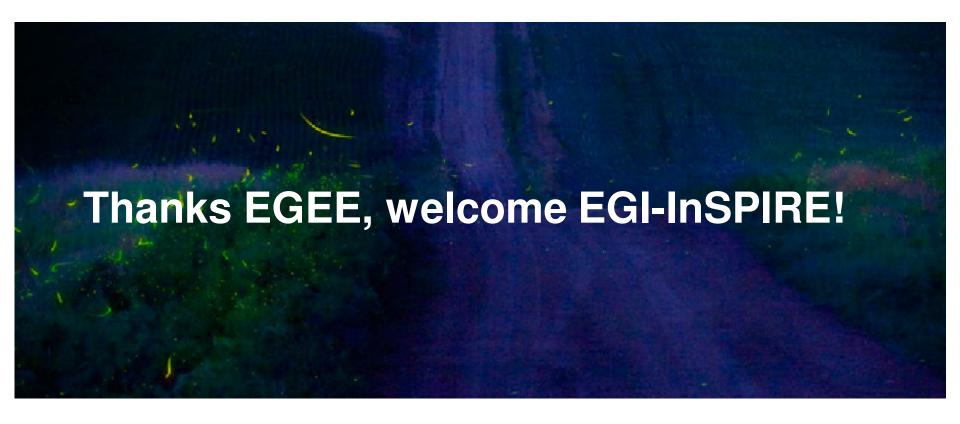
- Security Policy Group (SPG) development and maintenance of security policies that define the expected behaviour of sites and users to ensure a secure distributed computing infrastructure (NGIs, sites, application communities)
- Software Security Group (SSG) has representatives from the software providers contributing software to EGI in order to ensure a common coherent approach to the security frameworks.
- Security Coordination Group (SCG) coordination between the NGI
 operational security groups, the software security groups, the security
 policy activities both inside EGI and in other infrastructures and projects
- User Services Advisory Group (USAG) has representatives from the user communities to feedback to the EGI.eu on the user facing operations tools and support processes.
- Operational Tools Advisory Group (OTAG) has representatives from the NGI/EIRO Operations Centres and provides feedback on the operational tools and how they need to be adapted in response to EGI's requirements.



Conclusions

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- EGEE well established procedures, models, policies and tools are the fundation of EGI operations
- EGI-InSPIRE aims to further extending this framework through innovation to face the many challenges ahead:
 - EGEE-III to EGI-InSPIRE transition
 - Integration of nascent NGIs and new EIROs
 - New requirements
 - Revision and streamlining of existing procedures to ensure scalability
 - Flexible Operational Level Agreements
 - Integration of NGIs deploying different middleware stacks
 - Ensure interoperation and adapt according to the middleware harmonization efforts supported by the European Commission (EMI)
 - Integration with new DCIs
 - Extensions of existing procedures and of the monitoring and accounting frameworks



EGEE-III INFSO-RI-222667 EGI Operations

12