EGI Operations

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Outline

- EGI-InSPIRE SA1 work breakdown structure
- EGI-InSPIRE SA1 metrics
- From EGEE to EGI-InSPIRE
- Y1 SA1 roadmap

SA1 Work Breakdown Structure

- **TSA1.1 Activity Management**
  - **EGI.eu, Tiziana Ferrari**
- **TSA1.2 Secure infrastructure**
  - **STFC, Mingchao Ma**
- **TSA1.3 Service Deployment - validation**
  - **LIP, Mario David**
- **TSA1.4 Infrastructure for Grid Management**
  - **SRCE, Emir Imamagic**
- **TSA1.5 Accounting**
  - **STFC, J.Gordon**
- **TSA1.6 Helpdesk**
  - **KIT, T.Antoni**
- **TSA1.7 Support Teams**
  - **NL, R.Trompert**
- **TSA1.8 Providing a reliable grid Infrastructure**
  - **GR, C. Kanellopoulos**

- **TSA1.1 Activity Management**
  - Meetings
    - Participation to the Operations Management Board (OMB)
    - Participation to the bi-weekly operations meetings
  - Milestones and deliverables
    - Internal: reviewing SA1 documentation
    - External: reviewing other activities' documentation

TSA1.2 Secure Infrastructure

- EGI CSIRT covers all aspects of operational security aimed at achieving a *secure infrastructure* within EGI. It ensures both the coordination with peer grids and with the NGIs and NREN CSIRTs.

  – Incident Response Task Force (IRTF) Handle day to day operational security issues, coordinates Computer-Security-Incident-Response

  – Security Drills Group (SDG) testing of the inter CSIRT communication channels.

  – Security Monitoring Group (SMG) Develop, deploy and maintain security monitoring tools.

  – Training and Dissemination Group (TDG) Raise security awareness and improve security for system administrators by providing security training and best practice

TSA1.3 Service Deployment - validation

- NGI:
  - Participation to staged rollout of middleware component updates
  - Interoperability at the NGI level: operation of multiple middleware stacks and novel resources (virtualization, HPC, etc.), interoperability with regional grids, feeding interoperability requirements into EGI

- EGI:
  - Definition and implementation of a new workflow to automate software deployment cycle, from release of the sw developers to deployment
  - Coordination of the staged rollout activities carried out by the NGIs
  - Liaison with gLite Collaboration release team (interim)
  - Chairing the operations meetings
  - Operational interoperation between NGIs, e.g. of the accounting and monitoring infrastructure, gathering or requirements

- EGI - Deployment of central operational tools:
  - GOCDB, operations portal and dashboard, central Nagios-based SAM components and MyEGI, central messaging infrastructure, central network monitoring tools (downcollector)
  - Common deployment issues: migration to EGI.eu domain, failover
  - Coordination of regional deployment of tools (e.g. Nagios)
- NGI – Deployment (system management and validation) of regional instance of operational tools:
  - regional Nagios and MyEGI portal (mandatory)
  - regional GOCDB (prototype available)
  - regional operations portal and dashboard
  - regional accounting portal (prototype available)
  - Provide feedback on tool deployment issues and requirements

- **EGI - Deployment of central accounting infrastructure components**:
  - Central accounting repository
  - Central accounting portal
  - Gathering new accounting requirements
- **NGI – Deployment** (system management and validation) **of regional instance of accounting infrastructure**:
  - Regional accounting portal (prototype available)
  - Regional accounting repository (in the future)
  - Check for correctness and completeness of accounting information
  - Chaise sites not publishing accounting records
  - Provide feedback on accounting requirements

TSA1.6 Helpdesk

- **EGI - Deployment of central EGI helpdesk (GGUS)**:
  - System management of the tool and deployment of new releases
  - Implementation of failover configurations
  - Maintenance of GGUS Support Units
  - Validation of GGUS ticket reports
- **NGI – Regional helpdesk**
  - Deployment of regional helpdesk interworking with GGUS (optional)
  - Management of NGI Support Unit membership
  - Provide feedback on requirements

TSA1.7 Support

- EGI – Central support
  - Grid oversight (COD) – Netherlands, Poland
    - following up of escalated operational issues
    - Site suspension
    - Follow up of sites failing to provide 70%/75% monthly availability/reliability
  - Ticket Processing Management (TPM) – first line support, Italy and Germany
  - Coordination of network support
- NGI – Regional support
  - 1st and 2nd line support to national users and NGI sites
  - Grid oversight of an NGI (aka ROD)
  - NGI network support

- EGI:
  - Deployment of central grid middleware services (aka catch-all)
    - Dteam VOMS
    - VOMS service for VOs requesting it
    - Central Nagios infrastructure for security monitoring
  - Catch all CA
  - Validation and distribution of monthly availability/reliability statistics
  - Enhancement/extensions of Operational Level Agreements
  - Maintenance and development (coordination of) operational documentation, procedures, best practices

- NGI:
  - Deployment of NGI core middleware services (top-BDII, FTS, WMS/LB, central LFC, VOMS)
  - Operation of national CA
  - Follow up of availability issues in the region
  - Contribute to the maintenance and development of documentation, procedures and best practices
  - Site certification

SA1 Metrics

- Metrics are needed to measure advancement and status of a given activity within SA1
  - SA1 metrics: https://wiki.egi.eu/wiki/EGI-InSPIRE_SA1_Quality_Metrics
  - Overall project metrics: D1.1 Quality plan and project metrics (https://documents.egi.eu/document/55)
- NGI metrics. Most of them are automatically collected from existing tools. Metrics to be manually provided in the Quarterly Report:
  - Installed capacity: logical CPUs, physical CPUs, HEP SPEC installed capacity, Disk and Tape capacity
  - Integration metrics
    - Number of production HPC clusters per NGI
    - Number of production sites supporting MPI
    - Amount of integrated desktop resources
    - Amount of virtualised installed capacity accessible to EGI users

- Operations centres
  - Consolidation of a few EGEE-III ROCs
  - End of life of large multi-country ROCs (CE and SEE) → many new independent NGIs
  - Integration of SEE Grid and Baltic NGIs
- Governance: OMB
  - All NGI partners of EGI-InSPIRE
  - EGI infrastructure providers

- COD is now responsible of checking monthly availability and reliability statistics

- VO validation: now under the responsibility of EGI.eu

- User support activities

  – now mostly rely on NGI funding

  – EGI VO central services (Greece)

    https://wiki.egi.eu/wiki/TNA3.4_Technical_Services:

    - Training Events
    - Training Repository
    - Applications Database
    - VO Services: VO registration/deregistration, VO dashboard, basic application portal infrastructure

Year 1 roadmap1/2

- **Infrastructure**
  - Consolidation of new NGIs
  - Integration of new infrastructure providers (e.g. ROC Africa), finalization of Infrastructure provider MoU
  - Case studies of integration of new DCIs and heterogeneous middleware stacks

- **Plans and requirements**
  - Transition plan from gLite 3.1 to gLite 3.2
  - Deployment plan of regionalized operational tools
  - Accounting requirements to lead development in EGI-InSPIRE JRA1 and EMI

- **Middleware deployment**
  - More sites and NGIs involved in middleware staged rollout
  - Establishement of the Technical Coordination Board to implement reporting channels to the middleware developers (requirements and deployment issues)

Year 1 roadmap 2/2

- Support
  - revision of existing GGUS Support Units and related membership
  - definition of 2nd and 3rd line middleware Support Units
  - definition of network support infrastructure
- Update of existing documentation made available at the EGI wiki
- Availability statistics
  - Report generation needs to be streamlined
  - Improvement of availability calculation algorithm?
- Operational Level Agreements
  - Extension of existing ones (ongoing)
  - Understanding of impact on tools

References

- EGI CSIRT
  https://wiki.egi.eu/wiki/EGI_CSIRT:Main_Page

- EGI Operations wiki:
  https://wiki.egi.eu/wiki/EGI_Operations

- Meetings and agendas:
  https://wiki.egi.eu/wiki/EGI_Operations#Operations_boards_and_agendas

- SA1 quality metrics: https://wiki.egi.eu/wiki/EGI-InSPIRE_SA1_Quality_Metrics

- SA1 milestones
  (https://wiki.egi.eu/wiki/SA1_Milestones) and
  deliverables (https://wiki.egi.eu/wiki/SA1_Deliverables)