Introduction to EGI Federated Operations

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EGI Solutions

A combination of products, services, and intellectual property focused on solving a problem (opportunity) that creates and/or drives value (measurable) and can be significantly standardised







Purpose:

- To manage operations of heterogeneous distributed infrastructures
- To integrate resources from multiple independent providers with lightweight central coordination





Target groups:

- Primarily at Research Infrastructures and Resource Centres already within the EGI community or those wishing to become part of it
- May also be used by other IT service providers that are geographically and/ or structurally dispersed, but plan to organise themselves for federated service provision





Problems to be solved:

1. Lack of integration

 A common core infrastructure platform based on standards, common interfaces and protocols, communication, planning and coordination

2. Lack of expertise and specific knowledge

in integration or coordination, which leads to duplication of services or inefficient use of effort

 Centrally-provided expertise and streamlined best practices on how to set up and manage federation





Problems to be solved:

- 3. Beta-testing of applications and services in production
 - Federated service management best practices, cost-effective sharing of services community expertise & re-use of tools/output from public funded projects
- 4. Loss of efficiency resulting from the diversion of resources to implement integration, duplication of services
 - Existing technical solutions that can be adapted / re-used



High-Throughput

Data Analysis

Community Driven

Innovations

and Support

Federated

Cloud



Components:

- Operations tools
- Operations, Technology and Security coordination
- Helpdesk support
- Technical consultancy



Federated Operations – core services

- The core services that enable the EGI federation.
 - Human activates and operations tools
 - Supported by
 - council fees (40%)
 - in-kind contributions of the partners.

Human activities

- 1. Operations support
- 2. Security coordination
- 3. Acceptance criteria
- 4. Staged Rollout
- 5. 1st and 2nd level support

Operational tools

- 1. Message Broker Network
- 2. Operations Portal
- 3. Accounting Repository
- 4. Accounting and Metric Portal
- 5. SAM central services
- 6. Monitoring central services
- 7. Security monitoring and related support tools
- 8. Service registry (GOCDB)
- 9. Catchall services
- **10.** Incident management helpdesk
- 11. Collaboration tools/IT support
- 12. Software provisioning infrastructure



- The provisioning of Federated Operations is regulated by dedicated agreements
 - Operational Level Agreements (OLAs) between the providers and EGI.eu
 - Service Level Agreement (SLA) between EGI.eu and the consumers of the services.
- The performance monitored and reported based on the agreed level targets
 - Availability
 - Reliability
 - Quality of support
- Relies on the best practices for IT service management.





EGI Infrastructure – Success Story



Metrics (May 2015)	Value	
Countries	54	EGI Council members
Operations Centres	39	Integrated Infrastructures
Resource Centres	341	Peer Infrastructure



Feder

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Thank you for your attention.

Questions?



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