



Enabling Grids for
E-science in Europe

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All activity meeting, 18 June 2004

Service Activity 1

M. Cristina Vistoli
ROC Coordinator



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- Highest priority steps to take between next project conference in Den Haag
- Hiring status and manpower levels



Work accomplished

- Summary of work accomplished since First EGEE Conference in Cork
 - Clearly defined Roles and Responsibilities of ROC and CIC
 - ROC Coordination meeting in Milan:
 - Start technical workshop to exchange working experience and technical procedures between ROCs
 - UK: monitoring and accounting tools
 - IT: deployment procedures
 - FR: adding new VO
 - DE: user and operation support systems
 - SEE: Services and testbeds
 - Discussion to define procedure to integrate National Grids to EGEE

Work Accomplished:ROC

- ROC Responsibilities:
 - Acceptance testing (certification) of the new middleware on a variety of platforms before deployment
 - Deployment of middleware releases + coordination
 - SLA negotiation
 - Development of procedures and capabilities to operate the resources
 - First-line support in resolving any operational problems originating at the Resource Centres.
 - First-line user support

- Roles
 - Middleware release distribution inside the region taking care of integration of 'Local' VO
 - Bring new resources into the infrastructure and support their operation.
 - Coordination of integration of national grid infrastructures and how they integrate into EGEE.
 - Source of expert advice and technical support in deploying and operating the middleware in the RCs.
 - Participate in validating new middleware releases. Organise and operate certification testbeds within the region
 - Provide resources for pre-production service.
 - Port middleware to specific regional needs

ROC management roles

- Coordinate the operational management RCs
- Collect and Monitor Service Level Agreements (SLA)
- Negotiate application access to resources within the region.
- Organise CAs within the region.
- Coordinate activity reporting to SA1 management.

CIC roles

- Operate core services
 - VO-specific services
 - Database services for replica services for a VO (or set of VOs)
 - Other database services
 - Resource Brokers, User Interface, Information services.
 - General GRID Services covering whole EGEE scope
 - Collaborate with ROC to operate core services for region specific VO and National Grids
- Development of new management tools
- Act as GOC
 - Proactively monitor core services and provide support to the Regional Operations Centres
 - Deploy, operate and monitor grid-wide and Virtual Organization-specific grid services
 - Monitor infrastructure components and services
 - Publish usage figures and accounting
 - Performing monitoring and troubleshooting.
- Second-level support for ROCs
- Produce Project Deliverables

Deliverable list: products

Month	Deliverable / Milestone	Item	Lead
M03	DSA1.1	Detailed execution plan for first 15 months of infrastructure operation	CERN
M06	MSA1.1	Initial pilot production grid operational	
M06	DSA1.2	Release notes corresponding to the initial pilot Grid infrastructure operational	INFN
M09	DSA1.3	Accounting and reporting web site publicly available	CCLRC
M09	MSA1.2	First review	
M12	DSA1.4	Assessment of initial infrastructure operation and plan for next 12 months	IN2P3
M14	DSA1.5	First release of EGEE Infrastructure Planning Guide (“cook-book”),	CERN
M14	MSA1.3	Full production grid infrastructure operational	
M14	DSA1.6	Release notes corresponding to the full production Grid infrastructure operational	CCLRC
M18	MSA1.4	Second review	
M22	DSA1.7	Updated EGEE Infrastructure Planning Guide	CERN
M24	DSA1.8	Assessment of production infrastructure operation and outline of how sustained operation of EGEE might be addressed.	IN2P3
M24	MSA1.5	Third review and expanded production grid operational	
M24	DSA1.9	Release notes corresponding to expanded production Grid infrastructure operational	INFN

Deployment status on going: Production service-increasing number of resource centers based on LCG-2

- Germany: FZH, Karlsruhe, Wuppertal, CSCS.....
- Italy: CNAF, LNL, Milano, Torino, Roma1 and INFN-GRID sites:
Roma2, Padova, Trieste, Napoli, Bari, Catania, Bologna, Ferrara,
Lecce, Perugia, Pavia, Pisa...
- UK/Ireland: RAL, UCL, Manchester, ScotGrid, GridPP, Imperial college,
CAMBRIDGE, LANCs, QMUL, RALPP, ScotGRID, UCL-HEP,
University of Sheffield and UK-NGS sites
- France: Lyon, Clermont
- SEE: HellasGrid-GRnet, Wieszman (Israel)...
- CE: Cyfronet-Cracow, Cesnet, Prague, Hep-At, Budapest...
- SW: PIC,IFAE, Ciemat, IFIC, Valencia, Barcelona, IFCA, LIP/Pt
- NE: Nikhef, Sara
- RU: Sinp

deployment of non-HEP applications

- Activity already in place in several national Grids
- At EGEE level started with BIOMED VO
- VO server configured in IN2P3-Lyon
- EGEE-Resource broker in INFN-CNAF
- Resource centers provided by France, Clermont Lyon
- ROC are investigating possibility to have more resource centers available to run Biomed Application

Services and testbeds

- **M/W Certification testbed:**
 - The certification testbed is currently at CERN part of CERN OMC team.
 - It is expected that this testbed extended in a dynamic way to include testbed and verification activities coordinated in each region through the ROCs.
 - This activities includes certification of improvement to the current EGEE-0/LCG-2
 - ROCs should provide these resources
 - Express interest in the certification activity, up to now, IT and SEE ROC
- **Need resources for porting**
 - E.g. If a region has particular need – port to their favourite OS and certify middleware

Pre-production service

- In parallel with the production service, there will be a pre-production service in operation.
- This service will run the next version of the middleware
- It will start with running LCG-2, waiting for JRA1 components
- ROCs should provide resources for this services.
- Not yet defined ROCs commitment to take part of Pre-production services
- Backwards compatibility is a general requirements
- ROCs requirements on hw, sw, grid expertise for the candidate RC
- Experienced users need to be involved as well
- Nick Thackray (CERN-OMC) will coordinate the service and send to ROCs execution plan

M3 Deliverable: Execution Plan(1)

- Made of
 - General series documents
 - Federation series documents:
 - Defined table of content
 - Received most of the contributions
 - Delay from the federation with several countries involved with different expertise
- Progress followed in the weekly phone meetings

M3 Deliverable: Execution Plan(2)

- Prepared the core of the plan
- Prepared the individual federation plans
- Prepared the training plans
- Prepared the risk assessment and management plans
- Prepared a scope document with key dates for delivery
- Held a kick off meeting with the moderation team
- Next stage is integration, and further detailed information
- Plan will enter moderation phase on 1st July
- Plan will be ready by 31st July

M3 Deliverable: Execution Plan(3)

Successes from the preparation of the execution plan:

- Good co-operation between the ROCs
- Good teamwork
- Given us a chance to know one another better

Concerns for the execution plan:

- The process for the moderation takes 1 month
- Most of the work of the moderation process occurs in the first two weeks
- The moderation time occurs at the beginning of the holiday season
- If we run into any serious moderation objections either:
 - o the plan will be late in delivery
 - o the concerns of the moderator will be shelved to avoid delay

M3 Deliverable: Risk Assessment

- Uses the QinetiQ methodology
- Conducted with the ROC managers in May
- Asks 13 objective questions, and accepts one of five answers with scores from 2^0 .. 2^4
- Answers multiplied by a read-only weighting factor for its importance
- Sum of the product of the scores with the weighting factor give overall risk score
- Biggest risk areas are (all of similar importance):
 - 1 Total cost of the project - this project is bigger than usual for ROCs
 - 2 Project team diversity - all of the ROCs are dealing with many RCs
 - 3 Impact of failure - impact on reputation of ROC for failure
 - 4 Clarity of objectives – what are they being asked to do
 - 5 Complexity of reporting procedures – how complex and frequent is the reporting
- Conclusion
 - o We can do little about risk areas 1-3
 - o We can do something about risk areas 4-5

WBS

SA1.1	Initialisation Tasks (PM 01-06)		
	SA1.1.1	Execution Plan	IT
	SA1.1.2	SA1.1.1.3	IT
		Setup of ROC	IT
	SA1.1.3	Setup of CIC	IT
SA1.1.5	Release notes #1 (PM 04-06)	IT	
SA1.2	Operation (PM 07-24)		DSA1.2
	SA1.2.1	Operation and management of ROC	
	SA1.2.2	SA1.2.1.1	IT
		Operation and management of CIC	IT
		Operational Deliverables	
SA1.2.10	Release notes #3 (PM 22-24)	IT	
SA1.A	Administration/ common tasks		DSA1.9
	SA1.A.1	Activity management/Coordination	
	SA1.A.2	Coordination with other projects	
	SA1.A.3	EGEE conferences	
	SA1.A.4	EGEE deliverable review	
	SA1.A.5	Dissemination	
	SA1.A.6	EGEE publications	
	SA1.A.7	EU reviews	
	SA1.A.8	Partner tasks	
	SA1.A.9	Standardization bodies	
	SA1.A.10	Training (trainee)	
SA1.A.11	Training (trainer)		

WBS

SA1.1	Initialisation Tasks (PM 01-06)		
	SA1.1.1	Execution Plan	
		SA1.1.1.1	CERN
	SA1.1.3	Setup of CIC	
		SA1.1.3.1	CERN
	SA1.1.4	Setup of OMC	
		SA1.1.4.1	CERN
	SA1.2	Operation (PM 07-24)	
	SA1.2.2	Operation and management of CIC	
		SA1.2.2.1	CERN
SA1.2.3	Operation and management of OMC		
	SA1.2.3.1	CERN	
	Operational Deliverables		
SA1.2.6	Cookbook #1 (PM 12-14)	CERN	
SA1.2.8	Cookbook #2 (PM 22-24)	CERN	
SA1.A	Administration/ common tasks		
	SA1.A.1	Activity management/Coordination	
	SA1.A.2	Coordination with other projects	
	SA1.A.3	EGEE conferences	
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Highest priority steps

- Simplified procedure for bringing in the infrastructure: new VO, sites, and national grids
- Build Operating ROCs and CIC
 - Define and agree on a support system which incorporates both user and operation support with common user interface
 - Dispatching ticketing system to ROCs able to collect up to date info from RC, incorporating regional defined support structure
 - A dedicated team with representatives from each ROC has been defined
 - Define the meaning of 'SLA' for Grid Services and resource centers and develop management tools to measure and report
 - Define the system architecture in term of Grid services (CE,SE, RB, etc) able to fulfill VO requirements

Manpower level and hiring status

- CERN:
 - OMC and CIC: 38 FTE – 8 Funded based on LCG project operation teams
- IT:
 - Distributed ROC and CIC 33 FTE 44 people - partners INFN, UniLE, UniNa, UniCz, Enea, hiring plan almost complete
- NE
 - Distributed ROC 10 FTE 21 people, deviation 2.5, Partners: Nikhef, Sara, PDC, HPD2N, NSC
- FR
 - Distributed ROC and CIC: 26 FTE 40 people, 4 partners CNRS, CGG, CSSI ECP
- UK/Ireland
 - Distributedd ROC and CIC:
 - UK 17 FTE 21 people providing 17 FTE against a plan of 19 in SA1 (all funded)
 - Ireland 2 FTE 2-3 people against a plan of 2

Manpower level and hiring status

- DE/CH:
 - Distributed ROC 19 FTE, 22 persons
- CE
 - Distributed ROC 2FTE 6 people Cyfronet
- Russia
 - ROC 7,6 FTE 16 people - partners IHEP, SINP-MSU, JINR, PNPI, RRC KI, ITEP
 - CIC 4,5 FTE 7 people - partners SINP-MSU, JINR, KIAM RAS, RRC KI
- SW
- SEE
 - Distributed ROC: 18 FTE 58 people – partners: GRNET, Israel, Bulgaria, Cyprus