



Grid Technology Area

Quarterly Status & Progress Report

SC2

February 6, 2004



OGSA Engineering Activities

- Understand GT3 Toolkit capabilities
 - GT3 released July 1st, 2003
 - First checkpoint end of September (LCG Seminar)
 - Globus Collaboration started (f2f meeting at GGF)
 - Discussion list and data exchange
 - Feedback from tests effective
 - Comparative performance figures available
 - Worked on GT3.0.2, GT3.2 alpha++
 - Not Globus-only activity (interoperability issues)
 - Relations being established with OGSNet (Virginia)
 - AliEn test bed established
- GRAM experience reported at LHCC Review
 - Our attitude to save the valuable experience gathered during the recent years (EDG + Condor) became a recommendation
 - Preview of Condor-GT3 received and work started
- Work on IBM Grid Toolkit (Websphere + GT3) under NDA
 - Strong interest of IBM to have CERN in the project, weekly meetings/reports with IBM



Testing & Performance

- **GT3 - OGS**
 - Practically all Interfaces/Methods tested
 - Dedicated measurements performed
 - Container performance
 - GT3 (with interesting feedback), Tomcat, Websphere
 - Security
 - Functionality OK, Large overhead observed. Progress being done but still no 100% understood
- **All GT3 services tested**
 - GRAM (Globus Resource Allocation Manager)
 - Big performance problems
 - The message that it is a critical issue has passed...
 - RFT (Reliable File Transfer)
 - Bug observed (high CPU consumption)
 - New version tested
 - IS (Information Service)
 - Sound design, still some implementation issues
- **Web Services Management**
 - Use Case document + tests and discussion with the Globus team (document ES-LCG-008)
- **Modeling**
 - Simulation underway
 - Test services prototyped (in the ARDA spirit: for example a push and a pull WM)



ARDA

- Preliminary meeting with major players on November 3-4, 2003
 - Introduce players each other and explore synergies
 - Agreement that opportunities to work together existed
- Initial meeting with AliEn, EDG, LCG-AA and VDT on December 3-4
 - Addressing the ARDA RTAG-11 recommendation
 - Agreement that a prototype is feasible in a short time scale
 - Must first document proposed interfaces, semantics & methods
- Follow-up ARDA workshop organized on January 21-22, 2004
 - Over 100 registrations
 - Outcome is a project proposal being elaborated and discussed at the PEB
 - Objectives to coordinate Generic Middleware; HEP common Tools and libraries; Teams in LHC experiments distributed analysis; Providers of computing resources



EGEE Project - Middleware activities

- All Activities heads identified
- Hiring proceeding well at CERN at least (75%)
- Execution and Resource Plans being worked at
- External test sites identified
 - Still need confirmation
- Negotiation successfully concluded (as per EU)
- Signature still scheduled for project start on April 1st, 2004
- Kickoff meeting scheduled on April 18-22, 2004



Q4 2003 Milestones

1.3.1			Technology Review	
1.3.1.3	3.496	2	Report on the Review of Grid Technologies 2003 ready	06-10-2003

			LCG - EGEE Coordination	
1.3.4.3	3.503	2	2004 "blueprint" architecture published	01-10-2003
1.3.4.4	3.504	2	Work packages definition published	03-11-2003
1.3.4.5	3.505	2	Implementation teams, allocations to work packages, team management and job descriptions identified	03-11-2003
1.3.4.6	3.506	2	2004 work plan and system performance goals for 2004 by trimester published	01-12-2003
1.3.4.7	3.507	2	Work plan formally agreed	15-12-2003



Q1 2004 Milestones

			LCG - EGEE Coordination	
1.3.4.8	3.1618	2	EGEE Middleware people hired	29-02-2004
1.3.4.9	3.1617	2	EGEE Middleware Execution plan available	29-02-2004
1.3.4.10	3.1616	2	EGEE Contract signed	01-04-2004

			ARDA	
1.3.7.2	3.1623	2	ARDA Middleware Project organized	31-01-2004
1.3.7.3	3.1622	2	First prioritized ARDA Services endorsed	15-03-2004
1.3.7.4	3.1621	2	First prototype available for use/validation	30-04-2004



Resources

- Q4 2003
 - 50% of GTA Leader
 - 1 from Forschungszentrum Karlsruhe
 - 1 from CERN
 - 1 from EDG
 - 2 people from Moscow State University
 - Part of 1 person from Academia Sinica in Tapei
- Q1 2004 - Team will change
 - Some will move to EGEE
 - The FZK person has left, will be replaced Q2 2004