



Enabling Grids for E-science

DATAMAT role and achievements in EGEE

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1. DATAMAT in the DoW
2. Work performed by DATAMAT inside the EGEE project
3. The financial status of DATAMAT in EGEE
4. DATAMAT plans on Grid and EGEE exploitation
5. Some words on Industry Forum
6. Conclusions



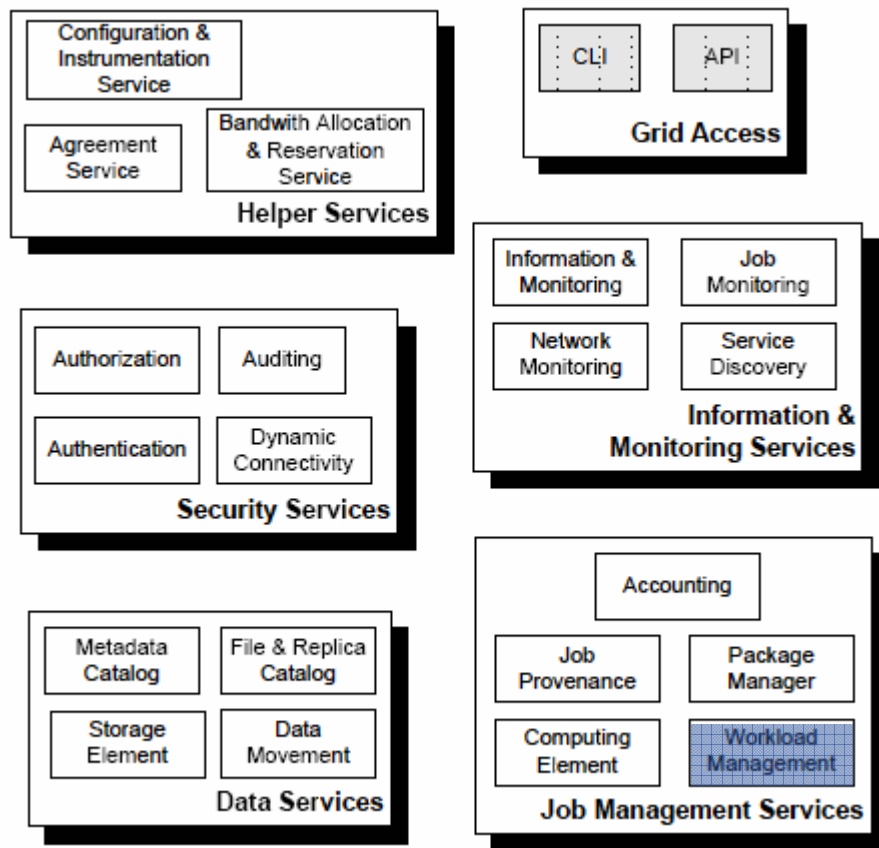
- **DATAMAT main activity is in the frame of JRA1**
- **DoW for JRA1 says:**

“The objective of the Middleware Engineering and Integration Research Activity is to provide robust middleware components, deployable on several platforms and operating systems [...] The evolution of such a set of middleware components towards a Service Oriented Architecture (SOA) adopting emerging standards [...] is an important goal of this activity.”

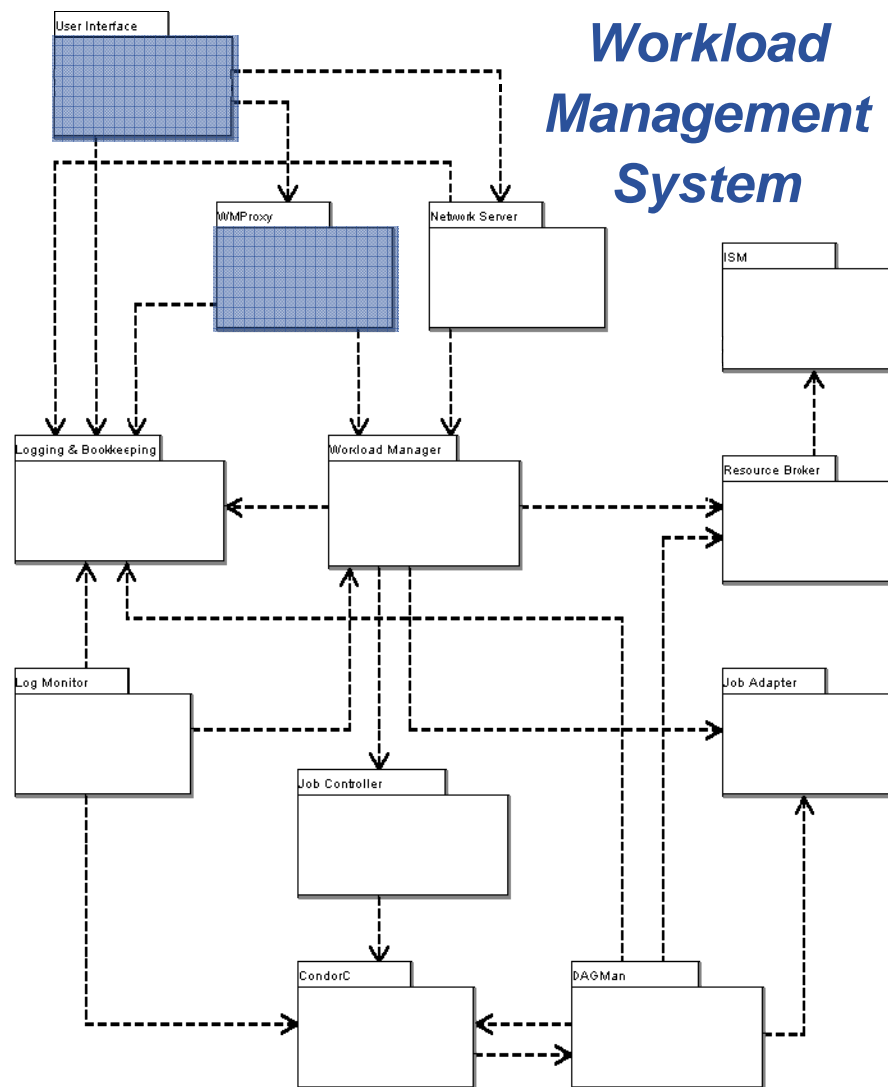
 - DATAMAT planned activities part of Resource Brokering and Accounting, in the frame of IT/CZ Cluster
 - DATAMAT planned resources: 6 FTE's
 - DATAMAT planned costs: 1.182 MEuro (1.176 MEuro for JRA1)

DATAMAT main task: to provide the interfaces to WMS

- User Interface (CLI and GUI)
- API's
- WMPProxy, the WS interface of WMS



gLite Services



2. Work performed (cont'd)

- **Participation to detailed design of WMS software**
- **Design and implementation of the Web Services based interface to WMS (a.k.a. WMPProxy)**
- **Design and development of client tools through the legacy interfaces of WMS and LB and through the WMPProxy (CLI, GUI, API)**
- **Specification of the Job Description Language (JDL) and development of its manipulation library**
- **Second line support to LCG project for problems on the UI and JDL**
- **IT/CZ Cluster Documentation Management**
- **IT/CZ representative in the PTF (Fabrizio Pacini)**
- **Deputy IT/CZ Cluster manager (Stefano Beco)**

- **Federico Rossi is member since the beginning of the Industry Forum Steering Committee**
 - Fully unfunded activities
 - Very useful to have a two-way liaison with the project and with other IT Companies
 - To push some “industrial requirements” in the project
 - To get common views and potential EGEE exploitation paths with other IF SC members

- **Effort:**
 - Mainly in line with plans (~93 pm's deployed up to M18, 6-7 FTE's since M12)
 - Plans for 7 to 6 (maybe 5 at the very end) FTE's until the end
- **Travels:**
 - About 4% of total costs up to M18
 - Plans for about 4% of remaining costs until the end
- **Money:**
 - 801.2 KEuro spent for RTD up to M18 (at 2004 rates)
 - 350-400 KEuro planned for RTD until the end (at 2005 rates)
- **In one word: practical targeted work done for EGEE within planned time, effort and budget constraints**

DATAMAT Overview

- **We are an Italian leading group in the supply of ICT solutions with 30+ years experience:**
 - ~1,500 highly qualified employees (end 2004)
 - 170.9 M€ Sales, 28.3 M€ EBITDA (FY2004)
 - **Our mission is to supply ICT solutions (products, systems and integrated services) in specific segments of vertical markets**
 - Bank, Insurance and Finance
 - Public Administration
 - Telecommunications, Media and Utilities
 - Defence, Space & Environment
 - Industry
- leveraging on:**
- strong application expertise (knowledge of client primary processes)
 - strong technical and technological competencies (“state-of-the-art”)
 - management and organizational capabilities in complex and high economic value contracts

4. Plans on EGEE exploitation

Why DATAMAT in Grid?

- Our traditional focus is on innovation, with a long record of international R&D projects followed by successful commercial exploitation.
- We perceived Grid as one of the most promising novelties for the ICT market, enabling distributed applications, and emerging scenario such as e-collaboration.
- In 2000 we decided to participate in DataGRID, the first large Grid Project in Europe, to acquire the specific knowledge of technology and to understand its potential business return in terms of application and services deployment...



- ... and in the following years to other European outstanding initiatives:

- CrossGRID (F2 Unit) – FP5
- EGEE (F3 Unit) – FP6
- AKoGriMo (F2 Unit) – FP6
- NextGRID (F2 Unit) – FP6



Which strategy behind?

- **Strong communication effort**
 - IPO Oct. 2001
 - Several times on specialised press / magazines / Italian TV as “opinion leader”
- **Invest on a new technology -> apply to a known case / market -> perform technology transfer cross-markets**
- **NEW!!!: DATAMAT is from last October a Finmeccanica company**
 - Largest Italian AeroSpace, Security & Defence Group
 - Human resources: >56,700
 - Industrial sectors:
 - *Aeronautics (Aircraft, Helicopters)*
 - *Space (Satellite, Ground Segment)*
 - *Transport (Trains, Railways, Underground)*
 - *Defence & Security (Sensors, Systems)*
 - *Communications*



una Società Finmeccanica

Preliminary Results



- **European Space Agency Reference Company for Grid**
 - SpaceGRID (800K€)
 - THE VOICE (550 K€) *use of EGEE*
 - Grid support to ESRIN (260 K€) *use of EGEE*
 - GDCD (500 K€) *potential use of EGEE*

- **Italian Reference Company for Grid**
 - Italian Rep's of main IT Vendors (IBM, HP, SUN, Oracle)
 - also through Industry Forum relationship
 - partnership on future initiatives (under discussion)
 - PRISMA*Grid (co-funding MIUR)
 - “Grid for industry”
 - Following c-OMEGA “initiative” with INFN et al.
 - Strong participation of Finmeccanica Companies
 - SME's districts
 - Other prospects (healthcare, banks, telco)

Positioning our investments...

- **EGEE = “Operational grid”**
 - M/W is available for deployment
 - We are already using it in ESA and encourage continuity policies
 - Infrastructure is good enough for industrial test-bedding and demonstration in “closed and well-known environment)
 - Experiments could set-up a virtuous cycle to overcome present limitations (on security, licensing, legacy, maturity, applications gridification, accepted standards, ... see last IF meeting!)
- **NEXTGRID + AKOGRIMO = “Next grid”**
 - Results will be more “architectures” than “engineered components”
 - Focus on new requirements coming from e-business models:
 - SLA, QoS, Dynamic and transient VO’s, Semantic workflows, ...
 - Investigate interaction between Grid and Mobility
 - large base of users, mobile Internet infrastructures based on IPv6, knowledge-related and semantics-driven services, ...
 - Involvement of Telco Companies

5. Some words on Industry Forum

- **The Industry Forum aims to raise awareness of EGEE within industry and encourage businesses to participate in the project and to use its results.**
- **Members(>100 companies): full list is available at ITF web site**
<http://public.eu-egee.org/industry/members.html>
- **Managed by a Steering Committee**
 - past and present industrial members include: IBM, HP, Microsoft, Oracle, EDS, ATOS Origin, Datamat, NICE, ...
- **Main activities:**
 - Quarterly electronic newsletter highlighting the most recent developments of the EGEE project, which may interest industry partners
 - Setting regular meetings for Industry Forum members
 - Organising and managing working groups on different industry-related topics, like technology, business and standards
 - Providing information and links to industry related grid material

- **What is DATAMAT getting from the project?**
 - Technological know-how
 - Return on image
 - Training / knowledge
 - New positioning on the ICT market
 - References

- **What is DATAMAT bringing into the project?**
 - Sound industrial ICT approach
 - Complex systems development know-how
 - Visibility of EGEE in the industrial sector
 - Perspective use of gLite in industrial applications

- **fully supporting our business strategy:**
consultancy -> application enabling /development -> integration



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Questions and Answers



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