Pannel Discussion

Plenary Pannel discussion session

EGEE-4 Pisa

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Questions

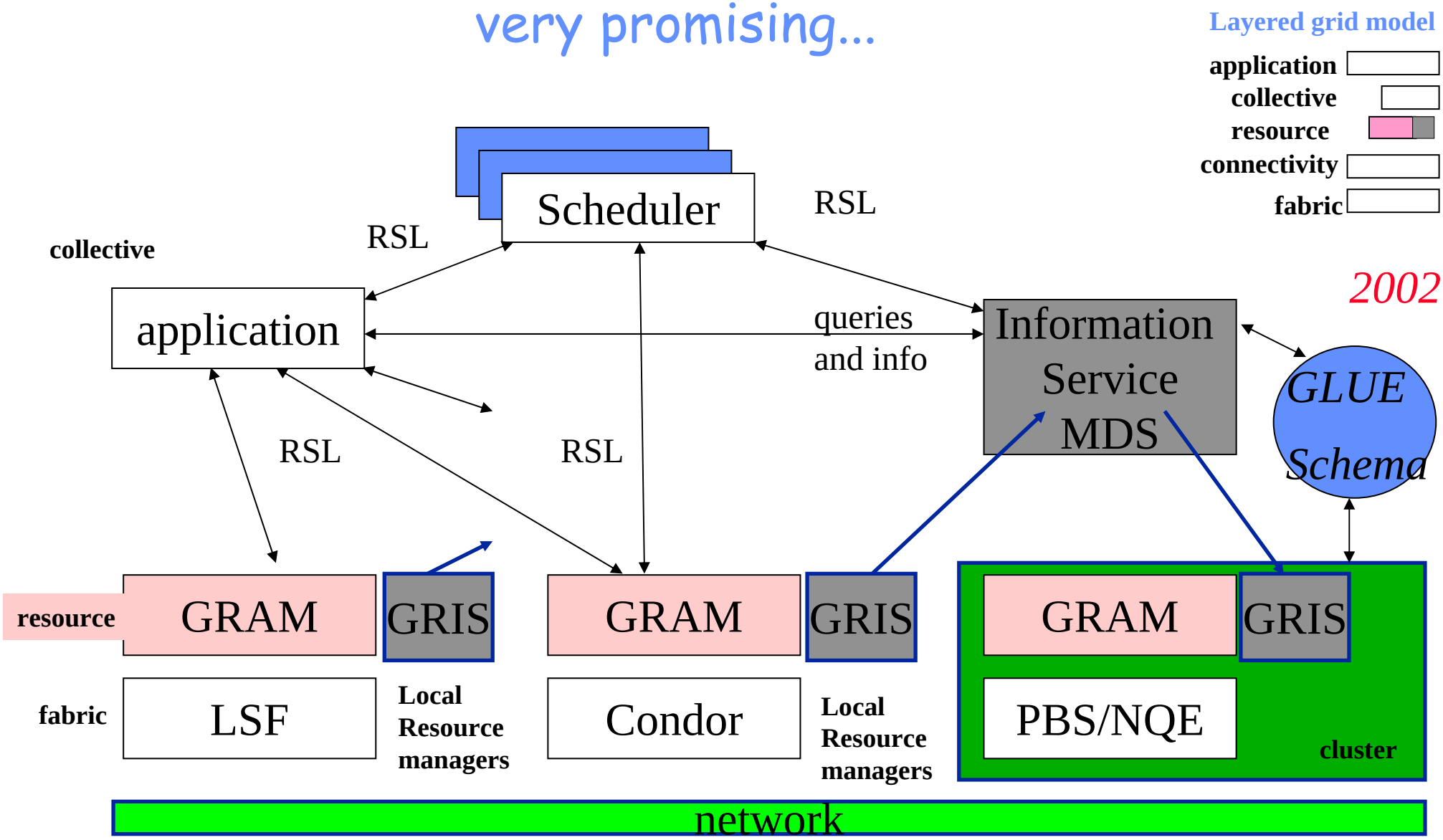
- What obstacles do you foresee in the interoperability between existing projects and the EGEE infrastructure?
- What are the main benefits or opportunities that you can foresee in future collaboration with existing infrastructure?

Question 1- The Issue: standardization

- The Grid book was issued in summer 1999.
- The vision:
- *Provide standard common services for:*
- *Security*
- *Grid Computing Resource Access protocols,*
- *Grid Resource Information,*
- *Storage Resource Access (SRM)*
- *Database access (DAI ?)*
- *And in addition provide more high level services for:*
- *Resource scheduling*
- *Reliable Data Management including Metadata*
- *Virtual Organization Management*
- *Monitoring*
- *…….*
- Global Grid Forum set up in beginning 2001 to guarantee the standardization process to happen in parallel to project prototyping for many applications

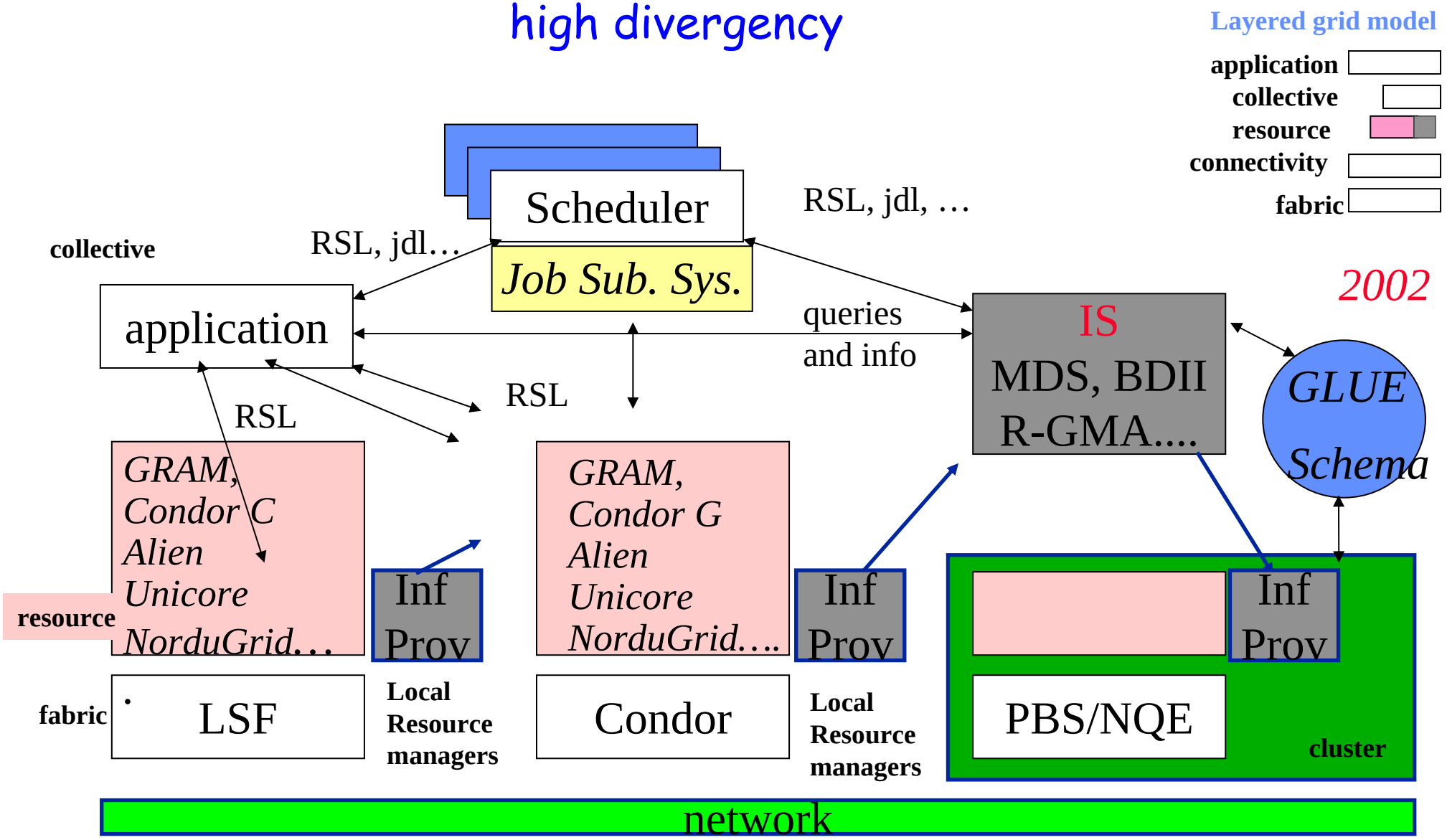
Grids status in 1999-2000

very promising...



Grids status in 2004

high divergency



Question 1: the answer

- Very slow progress in standardization after 5 full year of work of the Global Grid Forum
  - 3 meetings per years
- Very few specification approved for the key baseline OGSA services
- OGSI framework was a promising spec approved:
  - Unfortunately was ruled out after few months by vendors (in favor of WSRF)but generated many implementations…competing on performance: Globus, Indiana, Edinburgh….. and covering several platforms
  - It clearly indicated the way to go and how grids could take over
- Vendors focused on WSRF issues rather than baseline grid protocols
- Consequence: Dangerous tendency towards divergence
  - Large funds complicate rather than simplifying this problem
- Cannot keep expanding special interfaces for any new baseline service developed by the tens of projects
- A possible way out
- Need to be more effective in finalizing specs
  - Stronger input from infrastructure projects and applications communities in GGF discussions
- Research infrastructures projects should also re-address this issue between them as intermediate agreements to be brought to GGF
  - See successes SRM, Glue Schema…….
- Compete in implementations quality and functionalities not in standards and interfaces

Question 1: Is it really so bad ?

- Baseline components "correspondent" to GGF or de facto standards:
  - Storage Resource Manager (SRM) for Storage
  - GLUE Schema for resource description
  - GSI for Autentication of users and resources Globus GSI, Certificats X509, Trusted Certification Authorities (24 countries)
  - VOMS for Authorization
  - Gridftp: Privacy in communication
  - GGF *Usage Record (UR)* format (based on XML) ?
  - OGSA DAI
  - ……..
- But agreements and Specs badly missing for key services:
  - Resource access
    - JSDL?, Basic Execution Services; DRMAA….
  - Catalogs
  - Data Placement Services
  - Accounting
- Large in satisfaction also from Service Industries at the last GGF
- Research lead infrastructures projects can re-play a key role

Question 2

- Move towards Grids seems to be completely endorsed by the Society in all countries
- Many Grid components have now reached their maturity and satisfactory performance and are now deployed in "production infrastructures" for user's activities
- Users want from Grid components robust and quick responses as they are used to have with local systems. They are not available to go back to badly performing components.
- This make quite clear the key role of Open e-Infrastructure
- Development->Certification->Pre-production->Production of baseline and higher level services
- Components that pass the process of being certified of satisfactory quality for hundreds of users and are interoperable in key Infrastructures are certainly well suited to start their way for a general usage in the society
- Collaboration of e-Infrastructures projects can play a key role if they manage to agree to allow competitions in components implementations quality and not in interfaces