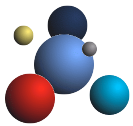
July 25, 2006
NESSI Workshop
Relationship with Standardization Bodies and Open Source Communities in the Grid Area

Position about Standardization Bodies and Open Source Communities



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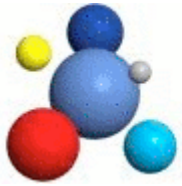
About our Research Group



Distributed Systems Architecture Group

"Grid Technology Research and Development to Enable Innovative IT provision models"

Relevant Information

- **Open-source Grid Technology Projects**
  - **GridWay**: *Metascheduling Technologies for the Grid:* http://www.GridWay.org
  - **Grid4Utility**: *A Grid Infrastructure for Utility Computing:* http://www.Grid4Utility.org
- **Participation in European Initiatives**
  - **EGEE-II**: *Enabling Grids for E-SciencE:* http://www.eu-egee.org
  - **BeInGrid**: *Business Experiments in Grids:* http://www.beingrid.com
- **Participation in GGF**
  - **DRMAA-WG**
  - **GSA-RG**
- **More information (members, research grants, papers…) at**
  - http://asds.dacya.ucm.es

Relevance of Standardization and Open-source Communities for Grid Projects

Standardization Bodies

Aim:

- Define **best practices** and **specifications** in collaboration with vendors and the user communities
- **Promote the adoption** of the standards
- **Build a community** for the exchange of ideas, experiences and requirements and best practices

Advantages of Adoption:

- Generation of an environment in which final users, vendors and technology providers can undertake investments with **greater confidence**
- Guaranty software **interoperability**
- **Protection** of software investment for both users & manufacturers

Final Benefits:

- Speed up **adoption** of technology innovations
- Cut down technology **costs**
- Faster and cheaper **integration**

Open-source Communities

Aim:

- **Define guidelines for collaborative development**, such as roles and responsibilities, communication, decision making…
- **Provide support** for the implementation of the guidelines

Advantages of Collaborative Development:

- Long-term **stability and support** to the project development
- **Greater variety** of technical visions, solutions, and features

Final Benefits:

- Speed up **delivery** of new products
- Cuts down development **costs**
- Higher **robustness** and **quality**

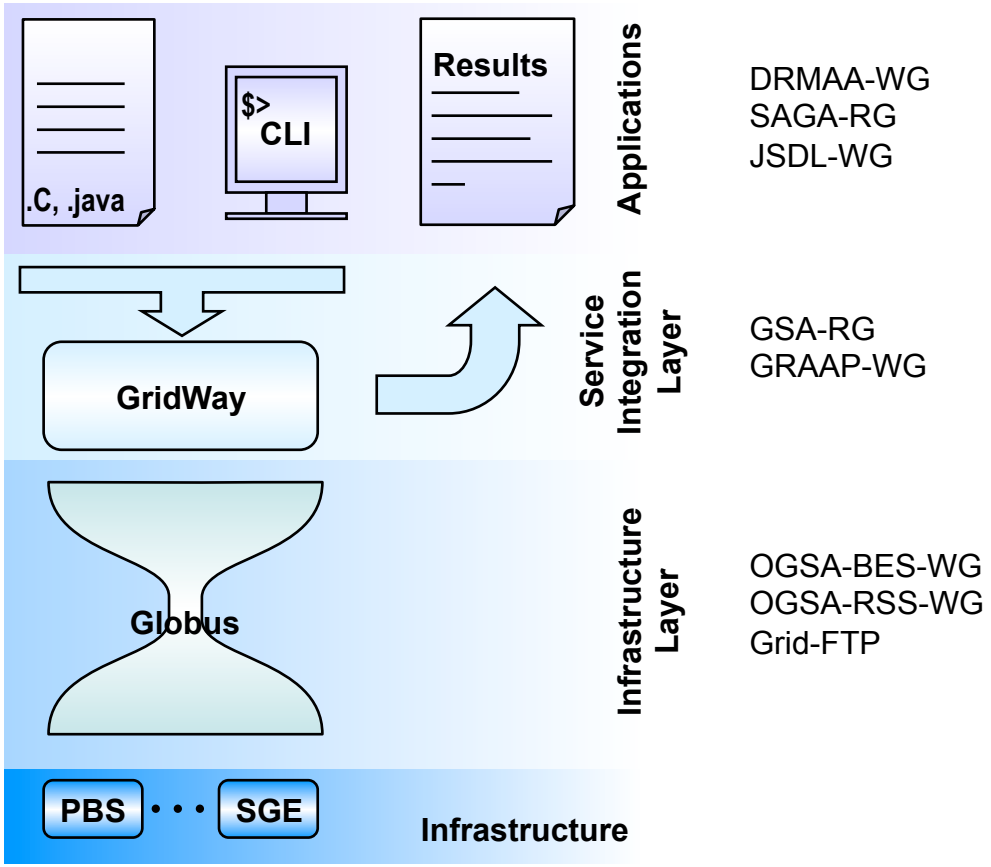
Standard adoption and a healthy open source community are crucial for the adoption of grid technology

In fact, almost every standard has been based upon open source technology

Our Experience in Adoption of Standards and Involvement in OSS Communities

GridWay Metascheduler

Standardization Body: GGF



DRMAA-WG
SAGA-RG
JSDL-WG

GSA-RG
GRAAP-WG

OGSA-BES-WG
OGSA-RSS-WG
Grid-FTP

Open-source Community: Globus

- **GridWay is now a Globus Proto-project**, and so it adheres to Globus philosophy and guidelines for collaborative development
- **GridWay uses basic infrastructure provided by Globus**:
  - Announce, user, development and commit notifications mailing lists
  - Bugzilla Database
  - CVS repository
  - Coding guidelines
  - WIKI
  - …

Involvement of IST Projects in Standardization Bodies

Advantages of Adoption of Standards in IST Projects

- Development of **reference implementations**
- Creation of a **superior product**, which immediately has a **competitive advantage**
- **Visibility** improvement and faster **technology transfer** and **adoption**
- **Risk mitigation** in the development of **long-term projects**

Proposal of a Value Statement about Standards

- **Use standards** and best practices already available
- **Participate in the specification of new standards** by exchanging ideas, experiences and requirements
- **Create new standards** if required

Conclusions

- The involvement of IST Projects in standardization bodies and open-source communities is **crucial for the long-term success of the projects and so to protect public investment**
- It is the best way to **collaborate between public and private entities in international environments**
- Research activities and standardization processes should be **tightly related** in order to assure the transfer of the results
- New proposals should include a **detailed plan of involvement in standardization processes** (how to track and influence standards), clearly identifying the standards that will be adopted and outlining the new standards that will be proposed or extended