OGSA-DAI

Dave Pearson
OGSA-DAI Programme Manager
OGSA-DAI Programme of Work

- Two phases
  - Phase 1 Feb – Sept 2002 complete
  - Phase 2 Oct 2002 – Jul 2003
- OGSA compliant
- DB2, MySQL, ORACLE, XINDICE
- Integration with Globus toolkit 3
- Joint UK government funding with industry
  - NeSC ~ £1.3m
  - NWES £100k
  - NEReSC £100k
- Collaborative Programme of Work:
  - Edinburgh, Manchester, and Newcastle Universities
  - IBM and Oracle
- Early adopter projects
  - MyGrid
  - AstroGrid
Starting Point

• Scope
  – Database interoperability
  – Requirements study

• Objectives
  – Generic functionality
  – No wheel reinvention
  – Exploit existing capabilities
  – Address needs of eScience community
  – Reference implementation for standards recommendations

• Quality plan
  – Based on proposal
  – Agreed phase 1 milestones and deliverables
  – Standards and processes
Challenges

• Resources & Skills
  – Development environment
  – Standards & methods
  – People
    • Continuity
    • Availability

• 2 Phases
  – Research
  – Development

• 5 way collaboration
  – Confidentially, IP, Open source licensing

• Multi-site
  – Edinburgh, Manchester, Newcastle
  – IBM Hursley
  – US involvement

• Milestones and deliverables
• Success criteria
Challenges

- Incremental releases
  - Testing
  - Documentation
- Refactoring dependencies
  - GGF and WS Standards
  - Globus Middleware
    - Release schedules
    - Quality
- Support
- User Community buy in
  - Existing projects
  - New projects
- User Feedback
  - Usage
  - Experiences
- Standardisation involvement
  - Effort
  - Cost
OGSA-DAI Status

• Release 1.0 – January 2003
  – Basic functionality
• Release 1.5 – End February
  – Runtime compatibility with GT3 alpha 2.0
  – Bug Fixes
  – Support Agreement implemented with GSC
• Release 2 – Mid-April 2003
  – Asynchronous delivery on GridFTP based data transport
  – GSC support fully integrated with OGSA-DAI team
  – GT3 alpha 3.0
• Release 2.5
  – Bug fixes
  – GT3 beta
• Release 3 – July 2003
  – Runtime compatibility with GT3 production
  – Full functional scope
  – DQP prototype
• +900 downloads to date
Key DAIT Activities

• A managed product development cycle
  – Ongoing product maintenance
  – Synchronised releases with Globus toolkit with maintained compatibility
  – 2 releases per year
• Proactive performance and quality improvement process
• Professional community interaction
  – Managed service registry
  – Tutorial and training schedule
  – Maintained documentation
• Sustained contribution to DAIS for standards recommendation development
  – Funded involvement
• Guided research
  – Community requirements input
  – Technology tracking
Goals for DAIT

• Further develop and support DAI services to deliver
  – Robust product strength software
  – Comprehensive functionality
• Drive and implement internationally agreed DAI standards
• Establish UK as a recognised centre of excellence for
  – Published DAI services
  – DAI training and learning
• Extend DAI services through
  – Requirements driven R&D
  – Technology driven R&D
DAIT Funding

• **Period of funding**
  – 24 month period, starting August 2003 to provide continuity

• **Estimate of required funding** £2.55m
  – Programme management
    • Full time PM = 0.09m
  – Research and development
    • 3 PDRA = 0.30m
  – OGSA-DAI product development
    • 10 staff ave £400/day = 1.92m
  – Community support
    • Nesc appointment = 0.09m
  – DAIS standards development
    • Equivalent 1 PDRA = 0.10m
  – Travel budget
    • Inter-site, DAIS & GGF meetings = 0.05m

• **Industrial Participation**
  – DTI funding position unclear until July
  – Letter of intent from participants
  – New partners?