



OGSA Transition

ATF Migration Strategy

Prof. Malcolm Atkinson
Director

www.nesc.ac.uk

28th April 2003

OGSI + OGSA

- **OGSI**
 - **Definition of Grid Services**
 - ▶ Web Services + Grid Behaviours
 - ▶ Life-time management
 - ▶ Service Data as foundation for Grid Information Services
 - **Hosting Environment**
 - ▶ Creation, Resource allocation, monitoring
 - ▶ Control and Data transport
 - **Draft Standard under consideration**
 - **Wide engagement**
 - **GT3 as reference implementation July 2003**
- **OGSA**
 - **Minimum set of Grid Services**
 - **Reference Implementations will appear incrementally**
- **Simulation of GT2 interfaces and functions**

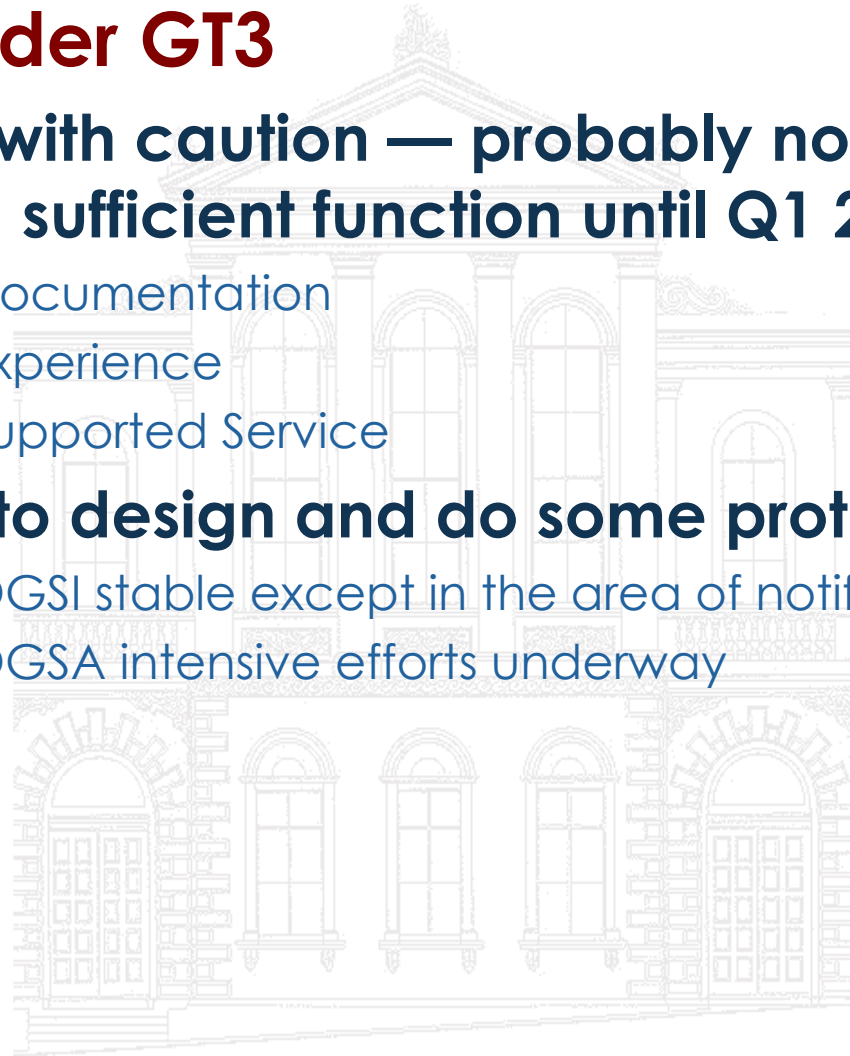
Users Moving from GT2 to GT3

- **No hurry**
 - GT2 supported to end 2003
 - And probably much longer
 - C library compatibility
 - Early adopters of GT3 will have to work harder
- **Attractions**
 - Decomposed functions make project contributions easier
 - Standards and architecture improved
 - Developed with a better engineering process
 - Access to web services and tools
 - Wider range of supported platforms

- **A Grid Services is a web service**
 - Have to add the Grid Service PortTypes
 - Should be easy iff
 - ▶ Appropriate libraries for this are made available
 - ▶ Those using Java should be easily provide
 - ▶ C, C++ and C# — How much later?
- **Issues**
 - Will the same registries be used?
 - What minimum Service Data required?
 - What hosting platforms?
 - Will tools still work?

New Projects

- **Consider GT3**
 - **But with caution — probably not easy to use or with sufficient function until Q1 2004**
 - ▶ Documentation
 - ▶ Experience
 - ▶ Supported Service
 - **OK to design and do some prototypes now?**
 - ▶ OGSi stable except in the area of notification
 - ▶ OGSA intensive efforts underway



Supporting GT3

- **Grid Support Centre, ETF & others**
 - They will face more complex challenges
 - **Variety of Services, Hosting Environments & Platforms**
 - ▶ Exploration, Evaluation and Assessment needed
 - **Combinatorial effects of composing services**
 - ▶ What will be a sensible core combination?
 - ▶ On what hosting environments and platforms?
 - **Examples of Composed services needed**
 - ▶ WSDL examples
 - ▶ Code examples
 - ▶ Deployment and operation demonstrations
 - **Phased transitions**
 - ▶ GT2 service + GT3 preparatory investigations
 - ▶ GT2 service + GT3 prototyping & experiment support
 - ▶ GT2 service + GT3 service
 - ▶ GT3 service
 - **Some bounds on when these may occur would help**
 - **A well-managed and engineered transition requires extra resources**

Supporting Transition

- **Progressive provision of Training**
 - Primers and guides on Web Sites
 - Hands-on developer courses
 - Orientation, Planning & Management
 - ▶ For Project Leaders, Designers and Architects
- **Plan to deliver this from e-Science Institute**
 - Schedule to match GSC + ETF schedule
 - Schedule to respond to project needs



Summary & Conclusions

- **Transition to OGSi/OGSA will prove worthwhile**
- **There are still issues to be resolved**
 - OGSA definition / delivery
 - Hosting environments & Platforms
 - Combinations of Services supported
 - Material and grids to support adopters
 - Resources to support transitions
- **A schedule of transitions should be (approximately & provisionally) published**
- **Expected time line**
 - Now GT2 service + GT3 M/W development & Evaluation
 - Late Q4 2003 early project use of GT3
 - Q1 & Q2 2004 significant project uptake
 - Late Q4 2004 most projects have transitioned



Comments & Questions Please



www.nesc.ac.uk