



## **OGSA-DAI**













# Policy for re-use



- This presentation can be re-used for academic purposes.
- However if you do so then please let <u>training</u>support@nesc.ac.uk know. We need to gather statistics of re-use: no. of events, number of people trained. Thank you!!







## Acknowledgments



- Matt Ford, NGS Induction Workshop (Dec. 2004, NeSC)
- Neil Chue Hong, OGSA-DAI Tutorial GGF13
- OGSA-DAI website, www.ogsadai.org







## Data services on NGS



#### Simple data files

- Middleware supporting
  - Replica files
  - Logical filenames
  - Catalogue: maps logical name to physical storage device/file
  - Virtual filesystems,
    POSIX-like I/O
- Storage Resource Broker

#### **Structured data**

- RDBMS, XML databases
- Require <u>extendable</u> middleware tools to support
  - Move computation near to data
  - easy access, controlled by AA
  - integration and federation
- OGSA -DAI







### What is OGSA-DAI?



- The Open Grid Services Architecture Data Access and Integration project is concerned with constructing middleware to assist with access and integration of data from separate data sources via the grid.
- The project was conceived by the UK Database Task Force and is working closely with the Global Grid Forum DAIS-WG and the Globus team.







## **OGSA-DAI Provides**



- Access to and updating of data resources
- Exposure of Data Resources to the Grid
- Additional data manipulation functionality at the service level
- Uniform access to disparate, heterogeneous data resources
  - Does not hide underlying data model
- Data resources exposed through services
  - Clients interact with these services







## **Interacting with Data** Resources



- Activity: The data resource manipulation, data transformation and delivery actions that the client wants the service to perform.
  - Think of sending the job to the data not the data to the job.
- Perform documents: Used by clients to specify to the services the activities they want executed.
- **Response documents**: Used by the services to inform clients as to the status of execution of their Perform documents and, often, to also return data to a client.

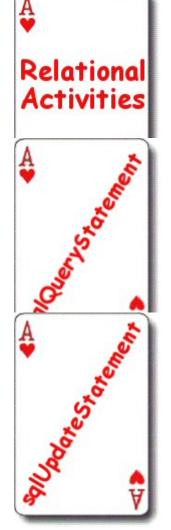




## GOSC OGSA-DAI Deck of Activities NGS





















## **OGSA-DAI** and the NGS



- the OGSA-DAI deployment on the NGS is being actively developed
- users should expect that procedures may change it does not reflect the commitment NGS has to providing a service.
- Initially the Manchester JISC data cluster has been charged with deploying the OGSA-DAI service



