



<http://www.grid-support.ac.uk>



<http://www.ngs.ac.uk>

# OGSA-DAI



<http://www.pparc.ac.uk/>



<http://www.eu-egee.org/>



# Policy for re-use



- This presentation can be re-used for academic purposes.
- However if you do so then please let [training-support@nesc.ac.uk](mailto:training-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](http://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 extendable 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







# 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