Data services on the NGS

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 know. We need to gather statistics of re-use: no. of events, number of people trained. Thank you!!

Overview

- OGSA-DAI: data access and integration

- GridFTP: a protocol for large file transfer

- The Storage Resource Broker

- And also: ORACLE – available for data storage

Oracle and the NGS

- The NGS core nodes, from the outset, have been partitioned into compute and data clusters.
- As the NGS matures the requirement for data hosting will grow
- Oracle database: for both users and services offered by the NGS.

The NGS Oracle service is ready to host data for your project!

- The RAL and Manchester sites are designated as the data clusters with each site having the ability to dedicate up to eight nodes for use by Oracle.
- Additional application needed after joining the NGS

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**
  - **Data in SRB vaults**

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**