OGSA-DAI
Usage Scenarios
Behind Application-Specific Services

Principles and Architectures for Structured Data Integration: OGSA-DAI as an example
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Usage scenarios

• OGSA-DAI is like any tool
  – Strengths and weaknesses
  – There are scenarios where it will be helpful and where it will not

• Publish usage scenarios
  – Best practice on how to use OGSA-DAI effectively
  – From the experiences of both users and ourselves
  – Current scenarios are on the WWW site

• “I have a data-related problem and OGSA-DAI made things worse”
  – OGSA-DAI is not a solution to every data access and integration problem in existence

• “OGSA-DAI is not as fast as JDBC”
  – A 747 is not as fast as an F15
  – Different products for different requirements
A naïve usage

A

Client Application

Application-specific service

B

Client Application

Application-specific service

OGSA-DAI

Key

Control messages

Data messages

A more effective usage

Client Application

Application-specific service

OGSA-DAI

FTP Server on Client

Client Application

Application-specific service

OGSA-DAI

Key

Control messages

Data messages
A more effective usage

- OGSA-DAI has provided delivery mechanism
  - Many delivery activities provided out-of-the-box
- Removes expensive inter-service data transfers from B
  - Data delivered straight from OGSA-DAI service to where it is needed
  - Client does not require knowledge of OGSA-DAI
- Develop new OGSA-DAI activities to perform application-specific data processing
  - Activity extensibility-point
  - Write new activity classes
  - Configure OGSA-DAI service to support these
- Overhead of developing application-specific data processing is reduced
  - Experiment with different delivery options
  - Allow clients to select from multiple delivery options

Multiple distributed resources

- Client Application
- Application-specific service
- OGSA-DAI
- OGSA-DAI
- OGSA-DAI

Key
- Control messages
- Data messages
Exploiting OGSA-DAI activities

- Preceding scenarios delegate much application-level functionality to OGSA-DAI so…
- …why not implement all application-specific functionality as OGSA-DAI activities?
  - Potentially moves computation closer to data
  - Eliminates expensive data movement
  - Improved range of delivery methods
  - A customised OGSA-DAI service can expose only application-specific activities
What are your requirements?

- Please do get in touch with the OGSA-DAI team
  - Discuss OGSA-DAI matters
  - Discuss requirements of a specific project
  - Arrange visits and collaborations
  - Contribute your own extensions
  - Feedback and comments are always welcome!

- Engage in discussions on the OGSA-DAI user list
  
  http://www.ogsadai.org.uk