

Access Grid 2.0

Workspace Docking



Overview

- Workspace Docking provides (in 2.0):
 - Data Sharing
 - Information (from the Venues Client) for doing ad-hoc peer-to-peer collaboration

Use Cases I

- Actor: User
 - User puts data into the Venue
 - Permanently
 - Transiently
 - User takes data from the Venue
 - User interacts with data from the Venue



Use Cases II

- Actor: User
 - User directly contacts another User to initiate a peer-to-peer interaction (text chat, file transfer, etc)

Requirements I

- Persistent storage for data in the Venue
- Authorization tools for data
 - Editing authorization information
 - Transferring ownership of the data to another user
 - Giving data a lifetime (?)



Requirements II

- Users need to know information about the data:
 - What kind of data?
 - Where is it?
 - Can I interact with it?
 - How do I interact with it?



Requirements III

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Architecture I

- Data are
 - Stored outside the Venue
 - Discovered in Venues
 - Represented by Data Descriptions in Venues

Architecture II

- Data Descriptions
 - Human Readable Data Description
 - Data Format Specification
 - Data Location
 - Authorization Policy
 - Default Client Location
 - Owner Information



Architecture III

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Technology Strategy

- Web Service provides language, platform, and location independent access to the service
- Identification/Authentication from Globus
- Authorization from ???
- Data Storage from ???



Technology Choices

- Web Services
 - SOAP
 - WSDL
- Globus Toolkit 2.x
 - Identity
 - Authentication
- Data Storage choices
 - Web DAV
 - Grid FTP Servers
 - Voyager?
 - Custom?

Design I

- The Venue has to provide a Data Storage Service for “permanent” data
- Exposed to the client through the Venues Operations for putting data into and taking data out of the Venue.
- Provided by a separate storage service



Design II

- The external storage service needs to be integrated with the rest of the security
- We should leverage someone else's storage server, if we can

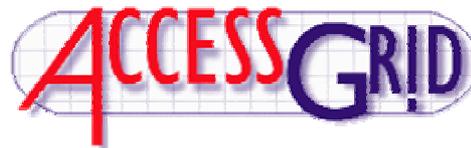
Design III

- The Node Management software has to provide a Data Storage Service for “transient” data
- Depending on the Node this may reside on a separate machine
 - Proxy storage for light-weight nodes
 - Multi-machine nodes



Design IV

- Workspace Docking is glued together by well crafted User Interface work.
- The Workspace Docking Client is integrated into the AG 2.0 Venues Client.
- We'd like to support drag n' drop



Design V

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Open Issues

- Data Storage Capacity Problems
 - We'd like to support large data sets

Conclusion

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Final Notes

- Questions?
- We'll meet monthly:
 - The first Tuesday of every month
 - Starting in December
 - 9AM Central – 11 AM Central
 - Argonne Institutional Venue

