

Proposed Charter for GGF Working Group on OGSA Data Replication Services

- *Name:* OGSA Data Replication Services (OREP)
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- *Secretary:* Andre Merzky (merzky@zib.de)
- *Mailing list:*
 - Initial comments on working group to rep-rg@gridforum.org list
 - After working group approval, will set up orep-wg@gridforum.org
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Description:

The OGSA Data Replication Services Working Group (OREP) is intended to create, review and refine grid service specifications for data replication services. These specifications will conform to the Grid Services Specification being developed by the OGSI Grid Service Infrastructure Working Group.

Initially, the working group will focus on a specification for Replica Location Services, which maintain and provide information about data location.

Milestones:

1. Document: "OGSA Local Replica Catalog Grid Service Specification," first draft submitted at GGF7 in March 2003. The Local Replica Catalog is one component of a Replica Location Service. The catalog registers mappings between logical names and target names (either physical or logical) for data replicas and responds to queries for replicas. Final specification expected in March 2004.
2. Document: "OGSA Replica Location Index Grid Service Specification," first draft to be submitted at GGF8 in June 2003. The Replica Location Index is one component of a Replica Location Service. The Replica Location Index aggregates replica mappings from one or more Local Replica Catalogs and responds to queries for data replicas. Final specification expected in March 2004.
3. Document: "OGSA Copy and Registration Grid Service Specification," first draft to be submitted at GGF9 in October 2003. A Copy and Registration Service combines data copy operations with operations to register newly created replicas in a Replica Location Service. It provides a degree of reliability specified by

service policies (e.g., rolling back to a consistent state if the copy or registration operations fail). Final specification expected June 2004.

4. Document: "OGSA Data Subscription Grid Service Specification," first draft to be submitted at GGF9 in October 2003. A Data Subscription Service allows users or other services to subscribe to particular data items and to receive subsequent updates of those data items. Depending on the policies supported by the service, these updates may be sent periodically or at the time of data update. Final specification expected June 2004.
5. Document: "OGSA Data Consistency Service Specification," first draft to be submitted at GGF10 in March 2004. A Consistency Service is a high-level service that maintains coherency among replicated data items according to specified consistency policies (e.g., update all copies within some interval or update all copies synchronously).

In parallel, the Replication Research Group will discuss the following issues:

1. Agree on breadth and depth of replication services
2. Definition of replica object model; relationship to namespace and data source objects (database objects, files, streams)