Metacat - Bug #163

need data repository interface for metacat

10/24/2000 05:38 PM - Matt Jones

Status:	Resolved		**Start date:**	10/24/2000
Priority:	Normal		**Due date:**	
Assignee:	David Blankman		**% Done:**	0%
Category:	metacat		**Estimated time:**	0.00 hour
Target version:	Postpone		**Spent time:**	0.00 hour
Bugzilla-Id:	163			

Description

Recent discussions have indicated that the metacat server should shield client interaction from the SRB and other data storage systems (e.g., http servers). Consequently, we need a new architecture for passing data to, and getting data from, the metacat server. The metacat server would then look at the address for the data object and dynamically load an adapter class that handles communication with the appropriate backend data system (e.g., SRB, http). This could be implemented as protocol handlers, or otherwise. The SRB adapter will require extensions to the current srb RMI server to allow for streaming data objects. All adapters will need to make use of the authentication and access control interfaces, so there may be a need to extend those interfaces. At a minimum the SRB adapter will need to query the authentication interface to find out the proper MCAT username and password to use (which might differ from the original if there is a user proxy system set up).

This proposed architecture assumes that the bottleneck introduced by passing all data through a few servers is negligible. the alternative is to connect clients directly to the SRB RMI server, which opens up possibilities of new clients causing metadata/data synchronization problems.

Related issues:

Blocked by Metacat - Bug #194: manage files by accession# on file system	**Resolved**	**04/09/2001**
Blocked by Metacat - Bug #195: allow metacat to store files on multiple fs	**In Progress**	**04/09/2001**

History

#1 - 02/14/2001 11:49 AM - Matt Jones

Chad and Dan's initial implementation of this interface allows users to store data on the Morpho server file system by opening a custom socket to the server. We now need to generalize the backend interface to this system to allow Metacat admins to configure the repositories used, either the local file store or the SRB system, or others as developed. Consequently, we need to re-evaluate the interface to generic repositories that we are using in the DataFileServer.java and DataFileUploadInterface.java classes. Owne has agreed to take on this task, and implement the SRB interface, and rewrite Metacat so that multiple repositories can be running at one time (and are dynamically loaded as needed).

#2 - 04/09/2001 12:28 PM - Matt Jones

At the Santa Barbara meeting we agreed to create a generic RepositoryInterface class that defines the set of methods used to access any backend data storage system, and then implement a single adapter class (FSAdapter) that allows stroage of objects on the file system. We have decided to hold off on the SRBAdapter for now.

#3 - 02/12/2002 04:15 PM - Matt Jones

Postponing until a later release. SRB functionality is a useful addition but not critical at this point. It would still be nice to have this modularity built in, but isn't critical at this point.

#4 - 02/17/2003 02:08 PM - David Blankman

In the process of hiring students to help work on this product

#5 - 03/13/2008 04:36 PM - Jing Tao

I don't think we need this feature anymore.

#6 - 03/27/2013 02:13 PM - Redmine Admin

Original Bugzilla ID was 163