Metacat Technical Plan
LTER Pilot Project – 6/23/2005

Key
• Completed task
• [In Process] Currently being worked on
• Task not yet started.

Initial Steps:

- Install Metacat locally for development
- Install LTER Pilot Web App and connect to local Metacat
- [In process] Connect to Albuquerque database
- Check in our version to NCSA CVS (with specific changes to config files and installation instructions)
- Feed relevant changes back to Metacat team (Jing, Saurabh)

HTTPS with GSI Credentials
• Client
  – Design changes to Client API
    ∴ login() with no arguments, throws exception if authentication fails
  – Get GSI credential into client from Web App
  – Connect from client via HTTPS, using GSI credential

• Server
  – Recover credential on server
  – Create & identify SessionID with credential
  – Extract username from DN?

**GT4 Web Service Wrapper**

- Grid Web Application
- Web Service Client
- SOAP
- GT4 Web Service
- Metacat Client API
- GT4 Web Service Provider
- Metacat Client API
- Metacat Server

**Step 2: Insert GT4 Web Service**

- Standard GT4 Web Service client
- Stubs generated in C, Java, etc.
- Lives and breathes Grid security

**Deployment for Demo**

- Get development GT4 container running
- Design SOAP API from Metacat client API
- Write WSDL & generate stubs
- Develop service provider and deploy to container
- Develop testing client and deploy to its own container

**Post-mortem and Feedback to Metacat Team**

- Discuss changes with Metacat team
- Forward code changes back to Metacat
  – PostGRES setup scripts?
  – Configuration changes (new config switches?)