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Overview

- AMGA is a grid metadata catalogue service designed to offer access to metadata for files stored on the Grid. We present the AMGA Manager, an easy-to-use, general-purpose GUI toolkit for AMGA. The AMGA Manager aims at providing an interactive exploration and searching environment for metadata in an user-friendly manner, and hiding complexities for accessing Grid service. It allows users to manipulate metadata entries, access control, user and group information through a user-friendly GUI. In addition, it includes many features improving usability and convenience such as the automatic query composition, importing and exporting metadata into a spreadsheet, and filtered metadata searching. Portability was one of the most important considerations, and the Eclipse IDE helped the toolkit work in various heterogeneous platforms, Linux, Windows, and Mac. We believe that these diverse features in the AMGA Manager helps users to build metadata searching environment more easily and faster and to boost productivity in managing large size metadata on Grid.

AMGA Manager - The Idea

- Users want easy access to the AMGA service
- It is difficult for beginners to use AMGA CLI commands
- A user acts with different roles
  - Data provider: create the metadata catalog
  - User manager and operator: manage the metadata
- End user: use the metadata catalog and analyze the experimental data
- We intend to provide an intuitive and easy-to-use GUI toolkit.

Software Development Methodology

- A prior to provide stability and increase development quality, we considered reasonable and effective software development methodology.
- Development Methodology
  - Object oriented design methodology, UML (Unified Modeling Language)
  - Prototype and Spiral Model

Development (1st year)

- Focus on
  - Simple Access with ID/Password
  - User Friendly Interface to manipulate metadata schema, entries, access control, group/user information
  - Query editor for users with completed CLI and easy interfaces
  - Easy monitoring the total interaction based on CLI commands
  - Effective results view
- Development:
  - Build an workbench on top of Eclipse platform with "Eclipse for RCP and RAP Developers" (Version 3.5)
  - Reuse the Java Client API

User Interface Contributions

- Access AMGA service
- Constraints management
- Collection management
- Support AMGA Version
- Completed CLI
- Attributes
- Support
- Easy Edit
- Generate simple AMGA queries
- Metadata management
- Group/User management
- Support
- Generate collections/entries
- High readability of SQL
- Results
- Filter
- Monitoring interaction
- Import Data Wizard
- Export Data Wizard
- Easy to install
  - Java version: JDK 1.6
  - Download: [http://java.sun.com](http://java.sun.com)
  - OS: toolkit works in various heterogeneous platforms: Windows, Linux, and Mac
- System Requirements
  - Intel Pentium 4
  - 512MB RAM
  - 30MB hard disk space
- Future Plans
  - More than version 1.3
  - Support AMGA Version
  - Main Features
    - User Friendly Interface
    - Easy AMGA Connections
    - Very Powerful Scheme Browser
    - Easy Monitoring Functions
    - Easy and Fast Query Execution

Installation & Support AMGA version

- Check
  - Java version: JDK 1.6
  - Download: [http://java.sun.com](http://java.sun.com)
  - OS: toolkit works in various heterogeneous platforms: Windows, Linux, and Mac
- System Requirements
  - Intel Pentium 4
  - 512MB RAM
  - 30MB hard disk space
- Easy to Install
  - Download the AMGA Manager program and Manual: [http://amga.web.cern.ch/amga](http://amga.web.cern.ch/amga)
  - Copy into your client PC directory
  - Find and Run execution file (AMGA Manager)
- Support AMGA Version
  - More than version 1.3
- Future Plans
  - Upstream and progress monitoring
  - GUI for additional commands (
  - Support Grid certificates
  - AMGA service configuration handling and AMGA version check
  - Dynamic functions of AMGA manager in accordance with AMGA version
  - Block comments in AMGA Editor
  - User requirements analysis and Further Study

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