AMGA Manager for Efficient Handling of Grid-Based Metadata at Belle II

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Overview
• AMGA
• AMGA Manager
• Product Features
• Installation
• Main Screenshots
• Contribution AMGA Manager V1.1 for Belle II
• Release Information
AMGA

- The Official EMI Metadata Software/Service
  - *De facto* standard metadata catalog service for grid community
  - Collaborative development among KISTI (Korea), CERN (Switzerland) and INFN (Italy)
  - KISTI is leading its evolution and development in EMI

- EMI: European Middleware Initiative consisting of 24 partners

- AMGA Website located at CERN

People involved in AMGA

- Soonwook Hwang: project responsible
- Sunil Ahn: SQL support, WS-DAIR, Federation, AMGA Server Maintenance
- Taesang Huh: AMGA GUI client
- Kees Claasen: API development and testing, User Support
- Salvatore Scilic: Java API maintainer
- Claudio Cherubino: PHP client

and formerly:

- Birger Kobitz: initial design
- NamGyu Kim: Thread Execution Model, DB Connection Sharing
- Nuno Santos: Developed replication code, Java API and SOAP frontend.
- Viktor Pose: Perl API, testing.
- Danilo Piparo: Python GUI.
- Ali Javadzadeh Bolviri: WS-DAIR
What is AMGA Manager?

- easy-to-use, general-purpose GUI toolkit(client) for AMGA
- interactive exploration and searching environment for metadata in a user-friendly manner and with hiding complexities
- Manipulation: metadata schema, entries, AC, G/U info, site info, collection properties etc.
Product Features

1. User Friendly Interface
2. Fast AMGA Connections
3. Powerful Schema Browser
4. Easy and Fast Query Execution
5. Prompt action about AMGA upgrade
Main Screenshots

- Schema Browser
- SQL Editor
- Data Import Wizard
- Data Export Wizard
- Group/User Manager
- Site Manager
- Filter

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## Contribution: AMGA Manager v1.1 for Belle II

<table>
<thead>
<tr>
<th>Functions</th>
<th>AMGA Manager v1.1</th>
<th>AMGA Manager v1.0</th>
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</table>
| **DataGrid(SB)** | • Streaming DataGrid  
• Play/Pause streaming data  
• Entries’ limitation of an action  
  ∴ possible to view a large scale of streaming metadata in real time | • One time  
  ∴ impossible to view a large scale of metadata in real time |
| **Collection View** | • Showing quickly collection view  
  ∴ ls –s : get only sub-dir( AMGA ver >= 2.1.1) | • Showing slowly collection view  
  ∴ ls –l : get both of entries and sub-dir |
|                | in the case of the target dir with a large scale of entries                     |                                                                                 |
| **Federation** | • Site Manager  
• Federation Manager | Null |
| **Connection (Authentication)** | • Globus authentication  
• VOMS authentication  
• Certificates authentication | • Only ID/PW authorization |
Release Information beginning with twiki

Site URL: http://ekpbelle2.physik.uni-karlsruhe.de/~twiki/bin/view/Computing/DataHandling

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Conclusion

• Various authentications including VOMS proxy
• Functional Improvement (Collection explorer browsing speed up, Data streaming at SB)
• Support federation among the grid sites
• Contribute to providing AMGA user-friendly interface to Belle II community

Plan

• Automated updater
• Reflection Belle/AMGA commands
e.g. belle_amga_create_userview, belle_amga_add_userdata, etc
• Improvement of schema setting module
Thank you!

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