caGrid Development Monthly Technical Status Report – August 2011

This report covers the progress made in the ongoing development of caGrid under Statement of Work *28XS097* during the month of August 2011 and has been prepared following the requirements of section 4.1.3 of that S.O.W.

# Issues Resolved

The following issues were moved into the “resolved” status in the caGrid Jira tracker during the period of August 1st to August 31st. Version numbers of “caGrid 1.5” refer to the next release of caGrid which supports SHA 2 certificates; Version numbers of “caGrid 1.6” refer to a future release.

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| --- | --- | --- | --- | --- |
| **Issue Type** | **Key** | **Summary** | **Resolution** | **Affects Version/s** |
| New Feature | [CAGRID-83](https://tracker.nci.nih.gov/browse/CAGRID-83) | Investigate impact of NCI 2009 techstack to caGrid | Fixed | General Investigation, caGrid 1.6 |
| Task | [CAGRID-120](https://tracker.nci.nih.gov/browse/CAGRID-120) | Investigate use of bundles for service deployment and how this might effect the skeleton. | Won't Fix | caGrid 2.0 |
| Task | [CAGRID-268](https://tracker.nci.nih.gov/browse/CAGRID-268) | Investigate SAML 2.0 with Apache CXF | Won't Fix |  |
| Sub-Task | [CAGRID-358](https://tracker.nci.nih.gov/browse/CAGRID-358) | CAGRID-268 Investigate community patch of WSS4J Library to Support SAML 2.0 | Won't Fix |  |
| Sub-Task | [CAGRID-359](https://tracker.nci.nih.gov/browse/CAGRID-359) | CAGRID-268 Investigate WSS4J support for SAML 2.0 | Won't Fix |  |
| Task | [CAGRID-408](https://tracker.nci.nih.gov/browse/CAGRID-408) | Investigate SAML 2 and WS-Security | Won't Fix |  |
| Task | [CAGRID-494](https://tracker.nci.nih.gov/browse/CAGRID-494) | Define all needed grid service URLs in the target grid serviceURLs.properties file | Fixed | caGrid 1.6 |
| Task | [CAGRID-531](https://tracker.nci.nih.gov/browse/CAGRID-531) | Make various projects test against a Derby DB instead of requing a live MySQL instance | Won't Fix | caGrid 1.6 |
| Sub-Task | [CAGRID-532](https://tracker.nci.nih.gov/browse/CAGRID-532) | CAGRID-531 Make dorian do tests with Derby DB | Won't Fix | caGrid 1.6 |
| Sub-Task | [CAGRID-533](https://tracker.nci.nih.gov/browse/CAGRID-533) | CAGRID-531 Make GTS do tests with Derby DB | Won't Fix | caGrid 1.6 |
| Sub-Task | [CAGRID-534](https://tracker.nci.nih.gov/browse/CAGRID-534) | CAGRID-531 Make CDS do tests with Derby DB | Won't Fix | caGrid 1.6 |
| Sub-Task | [CAGRID-535](https://tracker.nci.nih.gov/browse/CAGRID-535) | CAGRID-531 Make GME do tests with Derby DB | Won't Fix | caGrid 1.6 |
| Sub-Task | [CAGRID-536](https://tracker.nci.nih.gov/browse/CAGRID-536) | CAGRID-531 Gridgrouper to test with Derby DB | Won't Fix | caGrid 1.6 |
| New Feature | [CAGRID-565](https://tracker.nci.nih.gov/browse/CAGRID-565) | XMIDataMapper issues | Duplicate | caGrid 1.3 |
| New Feature | [CAGRID-567](https://tracker.nci.nih.gov/browse/CAGRID-567) | Upgrader for cagrid\_metadata extension 1.4 to 1.5 | Duplicate | caGrid 1.5 |
| New Feature | [CAGRID-594](https://tracker.nci.nih.gov/browse/CAGRID-594) | Upgrader for Data Services from 1.4 to 1.5 | Duplicate | caGrid 1.6 |
| Sub-Task | [CAGRID-620](https://tracker.nci.nih.gov/browse/CAGRID-620) | CAGRID-540 Perform mock upgrade of CVRGrid from 1.3 to 1.5 | Fixed | caGrid 1.5 |
| Sub-Task | [CAGRID-632](https://tracker.nci.nih.gov/browse/CAGRID-632) | CAGRID-540 GME Unit Test: MMSAbstractBaseTestCaseBase.testMetdata | Fixed | caGrid 1.5 |
| Task | [CAGRID-675](https://tracker.nci.nih.gov/browse/CAGRID-675) | Improve caGrid Ivy repository use | Won't Fix | caGrid 1.6 |
| Sub-Task | [CAGRID-724](https://tracker.nci.nih.gov/browse/CAGRID-724) | CAGRID-723 Technical Project Plan Update for July 2011 | Fixed | Sprint 2011\_07\_04-2011\_07\_15, Sprint 2011\_07\_18-2011\_07\_29 |
| Sub-Task | [CAGRID-729](https://tracker.nci.nih.gov/browse/CAGRID-729) | CAGRID-728 Technical Status Report for July 2011 | Fixed | Sprint 2011\_07\_04-2011\_07\_15, Sprint 2011\_07\_18-2011\_07\_29 |
| New Feature | [CAGRID-750](https://tracker.nci.nih.gov/browse/CAGRID-750) | Upgraders for SDK 4.0 data services from 1.3 and 1.4 to 1.5 | Fixed | caGrid 1.3, caGrid 1.4, caGrid 1.5 |
| New Feature | [CAGRID-751](https://tracker.nci.nih.gov/browse/CAGRID-751) | Upgraders for SDK 4.1 data services from 1.3 and 1.4 to 1.5 | Fixed | caGrid 1.3, caGrid 1.4, caGrid 1.5 |
| New Feature | [CAGRID-752](https://tracker.nci.nih.gov/browse/CAGRID-752) | Upgraders for SDK 4.2 data services from 1.3 and 1.4 to 1.5 | Fixed | caGrid 1.3, caGrid 1.4, caGrid 1.5, caGrid 1.6 |
| Sub-Task | [CAGRID-759](https://tracker.nci.nih.gov/browse/CAGRID-759) | CAGRID-758 Remove metadata 1.2 to 1.5 upgrader | Fixed | caGrid 1.5 |
| New Feature | [CAGRID-765](https://tracker.nci.nih.gov/browse/CAGRID-765) | Data Service Upgrade tests from 1.4 to 1.5 | Fixed | caGrid 1.5 |
| Sub-Task | [CAGRID-782](https://tracker.nci.nih.gov/browse/CAGRID-782) | CAGRID-752 Create SDK 4.2 data services with caGrid 1.3 and 1.4 | Fixed | caGrid 1.5 |
| Sub-Task | [CAGRID-783](https://tracker.nci.nih.gov/browse/CAGRID-783) | CAGRID-753 Create SDK 4.3 data services with caGrid 1.3 and 1.4 | Fixed | caGrid 1.5 |

# New Issues Identified

The following issues were added to the Jira tracker during the period of August 1st to August 31st. Note that the term “issue” is somewhat generic in Jira, and encompasses bugs, new features, tasks, etc.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Issue Type** | **Key** | **Summary** | **Status** | **Affects Version/s** |
| Improvement | [CAGRID-764](https://tracker.nci.nih.gov/browse/CAGRID-764) | Update the design of the gridgrouper membership search display of GAARDS-UI | Open |  |
| New Feature | [CAGRID-765](https://tracker.nci.nih.gov/browse/CAGRID-765) | Data Service Upgrade tests from 1.4 to 1.5 | Closed | caGrid 1.5 |
| New Feature | [CAGRID-766](https://tracker.nci.nih.gov/browse/CAGRID-766) | WS-Enumeration extension upgraders from 1.3 and 1.4 to 1.5 | Open | caGrid 1.3, caGrid 1.4, caGrid 1.5 |
| New Feature | [CAGRID-767](https://tracker.nci.nih.gov/browse/CAGRID-767) | WS-Enumeration extension upgraders from 1.4 and 1.5 to 1.6 | Open | caGrid 1.4, caGrid 1.5, caGrid 1.6 |
| New Feature | [CAGRID-768](https://tracker.nci.nih.gov/browse/CAGRID-768) | Support for JBoss 5.1.x running wsrf grid services | Open | caGrid 1.6 |
| Improvement | [CAGRID-769](https://tracker.nci.nih.gov/browse/CAGRID-769) | Backport Tomcat 6 Support to caGrid 1.4 | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-770](https://tracker.nci.nih.gov/browse/CAGRID-770) | CAGRID-769 Backport code changes for Tomcat 6 support from Trunk to 1.4 | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-771](https://tracker.nci.nih.gov/browse/CAGRID-771) | CAGRID-769 Backport build-deploy script changes for Tomcat 6 support from Trunk to 1.4 | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-772](https://tracker.nci.nih.gov/browse/CAGRID-772) | CAGRID-769 Fix caGrid Transfer under Tomcat 6 | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-773](https://tracker.nci.nih.gov/browse/CAGRID-773) | CAGRID-769 QA of all caGrid core services under Tomcat 6 | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-774](https://tracker.nci.nih.gov/browse/CAGRID-774) | CAGRID-769 Update installer to deploy Tomcat 6 | Open | caGrid 1.4 |
| New Feature | [CAGRID-775](https://tracker.nci.nih.gov/browse/CAGRID-775) | Support for JBoss 5.1 in caGrid 1.4 | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-776](https://tracker.nci.nih.gov/browse/CAGRID-776) | CAGRID-775 Create JBoss 5.1.x zip with pre-packaged WSRF | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-777](https://tracker.nci.nih.gov/browse/CAGRID-777) | CAGRID-775 Resolve issues with JNDI tree when WSRF is deployed to JBoss 5.1.x | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-778](https://tracker.nci.nih.gov/browse/CAGRID-778) | CAGRID-775 Integration tests for all caGrid core services under JBoss 5.1.x | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-779](https://tracker.nci.nih.gov/browse/CAGRID-779) | CAGRID-775 QA of all caGrid core services under JBoss 5.1.x | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-780](https://tracker.nci.nih.gov/browse/CAGRID-780) | CAGRID-775 Update installer to deploy JBoss 5.1.x | Open | caGrid 1.4 |
| New Feature | [CAGRID-781](https://tracker.nci.nih.gov/browse/CAGRID-781) | Add exposed validateQuery operation to Introduce generated Data Services | Open | caGrid 1.4 |
| Sub-Task | [CAGRID-782](https://tracker.nci.nih.gov/browse/CAGRID-782) | CAGRID-752 Create SDK 4.2 data services with caGrid 1.3 and 1.4 | Closed | caGrid 1.5 |
| Sub-Task | [CAGRID-783](https://tracker.nci.nih.gov/browse/CAGRID-783) | CAGRID-753 Create SDK 4.3 data services with caGrid 1.3 and 1.4 | Closed | caGrid 1.5 |
| Bug | [CAGRID-784](https://tracker.nci.nih.gov/browse/CAGRID-784) | Introduce shouldn't display extensions which are flagged as "deprecated" and "should be removed" | Open | caGrid 1.5, caGrid 1.6 |

# Releases of the caGrid Software

No releases of the software were made during the reporting period.

# Presentations, Documentation Updates, Community Communication

The Knowledge Center and caGrid development team continue close collaboration to facilitate solid community support and feature request gathering. The teams have worked together to identify additional potential performance improvements in the software and mitigate issues related to binary data types (CLOBs) under certain query and database configurations. The caGrid 1.5 development grid with SHA 2 certificates has been created and a community announcement regarding it has been drafted. The dev team is awaiting approval of CBIIT to go ahead with the formal public announcement.

# Outstanding Issues Being Actively Worked

Numerous issues are being actively worked by the development team, as identified in the section “New Issues Identified” with the status “In Progress”. Since this report is a snapshot and issues being worked will change frequently, interested parties are advised to monitor the caGrid development Jira tracker at <https://tracker.nci.nih.gov/browse/CAGRID>. Long running issues being worked include the following:

* [CAGRID-110](https://tracker.nci.nih.gov/browse/CAGRID-110)
  + Moving the integration tests to the containers specified by the NCI tech stack; specifically migrating to Tomcat 6
    - All tests have been moved to Tomcat 6, however one test remains in a failing state which cannot be readily fixed.
* [CAGRID-540](https://tracker.nci.nih.gov/browse/CAGRID-540)
  + The overarching SHA 2 implementation task
    - See the above information regarding the development grid.
* [CAGRID-161](https://tracker.nci.nih.gov/browse/CAGRID-161)
  + Fixing build problems with spaces in the file system path
    - Simple workarounds exist

# Critical Risks or External Dependencies

* Since the caGrid development project has been de-scoped and scaled down, there is a strong possibility that the release of a version of caGrid which supports SHA 2 will not be available until after the end of this calendar year. Currently, caGrid is operating under an exemption from the NIST mandate to move all federal systems to SHA 2 cryptography, but this exemption runs out at the end of the calendar year.
  + Another exemption will need to be implemented in lieu of a complete SHA 2 support release.
  + The 1.5 development grid has been deployed, and a public community announcement should be made soon so that users can begin testing and commenting on its correctness and functionality. Identifying any potential pain points for upgrades should be done as soon as practically possible.
* The de-scoped and scaled down development of caGrid will make it difficult to deliver new features that customers and users have requested in a timely manner.
  + This delay may cause them to abandon the grid entirely, or find alternative solutions to their use cases.
  + A mechanism for quicker support and feature addition releases could be researched and identified with the understanding that the only such changes made under this model wouldn’t impact the deployment of the production grid, which requires significant coordination and advance scheduling.