# caGrid Development Monthly Technical Status Report – July 2011

This report covers the progress made in the ongoing development of caGrid under Statement of Work *28XS097* during the month of July 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 July 1<sup>st</sup> to July 31<sup>st</sup>. 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.

Issue Type	Key	Summary	Resolution	Affects Version/s
Sub-Task	<u>CAGRID-</u> <u>107</u>	CAGRID-83 Unify use of Spring to version 2.5.6	Won't Fix	caGrid 1.6
Sub-Task	CAGRID- 508	CAGRID-540 Update Authentication Service to use/issue SHA-256 encrypted certificates	Fixed	
Sub-Task	CAGRID- 509	CAGRID-540 Update CDS to use/issue SHA-256 encrypted certificates	Fixed	
Sub-Task	CAGRID- 511	CAGRID-540 Create an announcement for upcoming SHA2 changes to the caGrid community	Fixed	
Sub-Task	CAGRID- 544	CAGRID-540 Decide on content of, write and send communique to users regarding legacy use of SHA-1	Won't Fix	caGrid 1.5
Sub-Task	<u>CAGRID-</u> <u>545</u>	CAGRID-540 Create and test SHA- 256 patch for caGrid 1.3	Won't Fix	caGrid 1.5
Sub-Task	CAGRID- 547	CAGRID-540 Write patch documentation for caGrid 1.3	Won't Fix	caGrid 1.5
Sub-Task	CAGRID- 549	CAGRID-540 Revise time estimate for caGrid 1.3 patch after full details of 1.5 changes are known.	Won't Fix	caGrid 1.5
Sub-Task	CAGRID- 550	CAGRID-540 Revise time estimate for caGrid 1.2 patch after full details of 1.4.1 changes are known.	Won't Fix	caGrid 1.5
Task	CAGRID- 603	Update XML API used to parse SAML assertions in opensaml project	Fixed	Sprint 2011_06_20- 2011_07_01

Sub-Task	<u>CAGRID-</u> <u>618</u>	CAGRID-603 Need some unit tests in the openSAML project to verify this still works.	Fixed	caGrid 1.6
Bug	CAGRID- 644	Preferences/Target Grids makes gaards-ui freeze	Cannot Reproduce	caGrid 1.5, caGrid 1.6
Task	CAGRID- 687	Review failing SHA 2 integration tests	Fixed	caGrid 1.5
Task	CAGRID- 694	Update services with special deployments to work with Tomcat 6	Fixed	caGrid 1.6
Bug	<u>CAGRID-</u> <u>703</u>	SDKQueryProcessors do not properly parse useHttpsUrl property	Fixed	caGrid 1.4, caGrid 1.5, caGrid 1.6
Improvement	CAGRID- 711	Get rid of endorsed jars	Fixed	caGrid 1.6
Bug	<u>CAGRID-</u> <u>712</u>	SyncGTS .xsd files are created without proper header	Fixed	caGrid 1.4, caGrid 1.5, caGrid 1.6
Task	<u>CAGRID-</u> <u>734</u>	Merge All Changes on the caGrid 1.4 branch into the SHA2 branch	Fixed	
Bug	<u>CAGRID-</u> <u>736</u>	Identifiers system tests fail due to change in templating the na.properties file	Fixed	caGrid 1.6
Task	CAGRID- 738	Update project version of SHA2 branch	Fixed	
Sub-Task	<u>CAGRID-</u> <u>739</u>	CAGRID-749 Upgrade Authentication Service to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	CAGRID- 740	CAGRID-749 Upgrade CDS to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	CAGRID- 741	CAGRID-749 Upgrade Dorian to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	CAGRID- 742	CAGRID-749 Upgrade FQP to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	<u>CAGRID-</u> <u>743</u>	CAGRID-749 Upgrade GME to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	CAGRID- 744	CAGRID-749 Upgrade GridGrouper to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	CAGRID- 745	CAGRID-749 Upgrade GTS to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	<u>CAGRID-</u> <u>746</u>	CAGRID-749 Upgrade MMS to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	CAGRID- 747	CAGRID-749 Transfer Introduce Extension needs an upgrader to 1.5	Fixed	caGrid 1.5
Sub-Task	<u>CAGRID-</u> <u>748</u>	CAGRID-749 Upgrade NA grid service to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	<u>CAGRID-</u> <u>756</u>	CAGRID-749 Upgrade SyncGTS Service to Introduce 1.5	Fixed	caGrid 1.5
Sub-Task	<u>CAGRID-</u> <u>757</u>	CAGRID-749 Upgrade TavernaWorkflow to Introduce 1.5	Fixed	caGrid 1.5

# **New Issues Identified**

The following issues were added to the Jira tracker during the period of July  $1^{st}$  to July  $31^{st}$ . Note that the term "issue" is somewhat generic in Jira, and encompasses

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hiiac	new	features.	tacke	otc .
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Issue	Key	Summary	Status	Affects Version/s
Type	itey	Summary	Status	Allects Versions
Task	CAGRID-	Technical Project Plan	Open	
	723			
Sub-	CAGRID-	CAGRID-723 Technical	Resolved	Sprint 2011 07 04-2011 07 15, Sprint
Task	724	Project Plan Update for		2011_07_18-2011_07_29
		July 2011		
Sub-	CAGRID-	CAGRID-723 Technical	Open	Sprint 2011_08_01-2011_08_12, Sprint
Task	<u>725</u>	Project Plan Update for		2011_08_15-2011_08_26, Sprint
		August 2011		2011_08_29-2011_09_09
Sub-	CAGRID-	CAGRID-723 Technical	Open	Sprint 2011_08_29-2011_09_09, Sprint
Task	<u>726</u>	Project Plan Update for		2011_09_12-2011_09_23, Sprint
		September 2011		2011_09_26-2011_10_07
			_	
Sub-	CAGRID-	CAGRID-723 Technical	Open	Sprint 2011_08_29-2011_09_09, Sprint
Task	<u>727</u>	Project Plan Update for October 2011		2011_09_12-2011_09_23, Sprint 2011_09_26-2011_10_07
		October 2011		2011_09_20-2011_10_07
T1-	04.0010	Table is all Otation December	0	
Task	CAGRID- 728	Technical Status Report	Open	
Sub-	CAGRID-	CAGRID-728 Technical	In	Sprint 2011_07_04-2011_07_15, Sprint
Task	729	Status Report for July	Progress	2011 07 18-2011 07 29
Task	725	2011	i rogress	2011_07_10 2011_07_23
Sub-	CAGRID-	CAGRID-728 Technical	Open	Sprint 2011 08 01-2011 08 12, Sprint
Task	730	Status Report for August		2011_08_15-2011_08_26, Sprint
		2011		2011_08_29-2011_09_09
Sub-	CAGRID-	CAGRID-728 Technical	Open	Sprint 2011_08_29-2011_09_09, Sprint
Task	<u>731</u>	Status Report for		2011_09_12-2011_09_23, Sprint
		September 2011		2011_09_26-2011_10_07
Sub-	CAGRID-	CAGRID-728 Technical	Open	Sprint 2011_09_26-2011_10_07, Sprint
Task	<u>732</u>	Status Report for		2011_10_10-2011_10_21
Tools	CACDID	October 2011	0	Comint 2044 00 20 2044 40 07
Task	CAGRID- 733	Project Summary Report for 28XS097	Open	Sprint 2011_09_26-2011_10_07
Task	CAGRID-	Merge All Changes on	Resolved	
Idak	734	the caGrid 1.4 branch	1 COUNCU	
	754	into the SHA2 branch		
Bug	CAGRID-	WEBSSO hides	Open	caGrid 1.4
	735	exceptions returned from		
		Dorian		
Bug	CAGRID-	Identifiers system tests	Closed	caGrid 1.6
	<u>736</u>	fail due to change in		
		templating the na.properties file		
Bug	CAGRID-	WEBSSO incorrectly	Open	caGrid 1.4
Dug	737	configures	Ороп	Judina 1.4
	<del></del>	Authentication and		
		Dorian clients		
Task	CAGRID-	Update project version of	Resolved	
	<u>738</u>	SHA2 branch		

Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	739	Authentication Service to	Resolved	CaGnu 1.5
Task	733	Introduce 1.5		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	740	CDS to Introduce 1.5		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	741	Dorian to Introduce 1.5	110001100	545114 1.5
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	742	FQP to Introduce 1.5	resolved	Cacha 1.5
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	743	GME to Introduce 1.5	110001100	Sacria 1.5
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	744	GridGrouper to Introduce	resolved	Cacha 1.5
raon	744	1.5		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	745	GTS to Introduce 1.5		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	746	MMS to Introduce 1.5	110001100	
Sub-	CAGRID-	CAGRID-749 Transfer	Resolved	caGrid 1.5
Task	747	Introduce Extension	110001100	Suchia 1.5
	7.17	needs an upgrader to 1.5		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	748	NA grid service to		
		Introduce 1.5		
Task	CAGRID-	Upgrade Core Services	Open	
	749	with Introduce 1.5		
New	CAGRID-	Upgraders for SDK 4.0	Closed	caGrid 1.3, caGrid 1.4, caGrid 1.5
Feature	750	data services from 1.3		, ,
		and 1.4 to 1.5		
New	CAGRID-	Upgraders for SDK 4.1	Closed	caGrid 1.3, caGrid 1.4, caGrid 1.5
Feature	<u>751</u>	data services from 1.3		
		and 1.4 to 1.5		
New	CAGRID-	Upgraders for SDK 4.2	On Hold	caGrid 1.3, caGrid 1.4, caGrid 1.5, caGrid 1.6
Feature	<u>752</u>	data services from 1.3		
N.1		and 1.4 to 1.5		0:140 0:144 0:145 0:140
New	CAGRID-	Upgraders for SDK 4.3	Open	caGrid 1.3, caGrid 1.4, caGrid 1.5, caGrid 1.6
Feature	<u>753</u>	data services from 1.3 and 1.4 to 1.5		
New	CAGRID-	Upgraders for SDK 4.4	Open	caGrid 1.3, caGrid 1.4, caGrid 1.5, caGrid 1.6
Feature	754	data services from 1.4 to	Open	Cadrid 1.5, Cadrid 1.4, Cadrid 1.5, Cadrid 1.0
1 catale	734	1.5		
New	CAGRID-	Merge caCORE SDK 4.4	Open	caGrid 1.5, caGrid 1.6
Feature	755	data service style project	0 00	
	===	into caGrid 1.5 and trunk		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	756	SyncGTS Service to		
		Introduce 1.5		
Sub-	CAGRID-	CAGRID-749 Upgrade	Resolved	caGrid 1.5
Task	<u>757</u>	TavernaWorkflow to		
		Introduce 1.5		
New	CAGRID-	caGrid metadata	In	caGrid 1.5, caGrid 1.6
Feature	<u>758</u>	extension 1.4 to 1.5 and	Progress	
0.1		1.6 upgrader		0:145
Sub-	CAGRID-	CAGRID-758 Remove	Closed	caGrid 1.5
Task	<u>759</u>	metadata 1.2 to 1.5		
Nour	CACDID	upgrader	Ones	oo Crid 1 4
New	CAGRID-	Allow Dorian Administrator to	Open	caGrid 1.4
Feature	<u>760</u>	manually add an IFS		
		user		
		uooi	l	

New Feature	<u>CAGRID-</u> <u>761</u>	Add ability to specify that a Group can only allow members from a specific authentication Service	Open	caGrid 1.4
New Feature	<u>CAGRID-</u> <u>762</u>	Add ability to completely remove a user from Grid Grouper	Open	caGrid 1.4
New Feature	CAGRID- 763	xmiToDomainModel generates invalid domain model when primitive types are used in XMI	Open	caGrid 1.4

### Releases of the caGrid Software

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

# Presentations, Documentation Updates, Community Communication

The caGrid development team continues to closely support and work with the caGrid Knowledge Center. In the course of this involvement, several unique use cases and issues were identified while working with representatives from a major pharmaceutical company. Of general interest and applicability to the wider caGrid user community was the implementation of significant performance improvements for users of caGrid data services and their associated client side tools for iterating results, which for some cases led to a roughly order-of-magnitude performance improvement. The changes to support this improvement have been incorporated into the main codebase, and are available as a drop-in jar replacement from our continuous integration dashboard, as well as ready for inclusion in the next release of caGrid.

# **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 <a href="https://tracker.nci.nih.gov/browse/CAGRID">https://tracker.nci.nih.gov/browse/CAGRID</a>. Long running issues being worked include the following:

#### • CAGRID-110

- Moving the integration tests to the containers specified by the NCI tech stack; specifically migrating to Tomcat 6
  - Most tests have been moved without issue, however one or two remain which require further investigation

- CAGRID-540
  - o The overarching SHA 2 implementation task
    - Most items for this development are complete, however some testing and integration work needs to be done.
- CAGRID-161
  - o Fixing build problems with spaces in the file system path
    - Simple workarounds exist
- CAGRID-646
  - Federated Query Processor scalability and performance improvements
    - Based on the community project created by UAB

### **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 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.