

GLITE R-GMA SERVER

1. RELEASE DESCRIPTION

This release contains the gLite R-GMA Server module v. 5.1.0. The following sections provide additional information about the release content, the module dependencies, the known bugs and issues and a list of bugs closed since the previous release. For information about installing and using the gLite R-GMA Server, please refer to the gLite Installation and User Guides.

2. CHANGES IN THIS RELEASE

2.1. CHANGES IN FUNCTIONALITY

2.1.1. Overview

The flexible-archiver has been replaced by the glue-archiver to archive the GLUE tables of the R-GMA server.

2.1.2. Details

- Flexible archiver:
 - Documentation has been brought up to date.
 - DB setup script pipes data to stdout.
 - Converted to python, new version allows any user to create any number of secondary producers.
- Glue archiver:
 - Initial release
 - Moved glue archiver configuration from flexible-archiver into glue-archiver module.
 - Cron script restarts archiver only if service was previously started.

2.2. CHANGES IN CONFIGURATION

The configuration of the module has changed. Please update your configuration if you upgrade from a previous version of the R-GMA server.

2.2.1. New configuration parameters

The following configuration parameters have been added:

File: glite-rgma-server.cfg.xml		
Parameter	Default value	Description
Advanced Parameters		
rgma.server.httpconnector_max PostSize	0	The maximum size in bytes of the POST which will be handled by the container FORM URL parameter parsing. The feature can be disabled by setting this attribute to a value inferior or equal to 0. If not specified, this attribute is set to 2097152 (2 megabytes). <i>Example: 0</i> [Type: 'integer']
rgma.server.LD_ASSUME_KER NEL	2.4.19	Version of linux threading libraries to be used for tomcat configuration <i>Example: 2.4.19</i>

		[Type: 'string']
<i>archiver specific configuration values</i>		
rgma.archiver.db.name	arch0	Database name for flexible archiver. [Type: 'string'] <i>Example: arch0</i>
rgma.archiver.db.user	Test	User name for flexible archiver db access. [Type: 'string'] <i>Example: info</i>
rgma.archiver.db.password	Info	User password for flexible archiver db access. [Type: 'string'] <i>Example: info</i>
System parameters		
rgma.server.security.configurationFile	\${GLITE_LOCATION}/etc/rgma-server/ServletAuthentication.props	Configuration file for R-GMA server security settings. <i>Example:</i> \${GLITE_LOCATION}/etc/rgma-server/ServletAuthentication.props [Type: 'string']
<i>Site-publisher specific configuration values</i>		
rgma.site-publisher.configurationFile	\${GLITE_LOCATION}/etc/rgma-publish-site/site.props	Configuration file for R-GMA site-publisher settings. <i>Example:</i> \${GLITE_LOCATION}/etc/rgma-server/ServletAuthentication.props [Type: 'string']
<i>archiver specific configuration values</i>		
rgma.archiver.configurationFile	\${GLITE_LOCATION}/etc/rgma-glue-archiver/glue.config	Configuration file for R-GMA flexible archiver archiving settings. <i>Example:</i> \${GLITE_LOCATION}/etc/rgma-glue-archiver/glue.config [Type: 'string']

2.2.2. Removed configuration parameters

The following configuration parameters have been removed:

File: glite-rgma-server.cfg.xml
Parameter
Advanced Parameters
rgma.server.archiver_configuration_file

2.2.3. Changed configuration parameters

No parameter has changed the name or the value in this release.

2.3. BUG FIXES

This release introduces a set of bug fixes (for the full list of fixed bug see sections 5.3 and 5.4):

- org.glite.rgma.server-servlet

- Bug #10238 Set defaultMinRetentionPeriod to 0 in rgma-server.conf and rgma-server-setup.py.
- Bug #10238 Uses updated services module with fixes for mysql connector data truncating problem
- Bug #6287 Added predefined query for the log4j table.
- Bug #9315 Changed service names to glite convention
- org.glite.rgma.stubs-servlet-java
 - Bug #9792 Changed APIBase to return correct message on "object closed" - used to return "API closed".
 - Bug #9744 Security set-up now only attempted on first connection to HTTPS.
- org.glite.rgma.flexible-archiver
 - Bug #10109 Only 1 SP can be stored per id file.
- org.glite.rgma-services
 - Bug #10238 Added code to shortcut isTupleInside... if minRetentionPeriod is 0.
 - Bug #10238 Added code to trap "Data truncation" exceptions. Changed behaviour of LP to match DBP: do not throw exception to user on failed insert/update.
- org.glite.rgma.api-c
 - Bug #10030 Allow cleanup predicate to be set on archiver for use by Python
- org.glite.rgma.api-cpp
 - Bug #10048 Close socket if we get connection refused
- org.glite.rgma.api-cpp
 - Bug #10030 Set cleanup predicate for secondary producer
- org.glite.rgma.glue-archiver
 - Bug #10608 Missing TRUSTFILE initialization for the glue-archiver

3. RELEASE CONTENTS

3.1. GLITE SUB-DEPLOYMENT MODULES

The gLite R-GMA Server module installs/uses the following set of gLite deployment modules:

- glite-rgma-server
- glite-rgma-servicetool
- glite-security-utils

Please see the corresponding release notes of these modules for details.

3.2. GLITE RPMS

The gLite R-GMA Server module is composed of the following gLite components (list includes the gLite components of the other used gLite deployment modules listed in section 3.1):

Component name	Description	Version	File
glite-config	gLite configuration scripts	1.4.5	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-config-1.4.5-1.noarch.rpm
glite-rgma-api-c	C API for R-GMA	4.1.13	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/i386/RPMS/glite-rgma-api-c-4.1.13-1.i386.rpm
glite-rgma-api-cpp	C++ API for R-GMA	4.1.15	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/i386/RPMS/glite-rgma-api-cpp-4.1.15-1.i386.rpm
glite-rgma-api-java	Java API for R-GMA	4.1.5	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-api-java-4.1.5-1.noarch.rpm
glite-rgma-api-python	Python API for R-GMA	4.1.15	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/i386/RPMS/glite-rgma-api-python-4.1.15-1.i386.rpm

glite-rgma-base	R-GMA configuration documentation	basic and	4.1.19	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-base-4.1.19-1.noarch.rpm
glite-rgma-common-config	gLite rgma configuration installation	common items	5.0.0	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-common-config-5.0.0-1.noarch.rpm
glite-rgma-flexible-archiver	R-GMA archiver	flexible	4.1.18	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-flexible-archiver-4.1.18-1.noarch.rpm
glite-rgma-glue-archiver	R-GMA Glue archiver		4.1.2	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-glue-archiver-4.1.2-1.noarch.rpm
glite-rgma-publish-site	R-GMA site publisher		4.1.14	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-publish-site-4.1.14-1.noarch.rpm
glite-rgma-server-config	gLite R-GMA server installation	server	5.1.0	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-server-config-5.1.0-1.noarch.rpm
glite-rgma-server-servlet	Servlet-based R-GMA server implementation		4.1.25	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-server-servlet-4.1.25-1.noarch.rpm
glite-rgma-servicetool	R-GMA service tool		4.1.19	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-4.1.19-3.noarch.rpm
glite-rgma-servicetool-config	gLite R-GMA servicetool installation		5.1.1	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-config-5.1.1-1.noarch.rpm
glite-rgma-standard-tables	A set of standard table schemas for R-GMA		4.1.8	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-standard-tables-4.1.8-1.noarch.rpm
glite-rgma-stubs-servlet-java	Java client implementation stubs for R-GMA		4.1.13	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-rgma-stubs-servlet-java-4.1.13-1.noarch.rpm
glite-security-trustmanager	The java certificate path checkin for proxy certs in SSL with plugins for tomcat and axis.		1.7.3	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-security-trustmanager-1.7.3-1.noarch.rpm
glite-security-util-java	The java utilities library for security		1.1.2	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-security-util-java-1.1.2-2.noarch.rpm
glite-security-utils-config	gLite Security Utilities configuration files		1.0.6	http://glite.web.cern.ch/glite/packages/R1.4/R20050916/bin/rhel30/noarch/RPMS/glite-security-utils-config-1.0.6-1.noarch.rpm

4. DEPENDENCIES

The gLite R-GMA Server module has the following dependencies:

Component name	Version	RPM file name
gLite-essentials-java	1.2.0	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/glite-essentials-java-1.2.0-2_EGEE.noarch.rpm
gLite-essentials-cpp	1.1.1	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/glite-essentials-cpp-1.1.1-1_EGEE.i386.rpm
MySQL client	4.1.11	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/MySQL-client-4.1.11-0.i386.rpm
MySQL server	4.1.11	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/MySQL-server-4.1.11-0.i386.rpm
Tomcat5	5.0.28	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/tomcat5-5.0.28-10_EGEE.noarch.rpm
Swig	1.3.21	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/swig-runtime-

		1.3.21-1_EGEE.i386.rpm
SUN Java JDK/JRE	1.4.2	http://java.sun.com

For the list of dependencies of the gLite sub-deployment modules, listed in section 3.1, please see the release notes of the corresponding modules for their list of dependencies.

5. KNOWN BUGS AND ISSUES

This release has the following known bugs and issues. Bug numbers refer to the gLite Bug Tracking system database hosted on the CERN Savannah system at <https://savannah.cern.ch/bugs/?group=jra1mdw>.

5.1. MAIN ISSUES

- When using multiple registries the archivers are inconsistent. Since the result of registry replication can produce unreliable results, it is recommended not to use more than one registry per R-GMA domain.

5.2. KNOWN OPEN BUGS

Bug number	Description
#4284	RGMA: error message for a non existent table is misleading
#4438	R-GMA doesn't check types
#4634	RGMA scripts from EDG still present
#5412	RGMA: No provision for not being port 8080
#5703	case sensitive varchar's when creating an archiver
#6288	HTTP proxy support is inconsistent
#6475	Case sensitivity for table names is problematic
#6479	csv and tsv output has vanished
#6493	Bad case sensitivity for insert
#6495	insert does not check the column name
#6496	Bad/missing error messages with select
#6498	Error message could be more helpful
#6501	Range checking on the date stamp leaves something to be desired
#6510	Case sensitivity depends on query type
#6511	Syntax checking could be better
#6512	More parsing errors
#6514	Case sensitivity error with a secondary producer
#6568	Could log commands to a file
#6935	Install guide mentions RGMA-Server in LTS Section
#6977	Printable version of the APIs would be nice
#7024	Additions to the manuals
#7149	Formatting strings for output
#7188	Bad messages if a port isn't open
#7189	How do you know the primary key?

#7220	Bad error message with ssl error
#7225	All client interactions should go via the local servlet box
#7226	rgma client configuration succeeds, but a client test fails
#7276	Bad error message for expired proxy
#7283	Inserting '\s
#7332	Services such as rgma-servicetool are not services.
#7399	API errors with expired proxy
#7442	Remove redundant tables
#7452	Inconsistent use of stdout and stderr in java API
#7487	the rgma client and it does not use the X509_CERT_DIR to look for the certificates of the CAs
#7542	Overriding the rgma.conf
#7543	Add a comment "command"?
#7566	rgma.servicetool parameters
#7574	rgmaservicetool configuration script changeme error
#7575	rgma servicetool configuration script does not exit on error
#7635	Problems with registry configuration
#7644	Need explanation of how to get info out of result sets
#7654	Detection of an error with TRUSTFILE
#7676	Need to find out server limits on parameters
#7704	Publication rate and LRP for site and service publishers should be configurable
#7726	Bad error message in web browser
#8099	Archivers are inconsistent
#8356	Test the service discovery API
#8479	Reassigned item: RGMA crashes on IA64
#8650	R-GMA dies trying to insert a record
#8872	Extra documentation in rgma.registry.hostname for using 2 registries
#8882	Predefined queries on the Browser are linked to the old schema tables
#8992	browser failed to update column definitions
#8993	rgma-server-setup.py sets the replicate attribute to true in rgma-server.conf even though only one registry is being use
#9109	API is missing a "show tables" equivalent
#9272	tomcat log4j warnings
#9375	glite-rgma-server-installer does not create /var/log/glite/rgma-server/rgma-server.log
#9381	NullPointerException in R-GMA StreamProducerServlet
#9384	R-GMA registry is not protected against careless use
#9395	Registry API causes deadlock
#9507	R-GMA BrowserServlet threw exception clicking on endpoint
#9523	StreamProducer doesn't crop VARCHARs to size defined in Schema
#9589	Site publisher needs extra config items
#9665	Cpp API makes a new connection for each server call resulting in slow performance

#9699	ArchiverThread doesn't check column types when inserting.
#9836	Insecure configuration of R-GMA fails
#10066	Reassigned item: Site Archiver
#10171	Would like str() to provide the state of an object using the Python API
#10181	Gin is aborting because of a fatal error
#10182	All Exceptions in Python API are mapped to RGMAException
#10387	Servicetool does not kill hanging status scripts
#10511	User guides should contain more advice
#10555	R-GMA site publisher documentation does not contain new values
#10600	Strings that look like numbers get treated as numbers
#10604	In memory streaming code causes out of bounds exception
#10617	SP deadlock with multiple tables
#10635	R-GMA archiver installation prints error
#10636	R-GMA glue archiver prints error if id file is not there
#10797	glite-rgma-server-config.py --configure fails due to undefined \$GLITE_LOCATION

5.3. BUGS FIXED IN THIS OR PREVIOUS RELEASES, BUT NOT YET TESTED

Bug number	Description
#5143	Too many open files using MySQL
#5411	http://hepunix.rl.ac.uk/egee/jra1-uk/glite/index.html has various errors
#5510	need for DB indices for DBProducer in underlying DBMS
#6287	add a predefined query to the browser to query the new log4 table
#6391	Wrong cron.hourly entry
#6481	Bad error message from show
#6990	Manual should refer to RC1 code
#7018	Manuals should mention case-sensitivity issues
#7156	C++ SecondaryProducer example doesn't behave as expected
#7218	Finding the configured registry and schema
#7315	R-GMA Servicetool dumps stack traces to stderr
#7398	C API check fails with centos?
#7449	Bad behaviour with misconfigured registry
#7600	servlet check doesn't spot time sync problem
#7622	Comments on the quickstart web page
#7655	declareTable fails with invalid predicate, but table is still declared
#7664	Bad service names?
#7838	Spell checkers are good!
#8106	Test 12 should not check GlueHost
#8427	rgma-gin problem: "Gin is aborting because of a fatal error"
#8439	Components deadlocks when Registry down and do not resume

#8457	R-GMA does not remove illegal XML characters
#8548	R1/LCG Java API doesn't work with Java 1.5
#8551	Rgma servers should avoid selecting a Registry if one is located locally.
#8552	'Out of Memory' Registries cause rgma system to run very slowly.
#8574	Issuing '\mysql -u root -p <\' failed
#8749	createOnDemandProducer calls the CanonicalProducer API incorrectly
#8765	R-GMA server: impossible to change the mysql password via the python scripts
#8811	Pong Servlet initialisation error running in insecure mode
#8812	ServletConnection throws exception in insecure mode
#8898	Flexible archiver init.d script returns ok when it has failed with a RGMAException
#8927	Registry hangs due to slow response from remote producers
#8950	in glite 1.1 having the site configured not to use RGMA, the deployment script fails with RGMA not working
#9195	APEL 3.4.45 Doesn't work with Java 1.5
#9238	Replica Manager thread dies and does not recover
#9303	C API fails with HTTP protocol error in some circumstances.
#9315	R-GMA components don't follow agreed naming convention for service type
#9366	R-GMA gin sends logs partly to console and not to log file
#9405	The rgma command line tool sets its PYTHONPATH incorrectly
#9406	The rgma python api RPM does not clean up after itself
#9539	LatestProducer created by python API has zero min retention period
#9544	Gin publishes tuples regardless of whether they have changed or not
#9606	Python RGMA exception incorrectly mapped when using reconnect() method
#9744	fatal error reported by java api when in insecure mode
#9792	Archiver does not recreate its Consumers when they die
#10030	history retention period for Secondary Producer does not work as expected
#10036	R-GMA API has functions which need to be modified or removed
#10048	Python API socket leak
#10109	Flexy uses old API and is not flexible
#10238	Archiver producer buffer fills up
#10608	Missing TRUSTFILE initialisation for the glue-archiver

5.4. BUGS CLOSED SINCE LAST RELEASE

This release fixes the following bugs and issues. Bug numbers refer to the gLite Bug Tracking system database hosted on the CERN Savannah system at <https://savannah.cern.ch/bugs/?group=jra1mdw>

Bug number	Description
#7916	"glite-rgma-client_installer.sh if -n \$basedir; then"
#8794	ConnectionTimeoutExceptions are passed back to the producer client
#10207	FTS: rgma service discovery configuration fails



Release Notes

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#10217	Bad location of the wsdl file as required by glite-rgma-servicetool-serviceName.cfg.xml ?
#10254	getting hostname on machines with two network cards
#10626	service discovery consistent rgma strategy needed