

GLITE R-GMA SERVER

1. RELEASE DESCRIPTION

This release contains the gLite R-GMA Server module v. 5.0.0. 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

This release introduces the following changes:

- Functionality changes:
 - R-GMA uses new Glue tables for schema and registry
 - R-GMA server and clients can run in secure and insecure mode.:
 - The server always runs in secure mode, the insecure mode can be enabled in addition.
 - Clients can connect to the server either via the secure or via the insecure port (if enabled)
 - This module is compatible with the LCG release 2.4.0
- Deployment and configuration changes:
 - Command line changes for configuration script:
 - No option given shows help
 - `--configure` configures service (but does not start service)
 - `--start` starts service
 - Configuration parameters
 - `rgma.server.httpconnector` configuration parameter for Tomcat (added)
 - `allow.unsecure.port` open insecure port to run in insecure mode as well (added)
 - Support of secure (using port 8443) and insecure mode (using port 8080)
 - R-GMA servicetool publishing follows common standard.
- Bug fixes (please refer to the complete list later in these notes)

There is a known incompatibility between gLite release 1.1 and 1.2:

- To enable backwards compatibility between gLite R-GMA1.2 and LCG2_4_0 modifications were made to some tables:
 - Service
 - ServiceStatus

In addition to this some tables have been removed:

- ServiceAssociation
- VOService
- ServiceData
- GlueServiceAccessControlRule

This causes problems with interoperability between version R1.1 and R1.2 of gLite R-GMA (if you publish from a 1.1. servicetool to a 1.2 server) with errors such as:

Cannot declareTable: table description not defined in the Schema

Cannot find tableName/columnName in the Schema DB: unknown tableName or columnName

The following workarounds are provided:

- All the necessary scripts can be downloaded from:
<http://hepunix.rl.ac.uk/egee/jral-uk/glite-r1/download/SchemaWorkaround.tar.gz>
- *Schema work around:*

The instructions below can be run with the server 'live'. In any case MySQL will need to be running.

1. After the installation of the gLite R-GMA 1.2 version of the registry/schema, run the dropTable script and drop the Service and ServiceStatus tables.
2. Replace the \$GLITE_LOCATION/share/rgma/schemas/misc.schema and Glue Service.schema with the misc.schema and Glue-Service.schema supplied
3. Run the setup script

```
$GLITE_LOCATION/share/rgma/scripts/rgma-server-setup.py --schema=yes --registry=yes --browser=yes
```

Once the mysql script has been generated, run it (you will be asked for the root mysql password)

```
mysql -u root -p < /opt/glite/etc/rgma-server/rgma_sql_conf.sql
```
4. If tomcat is not running start it.

- *Flexible Archiver work around:*

If you are running a flexible archiver, the flexible archiver will also need to be reconfigured:

1. Run the flexible archiver setup script:

```
$RGMA_HOME/bin/rgma-flexible-archiver-db-setup $RGMA_HOME/etc/rgma-flexible-archiver/flexy.props
```
2. Load the table update to MySQL:

```
mysql -u root -p < rgma-flexible-archiver-db-setup.sql > /dev/null
```
3. Restart the flexible archiver:

```
/etc/init.d/rgma-flexible-archiver start
```

3. RELEASE CONTENTS

The gLite R-GMA Server v.5.0.0 is composed of the following gLite components:

Component name	Description	Version	File
glite-config	gLite configuration scripts	1.2.1	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-config-1.2.1-1.noarch.rpm
org.glite.rgma-api-java	Java API for R.GMA	4.1.5	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-api-java-4.1.5-1.noarch.rpm
org.glite.rgma-base	R.GMA basic configuration and documentation	4.1.19	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-base-4.1.19-1.noarch.rpm

org.glite.rgma-common.config	gLite rgma common configuration items installation	5.0.0	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-common-config-5.0.0-1.noarch.rpm
org.glite.rgma-flexible-archiver	R.GMA flexible archiver	4.1.16	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-flexible-archiver-4.1.16-2.noarch.rpm
org.glite.rgma-publish-site	R.GMA site publisher	4.1.14	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-publish-site-4.1.14-1.noarch.rpm
org.glite.rgma-server-config	gLite R.GMA server installation	5.0.0	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-server-config-5.0.0-1.noarch.rpm
org.glite.rgma-server-servlet	Servlet-based R.GMA server implementation	4.1.21	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-server-servlet-4.1.21-1.noarch.rpm
org.glite.rgma-servicetool	R.GMA service tool	4.1.19	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-4.1.19-3.noarch.rpm
org.glite.rgma-servicetool-config	gLite R.GMA servicetool installation	5.0.0	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-config-5.0.0-1.noarch.rpm
org.glite.rgma-standard-tables	A set of standard table schemas for R.GMA	4.1.8	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-standard-tables-4.1.8-1.noarch.rpm
org.glite.rgma-stubs-servlet-java	Java client implementation stubs for R.GMA	4.1.12	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-rgma-stubs-servlet-java-4.1.12-1.noarch.rpm
org.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/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-security-trustmanager-1.7.3-1.noarch.rpm
org.glite.security-util.java	The java utilities library for security	1.1.2	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-security-util-java-1.1.2-2.noarch.rpm
org.glite.security-utils.config	gLite Security Utilities configuration files	1.0.2	http://glite.web.cern.ch/glite/packages/R1.2/R20050715/bin/rhel30/noarch/RPMS/glite-security-utils-config-1.0.2-2.noarch.rpm

4. DEPENDENCIES

The gLite R-GMA Server module v.5.0.0 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
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/tomcat5-5.0.28-9_EGEE.noarch.rpm
SUN Java JDK/JRE	1.4.2	http://java.sun.com

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=jralmdw>.

Know 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
#5703	case sensitive varchar's when creating an archiver
#6287	add a predefined query to the browser to query the new log4 table
#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
#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?



Release Notes

Doc. Identifier:

release_notes

Date: 22/07/2005

#7218	Finding the configured registry and schema
#7220	Bad error message with ssl error
#7225	All client interactions should go via the local servlet box
#7276	Bad error message for expired proxy
#7283	Inserting '\s
#7384	Proxy should default to the standard location
#7398	C API check fails with centos?
#7399	API errors with expired proxy
#7452	Inconsistent use of stdout and stderr in java API
#7542	Overriding the rgma.conf
#7543	Add a comment "command"?
#7635	Problems with registry configuration
#7644	Need explanation of how to get info out of result sets
#7654	Detection of an error with TRUSTFILE
#7664	Bad service names?
#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
#8106	Test 12 should not check GlueHost
#8356	Test the service discovery API
#8479	Reassigned item: RGMA crashes on IA64
#8650	R-GMA dies trying to insert a record
#8664	Latest producer doesn't work on JRA1 testbed
#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
#9195	APEL 3.4.45 Doesn't work with Java 1.5
#9238	Replica Manager thread dies and does not recover
#9272	tomcat log4j warnings
#9303	C API fails with HTTP protocol error in some circumstances.
#9315	R-GMA components don't follow agreed naming convention for service type
#9381	NullPointerException in R-GMA StreamProducerServlet
#9384	R-GMA registry is not protected against careless use
#9395	Registry API causes deadlock
#9406	The rgma python api RPM does not clean up after itself
#9491	Streaming server spams the consumer when its buffer is full
#9507	R-GMA BrowserServlet threw exception clicking on endpoint
#9507	R-GMA BrowserServlet threw exception clicking on endpoint

#9523	StreamProducer doesn't crop VARCHARs to size defined in Schema
#9539	LatestProducer created by python API has zero min retention period
#9586	WARN Exception in ConsumerThread for table: GlueSubCluster
#9606	Python RGMA exception incorrectly mapped when using reconnect() method
#9665	Cpp API makes a new connection for each server call resulting in slow performance

Bugs fixed in this or previous releases, but not yet tested:

Bug number	Description
#4568	Flexible archiver dies regularly
#4646	RGMA on the SE
#4698	RGMA logging fills up /var
#4822	running start on started service is not an error.
#5143	Too many open files using MySQL
#5306	Use GLITE_LOCATION not RGMA_HOME
#5411	http://hepunix.rl.ac.uk/egee/jra1-uk/glite/index.html has various errors
#5412	No provision for not being port 8080
#5510	need for DB indices for DBProducer in underlying DBMS
#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
#7090	rgma-server-setup.py ignores --registrydb and --schemadb option
#7156	C++ SecondaryProducer example doesn't behave as expected
#7397	r-gma command-line documentation feature request
#7442	Remove redundant tables
#7449	Bad behaviour with misconfigured registry
#7600	servlet check doesn't spot time sync problem
#7601	Connection not recovered after registry failure
#7622	Comments on the quickstart web page
#7655	declareTable fails with invalid predicate, but table is still declared
#7838	Spell checkers are good!
#8028	method close() in java API wrapper unmapped to old api close()
#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

#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

6. 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
#4823	--config on service script is not an option on flexible-archiver
#4853	rgma-servlet-status.py -pa sets up entries for the registry and schema when they are not installed
#4887	allow RetentionPeriod as a parameter in the conf file of the flexi
#5293	Database producer URL in rgma.conf is wrong
#5301	R-GMA: intermittent problem with producer->archiver chain
#5425	Deleted items should be replicated
#5475	log4j jar location is hardwired
#5809	Inserting '\s into latest producers
#6506	Tab completion doesn't pick up "from"
#6917	R-GMA server logs to /tmp instead of /var/log/glite
#7091	rgma-install-schema.py non-intuitive to use
#7349	glite-rgma-base-4.1.10-1 fails to install in LB installer
#7451	CTRL-C not properly trapped in python API
#7524	R-GMA server configuration scripts need "--silent" option
#7526	R-GMA flexible archiver scripts needs --silent flag
#7537	Minor problems with read command
#7541	Problems with the rgma man page
#7623	Missing documentation in command line help
#7624	Predicate doesn't work?
#7625	Insert gives unclear warning
#7626	YABEM (Yet Another Bad Error Message)
#7627	Missing help for show properties
#7631	No results returned from R-GMA
#7633	Would be useful to query the configured registries
#7692	How one can check whether his jobs do not start because of lack of resources, or because of problem
#7823	rgma-flexible-archiver fails frequently due to tomcat servlets hanging
#7854	Clickable links in browser
#8100	Slow response at CERN



Release Notes

Doc. Identifier:
release_notes

Date: 22/07/2005

#8102	RGMA test 10 is dumping core
#8107	Erratic test failures
#8425	Cleanup problem when using 1 registry
#8509	The GRRP thread ignores 'connection timed out' messages
#8518	rgma server dies frequently with OutOfMemoryError
#8608	Correct version of JDK for using the R-GMA APIs
#8668	R-GMA won't accept an insert which doesn't include all the columns
#8879	R-GMA Server doesn't register its services and site
#8987	Create table allows unsupported types to be created
#9367	Starting rgma-flexible-archiver: Inappropriate ioctl for device
#9378	bug in /opt/glite/libexec/rgma-system-tests/c/producer
#9402	Recreated consumer in archiver needs to call start() before calling pop()
#9419	RC1.2 R-GMA server crashes with OutOfMemoryError