

GLITE DATA MANAGEMENT SINGLE CATALOG (FIREMAN)

1. RELEASE DESCRIPTION

This release contains the gLite Data Management Single Catalog (Fireman) for MySQL module v. 2.1.3. 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 Data Management Single Catalog, please refer to the gLite Installation and User Guides.

2. CHANGES IN THIS RELEASE

2.1. CHANGES IN FUNCTIONALITY

This release introduces the following changes:

- All queries including symlinks handler pattern have been changed
- Error messages concerning symlink looping are more descriptive
- More symlink related error obscurities fixed (getlfnforguid)
- Configuration script uses new VO configuration method

2.2. CHANGES IN CONFIGURATION

It is not necessary anymore to define a separate Fireman instance for each VO. There is a single instance in the configuration file that is used to iterate automatically over all the VOs defined in the VO list.

The following new parameters have been added to the glite-data-single-catalog.cfg.xml file:

Parameter name	Default value	Description
set.mysql.root.password	false	If this parameter is true, then the root password of the mysql database is set to the value specified in mysql.root.password if it not yet set. This parameter has no effect if the database root password is already set. It can be used to ease automated installation and configuration of the service, if mysql is not managed in some other way [Example: false][Type: boolean]
catalog-service-fr-mysql.ADMIN_VOMS_ATTRIBUTES	<empty string>	ADMIN/superuser settings. Note that the extra privileges defined by the settings below are combined in an OR fashion - a VOMS match OR a mapfile match will result in the client being given the extra authorization. If both of these are empty there is no superuser defined for the service and certain

		<p>functionality is unavailable (i.e. if permissions on global default permissions are not tweaked, nobody can change them or create directories in the ROOT path.</p> <p>If a user's certificate contains this VOMS attribute, they are additionally permitted to do any operation upon the service including metadata bits operations. If a user's certificate contains any of these VOMS attributes, they are additionally permitted to do any operation upon the service including creating channel and VO managers</p> <p>[Example: /opt/glite/etc/config/ADMIN_VOMS_ATTRIBUTES][Type: string]</p>
catalog-service-fr-mysql.ADMIN_MAPFILE	<empty string>	<p>If a client's certificate subject name is listed in this file, they are additionally permitted to do any operation upon the service including manage channels.</p> <p>[Example: /opt/glite/etc/config/ADMIN_MAPFILE][Type: string]</p>

The following parameters have been changed in the glite-data-single-catalog.cfg.xml file:

Parameter name	Old value	New value	Description
catalog-service-fr-mysql.DBURL	jdbc:mysql://localhost:3306/\${catalog-service-fr-mysql.DBNAME}	jdbc:mysql://localhost:3306/\${catalog-service-fr-mysql.DBNAME}?zeroDateTimeBehavior=convertToNull	The DBURL has been augmented with the parameter zeroDateTimeBehavior

All parameters used to set VO-specific values have been removed from the service configuration files and moved to a dedicated VO configuration file called vo-list.cfg.xml. A template is available in /opt/glite/etc/config/templates. This file is common to all gLite services running on this node or referenced in the same site-config file (unless locally overridden). For more information please refer to the gLite 1.5 installation guide.

The R-GMA Service Publisher (aka R-GMA servicetool) parameters are now automatically handled by the configuration script and do not need to be explicitly set anymore in the configuration file. The parameters can be set in the configuration file to override the default values.

3. RELEASE CONTENTS

3.1. GLITE SUB-DEPLOYMENT MODULES

The gLite Data Management Single Catalog (Fireman) for MySQL module includes the following sub-modules:

- gLite Security Utilities
- gLite R-GMA Servicetool

The sub-modules are automatically installed with the Fireman module. For more information about these sub-modules please refer to the specific release notes and installation instructions.

3.2. GLITE RPMS

The gLite Data Management Single Catalog v. 2.1.3 is composed of the following gLite components:

Component name	Description	Version	File
glite-config	gLite configuration scripts	1.6.22	http://glite.web.cern.ch/glite/packages/R1.5/R20051130/bin/rhel30/noarch/RPMS/glite-config-1.6.22-2.noarch.rpm
glite-data-single-catalog-config	gLite Data Single Catalog configuration files	2.1.3	http://glite.web.cern.ch/glite/packages/R1.5/R20051130/bin/rhel30/noarch/RPMS/glite-data-single-catalog-config-2.1.3-1.noarch.rpm
glite-data-catalog-service-fr-mysql	gLite Data Catalog Service (MySQL version)	1.4.6	http://glite.web.cern.ch/glite/packages/R1.5/R20051130/bin/rhel30/noarch/RPMS/glite-data-catalog-service-fr-mysql-1.4.6-1.noarch.rpm
glite-data-common	common files for gLite Data Management web-services	1.2.2	http://glite.web.cern.ch/glite/packages/R1.5/R20051130/bin/rhel30/noarch/RPMS/glite-data-common-1.2.2-1.noarch.rpm
glite-rgma-servicetool-config	gLite R-GMA servicetool installation	5.2.2	http://glite.web.cern.ch/glite/packages/R1.5/R20051130/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-config-5.2.2-1.noarch.rpm
glite-security-utils-config	gLite Security Utilities configuration files	1.2.2	http://glite.web.cern.ch/glite/packages/R1.5/R20051130/bin/rhel30/noarch/RPMS/glite-security-utils-config-1.2.2-1.noarch.rpm

4. DEPENDENCIES

The gLite Data Management Single Catalog module has the following dependencies:

Component name	Description	Version	File
j2re	Java JRE	1.4.2	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/j2re-1.4.2_08-linux-i586.rpm
MySQL-client	MySQL - Client	4.1.11	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/MySQL-client-4.1.11-0.noarch.rpm
MySQL-server	MySQL	4.1.11	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/MySQL-server-4.1.11-0.noarch.rpm
tomcat5	Tomcat application server	5.0.28	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/tomcat5-5.0.28-11_EGEE.noarch.rpm

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>.

- Symlinks are not properly resolved in Fr-mysql
- Dead links inside Fireman Catalog after a failed glite-put.
It's possible to have some dead links inside the Fireman catalog if there are some glite-put that end with errors.
- No removal procedure is provided with this release apart from the removal of the RPMS. Any account, group or other resource created during the module configuration must be manually cleaned.

Known open bugs:

Bug number	Description
#8694	Fireman: Default group in Fireman
#9033	Catalog CLI: it is not possible to submit bulk create requests
#10535	Fireman Documentation: Examples in DM catalog c and c++ api do not work
#10991	Fireman MySQL: Symlinks are not properly resolved
#11645	Order in bulk ops assumptions in org.glie.data.catalog-api-java tests
#12233	Fireman: testGetGuidLfnMethods on api-java
#13324	Fireman MySQL: changes in ADMIN_MAPFILE for superusers should not require a service restart
#14228	Fireman MySQL: glite-catalog-getattr -r generates an SQL Exception

The following bugs have been fixed in this or previous releases, but not yet tested:

Bug number	Description
#5581	Cannot remove files from the catalog
#5633	Fireman catalog: "java.lang.reflect.InvocationTargetException" during bulk creation of entries
#5723	Fireman catalog: "500 Internal Server Error" response to readDir call after killing a client during a bulk create call
#5923	Fireman catalog: Exceptions while creating entries (via bulks) with 10 clients simultaneously
#6465	services/FileCatalog automatically added to the Fireman endpoint
#6724	MySQL Fireman: setPermission() does not remove ACL entries
#6951	Multiple clients cannot create multiple directories
#6985	MySQL Fireman: adding first replica with the masterReplica flag being true fails
#7256	data-catalog-api-c-2.0.0 let me create twice the same entry in the catalog
#7669	Oracle Fireman: create() sometimes fails
#7730	Fireman: glite-catalog-ls returns different message for MySQL and Oracle catalog when dir doesn't exist
#7993	option parsing of glite-catalog-find
#7995	SC: reference to glite-data-local-transfer-service left in Single Catalog Installation section
#8052	Problem with glite-catalog-mkdir with -p option
#8053	Problem with glite-catalog-create with -S option

#8054	Fireman: Problem with metadata commands	
#8060	Problem with glite-catalog-chkperm	
#8682	After the Single Catalog (MYSQL) installation /etc/grid-security/vomsdir is not created	
#9680	Fireman MySQL: default directory rights should be modified.	
#9681	Fireman MySQL: default file rights should be modified.	
#9773	Typo in template in glite-data-single-catalog.cfg.xml	
#10124	In the release notes of the glite data single catalog for mysql there is no mention of the new parameters	
#10550	glite-catalog-getattr segfaults for non-existent attributes	
#10551	glite-catalog-getattr -r option not recognised	
#10561	mysql Single Catalog has wrong default parameters for the rgma service discovery	
#10663	Fireman MySQL: zeroDateTimeBehavior is appended to the DB URL	
#10677	mkdir does not use user group but parents or default group.	
#10722	MySQL Fireman glite-catalog-setreplica doesn't work	
#10724	MySQL Fireman: add admin functionality	
#10725	Fireman MySQL: set VOMS group with create()	
#10828	Fireman MySQL: glite-catalog-ls pb with path ending with "/"	
#10874	Logging in Fireman-mysql should be improved	
#10958	fireman mysql fails after unsuccessful attempt to write in the SRM	
#11649	glite-catalog crashes when using double VO voms certificate	
#12204	Fireman MySQL: Symlink loops should not be allowed	

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=jralmdw>

Bug number	Description	
#6657	Fireman Service SOAP Error	
#6687	Multiple Clients and Fireman:MySQL	
#6730	LFN normalisation needs to be done in Fireman catalogs	
#6731	if inserting a file into the root directory, two slashes are used for the filename instead of one	
#6861	Incorrect error message from glite-catalog-ls command	
#6863	Warnings generated by gSoap when generating code from Fireman WSDL	
#6910	MySQL Fireman: readDir() skips entries	
#6994	MySQL Fireman: bug in LFN normalization	
#7070	Fireman MySQL: updateModifyTime() also changes the creation and the validity time	
#7166	Cannot create parent directories	
#7238	glite-catalog-rmdir doesn't produce a exception when directory is not empty	

#7668	mkdir() throws InternalException	
#7670	MySQL Fireman: readDir() error when number of entries is the exact multiple of the limit	
#7690	problem with glite-catalog-ls	
#7790	glite-security-utils_installer.sh is not run by the Single Catalog installation script	
#7833	Problem with glite-catalog-mv	
#8056	Problem with default user / owner and basic permissions.	
#8057	Problem with glite-catalog-chmod	
#8416	glite-catalog-find returns all entries	
#8437	Not possible to create dirs/files in Fireman catalog in secure mode	
#8438	glite-catalog-chkperm (MySQL version) only checks user permissions	
#8516	Java User Guide for the Fireman Catalog	
#8719	glite-seindex-list hangs for ever	
#9205	Fireman should not limit the length of the DN	
#9827	Problems with Mysql Connector in Fireman	
#10234	Can't reuse the LFN if in previous try the copy failed with this LFN	
#10297	getreplica returns pointer to strings in mysql_catalog	
#10373	glite-catalog-ls fails when quering a mysql single catalog	
#10538	glite-catalog commands segfault without valid VOMS proxy	
#10606	Can't create symlinks	
#10770	glite-catalog-setacl passes exisiting acl in when run with '-m' option	
#10857	glite-catalog-ls crashes if no proxy init	
#10968	Fireman mysql: it's possible to create symlinks to non-existing files	
#12626	When being root (without a certificate) it is still possible to query the catalog in secure mode	