G L I T E   W O R K L O A D   M A N A G E M E N T   S Y S T E M

1. RELEASE DESCRIPTION

This release contains the gLite Workload Management System module v. 2.0.3. The following sections provide additional information about the release content, the module dependencies, the know bugs and issues and a list of bugs closed since the previous release. For information about installing and using the gLite Workload Management System, please refer to the gLite Installation and User Guides.

2. CHANGES IN THIS RELEASE

This release introduces the following changes:

- Bug fixes (please refer to the bug fixes list below)

3. RELEASE CONTENTS

The gLite Workload Management System v. 2.0.3 is composed of the following gLite components:

Component name	Description	Version	File
org.glite.ce-monitor-client-api.c	Gsoap api for CE monitor client	1.3.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-ce-monitor-client-api-c-1.3.0-0.i386.rpm
org.glite.ce.wsdl	CE wsdl	1.3.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-ce-wsdl-1.3.0-1.noarch.rpm
glite-config	gLite configuration scripts	1.2.2	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-config-1.2.2-1.noarch.rpm
org.glite.lb.client	L&B client API and tools	1.0.5	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-lb-client-1.0.5-1.i386.rpm
org.glite.lb-client.interface	L&B client library header files	1.0.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-lb-client-interface-1.0.3-1.i386.rpm
org.glite.lb.common	L&B common subroutines library	1.1.6	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-lb-common-1.1.6-1.i386.rpm
org.glite.lb.logger	L&B local logger	1.0.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-lb-logger-1.0.3-1.i386.rpm
org.glite.rgma-api-java	Java API for R.GMA	4.1.5	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/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/R1.3/R20050805/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/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-rgma-common-config-5.0.0-1.noarch.rpm
org.glite.rgma-servicetool	R.GMA service tool	4.1.19	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-4.1.19-3.noarch.rpm

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org.glite.rgma-servicetool-config	gLite R.GMA servicetool installation	5.0.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-rgma-servicetool-config-5.0.0-1.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/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-rgma-stubs-servlet-java-4.1.12-1.noarch.rpm
org.glite.security.proxyrenewal	Proxy renewal daemon	1.0.13	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-security-proxyrenewal-1.0.13-1.i386.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/R1.3/R20050805/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/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-security-util-java-1.1.2-2.noarch.rpm
org.glite.security-utils.config	gLite Security Utilities configuration files	1.0.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-security-utils-config-1.0.3-1.noarch.rpm
org.glite.security-voms-api.c	VOMS API for C	1.5.9	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-security-voms-api-c-1.5.9-2.i386.rpm
org.glite.wms.broker		1.1.1	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-broker-1.1.1-1.i386.rpm
org.glite.wms.brokerinfo		1.2.5	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-brokerinfo-1.2.5-1.i386.rpm
org.glite.wms-brokerinfo.access	Brokerinfo access	1.1.1	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-brokerinfo-access-1.1.1-1.i386.rpm
org.glite.wms.classad_plugin		1.0.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-classad_plugin-1.0.0-1.i386.rpm
org.glite.wms.common		1.1.8	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-common-1.1.8-1.i386.rpm
org.glite.wms.config	gLite Workload Management System node configuration files	2.0.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/noarch/RPMS/glite-wms-config-2.1.0-1.noarch.rpm
org.glite.wms.configuration		1.0.5	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-configuration-1.0.5-1.i386.rpm
org.glite.wms.helper		1.0.10	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-helper-1.0.10-1.i386.rpm
org.glite.wms.interactive		1.0.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-interactive-1.0.0-1.i386.rpm
org.glite.wms.ism		1.3.2	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-ism-1.3.2-1.i386.rpm
org.glite.wms.jdl		1.1.6	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-jdl-1.1.6-2.i386.rpm
org.glite.wms.jobsubmission	WMS job submission module	1.1.1	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-jobsubmission-1.1.1-1.i386.rpm
org.glite.wms.manager	WMS manager service	1.2.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-manager-1.2.3-1.i386.rpm
org.glite.wms-manager-ns.commands		1.0.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-manager-ns-commands-1.0.3-1.i386.rpm
org.glite.wms-manager-		1.0.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RP

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ns.common			MS/glite-wms-manager-ns-common-1.0.0-1.i386.rpm
org.glite.wms-manager-ns.daemon		1.0.6	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-manager-ns-daemon-1.0.6-2.i386.rpm
org.glite.wms.matchmaking		1.1.1	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-matchmaking-1.1.1-1.i386.rpm
org.glite.wms.purger		1.0.4	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-purger-1.0.4-1.i386.rpm
org.glite.wms.rls		1.0.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-rls-1.0.0-1.i386.rpm
org.glite.wms-thirdparty.bypass		2.5.4	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-thirdparty-bypass-2.5.4-9.i386.rpm
org.glite.wms-thirdparty.globus_gridftp_server		1.5.3	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-thirdparty-globus_gridftp_server-1.5.3-1.i386.rpm
org.glite.wms-utils.exception		1.0.2	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-utils-exception-1.0.2-1.i386.rpm
org.glite.wms-utils.jobid		1.0.0	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-utils-jobid-1.0.0-1.i386.rpm
org.glite.wms-utils.tls		1.0.1	http://glite.web.cern.ch/glite/packages/R1.3/R20050805/bin/rhel30/i386/RPMS/glite-wms-utils-tls-1.0.1-1.i386.rpm

4. DEPENDENCIES

The gLite Workload Management System module v. 2.0.3 has the following dependencies:

Component name	Version	RPM file name
gLite Security Utilities	1.0.1	http://glite.web.cern.ch/glite/packages/R1.1/R20050430/installers/glite-security-utils_installer.sh
gLite R-GMA Service Publisher	4.2.0	http://glite.web.cern.ch/glite/packages/R1.1/R20050430/installers/glite-security-utils_installer.sh
gLite C/C++ Essentials	1.1.1	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/glite-essentials-cpp-1.1.1-1_EGEE.i386.rpm
Ares	1.1.1	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/ares-1.1.1-EGEE.i386.rpm
Condor	6.7.9	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/condor-6.7.9-1.i386.rpm
EDG Replica Manager Client Suite	2.3.1	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/edg-replica-manager-client-cpp_gcc3_2_2-norgma_suite-2.3.1-1_sl3_EGEE.i386.rpm
GPT	VDT 1.2.2	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/gpt-VDT1.2.2rh9-1.i386.rpm
Java SDK/JRE	1.4.2	http://java.sun.com/j2se/1.4.2/download.html
myproxy	1.14	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/myproxy-1.14-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
perl-Expect.pm	1.01	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/per-Expect.pm-1.01-9.i386.rpm
VDT Globus Essentials	VDT 1.2.2	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/vdt_globus_essentials-VDT1.2.2rh9-1.i386.rpm
VDT Globus Information Service Essentials	VDT 1.2.2	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/vdt_globus_info_essentials-VDT1.2.2rh9-1.i386.rpm
VDT Globus SDK	VDT 1.2.2	http://glite.web.cern.ch/glite/packages/externals/bin/rhel30/RPMS/vdt_globus_sdk-VDT1.2.2rh9-1.i386.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 .

- A high failure rate (about 80%) has been observed when submitting job storms. The workaround is to modify the file `/opt/condor-6.7.9/local.<HOSTNAME>/condor_config.local` to add the following parameter:
  ```
  NEGOTIATOR_IGNORE_USER_PRIORITIES = True
  ```
- Jobs submitted with RetryCount set to 0 are resubmitted multiple times without visible reason. Currently being investigated.
- The current release doesn't support submission of batch jobs and shallow resubmission. This will be added in future releases
- 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.
- The WMS system cannot at the moment submit jobs to a CE using Condor as a batch system ('vanilla' universe). This will be fixed in a future release

Known open bugs:

Bug number	Description	
#7512	Glite Python modules can be overload by user	
#7977	retry count not correctly supported for a DAG node	
#8327	Final job status error when job fails	
#8536	jobs remain in a ready state for ever, until the proxy expires and they abort	
#8540	job sumbission error "Got a job held event, reason: "	
#8600	glite-job-submi Error: UI_NO_NS_CONTACT	
#8759	Jobs submitted with RetryCount set to 0 are resubmitted multiple times without visible reason	
#8786	Support for shallow resubmission	
#8997	IOException when submitting jobs in a loop	
#8998	Job gets Aborted by WMS many times without obvious reason	
#9016	Job remains in Running state for long time after termination.	
#9545	Log monitor crashes on failed DAG removal.	
#9609	Jobs should be rejected if proxy renewal can't succeed	
#9628	Empty BrokerInfo file created by the WM for parametric and DAG job submissions	
#9864	obscure warning message in the logmonitor log file on the WMS	
#9900	InputSandbox Parameter not inherited by nodes in a DAG	
#9957	Rank and Requirements are not defaulted in the {pre|post}jobs in a partitionable job	
#9960	glite-job-submit segfaults if JobType is not set as checkpointable in a postjob	

#9963	Workload Manager hangs if the ism purchaser has to many grises to contact	
#9964	Missing GlueCESEBindCEAccessPoint value in the brokerinfo file	
#10047	Job submission failed with Java UI API	
#10056	The release notes of the WMS component version 1.3 are equal to the ones for release 1.2!	
#10063	WM doesn't start if one puts more than 1 CEmon endpoint in config file	

Fixed in this release, but not yet tested:

Bug number	Description	
#6417	faulty message when stopping the CondorG on the WMS	
#6682	Problems with input data based matchmaking	
#7097	Wrong status (or error message) if file does not exist in StorageIndex	
#7203	We cannot run interactive jobs	
#7227	Matching fails if the StorageIndex string is embedded in curly braces	
#7461	The default VO is not read by glite-job-submit, glite-job-list-match	
#7490	GLITE_LOCATION on the Prototype	
#8003	WMS hanging on prototype	
#8005	voms authentication error	
#8499	WMS UI links different flavors of the same Globus libs	
#8500	Long DAGs fail with Cannot Parse ClassAd error on WMS	
#8637	the system doesn't tell you where you find the output of a DAG job	
#8852	glite-job-list-match is stuck	
#8899	Step Weight is ignored by the NS (unknown)	
#9030	api-cpp subission&status cascade crashes	
#9031	secure connection to data catalog during list match	
#9136	glite-wms-job-cancel : the same question twice	
#9137	glite-wms-job-output/cancel: wrong check of the jobid syntax	
#9139	glite-wms-job-list-match: error message for jobs that are not supported	
#6362	Cannot submit jobs to WMS	
#6578	Sometimes jobs are aborted without obvious reason (for me)	
#6655	WMS stuck since Saturday ?	
#6700	Jobs were hanged too long	
#6768	Job failure rate raising sharply since today about 11:00	
#6778	Crash on invalid JDL	
#7140	glite-job-list-match gets stuck	
#7244	Jobs stuck in WAITING	
#7493	0 success rate while running example of physics analysis application	

#9140	glite-wms-job-cancel: - - input option	

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	
#5115	Can't submit jobs - authorization failure	
#7254	job submission fails with error "Error: NS_SUBMIT_FAIL"	
#8663	intermittent availability of CEs in the WMS system	
#8681	gsoap exception in Match-Making with the StorageIndex (InputData)	
#9771	InputData / SEIndex interface for WMS failure	
#10058	After upgrading the WMS from 1.2 to 1.3 an error occurs when starting up the service	