

**Quality Criteria Verification  
Executive Summary  
For QCV, Stage Rollout, DMSU and EGI internal**

Name of the component	emi.glexec_wn		
Release	emi.glexec_wn.sl5.x86_64-1.1.1		
Software Provider	EMI		
Release Contact	Name:	E-Mail	
	Cristina Aiftimiei	crstina.aiftimiei@pd.infn.it	
Validator	Name:	E-Mail	
	Enol Fernández	<a href="mailto:enolfc@ifca.unican.es">enolfc@ifca.unican.es</a>	
Component status	<b>Accepted</b>	Date	
Verification start date	14/06/2012	Verification end date	14/06/2012

**Summary of Quality Criteria verification:**

	Generic Quality Criteria Total (Critical/Non critical)			
	Passed	Not passed	Not Applicable	Total
<b>TP</b>	0	0	0	0
<b>VLD</b>	13	0	2	15
	Specific Quality Criteria			
<b>TP</b>	0	0	0	0
<b>VLD</b>	6	0	0	6

**Summary:**

The EMI-2 release of gLexec release introduces mostly bugfixes a some new features. The testing consisted in the installation & configuration of the product, tests of the basic glexec functionality and test of a new epilogue functionality. No issues where found.

**Validator comments:**

The verification was started with the installation of the new release on top of the existing Worker Nodes, configuration and simple use case testing. From the changes introduced in the glexec binary, the epilogue functionality was tested. Testing of bugs and other changes are properly documented by the TP.

The configuration was performed following the documentation and went without problems.

**Installation Log:**

```
# yum update
Loaded plugins: kernel-module, priorities, protectbase
Setting up Update Process
Resolving Dependencies
--> Running transaction check
---> Package argus-pep-api-c.x86_64 0:2.1.0-3.sl5 set to be updated
---> Package glexec.x86_64 0:0.9.6-1.el5 set to be updated
---> Package glexec-wrapper-scripts.noarch 0:0.0.6-1.el5 set to be updated
---> Package lcas.x86_64 0:1.3.18-2.el5 set to be updated
---> Package lcas-plugins-basic.x86_64 0:1.3.6-1.el5 set to be updated
---> Package lcas-plugins-check-executable.x86_64 0:1.2.4-1.el5 set to be updated
---> Package lcas-plugins-voms.x86_64 0:1.3.10-1.el5 set to be updated
```

<b>RELEASE:</b>	EMI.glexec-wn.sl5.x	<b>VALIDATOR:</b>	Enol Fernandez
<b>RT TICKET:</b>	3937		



Criteria	Accepted (Y/N/NA)	Tested (TP/VLD)	Comments
<b>DOCUMENTATION QC</b>			
GENERIC_DOC_1 (Functional Description)	Y	VLD	<a href="http://wiki.nikhef.nl/grid/GLExec">http://wiki.nikhef.nl/grid/GLExec</a>
GENERIC_DOC_2 (Release Notes)	Y	VLD	<a href="https://twiki.cern.ch/twiki/bin/view/EMI/EMI2Final#gLExec_wn_v_1_1_1_task_">https://twiki.cern.ch/twiki/bin/view/EMI/EMI2Final#gLExec_wn_v_1_1_1_task_</a>
GENERIC_DOC_3 (User Documentation)	Y	VLD	<a href="http://wiki.nikhef.nl/grid/GLExec#User_information">http://wiki.nikhef.nl/grid/GLExec#User_information</a>
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	Available both man and -h help
GENERIC_DOC_5 (API Documentation)	NA	VLD	Does not provide an API
GENERIC_DOC_6 (Administrator Documentatio	Y	VLD	<a href="http://wiki.nikhef.nl/grid/GLExec#Sysadmin_information">http://wiki.nikhef.nl/grid/GLExec#Sysadmin_information</a>
GENERIC_DOC_7 (Service Reference Card)	Y	VLD	<a href="http://wiki.nikhef.nl/grid/GLExec_Service_Reference_Card">http://wiki.nikhef.nl/grid/GLExec_Service_Reference_Card</a>
GENERIC_DOC_8 (Software License)	Y	VLD	Apache 2
GENERIC_DOC_9 (Release changes testing)	Y	VLD	<a href="https://wiki.nikhef.nl/grid/EMI-2_gLExec_release_test_report">https://wiki.nikhef.nl/grid/EMI-2_gLExec_release_test_report</a>
<b>SOFTWARE DISTRIBUTION QC</b>			
GENERIC_DIST_1 (Source Code Availability)	Y	VLD	Source code available at repo
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	Binary packages available, installed without issues
<b>SOFTWARE FEATURES QC</b>			
GENERIC_SOFT_1 (Backwards Compatibility)	NA	VLD	No backward incompatible changes introduced
GENERIC_SOFT_2 (New features testing)	Y	VLD	Tested epilogue functionality, other changes may need more testing
<b>SERVICE CRITERIA QC</b>			
GENERIC_SERVICE_5 (Automatic Configuration)	Y	VLD	Yaim configuration without issues
GENERIC_SERVICE_6 (Default Password Conf)	Y	VLD	No passwords for configuration
<b>SECURITY QC</b>			
GENERIC_SEC_1 (World Writable Files)	Y	VLD	No wwf found
GENERIC_SEC_3 (Passwords in world readable)	Y	VLD	No passwords stored
<b>MISCELLANEOUS QC</b>			
GENERIC_MISC_2 (Bug Tracking System)	Y	VLD	EMI is in GGUS
<b>AUTHENTICATION QC</b>			
AUTHN_IFACE_1 (X.509 Certificate support)	Y	VLD	Tested with X509 certs with VOMS attributes
<b>CLIENT TOOLS QC</b>			
CLIENT_TOOLS_1 (Command lineOptions cohe	Y	VLD	Both helps are coherent
CLIENT_TOOLS_2 (Error Messages)	Y	VLD	Error messages are quite descriptive

```

---> Package lcms.x86_64 0:1.5.5-1.el5 set to be updated
---> Package lcms-plugins-basic.x86_64 0:1.5.0-3.el5 set to be updated
---> Package lcms-plugins-c-pep.x86_64 0:1.2.2-1.el5 set to be updated
---> Package lcms-plugins-tracking-groupid.x86_64 0:0.1.0-1.el5 set to be updated
---> Package lcms-plugins-verify-proxy.x86_64 0:1.5.2-1.el5 set to be updated
---> Package lcms-plugins-voms.x86_64 0:1.5.3-1.el5 set to be updated
---> Package mkgltmpdir.noarch 0:0.0.3-2.el5 set to be updated
---> Package yaimglexec-wn.noarch 0:2.3.2-1.sl5 set to be updated
--> Finished Dependency Resolution
Beginning Kernel Module Plugin
Finished Kernel Module Plugin

```

Dependencies Resolved

```

=====
Package Arch Version Repository Size
=====
Updating:
argus-pep-api-c x86_64 2.1.0-3.sl5 EMI.glexec-wn.sl5.x86_64 53 k
glexec x86_64 0.9.6-1.el5 EMI.glexec-wn.sl5.x86_64 86 k
glexec-wrapper-scripts noarch 0.0.6-1.el5 EMI.glexec-wn.sl5.x86_64 5.9 k
lcas x86_64 1.3.18-2.el5 EMI.glexec-wn.sl5.x86_64 25 k
lcas-plugins-basic x86_64 1.3.6-1.el5 EMI.glexec-wn.sl5.x86_64 22 k
lcas-plugins-check-executable x86_64 1.2.4-1.el5 EMI.glexec-wn.sl5.x86_64 9.4 k
lcas-plugins-voms x86_64 1.3.10-1.el5 EMI.glexec-wn.sl5.x86_64 29 k
lcmaps x86_64 1.5.5-1.el5 EMI.glexec-wn.sl5.x86_64 86 k
lcmaps-plugins-basic x86_64 1.5.0-3.el5 EMI.glexec-wn.sl5.x86_64 38 k
lcmaps-plugins-c-pep x86_64 1.2.2-1.el5 EMI.glexec-wn.sl5.x86_64 32 k
lcmaps-plugins-tracking-groupid x86_64 0.1.0-1.el5 EMI.glexec-wn.sl5.x86_64 10 k
lcmaps-plugins-verify-proxy x86_64 1.5.2-1.el5 EMI.glexec-wn.sl5.x86_64 28 k
lcmaps-plugins-voms x86_64 1.5.3-1.el5 EMI.glexec-wn.sl5.x86_64 48 k
mkgltmpdir noarch 0.0.3-2.el5 EMI.glexec-wn.sl5.x86_64 11 k
yaimglexec-wn noarch 2.3.2-1.sl5 EMI.glexec-wn.sl5.x86_64 14 k

```

Transaction Summary

```

=====
Install      0 Package(s)
Upgrade     15 Package(s)

```

Total download size: 498 k

Is this ok [y/N]: y

Downloading Packages:

```

(1/15): glexec-wrapper-scripts-0.0.6-1.el5.noarch.rpm | 5.9 kB
00:00
(2/15): lcas-plugins-check-executable-1.2.4-1.el5.x86_64.rpm | 9.4 kB
00:00
(3/15): lcms-plugins-tracking-groupid-0.1.0-1.el5.x86_64.rpm | 10 kB
00:00
(4/15): mkgltmpdir-0.0.3-2.el5.noarch.rpm | 11 kB
00:00
(5/15): yaimglexec-wn-2.3.2-1.sl5.noarch.rpm | 14 kB
00:00
(6/15): lcas-plugins-basic-1.3.6-1.el5.x86_64.rpm | 22 kB
00:00
(7/15): lcas-1.3.18-2.el5.x86_64.rpm | 25 kB
00:00
(8/15): lcms-plugins-verify-proxy-1.5.2-1.el5.x86_64.rpm | 28 kB
00:00
(9/15): lcas-plugins-voms-1.3.10-1.el5.x86_64.rpm | 29 kB
00:00
(10/15): lcms-plugins-c-pep-1.2.2-1.el5.x86_64.rpm | 32 kB
00:00
(11/15): lcms-plugins-basic-1.5.0-3.el5.x86_64.rpm | 38 kB
00:00
(12/15): lcms-plugins-voms-1.5.3-1.el5.x86_64.rpm | 48 kB
00:00
(13/15): argus-pep-api-c-2.1.0-3.sl5.x86_64.rpm | 53 kB
00:00
(14/15): lcms-1.5.5-1.el5.x86_64.rpm | 86 kB
00:00
(15/15): glexec-0.9.6-1.el5.x86_64.rpm | 86 kB
00:00

```

```

-----
Total 101 kB/s | 498 kB
00:04

```

```

Running rpm_check_debug
Running Transaction Test

```

```

Finished Transaction Test
Transaction Test Succeeded
Running Transaction
  Updating      : lcmsaps                               1/30
  Updating      : lcas                                  2/30
  Updating      : argus-pep-api-c                       3/30
  Updating      : glxec                                  4/30
  Updating      : lcmsaps-plugins-verify-proxy         5/30
  Updating      : yaim-glexec-wn                       6/30
  Updating      : glxec-wrapper-scripts                7/30
  Updating      : mkgltmpdir                            8/30
  Updating      : lcas-plugins-check-executable        9/30
  Updating      : lcas-plugins-voms                   10/30
  Updating      : lcas-plugins-basic                   11/30
  Updating      : lcmsaps-plugins-voms                 12/30
  Updating      : lcmsaps-plugins-c-pep                 13/30
  Updating      : lcmsaps-plugins-basic                 14/30
  Updating      : lcmsaps-plugins-tracking-groupid     15/30
  Cleanup      : yaim-glexec-wn                       16/30
  Cleanup      : glxec-wrapper-scripts                17/30
  Cleanup      : mkgltmpdir                            18/30
  Cleanup      : lcas-plugins-check-executable        19/30
  Cleanup      : lcas-plugins-voms                   20/30
  Cleanup      : lcas                                  21/30
  Cleanup      : lcmsaps-plugins-verify-proxy         22/30
  Cleanup      : lcas-plugins-basic                   23/30
  Cleanup      : lcmsaps-plugins-voms                 24/30
  Cleanup      : lcmsaps-plugins-c-pep                 25/30
  Cleanup      : lcmsaps-plugins-basic                 26/30
  Cleanup      : lcmsaps-plugins-tracking-groupid     27/30
  Cleanup      : argus-pep-api-c                       28/30
  Cleanup      : lcmsaps                              29/30
  Cleanup      : glxec                                  30/30

Updated:
  argus-pep-api-c.x86_64 0:2.1.0-3.s15                glxec.x86_64 0:0.9.6-1.e15
  glxec-wrapper-scripts.noarch 0:0.0.6-1.e15         lcas.x86_64 0:1.3.18-2.e15
  lcas-plugins-basic.x86_64 0:1.3.6-1.e15             lcas-plugins-check-
executable.x86_64 0:1.2.4-1.e15
  lcas-plugins-voms.x86_64 0:1.3.10-1.e15            lcmsaps.x86_64 0:1.5.5-1.e15
  lcmsaps-plugins-basic.x86_64 0:1.5.0-3.e15         lcmsaps-plugins-c-pep.x86_64
0:1.2.2-1.e15
  lcmsaps-plugins-tracking-groupid.x86_64 0:0.1.0-1.e15 lcmsaps-plugins-verify-
proxy.x86_64 0:1.5.2-1.e15
  lcmsaps-plugins-voms.x86_64 0:1.5.3-1.e15         mkgltmpdir.noarch 0:0.0.3-
2.e15
  yaim-glexec-wn.noarch 0:2.3.2-1.s15

Complete

```

## Yaim Log:

```

/opt/glite/yaim/bin/yaim -c -s /opt/glite/yaim/etc/site-info.def -n glite-WN -n
SGE_client -n GLEXEC_wn
[...]
INFO: Executing function: config_glexec_wn_users_setenv
DEBUG: Currently this function doesn't set any environment variables.
INFO: Executing function: config_glexec_wn_users
INFO: Executing function: config_glexec_wn_log_setenv
DEBUG: Currently this function doesn't set any environment variables.
INFO: Executing function: config_glexec_wn_log
DEBUG: creating /var/log/glexec
DEBUG: Creating lcas/lcmsaps glexec log file
INFO: Executing function: config_glexec_wn_setenv
DEBUG: Setting environment variable GLEXEC_LOCATION, to value "/usr".
DEBUG: Unset environment variable GLEXEC_LOCATION.
INFO: Executing function: config_glexec_wn
DEBUG: Backing up old configuration file.
DEBUG: Building the user white list
INFO: Generating glexec configuration file /etc/glexec.conf
DEBUG: Specify the log file in the glexec configuration file
INFO: glexec is configured in setuid mode
INFO: Executing function: config_glexec_wn_lcaslcmaps_setenv
DEBUG: Currently this function doesn't set any environment variables.
INFO: Executing function: config_glexec_wn_lcaslcmaps
INFO: creating empty ban_users.db

```

```

INFO: Generating LCAS config file
DEBUG: Backing up LCAS old configuration file.
DEBUG: checking presence of /usr/lib64/lcas/lcas_userban.mod
DEBUG: checking presence of /usr/lib64/lcas/lcas_voms.mod
INFO: Generating LCMAPS config file
DEBUG: Backing up old LCMAPS configuration file.
DEBUG: Setting permissions on the LCMAPS config file
DEBUG: ... Include verify proxy module
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_verify_proxy.mod
DEBUG: ... Include vomslocalgroup {voms,}{local,pool}account modules
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_dummy_good.mod
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_voms_localgroup.mod
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_voms_localaccount.mod
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_voms_poolaccount.mod
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_localaccount.mod
DEBUG: checking presence of /usr/lib64/lcmaps/lcmaps_poolaccount.mod
DEBUG: Finished LCMAPS configuration
INFO: Executing function: config_vomsmap_setenv
DEBUG: Setting environment variable GRIDMAPDIR, to value "/etc/grid-
security/gridmapdir".
DEBUG: Unset environment variable GRIDMAPDIR.
INFO: Executing function: config_vomsmap
INFO: Creating grid-map directory in /etc/grid-security/gridmapdir
INFO: Creating voms grid-map file in /etc/grid-security/voms-grid-mapfile
INFO: Creating voms groupmap file in /etc/grid-security/groupmapfile
DEBUG: **** VO OPS ****
DEBUG: create gridmapdir files
DEBUG: **** VO CESGA ****
DEBUG: create gridmapdir files
DEBUG: **** VO LHCB ****
DEBUG: create gridmapdir files
DEBUG: **** VO DTEAM ****
DEBUG: create gridmapdir files
DEBUG: **** VO BIOMED ****
DEBUG: create gridmapdir files
DEBUG: **** VO COMPCHEM ****
DEBUG: create gridmapdir files
DEBUG: **** VO FUSION ****
DEBUG: create gridmapdir files
[...]
```

### Tests performed:

Submitted simple job that invokes glxexec for a host with whitelisted user or not:

```

#!/bin/bash

echo "Testing @ `hostname`"
echo "User info `id -a`"

echo "Proxy file: $X509_USER_PROXY"

export GLEXEC_CLIENT_CERT=${X509_USER_PROXY}
export GLEXEC_SOURCE_PROXY=${X509_USER_PROXY}

cmd="/usr/sbin/glxexec /usr/bin/id -a"
echo "Executing $cmd"
```

Output (whitelisted user):

```

Testing @ sa3-wn001.egee.cesga.es
User info uid=30429(dteam069) gid=30010(dteam) groups=20001,30010(dteam)
Proxy file: /home/dteam069/home_cream_087286539/cream_087286539.proxy
Executing /usr/sbin/glxexec /usr/bin/id -a
uid=30406(dteam046) gid=30010(dteam) groups=30010(dteam)
```

Output (not whitelisted):

```
Testing @ sa3-wn001.egee.cesga.es
User info uid=30429(dteam069) gid=30010(dteam) groups=20000,30010(dteam)
Proxy file: /home/dteam069/home_cream_336569105/cream_336569105.proxy
Executing /usr/sbin/glexec /usr/bin/id -a
[gLExec]: User dteam069 (uid=30429) is not whitelisted, i.e. may not invoke gLExec.
    If this is unexpected, ask the sysadmin to check the syslog and the
    permissions of the config file.
```

Test epilogue:

Created a epilogue that prints glexec variables to a file in tmp and executed the same test script. Output:

```
Epilogue started
Epilogue variables!
GLEXEC_EPILOG_ARGC=2
GLEXEC_EPILOG_TARGET_GID=30010
GLEXEC_EPILOG_TARGET_SGIDS=
GLEXEC_EPILOG_TARGET_UID=30406
GLEXEC_EPILOG_ARGV0=/usr/bin/id
GLEXEC_EPILOG_ARGV1=-a
GLEXEC_EPILOG_GLEXEC_SID=6147
GLEXEC_EPILOG_GLEXEC_PGID=30843
GLEXEC_EPILOG_TARGET_RC=0
GLEXEC_EPILOG_GLEXEC_GID=30010
GLEXEC_EPILOG_GLEXEC_UID=30419
GLEXEC_EPILOG_GLEXEC_SGIDS=30010
GLEXEC_EPILOG_GLEXEC_GROUP=dteam
GLEXEC_EPILOG_TARGET_GROUP=dteam
GLEXEC_EPILOG_GLEXEC_USER=dteam059
GLEXEC_EPILOG_GLEXEC_CWD=/home/dteam059
GLEXEC_EPILOG_TARGET_PGID=30847
GLEXEC_EPILOG_TARGET_USER=dteam046
GLEXEC_EPILOG_GLEXEC_PID=30846
GLEXEC_EPILOG_TARGET_PID=30847
```

**Specific Functional Tests to be repeated in SR:**

No specific functional tests to be repeated in SR.

**Specific Non-functional tests (Scalability, etc...) to be repeated in SR:**

No need for extra non-functional tests.

**Comments for UMD QC definition (TSA2.2):**

No comments.

**Comments for SR (TSA1.3):**

No comments

**Comments for DMSU (TSA2.5):**

No comments.

**Comments for TP:**

No comments