

**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_64-1.0.1		
Software Provider	EMI		
Release Contact	Name:	E-Mail	
	Cristina Aiftimiei	crisrina.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	06/10/2011	Verification end date	06/10/2011

**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>	12	0	1	13
	Specific Quality Criteria			
<b>TP</b>	0	0	0	0
<b>VLD</b>	1	0	1	2

**Summary:**

This gLexec release does not introduce any changes in functionality. Some functionality tests were redone anyhow to assure the product still works without issues. The yaim problems detected in previous release are not present anymore.

**Validator comments:**

The verification was limited to the installation of the new release on top of the existing Worker Nodes, configuration and simple use case testing. Since no changes in the glexec binary were introduced, the tests performed for previous verification still hold as valid.

The configuration was performed following the documentation and went without problems. Of the two WN available, a different whitelist of users was specified in order to test later that the configuration is done correctly.

**Installation Log:**

# yum update
Loaded plugins: kernel-module, protectbase
http://repository.egi.eu/sw/stagerollout/emi.extras.sl5.x86_64/1/repo/repodata/repomd.xml:
[Errno 14] HTTP Error 404: Not Found
Trying other mirror.
EMI.glexec_wn.sl5.x86_64   1.9 kB 00:00

EMI.glexec\_wn.sl5.x86\_64/primary\_db | 14 kB 00:00

232 packages excluded due to repository protections

Setting up Update Process

Resolving Dependencies

--> Running transaction check

---> Package emi-version.x86\_64 0:1.3.0-1.sl5 set to be updated

---> Package glite-yaim-core.noarch 0:5.0.2-1.sl5 set to be updated

---> Package kernel.x86\_64 0:2.6.18-274.3.1.el5 set to be installed

---> Package kernel-headers.x86\_64 0:2.6.18-274.3.1.el5 set to be updated

---> Package yaim-glexec-wn.noarch 0:2.0.3-5.sl5 set to be updated

--> Finished Dependency Resolution

Beginning Kernel Module Plugin

Finished Kernel Module Plugin

--> Running transaction check

---> Package kernel.x86\_64 0:2.6.18-194.3.1.el5 set to be erased

--> Finished Dependency Resolution

Dependencies Resolved

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Package	Arch	Version	Repository	Size
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Installing:

kernel x86\_64 2.6.18-274.3.1.el5 sl-security 21 M

Updating:

emi-version x86\_64 1.3.0-1.sl5 EMI.glexec\_wn.sl5.x86\_64 2.0 k

glite-yaim-core noarch 5.0.2-1.sl5 EMI.glexec\_wn.sl5.x86\_64 116 k

kernel-headers x86\_64 2.6.18-274.3.1.el5 sl-security 1.3 M

yaim-glexec-wn noarch 2.0.3-5.sl5 EMI.glexec\_wn.sl5.x86\_64 14 k

Removing:

kernel x86\_64 2.6.18-194.3.1.el5 installed 92 M

Transaction Summary

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Install 1 Package(s)  
Upgrade 4 Package(s)  
Remove 1 Package(s)  
Reinstall 0 Package(s)  
Downgrade 0 Package(s)

Total download size: 22 M

Is this ok [y/N]: y

Downloading Packages:

(1/5): emi-version-1.3.0-1.sl5.x86\_64.rpm | 2.0 kB 00:00

(2/5): yaim-glexec-wn-2.0.3-5.sl5.noarch.rpm | 14 kB 00:00

(3/5): glite-yaim-core-5.0.2-1.sl5.noarch.rpm | 116 kB 00:00

(4/5): kernel-headers-2.6.18-274.3.1.el5.x86\_64.rpm | 1.3 MB 00:05

(5/5): kernel-2.6.18-274.3.1.el5.x86\_64.rpm | 21 MB 01:11

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Total 288 kB/s | 22 MB 01:18

Running rpm\_check\_debug

Running Transaction Test

Finished Transaction Test

Transaction Test Succeeded

Running Transaction

Updating : glite-yaim-core 1/10

Updating : kernel-headers 2/10

Updating : emi-version 3/10

Updating : yaim-glexec-wn 4/10

Installing : kernel 5/10

Cleanup : glite-yaim-core 6/10

Cleanup : kernel-headers 7/10

Cleanup : emi-version 8/10

Cleanup : kernel 9/10

Cleanup : yaim-glexec-wn 10/10

Removed:

kernel.x86\_64 0:2.6.18-194.3.1.el5

Installed:

kernel.x86\_64 0:2.6.18-274.3.1.el5

Updated:

emi-version.x86\_64 0:1.3.0-1.sl5

glite-yaim-core.noarch 0:5.0.2-1.sl5

kernel-headers.x86\_64 0:2.6.18-274.3.1.el5

yaim-glexec-wn.noarch 0:2.0.3-5.sl5

Complete!

# yum install emi-glexec\_wn

Loaded plugins: kernel-module, protectbase

http://repository.egi.eu/sw/stagerollout/emi.extras.sl5.x86\_64/1/repodata/repomd.xml:

[Errno 14] HTTP Error 404: Not Found

Trying other mirror.

232 packages excluded due to repository protections

Setting up Install Process

Resolving Dependencies

--> Running transaction check

---> Package emi-glexec\_wn.x86\_64 0:1.0.0-1.sl5 set to be updated

--> Processing Dependency: lcms-plugins-tracking-groupid for package: emi-glexec\_wn

--> Processing Dependency: lcms-plugins-basic for package: emi-glexec\_wn

--> Processing Dependency: lcms-plugins-voms for package: emi-glexec\_wn

--> Processing Dependency: lcms-plugins-c-pep for package: emi-glexec\_wn

--> Processing Dependency: glexec for package: emi-glexec\_wn

--> Processing Dependency: lcas-plugins-voms for package: emi-glexec\_wn

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--> Processing Dependency: lcms-plugins-verify-proxy for package: emi-glexec_wn
--> Processing Dependency: lcms-plugins-scas-client for package: emi-glexec_wn
--> Running transaction check
---> Package glexec.x86_64 0:0.8.10-1.sl5 set to be updated
---> Package lcas-plugins-voms.x86_64 0:1.3.7-1.sl5 set to be updated
---> Package lcms.x86_64 0:1.4.29-1.sl5 set to be updated
---> Package lcms-plugins-basic.x86_64 0:1.4.5-1.sl5 set to be updated
---> Package lcms-plugins-c-pep.x86_64 0:1.1.3-1.sl5 set to be updated
---> Package lcms-plugins-scas-client.x86_64 0:0.2.22-1.sl5 set to be updated
---> Package lcms-plugins-tracking-groupid.x86_64 0:0.0.1-1.sl5 set to be updated
---> Package lcms-plugins-verify-proxy.x86_64 0:1.4.12-2.sl5 set to be updated
---> Package lcms-plugins-voms.x86_64 0:1.4.3-1.sl5 set to be updated
--> Finished Dependency Resolution
Beginning Kernel Module Plugin
Finished Kernel Module Plugin

```

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing:				
emi-glexec_wn			x86_64	1.0.0-1.sl5
EMI.glexec_wn.sl5.x86_64		1.9 k		
Installing for dependencies:				
glexec	x86_64	0.8.10-1.sl5	UMD-1-base	58 k
lcas-plugins-voms		x86_64	1.3.7-1.sl5	UMD-1-base 29 k
lcmaps		x86_64	1.4.29-1.sl5	UMD-1-base 98 k
lcmaps-plugins-basic		x86_64	1.4.5-1.sl5	UMD-1-base 48 k
lcmaps-plugins-c-pep		x86_64	1.1.3-1.sl5	UMD-1-base 32 k
lcmaps-plugins-scas-client		x86_64	0.2.22-1.sl5	UMD-1-base 42 k
lcmaps-plugins-tracking-groupid		x86_64	0.0.1-1.sl5	UMD-1-base 9.7 k
lcmaps-plugins-verify-proxy			x86_64	1.4.12-2.sl5
EMI.glexec_wn.sl5.x86_64		25 k		
lcmaps-plugins-voms		x86_64	1.4.3-1.sl5	UMD-1-base 39 k

Transaction Summary

Install 10 Package(s)  
Upgrade 0 Package(s)

Total download size: 382 k

Is this ok [y/N]: y

Downloading Packages:

(1/10): emi-glexec_wn-1.0.0-1.sl5.x86_64.rpm	1.9 kB
00:00	
(2/10): lcmsaps-plugins-tracking-groupid-0.0.1-1.sl5.x86_64.rpm	9.7 kB
00:00	
(3/10): lcmsaps-plugins-verify-proxy-1.4.12-2.sl5.x86_64.rpm	25 kB
00:00	
(4/10): lcas-plugins-voms-1.3.7-1.sl5.x86_64.rpm	29 kB
00:00	
(5/10): lcmsaps-plugins-c-pep-1.1.3-1.sl5.x86_64.rpm	32 kB
00:00	
(6/10): lcmsaps-plugins-voms-1.4.3-1.sl5.x86_64.rpm	39 kB
00:00	
(7/10): lcmsaps-plugins-scas-client-0.2.22-1.sl5.x86_64.rpm	42 kB
00:00	
(8/10): lcmsaps-plugins-basic-1.4.5-1.sl5.x86_64.rpm	48 kB
00:00	
(9/10): glexec-0.8.10-1.sl5.x86_64.rpm	58 kB
00:00	
(10/10): lcmsaps-1.4.29-1.sl5.x86_64.rpm	98 kB
00:00	

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Total 96 kB/s | 382 kB 00:03

Running rpm\_check\_debug

Running Transaction Test

Finished Transaction Test

Transaction Test Succeeded

Running Transaction

Installing	: lcmsaps	1/10	
Installing	: lcmsaps-plugins-verify-proxy		2/10
Installing	: glexec	3/10	
Installing	: lcmsaps-plugins-c-pep		4/10
Installing	: lcmsaps-plugins-tracking-groupid		5/10
Installing	: lcmsaps-plugins-basic		6/10
Installing	: lcmsaps-plugins-voms		7/10
Installing	: lcmsaps-plugins-scas-client		8/10
Installing	: lcas-plugins-voms		9/10
Installing	: emi-glexec_wn		10/10

Installed:

emi-glexec\_wn.x86\_64 0:1.0.0-1.sl5

Dependency Installed:

glexec.x86_64 0:0.8.10-1.sl5	lcas-plugins-voms.x86_64 0:1.3.7-1.sl5
lcmaps.x86_64 0:1.4.29-1.sl5	lcmaps-plugins-basic.x86_64 0:1.4.5-1.sl5
lcmaps-plugins-c-pep.x86_64 0:1.1.3-1.sl5	lcmaps-plugins-scas-client.x86_64 0:0.2.22-1.sl5
lcmaps-plugins-tracking-groupid.x86_64 0:0.0.1-1.sl5	lcmaps-plugins-verify-proxy.x86_64 0:1.4.12-2.sl5
lcmaps-plugins-voms.x86_64 0:1.4.3-1.sl5	

Complete!

### Yaim Log:

```

/opt/glite/yaim/bin/yaim -c -s /opt/glite/yaim/etc/site-info.def -n MPI_WN -n WN -n TORQUE_client -n GLEXEC_wn

[...]
INFO: Executing function: config_glexec_wn_users_check
INFO: Executing function: config_glexec_wn_log_check
INFO: Executing function: config_glexec_wn_check
INFO: Executing function: config_glexec_wn_lcaslcmaps_check
INFO: Executing function: config_vomsmmap_check
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
INFO: Executing function: config_glexec_wn_setenv
DEBUG: Currently this function doesn't set any environment variables.
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: Generating LCAS config file
DEBUG: Backing up LCAS old configuration file.
DEBUG: checking presence of /usr/lib64/modules/lcas_userban.mod
INFO: Generating LCMAPS config file
DEBUG: configuring ARGUS endpoints
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/modules/lcmaps_verify_proxy.mod
DEBUG: ... Include posix_enf module
DEBUG: checking presence of /usr/lib64/modules/lcmaps_posix_enf.mod

```

```

INFO: glexec is configured to work with ARGUS
DEBUG: ... Include lcmaps_c_peg module
DEBUG: checking presence of /usr/lib64/modules/lcmaps_c_peg.mod
DEBUG: writing the policy
INFO: Executing function: config_vomsmmap_setenv
DEBUG: Setting environment variable GRIDMAPDIR, to value "/etc/grid-
security/gridmapdir".
DEBUG: Unset environment variable GRIDMAPDIR.
INFO: Executing function: config_vomsmmap
INFO: Creating vomsm grid-map file in /etc/grid-security/vomsm-grid-mapfile
INFO: Creating vomsm groupmap file in /etc/grid-security/groupmapfile
DEBUG: **** VO OPS ****
INFO: No gridmapdir files are created since CONFIG_GRIDMAPDIR=no
DEBUG: **** VO DTEAM ****
INFO: No gridmapdir files are created since CONFIG_GRIDMAPDIR=no
DEBUG: **** VO OPS.VO.IBERGRID.EU ****
INFO: No gridmapdir files are created since CONFIG_GRIDMAPDIR=no
DEBUG: **** VO IBER.VO.IBERGRID.EU ****
INFO: No gridmapdir files are created since CONFIG_GRIDMAPDIR=no
INFO: Copying the /etc/grid-security/vomsm-grid-mapfile in the standard location
/etc/grid-security/grid-mapfile
[...]

```

### Tests performed:

Submitted simple job that invokes glexec 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/glexec /usr/bin/id -a"
echo "Executing $cmd"

```

### Output (whitelisted user):

```

Testing @ test14.egi.cesga.es
User info uid=30363(dteam003) gid=30010(dteam) groups=30010(dteam)
context=root:system_r:initrc_t
Proxy file: /home/dteam003/home_cream_129767284/cream_129767284.proxy
Executing /usr/sbin/glexec /usr/bin/id -a
uid=30386(dteam026) gid=30010(dteam) context=root:system_r:initrc_t

```

### Output (not whitelisted):

```

Testing @ test15.egi.cesga.es
User info uid=30363(dteam003) gid=30010(dteam) groups=30010(dteam)

```

```
context=root:system_r:initrc_t
Proxy file: /home/dteam003/home_cream_533742768/cream_533742768.proxy
Executing /usr/sbin/glexec /usr/bin/id -a
[gLExec]: The user, uid=30363(dteam003), is not whitelisted. The calling user
account is not privileged to execute and use gLExec.
```

**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



Criteria	Accepted (Y/N/NA)	Tested (TP/VLD)	Comments
<b>VALIDATOR:</b>	<b>Enol Fernandez</b>	<b>RT TICKET:</b>	#2932
<b>Generic QC</b>			
GENERIC_DOC_1 (Functional Description)	Y	VLD	No changes since last release
GENERIC_DOC_2 (Release Notes)	Y	VLD	No changes since last release
GENERIC_DOC_3 (User Documentation)	Y	VLD	No changes since last release
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	No changes since last release
GENERIC_DOC_5 (API Documentation)	NA	VLD	No public API
GENERIC_DOC_6 (Administrator Documentatio	Y	VLD	No changes since last release
GENERIC_DOC_8 (Software License)	Y	VLD	Apache 2
GENERIC_DOC_9 (Release changes testing)	Y	VLD	Tests of changes available
GENERIC_DIST_1 (Source Code Availability)	Y	VLD	Source code of glxec is available
GENERIC_DIST_2 (Source Distribution)	Y	VLD	Packages built with etics
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	Binary packages available and installable
GENERIC_SERVICE_4 (Automatic Configuratio	Y	VLD	Yaim configuration works without issues
GENERIC_MISC_2 (Bug Tracking System)	Y	VLD	EMI registered as 3rd line support
<b>Security Capabilities QC</b>			
AUTHN_IFACE_1 (X.509 Certificate support)	Y	VLD	Tests done with several proxies
AUTHN_IFACE_2 (SAML authentication)	NA	VLD	SAML Not supported