

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

Name of the component			
Release	EMI.cream.sl6.x86_64-1.14.1	RT Ticket	#4387
Software Provider			
Release Contact	Name: Cristina Aiftimiei	E-Mail: cristina.aiftimiei@pd.infn.it	
Validator	Name: Esteban Freire García	E-Mail: esfreire@cesga.es	
V. Hours Worked	6		
Component status	Verified	Date	17/10/12
Verification start date	17/10/12	Verification end date	17/10/12

Summary:

EMI.cream.sl6.x86_64-1.14.1 was updated from UMD-2 without any issue.

The only thing to comment is that I had to follow the workaround described on <https://wiki.italiangrid.it/twiki/bin/view/CREAM/KnownIssues>

{{

Authorization problem with argus (pkcs#8 keys). Problem is related with a known bug in bouncycastle, <http://www.bouncycastle.org/jira/browse/BJA-400>, which prevents the CREAM authorization to be correctly initialized if the format of private key is pkcs#8 instead of the old format (pkcs#1).

- o <https://ggus.eu/tech/ticket_show.php?ticket=83329>
+ Workaround: re-process the private key on SL6 with the following command: "openssl rsa -in hostkey.pem -out newhostkey.pem"

GGUS Tickets:

Summary of Quality Criteria verification:

	Generic Quality Criteria Total (Critical/Non critical)			
	Passed	Not passed	Not Applicable	Total
TP				
VLD	18			18
	Specific Quality Criteria			
TP				
VLD	18			18

Quality Criteria verification cheatsheet:

Criteria	Accepted	Tested	Comments
DOCUMENTATION QC			
GENERIC_DOC_1 (Functional Description)	Optional		
GENERIC_DOC_2 (Release Notes)	Y	VLD	https://rt.egi.eu/rt/Ticket/Display.html?id=4387
GENERIC_DOC_3 (User Documentation)	Y	VLD	https://wiki.italiagrid.it/wiki/bin/view/CREAM/UserGuideEMI2
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	https://wiki.italiagrid.it/wiki/bin/view/CREAM/UserGuideEMI2#Man_pages_for_CREAM_Command_Line
GENERIC_DOC_5 (API Documentation)	Y	VLD	https://wiki.italiagrid.it/wiki/bin/view/CREAM/DevelopersDocumentation
GENERIC_DOC_6 (Administrator Documentation)	Y	VLD	https://wiki.italiagrid.it/wiki/bin/view/CREAM/SystemAdministratorGuideForEMI2
GENERIC_DOC_7 (Service Reference Card)	Y	VLD	https://wiki.italiagrid.it/wiki/bin/view/CREAM/ServiceReferenceCardEMI2
GENERIC_DOC_8 (Software License)	Y	VLD	Emi-cream: Apache Software License 2.0
GENERIC_DOC_9 (Release changes testing)	Y	VLD	https://rt.egi.eu/rt/Ticket/Display.html?id=4387
SOFTWARE DISTRIBUTION QC			
GENERIC_DIST_1 (Source Code Availability)	Y	VLD	
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	
SOFTWARE FEATURES QC			
GENERIC_SOFT_1 (Backwards Compatibility)	Y	VLD	
GENERIC_SOFT_2 (New features testing)	Y	VLD	
SERVICE CRITERIA QC			
GENERIC_SERVICE_1 (Service control and status)	Y	VLD	
GENERIC_SERVICE_2 (Log Files)	Y	VLD	
GENERIC_SERVICE_3 (Service Reliability)	Optional		
GENERIC_SERVICE_4 (Service Robustness)	Optional		
GENERIC_SERVICE_5 (Automatic Configuration)	Optional		
GENERIC_SERVICE_6 (Default Password Configuration)	Y	VLD	
SECURITY QC			
GENERIC_SEC_1 (World Writable Files)	Y	VLD	
GENERIC_SEC_3 (Passwords in world readable files)	Y	VLD	
MISCELLANEOUS QC			
GENERIC_MISC_2 (Bug Tracking System)	Y	VLD	GGUS
AUTHENTICATION QC			
AUTHN_IFACE_1 (X.509 Certificate support)	Y	VLD	
AUTHN_DELEG_1 (Delegation Interface)	Y	VLD	
AUTHORISATION QC			
AUTHZ_PCYDEF_3 (Ban User/FQAN)	Y	VLD	
AUTHZ_PCYDEF_4 (Allowed users definition)	Y	VLD	
AUTHZ_PEP_1 (Policy Enforcement)	Y	VLD	
AUTHZ_PEP_2 (User Mapping)	Y	VLD	
JOB EXECUTION QC			
JOBEXEC_IFACE_1 (Job Execution Interface)	Y	VLD	
JOBEXEC_JOB_1 (Simple Job)	Y	VLD	
JOBEXEC_JOB_2 (Simple Job with input/output)	Y	VLD	
JOBEXEC_JOB_3 (Cancel Job)	Y	VLD	
JOBEXEC_EXECMNGR_1 (Not Invasive Dependencies)	Y	VLD	
JOBEXEC_EXECMNGR_2 (Job Management)	Y	VLD	
JOBEXEC_EXECMNGR_3 (Information Retrieval)	Y	VLD	
JOBEXEC_AVAIL_1 (Service Redundancy)	Y	VLD	
JOBEXEC_AVAIL_2 (Self Disabling Mechanism)	Optional		
JOBEXEC_AVAIL_4 (Timely Job Status Update)	Optional		
PARALLEL JOB QC			
PARALLEL_JOB_1 (Simple parallel job submission)	Y	VLD	
PARALLEL_JOB_2 (Single machine parallel job)	Optional		
PARALLEL_JOB_3 (Fine grained mapping parallel job)	Optional		
MONITORING PROBES QC			
MON_PROBE_GENERIC_1 (Certificate Lifetime)	Optional		
MON_PROBE_GENERIC_2 (Service Probe)	Optional		
MON_PROBE_JOBEXEC_1 (Job Execution Probe)	Y	VLD	

Validator comments:

EMI.cream.sl6.x86_64-1.14.1 was updated from UMD-2 without any issue.

== EMI.cream.sl6.x86_64-1.14.1 ==
=== Ticket assigned ===

* [[<https://rt.egi.eu/rt/Ticket/Display.html?id=4387>]]

=== Repositories ===

(!) Verifier must install a new repo for each product, this information is available at RT ticket field:

{{{

```
[root@test06 yum.repos.d]# cat EMI.cream.sl6.x86_64.repo
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -
(4387,702,629)
```

```
[EMI.cream.sl6.x86_64]
name=EMI.cream.sl6.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-2.emi.cream.sl6.x86_64/1/14/1/
enabled=1
protect=1
priority=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/2/RPM-GPG-KEY-emi
}}}
```

=== Installing ===

==== Updating =====

* yum update

{{{

```
=====
=====
=====
=====
=====
```

Package	Arch	Version
Repository	Size	

```
=====
=====
=====
```

```
Installing:
kernel                x86_64                2.6.32-279.9.1.el6
sl-security           25 M
Updating:
```

bdi	noarch	5.2.12-1.el6
UMD-2-updates	22 k	
bind-libs	x86_64	32:9.8.2-
0.10.rc1.el6_3.5	sl-security	870 k
bind-utils	x86_64	32:9.8.2-
0.10.rc1.el6_3.5	sl-security	181 k
dbus	x86_64	1:1.2.24-7.el6_3
sl-security	206 k	
dbus-libs	x86_64	1:1.2.24-7.el6_3
sl-security	126 k	
dynsched-generic	noarch	2.4.1-1.sl6
EMI.cream.sl6.x86_64	44 k	
emi-trustmanager	noarch	3.1.4-1.sl6
EMI.cream.sl6.x86_64	249 k	
emi-version	x86_64	2.3.0-1.sl6
UMD-2-updates	2.2 k	
ghostscript	x86_64	8.70-14.el6_3.1
sl-security	4.4 M	
glite-ce-cream	noarch	1.14.1-1.sl6
EMI.cream.sl6.x86_64	532 k	
glite-ce-cream-api-java	noarch	1.14.1-2.sl6
EMI.cream.sl6.x86_64	2.4 M	
glite-ce-cream-core	noarch	1.14.1-1.sl6
EMI.cream.sl6.x86_64	394 k	
glite-ce-cream-es	noarch	1.14.1-1.sl6
EMI.cream.sl6.x86_64	58 k	
glite-ce-cream-utils	x86_64	1.2.1-0.sl6
EMI.cream.sl6.x86_64	33 k	
glite-info-provider-service	noarch	1.9.0-5.el6
UMD-2-updates	61 k	
glite-yaim-bdi	noarch	4.3.11-1.el6
UMD-2-updates	10 k	
globus-gridftp-server	x86_64	6.14-1.el6
epel	154 k	
globus-gridftp-server-control	x86_64	2.7-1.el6
epel	71 k	
globus-gridftp-server-progs	x86_64	6.14-1.el6
epel	45 k	
glue-schema	noarch	2.0.8-2.el6
UMD-2-updates	31 k	
gridsite-libs	x86_64	1.7.22-2.el6
UMD-2-updates	87 k	
kernel-firmware	noarch	2.6.32-
279.9.1.el6	sl-security	8.7 M
libxml2	x86_64	2.7.6-8.el6_3.3
sl-security	797 k	
openjpeg-libs	x86_64	1.3-9.el6_3
sl-security	58 k	
selinux-policy	noarch	3.7.19-
155.el6_3.4	sl-security	1.3 M

selinux-policy-targeted	noarch	3.7.19-
155.el6_3.4	sl-security	2.6 M
tzdata	noarch	2012f-1.el6
sl-security	448 k	
tzdata-java	noarch	2012f-1.el6
sl-security	153 k	
Removing:		
kernel	x86_64	2.6.32-220.17.1.el6
@sl-security/6.2	112 M	

Transaction Summary

```

=====
=====
=====
=====

```

```
}}}
```

```
{{{
```

```
}}}
```

```
==== Configuration of a CREAM CE node in no cluster mode =====
```

```
==== Configure the siteinfo.def file =====
```

* Set your siteinfo.def file, which is the input file used by yaim. Documentation about yaim variables relevant for CREAM CE is available at:

* [\[\[https://twiki.cern.ch/twiki/bin/view/LCG/Site-info_configuration_variables#cream_CE\]\]](https://twiki.cern.ch/twiki/bin/view/LCG/Site-info_configuration_variables#cream_CE)

```
==== Configuring with YAIM =====
```

```
{{{
```

```
[root@test06 etc]# /opt/glite/yaim/bin/yaim -c -s /opt/glite/yaim/etc/site-info.def -n
MPI_CE -n creamCE -n TORQUE_server -n TORQUE_utils
```

```
[ ..... ]
```

```
Stopping BDII update process: [ OK ]
```

```
Stopping BDII slapd: [ OK ]
```

```
Starting BDII slapd: [ OK ]
```

```
Starting BDII update process: [ OK ]
```

```
INFO: Executing function: config_cream_gip_info_dynamic_setenv
```

```
INFO: Executing function: config_cream_gip_info_dynamic
```

```
INFO: Executing function: config_cream_gip_setenv
```

```
INFO: Executing function: config_cream_gip
```

```
WARNING: Queue GRID_ops was enabled for one or more FQANs which specify an
entire VO
```

```
WARNING: Queue GRID_dteam was enabled for one or more FQANs which specify
an entire VO
```

WARNING: Queue GRID_opsibeu was enabled for one or more FQANs which specify an entire VO

WARNING: Queue GRID_opsibeu was enabled for one or more FQANs which specify an entire VO

WARNING: Queue GRID_iberibeu was enabled for one or more FQANs which specify an entire VO

WARNING: Queue GRID_iberibeu was enabled for one or more FQANs which specify an entire VO

INFO: Executing function: config_cream_gip_glue2_setenv

INFO: Executing function: config_cream_gip_glue2

SE_LIST=test08.egi.cesga.es

INFO: File /etc/glite-ce-glue2/glite-ce-glue2.conf backed-up in /etc/glite-ce-glue2/glite-ce-glue2.conf.bak_20121016_154902

INFO: Executing function: config_cream_gip_scheduler_plugin_setenv

INFO: Executing function: config_cream_gip_scheduler_plugin

INFO: Executing function: config_cream_gip_software_plugin_setenv

INFO: Executing function: config_cream_gip_software_plugin

INFO: Executing function: config_cream_vo_tag_dir

INFO: Executing function: config_info_service_cream_ce_setenv

INFO: Executing function: config_info_service_cream_ce

INFO: Executing function: config_info_service_cemon_setenv

INFO: Executing function: config_info_service_cemon

INFO: Executing function: config_cream_info_service_rtepublish_setenv

INFO: Executing function: config_cream_info_service_rtepublish

INFO: Executing function: config_cream_cemon_setenv

INFO: Executing function: config_cream_cemon

Stopping tomcat6: [OK]

Starting tomcat6: [OK]

INFO: Executing function: config_cream_gliteservices_setenv

INFO: Executing function: config_cream_gliteservices

INFO: Executing function: config_cream_locallogger_setenv

INFO: Executing function: config_cream_locallogger

INFO: Executing function: config_glite_locallogger_setenv

INFO: Executing function: config_glite_locallogger

INFO: The workaround for bug 22389 already exists

Stopping glite-lb-logd ... not running

Stopping glite-lb-interlogd ... not running

Starting glite-lb-logd ... This is LocalLogger, part of Workload Management System in EU DataGrid & EGEE.

done

Warning: stale /var/cream_lb/glite-lb-interlogd.pid for glite-lb-interlogd

Warning: stale /tmp/interlogger.sock for glite-lb-interlogd

Starting glite-lb-interlogd ... done

INFO: Executing function: config_cream_glite_initd

INFO: Executing function: config_torque_server_setenv

INFO: Currently this function doesn't set any environment variables.

INFO: Executing function: config_torque_server

INFO: Re-starting the torque server

Shutting down TORQUE Server: [OK]

/var/lib/torque/server_priv/serverdb

```
Starting TORQUE Server: [ OK ]
Max open servers: 9
set server scheduling = True
set server acl_host_enable = False
set server managers = root@test06.egi.cesga.es
set server operators = root@test06.egi.cesga.es
set server default_queue = dteam
set server log_events = 511
set server mail_from = adm
set server mail_domain = never
set server query_other_jobs = True
set server scheduler_iteration = 600
set server default_node = lcgpro
set server node_pack = False
set server kill_delay = 10
set server authorized_users = *@test06.egi.cesga.es
Max open servers: 9
set queue GRID_ops queue_type = Execution
set queue GRID_ops resources_max.cput = 48:00:00
set queue GRID_ops resources_max.walltime = 72:00:00
set queue GRID_ops enabled = True
set queue GRID_ops started = True
set queue GRID_ops acl_group_enable = True
Max open servers: 9
set queue GRID_dteam queue_type = Execution
set queue GRID_dteam resources_max.cput = 48:00:00
set queue GRID_dteam resources_max.walltime = 72:00:00
set queue GRID_dteam enabled = True
set queue GRID_dteam started = True
set queue GRID_dteam acl_group_enable = True
Max open servers: 9
set queue GRID_opsibeu queue_type = Execution
set queue GRID_opsibeu resources_max.cput = 48:00:00
set queue GRID_opsibeu resources_max.walltime = 72:00:00
set queue GRID_opsibeu enabled = True
set queue GRID_opsibeu started = True
set queue GRID_opsibeu acl_group_enable = True
Max open servers: 9
set queue GRID_iberibeu queue_type = Execution
set queue GRID_iberibeu resources_max.cput = 48:00:00
set queue GRID_iberibeu resources_max.walltime = 72:00:00
set queue GRID_iberibeu enabled = True
set queue GRID_iberibeu started = True
set queue GRID_iberibeu acl_group_enable = True
Shutting down TORQUE Server: [ OK ]
/var/lib/torque/server_priv/serverdb
Starting TORQUE Server: [ OK ]
INFO: Executing function: config_mai_cfg_setenv
INFO: Executing function: config_mai_cfg
INFO: configuring maui ...
```

```
MPI_CE creamCE TORQUE_server TORQUE_utils
Shutting down MAUI Scheduler:          [ OK ]
Starting MAUI Scheduler:                [ OK ]
INFO: Executing function: config_apel_pbs_setenv
INFO: Executing function: config_apel_pbs
INFO: Executing function: config_gip_sched_plugin_pbs_setenv
INFO: Executing function: config_gip_sched_plugin_pbs
INFO: Executing function: config_torque_submitter_ssh
Starting MUNGE: munged
Reloading sshd:                         [ OK ]
INFO: Configuration Complete.           [ OK ]
INFO: YAIM terminated succesfully.
```

```
}}}
```

(!) I had to follow the workaround described on
<https://wiki.italiangrid.it/twiki/bin/view/CREAM/KnownIssues>

```
{{
```

Authorization problem with argus (pkcs#8 keys). Problem is related with a known bug in bouncycastle, <http://www.bouncycastle.org/jira/browse/BJA-400>, which prevents the CREAM authorization to be correctly initialized if the format of private key is pkcs#8 instead of the old format (pkcs#1).

```
*
```

- o <https://ggus.eu/tech/ticket_show.php?ticket=83329>
 - + Workaround: re-process the private key on SL6 with the following command: "openssl rsa -in hostkey.pem -out newhostkey.pem"

```
}}}
```

```
{{{
```

I had to do is delete the head for the following certificates "tomcat-cert.pem" and "tomcat-key.pem" and then restart "gLite" service. About deleted the head in both certificates, I am referring to just leave the following lines and the "data" included between these lines:

```
-----BEGIN CERTIFICATE-----
```

```
-----END CERTIFICATE-----
```

```
-----BEGIN RSA PRIVATE KEY-----
```

```
-----END RSA PRIVATE KEY-----
```

```
}}}
```

```
=== TESTING ===
```


==== Checking if ssh works in bidirectional sense ====

* From WN to CE (OK)

{

[root@test14 ~]# su - dteam004

[dteam004@test14 ~]\$ ssh test06.egi.cesga.es

[dteam004@test06 ~]\$

}

==== Trying some internal commands ====

{

[root@test06 etc]# qstat -B

Server	Max	Tot	Que	Run	Hld	Wat	Trn	Ext	Status
--------	-----	-----	-----	-----	-----	-----	-----	-----	--------

test06.egi.cesga	0	0	0	0	0	0	0	0	Active
------------------	---	---	---	---	---	---	---	---	--------

[root@test06 etc]# qstat -Q

Queue	Max	Tot	Ena	Str	Que	Run	Hld	Wat	Trn	Ext	T
-------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---

GRID_ops	0	0	yes	yes	0	0	0	0	0	0	E
GRID_dteam	0	0	yes	yes	0	0	0	0	0	0	E
GRID_opsibeu	0	0	yes	yes	0	0	0	0	0	0	E
GRID_iberibeu	0	0	yes	yes	0	0	0	0	0	0	E

[root@test06 etc]# qstat -q

server: test06.egi.cesga.es

Queue	Memory	CPU	Time	Walltime	Node	Run	Que	Lm	State
-------	--------	-----	------	----------	------	-----	-----	----	-------

GRID_ibergrid	--	48:00:00	72:00:00	--	0	0	--	E	R
GRID_ops	--	48:00:00	72:00:00	--	0	0	--	E	R
GRID_dteam	--	48:00:00	72:00:00	--	0	0	--	E	R
GRID_opsibeu	--	48:00:00	72:00:00	--	0	0	--	E	R
GRID_iberibeu	--	48:00:00	72:00:00	--	0	0	--	E	R

0 0

}

* Submitting a direct qsub

{

[root@test06 etc]# su - opssgm004

[opssgm004@test06 ~]\$ vi test.sh

[opssgm004@test06 ~]\$ sh -x test.sh

```
+ hostname
test06.egi.cesga.es
+ date
Tue Oct 16 15:52:21 CEST 2012
```

```
[opssgm004@test06 ~]$ qsub -q GRID_ops -l nodes=test14.egi.cesga.es test.sh
299.test06.egi.cesga.es
[opssgm004@test06 ~]$ qstat
[opssgm004@test06 ~]$ ls
test.sh test.sh.e299 test.sh.o299
[opssgm004@test06 ~]$ cat test.sh.e299
[opssgm004@test06 ~]$ cat test.sh.o299
test14.egi.cesga.es
Thu Oct 4 13:11:02 CEST 2012
}}}
```

==== Submitting a job from the CESGA UI =====

```
{
{
{
[esfreire@test13 ~]$ glite-ce-delegate-proxy -e test06.egi.cesga.es esfreire
2012-10-16 16:12:21,996 NOTICE - Proxy with delegation id [esfreire] succesfully
delegated to endpoint [https://test06.egi.cesga.es:8443//ce-cream/services/gridsite-
delegation]
```

```
[esfreire@test13 ~]$ glite-ce-proxy-renew -e test06.egi.cesga.es esfreire
2012-10-16 16:12:50,733 NOTICE - Proxy with delegation id [esfreire] succesfully
renewed to endpoint [https://test06.egi.cesga.es:8443//ce-cream/services/gridsite-
delegation]
[esfreire@test13 ~]$
}}}
```

```
{
{
{
[esfreire@test13 ~]$ glite-ce-job-submit -D esfreire -r test06.egi.cesga.es:8443/cream-
pbs-GRID_ops testCream1.jdl
https://test06.egi.cesga.es:8443/CREAM725938692
```

```
[esfreire@test13 ~]$ glite-ce-job-status
https://test06.egi.cesga.es:8443/CREAM725938692
```

```
***** JobID=[https://test06.egi.cesga.es:8443/CREAM725938692]
      Status    = [DONE-OK]
      ExitCode   = [0]
```

```
}}}
```

==== Checking bug #95480, CREAM doesn't transfert the output =====

* <https://savannah.cern.ch/bugs/?95480>

```
{
{
{
```

```
[esfreire@test13 ~]$ cat check_bug.jdl
[
Executable    = "hola.sh";
StdOutput     = "esfreire.out";
StdError      = "esfreire.err";
InputSandbox  = {"hola.sh"};
OutputSandbox = {"esfreire.out","esfreire.err"};
SANDBOX_TRANSFER_METHOD="LRMS";
OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";
]
}}}
```

```
{}
[esfreire@test13 ~]$ glite-ce-job-submit -D esfreire -r test06.egi.cesga.es:8443/cream-
pbs-GRID_ops check_bug.jdl
https://test06.egi.cesga.es:8443/CREAM244495698
```

```
[esfreire@test13 ~]$ glite-ce-job-status
https://test06.egi.cesga.es:8443/CREAM244495698
```

```
***** JobID=[https://test06.egi.cesga.es:8443/CREAM244495698]
      Status    = [DONE-OK]
      ExitCode   = [0]
```

```
}}}
```

```
{}
[root@se2 tmp]# cat esfreire.err
[root@se2 tmp]# cat esfreire.out
test15.egi.cesga.es
```

```
}}}
```

Not applicable Quality Criteria

Specific Functional Tests to be repeated in SR:

Test number	Description	Motivation

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

Test number	Description	Motivation

Comments for UMD QC definition (TSA2.2):

- Review criteria xxxx
- Add criteria xxxx

Comments for SR (TSA1.3):

The only thing to comment is that I had to follow the workaround described on <https://wiki.italiangrid.it/twiki/bin/view/CREAM/KnownIssues>

{{

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*

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- + Workaround: re-process the private key on SL6 with the following command: "openssl rsa -in hostkey.pem -out newhostkey.pem"

}}}

Comments for DMSU (TSA2.5):

Comments for TP: