

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

|                         |                    |   |                      |
|-------------------------|--------------------|---|----------------------|
| Name of the component   |                    |   |                      |
| Release                 | EMI.cream-sge.sl6  | RT Ticket                                       | <a href="#">3924</a> |
| Software Provider       |                    |   |                      |
| Release Contact         | Name:              | E-Mail  |                      |
| Validator               | Name:Daniela Bauer | E-Mail<br>daniela.bauer.grid@google<br>mail.com |                      |
| V. Hours Worked         | N/A                |   |                      |
| Component status        |                    | Date  |                      |
| Verification start date | 31/5/2012          | Verification end date                           |                      |

**Summary:**

**Verification of the EMI CREAM CE and related products for SGE on SL6 (technically on CentOS 6). The product works as expected, though needs some fixes to the bdi for the bdi to actually work. There is a known compatibility wrt openssl in SL6 that affects the hostcertificate which is not documented outside GGUS.**

**GGUS Tickets:**

[https://ggus.eu/ws/ticket\\_info.php?ticket=82746](https://ggus.eu/ws/ticket_info.php?ticket=82746)

[https://ggus.eu/ws/ticket\\_info.php?ticket=83352](https://ggus.eu/ws/ticket_info.php?ticket=83352)

**Summary of Quality Criteria verification:**

|            | Generic Quality Criteria Total (Critical/Non critical) |            |                |       |
|------------|--|------------|----------------|-------|
|            | Passed   | Not passed | Not Applicable | Total |
| <b>TP</b>  |  |            |                |       |
| <b>VLD</b> | 13   | 0          | 0              | 13    |
|            | Specific Quality Criteria                              |            |                |       |
| <b>TP</b>  |  |            |                |       |
| <b>VLD</b> | 14   | 0          | 0              | 14    |

| Criteria  | Accepted (Y/N/N/A) | Tested (TP/VLD) | Comments |
|---|--------------------|-----------------|----------|
| <b>DOCUMENTATION QC</b>                         |                    |                 |          |
| GENERIC_DOC_1 (Functional Description)          | Optional           |                 |          |
| GENERIC_DOC_2 (Release Notes)                   | Y                  | VLD             |          |
| GENERIC_DOC_3 (User Documentation)              | Optional           |                 |          |
| GENERIC_DOC_4 (Online Criteria verification)    | Optional           |                 |          |
| GENERIC_DOC_5 (API Documentation)               | Optional           |                 |          |
| GENERIC_DOC_6 (Administrator Documentation)     | Optional           |                 |          |
| GENERIC_DOC_7 (Service Reference Card)          | Optional           |                 |          |
| GENERIC_DOC_8 (Software License)                | Y                  | VLD             |          |
| GENERIC_DOC_9 (Release changes testing)         | Y                  | VLD             |          |
| <b>SOFTWARE DISTRIBUTION QC</b>                 |                    |                 |          |
| GENERIC_DIST_1 (Source Code Availability)       | Y                  | VLD             |          |
| GENERIC_DIST_3 (Binary Distribution)            | Y                  | VLD             |          |
| <b>SOFTWARE FEATURES QC</b>                     |                    |                 |          |
| GENERIC_SOFT_1 (Backwards Compatibility)        | Y                  | VLD             |          |
| GENERIC_SOFT_2 (New features testing)           | Y                  | VLD             |          |
| <b>SERVICE CRITERIA QC</b>                      |                    |                 |          |
| 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 Control)    | Y                  | VLD             |          |
| <b>SECURITY QC</b>                              |                    |                 |          |
| GENERIC_SEC_1 (World Writable Files)            | Y                  | VLD             |          |
| GENERIC_SEC_3 (Passwords in world readable)     | Y                  | VLD             |          |
| <b>MISCELLANEOUS QC</b>                         |                    |                 |          |
| GENERIC_MISC_2 (Bug Tracking System)            | Y                  | VLD             |          |
| <b>AUTHENTICATION QC</b>                        |                    |                 |          |
| AUTHN_IFACE_1 (X.509 Certificate support)       | Y                  | VLD             |          |
| AUTHN_DELEG_1 (Delegation Interface)            | Y                  | VLD             |          |
| <b>AUTHORISATION QC</b>                         |                    |                 |          |
| AUTHZ_PCYDEF_3 (Ban User/FQAN)                  |                    |                 |          |
| AUTHZ_PCYDEF_4 (Allowed users definition)       |                    |                 |          |
| AUTHZ_PEP_1 (Policy Enforcement)                |                    |                 |          |
| AUTHZ_PEP_2 (User Mapping)                      |                    |                 |          |
| <b>JOB EXECUTION QC</b>                         |                    |                 |          |
| 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           |                 |          |
| <b>PARALLEL JOB QC</b>                          |                    |                 |          |
| PARALLEL_JOB_1 (Simple parallel job submission) | Y                  | VLD             |          |
| PARALLEL_JOB_2 (Single machine parallel job)    | Optional           |                 |          |
| PARALLEL_JOB_3 (Fine grained mapping parallel)  | Optional           |                 |          |
| <b>MONITORING PROBES QC</b>                     |                    |                 |          |
| MON_PROBE_GENERIC_1 (Certificate Lifetime)      | Optional           |                 |          |
| MON_PROBE_GENERIC_2 (Service Probe)             | Optional           |                 |          |
| MON_PROBE_JOBEXEC_1 (Job Execution Failure)     | Y                  | VLD             |          |
| MON_PROBE_JOBEXEC_2 (CREAM Job Execution)       | Y                  | VLD             |          |
| <b>ACCOUNTING CAPABILITY QC</b>                 |                    |                 |          |
| ACC_JOBEXEC_1 (Job Execution Appliances)        | Y                  | VLD             |          |
| <b>CLIENT TOOLS QC</b>                          |                    |                 |          |
| CLIENT_TOOLS_1 (Command line Options control)   | Optional           |                 |          |
| CLIENT_TOOLS_2 (Error Messages)                 | Optional           |                 |          |

**Validator comments:**

No problems during **installation** (sorry, no log).

**Configuration** (via yaim). When running yaim for the first time, it complains about /etc/lrms/scheduler.conf not being found (this gets made by yaim). When running yaim subsequently this file exists and the error disappears.

The host certificate needs to be generated using openssl < 1.0, which openssl 1 is standard on SL6. This is documented in GGUS **82746**. Also, because I initially accidentally downloaded the globus libraries from the epel-testing.repo a problem in future releases of globus has been identified. This is tracked in <https://savannah.cern.ch/bugs/?95337>

**Tests performed:****(1) Job submitted, output retrieved.**

```
lx05:grid_job_dteam :~] glite-ce-service-info cepro08.grid.hep.ph.ic.ac.uk
Interface Version = [2.1]
Service Version   = [1.14 - EMI version: 2.0.0-1]
Description       = [CREAM 2]
Started at        = [Fri Jun 22 13:58:01 2012]
Submission enabled = [YES]
Status            = [RUNNING]
```

**Script to run:**

```
lx05:grid_job_dteam :~] cat simple.imperial.dteam.sh
#!/bin/sh
date
pwd

# the sleep statements are there to assure the script runs
# at least for 3 minutes

echo "glxec"
export GLEXEC_CLIENT_CERT=$X509_USER_PROXY
which glxec
/opt/glite/sbin/glexec /usr/bin/id -a; echo $?

# **** environment ****
sleep 20
echo -e "\n"
echo "Checking the environment"
echo -e "\n"
ghostname=`hostname --long 2>&1`
gipname=`hostname --ip-address 2>&1`
echo $ghostname "has address" $gipname
uname -a
cat /etc/redhat-release
env | sort >> environment.txt
rpm -qa | sort >> environment.txt
```

```

# **** who am i ****
voms-proxy-info -all

# I have no idea how to get a SURL
# lets assume I am allowed to read the resource bdii of the SE from the WN
# (to save me from working out the site bdii from the topbdii)
LOOKHERE=`/usr/bin/ldapsearch -x -H ldap://$VO_DTEAM_DEFAULT_SE:2170 -b
mds-vo-name=resource,o=grid | grep -B10 "GlueVOInfoAccessControlBaseRule:
VO:dteam" | grep GlueVOInfoPath | awk '{print $2}'`
echo "directory path:" $LOOKHERE

MYDATE=`date +%s`
TESTFILEVAR=testfile.$MYDATE.txt
echo TESTFILEVAR $TESTFILEVAR

# **** lcg-cp ****

echo -e "\n"
echo "======"
echo -e "\n"

echo "Testing lcg-cp (copy in)"
lcg-cp --vo=dteam --connect-timeout=300 --sendreceive-timeout=3600 environment.txt
srm://$VO_DTEAM_DEFAULT_SE/pnfs/hep.ph.ic.ac.uk/data/dteam/dbauer/
$TESTFILEVAR
lcg-ls --vo=dteam --connect-timeout=300 srm://
$VO_DTEAM_DEFAULT_SE/pnfs/hep.ph.ic.ac.uk/data/dteam/dbauer/
$TESTFILEVAR

echo "Testing lcg-cp (copy out)"
lcg-cp --vo=dteam --connect-timeout=300 --sendreceive-timeout=3600 srm://
$VO_DTEAM_DEFAULT_SE/pnfs/hep.ph.ic.ac.uk/data/dteam/dbauer/
$TESTFILEVAR testfile_out.txt

echo "Checking the file copied back: "
ls -l testfile_out.txt

echo "Deleting lcg-cp testfile"
lcg-del -l --vo=dteam srm://$VO_DTEAM_DEFAULT_SE$LOOKHERE/dbauer/
$TESTFILEVAR
echo "File (from lcg-cp) deleted, grep should be empty"
lcg-ls --vo=dteam srm://$VO_DTEAM_DEFAULT_SE$LOOKHERE/dbauer | grep
$TESTFILEVAR
sleep 20

# -----

```



## Checking the environment

```
wf25.grid.hep.ph.ic.ac.uk has address 146.179.246.230
Linux wf25.grid.hep.ph.ic.ac.uk 2.6.18-308.8.1.el5 #1 SMP Tue May 29 14:57:25 EDT
2012 x86_64 x86_64 x86_64 GNU/Linux
CentOS release 5.8 (Final)
subject  : /C=UK/O=eScience/OU=Imperial/L=Physics/CN=daniela
bauer/CN=proxy/CN=proxy/CN=proxy/CN=limited proxy
issuer   : /C=UK/O=eScience/OU=Imperial/L=Physics/CN=daniela
bauer/CN=proxy/CN=proxy/CN=proxy
identity : /C=UK/O=eScience/OU=Imperial/L=Physics/CN=daniela
bauer/CN=proxy/CN=proxy/CN=proxy
type     : limited proxy
strength : 1024 bits
path     : /home/grid/lt2-dteam180/home_cre08_718834409/cre08_718834409.proxy
timeleft : 23:40:29
==== VO dteam extension information ====
VO       : dteam
subject  : /C=UK/O=eScience/OU=Imperial/L=Physics/CN=daniela bauer
issuer   : /C=GR/O=HellasGrid/OU=hellasgrid.gr/CN=voms2.hellasgrid.gr
attribute : /dteam/Role=NULL/Capability=NULL
timeleft : 23:43:22
uri      : voms2.hellasgrid.gr:15004
directory path: /pnfs/hep.ph.ic.ac.uk/data/dteam
TESTFILEVAR testfile.1340724978.txt
```

```
=====
Testing lcg-cp (copy in)
/pnfs/hep.ph.ic.ac.uk/data/dteam/dbauer/testfile.1340724978.txt
Testing lcg-cp (copy out)
Checking the file copied back:
-rw-r--r-- 1 lt2-dteam180 lt2-dteam 30578 Jun 26 16:36 testfile_out.txt
Deleting lcg-cp testfile
File (from lcg-cp) deleted, grep should be empty
```

```
=====
-rw-r--r-- 1 lt2-dteam180 lt2-dteam 30578 Jun 26 16:36 environment.txt
DCAPFILEVAR dcapin.1340724978.txt
copy file in:
check file arrived safely:
-rw-r--r-- 1 2 2 30578 ONLINE
/pnfs/hep.ph.ic.ac.uk/data/dteam/dbauer/dcapin.1340724978.txt
* Checksum: 09422e89 (adler32)
```

testing local dcap/dcap - copy out  
-rw-r--r-- 1 lt2-dteam180 lt2-dteam 30578 Jun 26 16:36  
/srv/localstage/scratch/9325822.1.grid.q/dcapin.1340724978.txt  
deleting dcap/dcap test file on SE

+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*+\*

List all files left in working directory

environment.txt

RECV.log

SENT.log

simple.imperial.dteam.sh

standarderr.err

standardout.out

testfile\_out.txt

TEST.log

+ \_ + \_ + \_ + \_ + \_ + \_ + \_ + \_ +

I am done here.

**(2) Various bdii queries submitted**, two problems found, documented in GGUS 83352.

After fixing these, the bdii seems to report correctly.

**(3) The CE went into production about 2 weeks ago, no failure rate higher than average was observed.**

**(4) It seems to correctly publish its results into APEL.**

mysql> select Max(EventDate), SubmitHost from EventRecords group by SubmitHost;

```
+-----+-----+
| Max(EventDate) | SubmitHost          |
+-----+-----+
| 2012-05-31     | ceprod03.grid.hep.ph.ic.ac.uk |
| 2012-01-17     | ceprod04.grid.hep.ph.ic.ac.uk |
| 2012-06-26     | ceprod05.grid.hep.ph.ic.ac.uk |
| 2012-06-26     | ceprod06.grid.hep.ph.ic.ac.uk |
| 2012-06-26     | ceprod07.grid.hep.ph.ic.ac.uk |
| 2012-06-26     | ceprod08.grid.hep.ph.ic.ac.uk |
| 2012-06-26     | cetest00.grid.hep.ph.ic.ac.uk |
+-----+-----+
```

**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):**

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

**Comments for TP:**