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

Name of the component			
Release	**EMI.cream-torque.sl6.x86_64-2.0.1**	RT Ticket	#4863
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	1		
Component status	**Verified**	Date	14/01/13
Verification start date	10/01/13	Verification end date	14/01/13

Summary:

EMI.cream-torque.sl6.x86_64-2.0.1 was updated from UMD-2 repository and from scratch without any issue.

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	Accept	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=4863
GENERIC_DOC_3 (User Documentation)	Y	VLD	https://wiki.italiangrid.it/twiki/bin/view/CREAM/UserGuideEMI2
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	https://wiki.italiangrid.it/twiki/bin/view/CREAM/UserGuideEMI2#Man_pages_for_CREAM_Command_Line
GENERIC_DOC_5 (API Documentation)	Y	VLD	https://wiki.italiangrid.it/twiki/bin/view/CREAM/DevelopersDocumentation
GENERIC_DOC_6 (Administrator Documentat	Y	VLD	https://wiki.italiangrid.it/twiki/bin/view/CREAM/SystemAdministratorGuideForEMI2
GENERIC_DOC_7 (Service Reference Card)	Y	VLD	https://wiki.italiangrid.it/twiki/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=4863
SOFTWARE DISTRIBUTION QC			
GENERIC_DIST_1 (Source Code Availability)	Y	VLD	http://admin-repo.egi.eu/sw/unverified/umd-2.emi.cream-torque.sl6.x86_64/2/0/1/lcg-info-dynamic-scheduler-pbs-2.3.1-1
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 s	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 Configurat	Optional		
GENERIC_SERVICE_6 (Default Password Co	Y	VLD	
SECURITY QC			
GENERIC_SEC_1 (World Writable Files)	Y	VLD	
GENERIC_SEC_3 (Passwords in world readab	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/outp	Y	VLD	
JOBEXEC_JOB_3 (Cancel Job)	Y	VLD	
JOBEXEC_EXECMNGR_1 (Not Invasive Dep	Y	VLD	
JOBEXEC_EXECMNGR_2 (Job Management	Y	VLD	
JOBEXEC_EXECMNGR_3 (Information Retrie	Y	VLD	
JOBEXEC_AVAIL_1 (Service Redundancy)	Y	VLD	
JOBEXEC_AVAIL_2 (Self Disabling Mechanis	Optional		
JOBEXEC_AVAIL_4 (Timely Job Status Upda	Optional		
PARALLEL JOB QC	Y	VLD	
PARALLEL_JOB_1 (Simple parallel job submi	Y	VLD	
PARALLEL_JOB_2 (Single machine parallel j	Optional		
PARALLEL_JOB_3 (Fine grained mapping par	Optional		
MONITORING PROBES QC			
MON_PROBE_GENERIC_1 (Certificate Lifetir	Optional		
MON_PROBE_GENERIC_2 (Service Probe)	Optional		
MON_PROBE_JOBEXEC_1 (Job Execution F	Y	VLD	

Validator comments:
== EMI.cream-torque.sl6.x86_64-2.0.1 ==

=== Ticket assigned ===

 * [https://rt.egi.eu/guest/Ticket/Display.html?id=4863]

(!) 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-torque.sl6.x86_64.repo
EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) - (4863,820,746)

[EMI.cream-torque.sl6.x86_64]
name=EMI.cream-torque.sl6.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-2.emi.cream-torque.sl6.x86_64/2/0/1/
enabled=1
protect=1
priority=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/2/RPM-GPG-KEY-emi

}}}

=== Installing ===
 * yum update
{{{
===

Package	Arch	Version Repository	Size

===

Updating:
 lcg-info-dynamic-scheduler-pbs   noarch   2.3.1-1.sl6   EMI.cream-torque.sl6.x86_64   21 k

Transaction Summary
===

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

}}}

==== Configure the siteinfo.def file for the CreamCE ====

 * This is the site-info used to configure the CreamCE + Torque + MPI

(!)

  * Taking the information about how to configure MPI in the CreamCE from the following links:

 * https://wiki.egi.eu/wiki/MAN03

  * There is a point in the previous link pointing to this one, that it is where is explained how to configure YAIM to configure torque + MPI: http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils

{{{

YAIM example site configuration file - adapt it to your site!

###############################

CE configuration variables

###############################

CE_HOST=test06.egi.cesga.es

WMS_HOST=test22.egi.cesga.es

```
BDII_HOST=topbdii02.ncg.ingrid.pt

SITE_BDII_HOST=sbdii02.ncg.ingrid.pt

##LFC_HOST=lxb7607.cern.ch

PX_HOST=myproxy.egi.cesga.es

MON_HOST=test07.egi.cesga.es


YAIM_LOGGING_LEVEL=DEBUG



######################################
# CREAM CE node cluster mode  #
######################################
CREAMCE_CLUSTER_MODE=no




##################################
# Site configuration variables #
##################################


SITE_EMAIL=egee-admin@cesga.es



SITE_NAME=CESGA-EGEE

SITE_LOC="Santiago de Compostela, Spain"

SITE_LAT=42.875558        #42.8757 # -90 to 90 degrees
```

SITE_LONG=-8.553147   #-8.5536 # -180 to 180 degrees

###
Batch server configuration variables
###

Jobmanager specific settings

JOB_MANAGER=lcgpbs

BATCH_SERVER=test06.egi.cesga.es

CE_BATCH_SYS=torque

BATCH_LOG_DIR=/var/torque

BATCH_VERSION=torque-2.5.7-7

###################################
APEL configuration variables
###################################

Database password for the APEL DB.

APEL_MYSQL_HOST=test07.egi.cesga.es

APEL_DB_PASSWORD=""

##

ARGUS authorisation framework control

```
##############################################


# Set USE_ARGUS to yes to enable the configuration of ARGUS


###USE_ARGUS=yes

USE_ARGUS=no



# In case ARGUS is to be used the following should be set

# The ARGUS service PEPD endpoints as a space separated list:


###ARGUS_PEPD_ENDPOINTS="https://test10.egi.cesga.es:8154/authz"

###CREAM_PEPC_RESOURCEID="http://www.egee.cesga.es/test10"



# These variables tell YAIM where to find additional configuration files.

WN_LIST=/opt/glite/yaim/etc/wn-list.conf

USERS_CONF=/opt/glite/yaim/etc/users.conf

GROUPS_CONF=/opt/glite/yaim/etc/groups.conf

FUNCTIONS_DIR=/opt/glite/yaim/functions
```

#

SE_dpm-specific settings - Ignore if you are not running a DPM

#

Set these if you are installing a DPM yourself

and/or if you need a default DPM for the lcg-stdout-mon

#

DPMDATA is now deprecated. Use an entry like $DPM_HOST:/filesystem in

the DPM_FILESYSTEMS variable.

From now on we use DPM_DB_USER and DPM_DB_PASSWORD to make clear

its different role from that of the dpmmgr unix user who owns the

directories and runs the daemons.

The name of the DPM head node

DPM_HOST=test08.egi.cesga.es

DPMPOOL=egi-pool * This is the site-info used to configure the CreamCE + Torque + MPI

(!)

 * Taking the information about how to configure MPI in the CreamCE from the following links:

 * https://wiki.egi.eu/wiki/MAN03

* There is a point in the previous link pointing to this one, that it is where is explained how to configure YAIM to configure torque + MPI: http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils

DPM_FILESYSTEMS="$DPM_HOST:/storage"

The base user

DPM_DB_USER=dpmmgr

DPM_DB_HOST=$DPM_HOST

DPM_DB_PASSWORD=

Specifies the default amount of space reserved for a file

#DPMFSIZE=200M

DPM_INFO_USER=dpm_info

DPM_INFO_PASS=

Variable for the port range - Optional, * This is the site-info used to configure the CreamCE + Torque + MPI

(!)

 * Taking the information about how to configure MPI in the CreamCE from the following links:

 * https://wiki.egi.eu/wiki/MAN03

* There is a point in the previous link pointing to this one, that it is where is explained how to configure YAIM to configure torque + MPI: http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtilsdefault value is shown

RFIO_PORT_RANGE="20000 25000"

This largely replaces CE_CLOSE_SE but it is a list of hostnames

SE_MOUNT_INFO_LIST="none"

SE_LIST="$DPM_HOST"

SE_ARCH="multidisk" # "disk, tape, multidisk, other"

##############################

SubCluster configuration

##############################

Architecture and enviroment specific settings

CE_CPU_MODEL=Opteron

CE_CPU_VENDOR=amd

CE_CPU_SPEED=2200

CE_OS="ScientificSL"   # Forma correcta

CE_OS_RELEASE=5.5

CE_OS_VERSION="Boron"

#New variables

CE_PHYSCPU=2

CE_LOGCPU=2

CE_OS_ARCH=x86_64

CE_CAPABILITY="CPUScalingReferenceSI00=2395"

CE_OTHERDESCR="Cores=24,Benchmark=9.58-HEP-SPEC06"

SE_MOUNT_INFO_LIST="none"

CE_SI00=2395

CE_MINPHYSMEM=524

CE_MINVIRTMEM=512

CE_SMPSIZE=2

CE_SF00=1714

CE_OUTBOUNDIP=TRUE

CE_INBOUNDIP=FALSE * This is the site-info used to configure the CreamCE + Torque + MPI

(!)

  * Taking the information about how to configure MPI in the CreamCE from the following links:

  * https://wiki.egi.eu/wiki/MAN03

  * There is a point in the previous link pointing to this one, that it is where is explained how to configure YAIM to configure torque + MPI: http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils

CE_RUNTIMEENV="

LCG-2

LCG-2_1_0

LCG-2_1_1

LCG-2_2_0

LCG-2_3_0

LCG-2_3_1

LCG-2_4_0

LCG-2_5_0

LCG-2_6_0

LCG-2_7_0

GLITE-3_0_0

GLITE-3_0_2

GLITE-3_1_0

R-GMA

"

###CREAM CE Variables

CEMON_HOST=test06.egi.cesga.es

CREAM_DB_USER=umdtest

CREAM_DB_PASSWORD="" * This is the site-info used to configure the CreamCE + Torque + MPI

(!)

  * Taking the information about how to configure MPI in the CreamCE from the following links:

* https://wiki.egi.eu/wiki/MAN03

* There is a point in the previous link pointing to this one, that it is where is explained how to configure YAIM to configure torque + MPI: http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils

MYSQL_PASSWORD=""

BLPARSER_HOST=test06.egi.cesga.es

MPI CONFIGURATION

####################################

MPI_OPENMPI_ENABLE="yes"

MPI_OPENMPI_VERSION="1.4-4"

##If you do NOT provide a shared home, set $MPI_SHARED_HOME to "no" (default).

MPI_SHARED_HOME="no"

If you do NOT have SSH Hostbased Authentication between your WNs, set the below variable to "no" (default). Else, set it to "yes".

MPI_SSH_HOST_BASED_AUTH="yes"

If you use Torque as batch system, you may want to let the yaim plugin configure a submit filter for you. Uncomment the following line to do so

MPI_SUBMIT_FILTER="yes"

VOS="atlas alice lhcb cms dteam biomed"

Space separated list of supported VOs by your site

VOS="ops dteam ops.vo.ibergrid.eu iber.vo.ibergrid.eu"

QUEUES="GRID_ops GRID_dteam GRID_opsibeu GRID_iberibeu"

VO_SW_DIR=/opt/exp_soft

#New in Yaim 3.0.1

GRID_OPS_GROUP_ENABLE="ops /VO=ops/GROUP=/ops/ROLE=lcgadmin"

GRID_DTEAM_GROUP_ENABLE="dteam
/VO=dteam/GROUP=/dteam/ROLE=lcgadmin"

GRID_OPSIBEU_GROUP_ENABLE="ops.vo.ibergrid.eu
/VO=ops.vo.ibergrid.eu/GROUP=/ops.vo.ibergrid.eu/ROLE=VO-Admin
/VO=ops.vo.ibergrid.eu/GROUP=/ops.vo.ibergrid.eu/ROLE=Production"

GRID_IBERIBEU_GROUP_ENABLE="iber.vo.ibergrid.eu
/VO=iber.vo.ibergrid.eu/GROUP=/iber.vo.ibergrid.eu/ROLE=VO-Admin /VO=iber.vo.
* This is the site-info used to configure the CreamCE + Torque + MPI

(!)

   * Taking the information about how to configure MPI in the CreamCE from the
following links:

  * https://wiki.egi.eu/wiki/MAN03

   * There is a point in the previous link pointing to this one, that it is where is explained
how to configure YAIM to configure torque + MPI:
http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtilsibergrid.eu/GROUP=/iber.vo.iber
grid.eu/ROLE=Production"

#:::::::::::::

#ops

#:::::::::::::

VO_OPS_SW_DIR=$VO_SW_DIR/ops

VO_OPS_DEFAULT_SE=$DPM_HOST

VO_OPS_STORAGE_DIR=$CLASSIC_STORAGE_DIR/ops

VO_OPS_QUEUES="GRID_ops"

VO_OPS_VOMS_SERVERS="vomss://voms.cern.ch:8443/voms/ops?/ops/"

VO_OPS_VOMSES="'ops voms.cern.ch 15009
/DC=ch/DC=cern/OU=computers/CN=voms.cern.ch ops'"

VO_OPS_VOMS_CA_DN="'/DC=ch/DC=cern/CN=CERN Trusted Certification
Authority' '/DC=ch/DC=cern/CN=CERN Trusted Certification Authority'"

#:::::::::::::

#dteam

#:::::::::::::

VO_DTEAM_SW_DIR=$VO_SW_DIR/dteam

VO_DTEAM_DEFAULT_SE=$DPM_HOST

VO_DTEAM_STORAGE_DIR=$CLASSIC_STORAGE_DIR/dteam

VO_DTEAM_QUEUES="GRID_dteam"

VO_DTEAM_VOMS_SERVERS='vomss://voms.hellasgrid.gr:8443/voms/dteam?/dtea
m/'

VO_DTEAM_VOMSES="'dteam lcg-voms.cern.ch 15004
/DC=ch/DC=cern/OU=computers/CN=lcg-voms.cern.ch dteam 24' 'dteam voms.cern.ch
15004 /DC=ch/DC=cern/OU=computers/CN=voms.cern.ch dteam 24' 'dteam
voms.hellasgrid.gr 15004 /C=GR/O=HellasGrid/

OU=hellasgrid.gr/CN=voms.hellasgrid.gr dteam 24' 'dteam voms2.hellasgrid.gr
15004 /C=GR/O=HellasGrid/OU=hellasgrid.gr/CN=voms2.hellasgrid.gr dteam 24'"

VO_DTEAM_VOMS_CA_DN="'/DC=ch/DC=cern/CN=CERN Trusted Certification
Authority' '/DC=ch/DC=cern/CN=CERN Trusted Certification Authority'
'/C=GR/O=HellasGrid/OU=Certification Authorities/CN=HellasGrid CA 2006'
'/C=GR/O=HellasGrid/OU=Certif

ication Authorities/CN=HellasGrid CA 2006'"

IBERGRID VOS

ops.vo.ibergrid.eu

VO_OPS_VO_IBERGRID_EU_SW_DIR=$VO_SW_DIR/opsibeu

VO_OPS_VO_IBERGRID_EU_DEFAULT_SE=$DPM_HOST

VO_OPS_VO_IBERGRID_EU_STORAGE_DIR=$CLASSIC_STORAGE_DIR/opsibeu

VO_OPS_VO_IBERGRID_EU_QUEUES="GRID_opsibeu"

VO_OPS_VO_IBERGRID_EU_VOMS_SERVERS="'vomss://voms02.ncg.ingrid.pt:8443/voms/ops.vo.ibergrid.eu?/ops.vo.ibergrid.eu'"

VO_OPS_VO_IBERGRID_EU_VOMSES="'ops.vo.ibergrid.eu voms02.ncg.ingrid.pt 40001 /C=PT/O=LIPCA/O=LIP/OU=Lisboa/CN=voms02.ncg.ingrid.pt ops.vo.ibergrid.eu'"

VO_OPS_VO_IBERGRID_EU_VOMS_CA_DN="'/C=PT/O=LIPCA/CN=LIP Certification Authority'"

iber.vo.ibergrid.eu

VO_IBER_VO_IBERGRID_EU_SW_DIR=$VO_SW_DIR/iberibeu

VO_IBER_VO_IBERGRID_EU_DEFAULT_SE=$DPM_HOST

VO_IBER_VO_IBERGRID_EU_STORAGE_DIR=$CLASSIC_STORAGE_DIR/iberibeu

VO_IBER_VO_IBERGRID_EU_QUEUES="GRID_iberibeu"

VO_IBER_VO_IBERGRID_EU_VOMS_SERVERS="'vomss://voms02.ncg.ingrid.pt:8443/voms/iber.vo.ibergrid.eu?/iber.vo.ibergrid.eu'"

VO_IBER_VO_IBERGRID_EU_VOMSES="'iber.vo.ibergrid.eu voms02.ncg.ingrid.pt 40003 /C=PT/O=LIPCA/O=LIP/OU=Lisboa/CN=voms02.ncg.ingrid.pt iber.vo.ibergrid.eu'"

VO_IBER_VO_IBERGRID_EU_VOMS_CA_DN="'/C=PT/O=LIPCA/CN=LIP Certification Authority'"

}}}

{{{

ops.vo.ibergrid.eu and iber.vo.ibergrid.eu VOs were included from verification VOMS server installed at LIP. (voms02.ncg.ingrid.pt)

LB and WMS were configured at IFIC (tst04.ific.uv.es & tst05.ific.uv.es)

TopBDII was configured for verification in topbdii02.ncg.ingrid.pt.

}}}

 * 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]

-->quedei aqui

(!) Be sure that CREAMCE_CLUSTER_MODE is set to no (or not set at all).

(!) The MPI_CE profile should be the first in the yaim configuration, otherwise the Glue variables will not be properly defined. This restriction may be removed in future versions.

===== Configuring with YAIM the CreamCE =====

{{{

/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

[.....]

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

pbs_server is not running.

/var/torque/server_priv/serverdb

Starting TORQUE Server: [OK]ation: [OK]

Max open servers: 9

create queue GRID_ops

Max open servers: 9

create queue GRID_dteam

Max open servers: 9

create queue GRID_opsibeu

Max open servers: 9

create queue GRID_iberibeu

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/torque/server_priv/serverdb

Starting TORQUE Server: [OK]

   INFO: Executing function: config_maui_cfg_setenv

   INFO: Executing function: config_maui_cfg

   INFO: configuring maui ...

MPI_CE creamCE TORQUE_server TORQUE_utils

MAUI is already stopped: [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

WARNING: The munge key /etc/munge/munge.key does not exist.

WARNING: Munge is required to submit jobs to the torque server.

WARNING: Not starting the munge daemon

Reloading sshd: [OK]

INFO: Configuration Complete.   [OK]

INFO: YAIM terminated succesfully.

[root@test06 etc]#

}}}

=== TESTING ===

==== Checking ldap (OK) ====

{{{

[root@ce2 etc]# ldapsearch -x -H ldap://sbdii02.ncg.ingrid.pt:2170 -b o=grid | grep cesga

test06.egi.cesga.es, UMD-VERIFICATION, grid

dn: GlueClusterUniqueID=test06.egi.cesga.es,Mds-Vo-name=UMD-VERIFICATION,o=gri

GlueClusterUniqueID: test06.egi.cesga.es

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_ops

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_dteam

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_opsibergrid

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_ibergrid

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_ops

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_dteam

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_opsibe

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_ibergr

GlueClusterName: test06.egi.cesga.es

}}}

```
{{{

[root@ce2 etc]# ldapsearch -x -H ldap://topbdii02.ncg.ingrid.pt:2170 -b o=grid  | grep
test06

# test06.egi.cesga.es, UMD-VERIFICATION, local, grid

dn: GlueClusterUniqueID=test06.egi.cesga.es,Mds-Vo-name=UMD-
VERIFICATION,Mds-V

GlueClusterUniqueID: test06.egi.cesga.es

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_ops

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_dteam

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_opsibergrid

GlueClusterService: test06.egi.cesga.es:8443/cream-pbs-GRID_ibergrid

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_ops

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_dteam

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_opsibe
```

GlueForeignKey: GlueCEUniqueID: test06.egi.cesga.es:8443/cream-pbs-GRID_ibergr

GlueClusterName: test06.egi.cesga.es

}}}

{{{

[root@ce2 etc]# ldapsearch -x -H ldap://test06.egi.cesga.es:2170 -b o=grid | grep GlueCEStateFreeCPUs

GlueCEStateFreeCPUs: 4

GlueCEStateFreeCPUs: 4

GlueCEStateFreeCPUs: 4

GlueCEStateFreeCPUs: 4

}}}

{{{

[root@ce2 common]# ldapsearch -x -h test06.egi.cesga.es -p 2170 -b mds-vo-name=resource,o=grid | grep MPI

GlueHostApplicationSoftwareRunTimeEnvironment: MPI-START

GlueHostApplicationSoftwareRunTimeEnvironment: MPI_NO_SHARED_HOME

GlueHostApplicationSoftwareRunTimeEnvironment: OPENMPI

GlueHostApplicationSoftwareRunTimeEnvironment: OPENMPI-1.4-4

}}}

{{{

[root@se2 tmp]# ldapsearch -x -h test06.egi.cesga.es -p 2170 -b mds-vo-name=resource,o=grid | grep 444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

GlueCEStateWaitingJobs: 444444

}}}

 * Checking if MPI has been configured correctly

{{{

[root@test06 etc]# cat /var/torque/torque.cfg

SUBMITFILTER /var/torque/submit_filter

}}}

==== 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
```

}}}

 * Checking the environment on the WNs

{{{

```
[dteam004@test14 ~]$ env|grep MPI_
MPI_OPENMPI_PATH=/usr/lib64/openmpi/1.4-gcc
MPI_OPENMPI_VERSION=1.4
MPI_DEFAULT_FLAVOUR=openmpi
I2G_MPI_START=/usr/bin/mpi-start
```

}}}

* Submitting a direct qsub

{{{

[opssgm004@test06 ~]$ vi test.sh

[opssgm004@test06 ~]$ chmod +x test.sh

[opssgm004@test06 ~]$ qsub -q GRID_ops -l nodes=test14.egi.cesga.es test.sh

0.test06.egi.cesga.es

[opssgm004@test06 ~]$ ls

test.sh test.sh.e0 test.sh.o0

[opssgm004@test06 ~]$ cat test.sh.e0

[opssgm004@test06 ~]$ cat test.sh.o0

test14.egi.cesga.es

Thu Jan 10 17:12:24 CET 2013

}}}

(!)

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

{{{

[esfreire@test13 ~]$ glite-ce-delegate-proxy -e test06.egi.cesga.es esfreire

2013-01-10 17:16:39,606 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

2013-01-10 17:17:51,075 NOTICE - Proxy with delegation id [esfreire] succesfully renewed to endpoint [https://test06.egi.cesga.es:8443//ce-cream/services/gridsite-delegation]

}}}

{{{

{{{

[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/CREAM976905590

[esfreire@test13 ~]$ glite-ce-job-status
https://test06.egi.cesga.es:8443/CREAM976905590

****** JobID=[https://test06.egi.cesga.es:8443/CREAM976905590]

        Status   = [DONE-OK]

        ExitCode   = [0]

}}}

==== Submitting MPI jobs ====

{{{

[esfreire@test13 verification]$ cat job1.jdl

CPUNumber   = 4;

Executable   = "/usr/bin/mpi-start";

Arguments   = "-v -pre hooks.sh cpi";

InputSandbox = {"cpi.c", "hooks.sh"};

StdOutput   = "std.out";

StdError   = "std.err";

OutputSandbox = {"std.out","std.err"};

##OutputSandboxBaseDestUri = "gsiftp://localhost";

OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";

Requirements =

   Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment) &&

   Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);

}}}

{{{

[esfreire@test13 verification]$ cat cat hooks.sh

#!/bin/sh

```
pre_run_hook () {

  # Compile the program.
  echo "Compiling ${I2G_MPI_APPLICATION}"

  sleep 20

  # Actually compile the program.
  cmd="mpicc ${MPI_MPICC_OPTS} -o ${I2G_MPI_APPLICATION} ${I2G_MPI_APPLICATION}.c"
  $cmd
  if [ ! $? -eq 0 ]; then
    echo "Error compiling program.  Exiting..."
    return 1
  fi

  # Everything's OK.
  echo "Successfully compiled ${I2G_MPI_APPLICATION}"

  return 0
}

}}}
```

```
[esfreire@test13 verification]$ cat job2.jdl

CPUNumber     = 2;

Executable    = "/usr/bin/mpi-start";

Arguments     = "-t openmpi -v -pre hooks.sh cpi";

InputSandbox  = {"cpi.c", "hooks.sh"};

StdOutput     = "std.out";

StdError      = "std.err";

OutputSandbox = {"std.out","std.err"};

OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";

Requirements  =

   Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment)
&&

   Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);




[esfreire@test13 verification]$ glite-ce-job-status
https://test06.egi.cesga.es:8443/CREAM942629962


****** JobID=[https://test06.egi.cesga.es:8443/CREAM942629962]

      Status     = [DONE-OK]

      ExitCode     = [0]




}}}


{{{
```

[root@se2 tmp]# cat std.err

mpi-start [INFO   ]:
****

mpi-start [INFO   ]: UID   = opssgm006

mpi-start [INFO   ]: HOST   = test15.egi.cesga.es

mpi-start [INFO   ]: DATE   = Thu Jan 10 18:17:55 CET 2013

mpi-start [INFO   ]: VERSION = 1.1.0

mpi-start [INFO   ]:
****

mpi-start [INFO   ]: search for scheduler

mpi-start [INFO   ]: activate support for pbs

mpi-start [INFO   ]: Unable to detect number of cores per cpu, assuming 1

mpi-start [INFO   ]: Detected 0 CPU socket(s) and 1 core(s) per CPU

mpi-start [INFO   ]: activate support for openmpi

mpi-start [INFO   ]: call backend MPI implementation

mpi-start [INFO   ]: start program with mpirun

Process 0 on test15.egi.cesga.es: n=1

Using 16384 intervals

Process 1 on test15.egi.cesga.es: n=1

[root@se2 tmp]# cat std.out

Compiling cpi

Successfully compiled cpi

=[START]===
================

pi is approximately 3.1415926539002363, Error is 0.0000000003104432

wall clock time = 0.001998

=[FINISHED]==

}}}

{{{

[esfreire@test13 verification]$ cat job3.jdl

NodeNumber   = 2;

SMPGranularity = 2;

WholeNodes   = True;

Executable   = "/usr/bin/mpi-start";

Arguments   = "-v -pre hooks.sh cpi";

InputSandbox   = {"cpi.c", "hooks.sh"};

StdOutput   = "std.out";

StdError   = "std.err";

OutputSandbox = {"std.out","std.err"};

OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";

Requirements   =

  Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment) &&

  Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);

[esfreire@test13 verification]$ glite-ce-job-submit -r test06.egi.cesga.es:8443/cream-pbs-GRID_ops -D esfreire job3.jdl

https://test06.egi.cesga.es:8443/CREAM342252956

}}}

{{{

[root@se2 tmp]# cat std.err

mpi-start [INFO]:
****

mpi-start [INFO]: UID   = opssgm006

mpi-start [INFO]: HOST   = test15.egi.cesga.es

mpi-start [INFO]: DATE   = Tue Jan 17 18:27:14 CET 2012

mpi-start [INFO]: VERSION = 1.1.0

mpi-start [INFO]:
****

mpi-start [INFO]: search for scheduler

mpi-start [INFO]: activate support for pbs

mpi-start [INFO]: Unable to detect number of cores per cpu, assuming 1

mpi-start [INFO]: Detected 0 CPU socket(s) and 1 core(s) per CPU

mpi-start [INFO]: activate support for openmpi

mpi-start [INFO]: call backend MPI implementation

mpi-start [INFO]: start program with mpirun

Process 0 on test15.egi.cesga.es: n=1

Using 16384 intervals

Process 1 on test15.egi.cesga.es: n=1

[root@se2 tmp]# cat std.out

Compiling cpi

Successfully compiled cpi

=[START]===

pi is approximately 3.1415926539002363, Error is 0.0000000003104432

wall clock time = 0.001926

=[FINISHED]==

}}}

{{{

[esfreire@test13 verification]$ cat job-oldsyntax.jdl

CPUNumber   = 4;

Executable   = "starter.sh";

Arguments   = "cpi OPENMPI";

InputSandbox = {"starter.sh", "cpi.c", "hooks.sh"};

StdOutput   = "std.out";

StdError   = "std.err";

OutputSandbox = {"std.out","std.err"};

OutputSandboxBaseDestUri = "gsiftp://se2.egee.cesga.es/tmp";

Environment   = {"I2G_MPI_PRE_RUN_HOOK=hooks.sh"};

Requirements =

   Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment) &&

   Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);

}}}

[root@se2 tmp]# cat std.err

mpi-start [INFO   ]:
****

mpi-start [INFO   ]: UID   = opssgm006

mpi-start [INFO   ]: HOST   = test15.egi.cesga.es

mpi-start [INFO   ]: DATE   = Wed Jan 25 09:50:04 CET 2012

mpi-start [INFO   ]: VERSION = 1.1.0

mpi-start [INFO   ]:
****

mpi-start [INFO   ]: search for scheduler

mpi-start [INFO   ]: activate support for pbs

mpi-start [INFO   ]: Unable to detect number of cores per cpu, assuming 1

mpi-start [INFO   ]: Detected 0 CPU socket(s) and 1 core(s) per CPU

mpi-start [INFO   ]: activate support for openmpi

mpi-start [INFO   ]: call backend MPI implementation

mpi-start [INFO   ]: start program with mpirun

Process 0 on test15.egi.cesga.es: n=1

Using 16384 intervals

Process 2 on test14.egi.cesga.es: n=1

Process 3 on test14.egi.cesga.es: n=1

Process 1 on test15.egi.cesga.es: n=1

[root@se2 tmp]# cat std.out

Compiling cpi

Successfully compiled cpi

=[START]===
================

pi is approximately 3.1415926539002341, Error is 0.0000000003104410

wall clock time = 0.003777

=[FINISHED]===
================

}}}

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):
EMI.cream-torque.sl6.x86_64-2.0.1 was updated from UMD-2 repository and from scratch without any issue.

Comments for DMSU (TSA2.5):

Comments for TP: