

Quality Criteria Verification Report

Product	CREAM SLURM	Release	1.0.1
Software Provider	EMI	RT Ticket	#5325 #5324
Provider contact	Cristina Aifitimei cristina.aifitimei@pd.infn.it		
Verifier	Carles Acosta Silva cacosta@pic.es		
Hours worked	4h	Date	12/04/13
Status	Accepted		

Summary

Verification of the EMI CREAM with the SLURM module in SL6. There are different issues that have to be considered to configure properly the product. After these changes, the product works correctly.

We have tested:

- CREAM
- CREAM-SLURM
- SLURM server
- WN
- SLURM-WN
- glite-MPI

Related tickets

There are two GGUS ticket solved related to the publication system and the Parallel Job execution:

https://ggus.eu/ws/ticket_info.php?ticket=96171
https://ggus.eu/ws/ticket_info.php?ticket=95751

Documentation Criteria

Document	Link
Release notes	http://www.eu-emi.eu/releases/emi-3-monte-bianco/updates/-/asset_publisher/5Na8/content/update-10-04-11-2013-v-3-6-0-1#CREAM_SLURM_v_1_0_1
User Documentation	https://wiki.italiangrid.it/twiki/bin/view/CREAM/UserGuideEMI3
API Documentation	https://wiki.italiangrid.it/twiki/bin/view/CREAM/DevelopersDocumentation
Admin Documentation	https://wiki.italiangrid.it/twiki/bin/view/CREAM/SystemAdministratorGuideForEMI3
Software License	<i>License type or link</i>

Generic Criteria

Criteria	Status ¹	Additional Comments
----------	---------------------	---------------------

¹ **OK**, **WARN**, **FAIL**, NA (Not Applicable) or NT (Not Tested)

Binary Distribution	OK	Packages installed correctly
Upgrade	NT	
X.509 Certificate support	OK	Tested with x.509 proxies
SHA-2 Certificates Support	OK	Tested in previous verification
RFC Proxy support	OK	
ARGUS Integration	NT	
World Writable Files	OK	Only world writable files in tmp and sockets
Passwords in world readable files	OK	There are no passwords in world readable files
GlueSchema 1.3 Support	OK	
GlueSchema 2.0 Support	OK	GLUE2EndPointImplementationVersion=1.16.1
Middleware Version Information	OK	GLUE2EntityOtherInfo: MiddlewareVersion=3.5.0-1.el6
Service Probes	OK	Tests passed in nagios box (test23.egi.cesga.es)
Accounting Records	OK	A workaround is needed. See Basic functionality tests.
Bug Tracking System	OK	GGUS

Specific QC

Basic Functionality Test

- 1 **OK** Querying general information with ldap system. Querying information with glite-ce-service-info

```
$ ldapsearch -x -h test31.egi.cesga.es -p 2170 -LLL -b o=glue
"(&(objectclass=GLUE2Endpoint)(GLUE2EndpointImplementationName=CREAM)
(GLUE2EntityOtherInfo=MiddlewareVersion=*)(GLUE2E
ndpointURL=*test31.egi.cesga.es*))"
dn: GLUE2EndpointID=test31.egi.cesga.es_org.glite.ce.CREAM,GLUE2ServiceID=test
31.egi.cesga.es_ComputingElement,GLUE2GroupID=resource,o=glue
GLUE2ComputingEndpointStaging: staginginout
GLUE2EndpointQualityLevel: production
GLUE2EndpointImplementor: gLite
GLUE2EndpointHealthStateInfo: tomcat6 (pid 13112) is running...[ OK ]
GLUE2EntityOtherInfo: HostDN=CN=host/test31.egi.cesga.es,O=cesga,DC=irisgrid,D
C=es
GLUE2EntityOtherInfo: InfoProviderName=glite-ce-glue2-endpoint-static
GLUE2EntityOtherInfo: InfoProviderVersion=1.1
GLUE2EntityOtherInfo: InfoProviderHost=test31.egi.cesga.es
GLUE2EntityOtherInfo: MiddlewareName=EMI
GLUE2EntityOtherInfo: MiddlewareVersion=3.5.0-1.el6
GLUE2EntityOtherInfo: ArgusEnabled=FALSE
GLUE2EndpointCapability: executionmanagement.jobexecution
GLUE2EndpointHealthState: ok
GLUE2EndpointServiceForeignKey: test31.egi.cesga.es_ComputingElement
GLUE2EntityName: test31.egi.cesga.es_org.glite.ce.CREAM
GLUE2EndpointTechnology: webservice
GLUE2EndpointWSDL: https://test31.egi.cesga.es:8443/ce-cream/services/CREAM2?w
sdl
GLUE2EndpointInterfaceName: org.glite.ce.CREAM
GLUE2ComputingEndpointComputingServiceForeignKey: test31.egi.cesga.es_Computin
gElement
GLUE2EndpointURL: https://test31.egi.cesga.es:8443/ce-cream/services
GLUE2EndpointDowntimeInfo: See the GOC DB for downtimes: https://goc.egi.eu/
GLUE2EndpointImplementationVersion: 1.16.1
GLUE2EndpointSemantics: http://wiki.italiangrid.org/twiki/bin/view/CREAM/UserG
uide
```

GLUE2EndpointIssuerCA: CN=IRISGridCA,DC=irisgrid,DC=es
GLUE2EndpointServingState: production
GLUE2EndpointImplementationName: CREAM
GLUE2EndpointInterfaceVersion: 2.1
GLUE2EndpointSupportedProfile: <http://www.ws-i.org/Profiles/BasicProfile-1.0.html>
objectClass: GLUE2Entity
objectClass: GLUE2Endpoint
objectClass: GLUE2ComputingEndpoint
GLUE2EndpointTrustedCA: CN=Grid Canada Certificate Authority,O=Grid,C=CA
GLUE2EndpointTrustedCA: CN=Scientific Data Grid CA,DC=SDG,DC=Grid,DC=CN
GLUE2EndpointTrustedCA: CN=TR-Grid CA,O=TRGrid,C=TR
GLUE2EndpointTrustedCA: CN=UFF Latin American and Caribbean Catch-all Grid CA, O=UFF LACGrid CA,DC=IC,DC=UFF,DC=BR
GLUE2EndpointTrustedCA: CN=ArmeSFo CA,O=ArmeSFo,C=AM
GLUE2EndpointTrustedCA: CN=NorduGrid Certification Authority,O=NorduGrid,O=Grid
GLUE2EndpointTrustedCA: CN=ULAGrid Certification Authority,OU=CeCaCULA,O=Universidad de Los Andes,O=Grid,C=VE
GLUE2EndpointTrustedCA: CN=SWITCHgrid Root CA,O=Switch - Teleinformatikdienstefuer Lehre und Forschung,C=CH
GLUE2EndpointTrustedCA: CN=ESnet Root CA 1,OU=Certificate Authorities,O=ESnet, DC=ES,DC=net
GLUE2EndpointTrustedCA: CN=NCHC CA,DC=NCHC,DC=ORG,DC=TW
GLUE2EndpointTrustedCA: CN=QuoVadis Grid ICA,OU=Issuing Certification Authority,O=QuoVadis Limited,C=BM
GLUE2EndpointTrustedCA: CN=Baltic Grid Certification Authority,DC=balticgrid,DC=org
GLUE2EndpointTrustedCA: CN=CERN Grid Certification Authority,DC=cern,DC=ch
GLUE2EndpointTrustedCA: CN=Academia Sinica Grid Computing Certification Authority Mercury,O=AS,C=TW
GLUE2EndpointTrustedCA: CN=PRAGMA-UCSD CA,DC=PRAGMA-GRID,DC=NET
GLUE2EndpointTrustedCA: CN=DigiCert Grid CA-1,O=DigiCert Grid,DC=DigiCert-Grid,DC=com
GLUE2EndpointTrustedCA: CN=ANSPGrid CA,OU=ANSPGrid CA,O=ANSP,C=BR
GLUE2EndpointTrustedCA: CN=IRAN-GRID CA,O=IRAN-GRID,O=IPM,C=IR
GLUE2EndpointTrustedCA: CN=CyGridCA,O=HPCL,O=CyGrid,C=CY
GLUE2EndpointTrustedCA: CN=UTN-USERFirst-Hardware,OU=<http://www.usertrust.com>, O=The USERTRUST Network,L=Salt Lake City,ST=UT,C=US
GLUE2EndpointTrustedCA: CN=MREN-CA,DC=MREN,DC=ac,DC=me
GLUE2EndpointTrustedCA: CN=KISTI Grid Certificate Authority,O=GRID,O=KISTI,C=KR
GLUE2EndpointTrustedCA: CN=SRCE CA,OU=srce,O=edu,C=HR
GLUE2EndpointTrustedCA: CN=Certificate Issuer,OU=Certification Authority,O=AustrianGrid,C=AT
GLUE2EndpointTrustedCA: CN=CESNET CA 3,O=CESNET CA,DC=cesnet-ca,DC=cz
GLUE2EndpointTrustedCA: CN=DigiCert Grid Trust CA,OU=www.digicert.com,O=DigiCert Grid,C=US
GLUE2EndpointTrustedCA: CN=MyProxy,OU=Certificate Authorities,O=National Center for Supercomputing Applications,C=US
GLUE2EndpointTrustedCA: CN=CILogon Silver CA 1,O=CILogon,C=US,DC=cilogon,DC=org
GLUE2EndpointTrustedCA: CN=SEE-GRID CA,DC=SEE-GRID,DC=ORG
GLUE2EndpointTrustedCA: CN=TERENA eScience Personal CA,O=TERENA,C=NL
GLUE2EndpointTrustedCA: CN=BEgrid CA,O=BELNET,OU=BEGRID,C=BE
GLUE2EndpointTrustedCA: CN=Russian Data-Intensive Grid CA,O=RDIG,C=RU
GLUE2EndpointTrustedCA: CN=HellasGrid CA 2006,OU=Certification Authorities,O=HellasGrid,C=GR
GLUE2EndpointTrustedCA: CN=IRISGridCA,DC=irisgrid,DC=es
GLUE2EndpointTrustedCA: CN=QuoVadis Root Certification Authority,OU=Root Certification Authority,O=QuoVadis Limited,C=BM
GLUE2EndpointTrustedCA: CN=AAA Certificate Services,O=Comodo CA Limited,L=Saltford,ST=Greater Manchester,C=GB
GLUE2EndpointTrustedCA: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
GLUE2EndpointTrustedCA: CN=MaGrid CA,O=MaGrid,C=MA

GLUE2EndpointTrustedCA: emailAddress=gridca@ihep.ac.cn,CN=gridca-cn,O=HEP,C=CN
GLUE2EndpointTrustedCA: CN=CNRS2-Projets,O=CNRS,C=FR
GLUE2EndpointTrustedCA: CN=UK e-Science CA 2B,OU=Authority,O=eScienceCA,C=UK
GLUE2EndpointTrustedCA: CN=MARGI-CA,O=MARGI,C=MK
GLUE2EndpointTrustedCA: CN=UK e-Science CA 2A,OU=Authority,O=eScienceCA,C=UK
GLUE2EndpointTrustedCA: CN=TERENA eScience SSL CA,O=TERENA,C=NL
GLUE2EndpointTrustedCA: CN=NIKHEF medium-security certification auth,O=NIKHEF,
C=NL
GLUE2EndpointTrustedCA: CN=LIP Certification Authority,O=LIPCA,C=PT
GLUE2EndpointTrustedCA: CN=NERSC Online CA,OU=Certificate Authorities,DC=ES,DC
=net
GLUE2EndpointTrustedCA: CN=CA,OU=UNAM,O=UNAMgrid,C=MX
GLUE2EndpointTrustedCA: CN=PSC MyProxy CA,O=Pittsburgh Supercomputing Center,C
=US
GLUE2EndpointTrustedCA: CN=HKU Grid CA,DC=GRID,DC=HKU,DC=HK
GLUE2EndpointTrustedCA: CN=REUNA Certification Authority,O=REUNACA,C=CL
GLUE2EndpointTrustedCA: emailAddress=camanager@vpac.org,CN=APACGrid,OU=CA,O=AP
ACGrid,C=AU
GLUE2EndpointTrustedCA: CN=GRID2-FR,O=CNRS,C=FR
GLUE2EndpointTrustedCA: CN=MD-Grid CA,OU=Certification Authority,O=RENAM,DC=MD
-Grid,DC=MD
GLUE2EndpointTrustedCA: CN=KEK GRID Certificate Authority,OU=CRC,O=KEK,C=JP
GLUE2EndpointTrustedCA: CN=SWITCHslcs CA,O=SWITCH,C=CH
GLUE2EndpointTrustedCA: CN=NAREGI CA,OU=CGRD,O=National Research Grid Initiati
ve,C=JP
GLUE2EndpointTrustedCA: CN=UFF Brazilian Grid Certification Authority,O=UFF Br
Grid CA,O=ICPEDU,C=BR
GLUE2EndpointTrustedCA: CN=Belarusian Grid Certification Authority,O=uip.bas-
net.by,DC=grid,DC=by
GLUE2EndpointTrustedCA: CN=Indian Grid Certification Authority,DC=GARUDAINDIA,
DC=IN
GLUE2EndpointTrustedCA: CN=HIAST GRID CA,O=HIAST,C=SY
GLUE2EndpointTrustedCA: CN=Institute of High Energy Physics Certification Auth
ority,O=HEP,C=CN
GLUE2EndpointTrustedCA: CN=HellasGrid Root CA 2006,OU=Certification Authoritie
s,O=HellasGrid,C=GR
GLUE2EndpointTrustedCA: CN=Two Factor CA,OU=Certificate Authorities,O=National
Center for Supercomputing Applications,C=US
GLUE2EndpointTrustedCA: CN=Certification Authority for Latvian Grid,DC=latgrid
,DC=LV
GLUE2EndpointTrustedCA: CN=Certificate Authority,OU=GRID,O=AIST,C=JP
GLUE2EndpointTrustedCA: CN=INFN CA,O=INFN,C=IT
GLUE2EndpointTrustedCA: CN=CERN Root Certification Authority 2,O=CERN,C=ch
GLUE2EndpointTrustedCA: CN=UTN-USERFirst-Client Authentication and Email,OU=ht
tp://www.usertrust.com,O=The USERTRUST Network,L=Salt Lake City,ST=UT,C=US
GLUE2EndpointTrustedCA: emailAddress=ca@mail.iucc.ac.il,CN=IUCC,O=IUCC,C=IL
GLUE2EndpointTrustedCA: CN=RomanianGRID CA,OU=Certification Authority,O=ROSA,D
C=RomanianGRID,DC=RO
GLUE2EndpointTrustedCA: CN=SlovakGrid CA,O=SlovakGrid,C=SK
GLUE2EndpointTrustedCA: CN=UK e-Science Root,OU=Authority,O=eScienceRoot,C=UK
GLUE2EndpointTrustedCA: CN=DFN SLCS-CA,OU=DFN-PKI,O=DFN-Verein,C=DE
GLUE2EndpointTrustedCA: CN=CNRS2,O=CNRS,C=FR
GLUE2EndpointTrustedCA: CN=SiGNET CA,O=SiGNET,C=SI
GLUE2EndpointTrustedCA: CN=AEGIS-CA,O=AEGIS,C=RS
GLUE2EndpointTrustedCA: CN=EG-GRID Certification Authority,O=EG-GRID,C=EG
GLUE2EndpointTrustedCA: CN=CERN Root CA,DC=cern,DC=ch
GLUE2EndpointTrustedCA: CN=MyProxy,O=National Institute for Computational Scie
nces,DC=NICS,DC=TENNESSEE,DC=EDU
GLUE2EndpointTrustedCA: CN=Uniandes CA,OU=DTI,O=UNIANDES,O=Uniandes CA,C=CO
GLUE2EndpointTrustedCA: CN=CESNET CA Root,O=CESNET CA,DC=cesnet-ca,DC=cz
GLUE2EndpointTrustedCA: CN=DZ e-Science CA,O=DZ e-Science GRID,DC=ARN,DC=DZ
GLUE2EndpointTrustedCA: CN=BG.ACAD CA,DC=acad,DC=bg
GLUE2EndpointTrustedCA: CN=DOEGrids CA 1,OU=Certificate Authorities,DC=DOEGrid
s,DC=org
GLUE2EndpointTrustedCA: CN=CACL,OU=Certificate Authorities,O=National Center f
or Supercomputing Applications,C=US

```

GLUE2EndpointTrustedCA: CN=AddTrust External CA Root,OU=AddTrust External TTP
Network,O=AddTrust AB,C=SE
GLUE2EndpointTrustedCA: CN=GridKa-CA,O=GermanGrid,C=DE
GLUE2EndpointTrustedCA: CN=NIIF Root CA,OU=Certificate Authorities,O=NIIF,C=HU
GLUE2EndpointTrustedCA: CN=NECTEC GOC CA,OU=GOC,O=NECTEC,C=TH
GLUE2EndpointTrustedCA: CN=PKIGrid,L=CeSPI,OU=UNLP,O=e-Ciencia,C=AR
GLUE2EndpointTrustedCA: CN=Polish Grid CA,O=GRID,C=PL
GLUE2EndpointTrustedCA: CN=PK-GRID-CA,O=NCP,C=PK
GLUE2EndpointTrustedCA: CN=DFN-Verein PCA Grid - G01,OU=DFN-PKI,O=DFN-Verein,C
=DE
GLUE2EndpointTrustedCA: CN=DigiCert Grid Root CA,O=DigiCert Grid,DC=DigiCert-G
rid,DC=com
GLUE2EndpointTrustedCA: CN=Malaysian Identity Federation and Access Management
,O=MYIFAM,C=MY,DC=MYIFAM,DC=UPM,DC=MY
GLUE2EndpointTrustedCA: CN=CERN Trusted Certification Authority,DC=cern,DC=ch
GLUE2EndpointTrustedCA: CN=UGRID CA,DC=ugrid,DC=org
GLUE2EndpointTrustedCA: CN=Kerberized CA HSM,OU=Certificate Authorities,O=Ferm
ilab,DC=fnal,DC=gov
GLUE2EndpointTrustedCA: CN=JUNet CA,O=JUNet,C=JO
GLUE2EndpointTrustedCA: CN=Root Certificate Authority at CNIC,DC=Grid,DC=CN
GLUE2ComputingEndpointJobDescription: glite:jd1
GLUE2EndpointID: test31.egi.cesga.es_org.glite.ce.CREAM
GLUE2EndpointStartTime: 2013-12-02T15:58:23Z
GLUE2EntityCreationTime: 2013-12-02T16:20:31Z

```

```

$ glite-ce-service-info test31.egi.cesga.es
Interface Version = [2.1]
Service Version = [1.16.1 - EMI version: 3.5.0-1.el6]
Description = [CREAM 2]
Started at = [Mon Dec 2 16:58:23 2013]
Submission enabled = [YES]
Status = [RUNNING]

```

2 OK Renewals and delegate proxys

```

$glite-ce-delegate-proxy -e test31.egi.cesga.es:8443 myproxy
Proxy with delegation id [myproxy] succesfully delegated to endpoint
[test31.egi.cesga.es:8443]
$glite-ce-proxy-renew -e test31.egi.cesga.es:8443 myproxy
Proxy with delegation id [myproxy succesfully renewed to endpoint
[test31.egi.cesga.es:8443]

```

3 OK Submit and cancel single core jobs

Simple job (no output)

```

$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_short job-sleep.jdl
https://test31.egi.cesga.es:8443/CREAM153089117
$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM153089117

***** JobID=[https://test31.egi.cesga.es:8443/CREAM153089117]
Status = [REALLY-RUNNING]

$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM153089117

***** JobID=[https://test31.egi.cesga.es:8443/CREAM153089117]
Status = [DONE-OK]
ExitCode = [0]

```

Simple job (with output)

```

$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_short job-output.jdl
$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM202136267

***** JobID=[https://test31.egi.cesga.es:8443/CREAM202136267]
      Status      = [REALLY-RUNNING]

$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM202136267

***** JobID=[https://test31.egi.cesga.es:8443/CREAM202136267]
      Status      = [DONE-OK]
      ExitCode    = [0]

$glite-ce-job-output https://test31.egi.cesga.es:8443/CREAM202136267

2013-07-25 11:10:51,052 INFO - For JobID
[https://test31.egi.cesga.es:8443/CREAM202136267] output will be stored in the dir
./test31.egi.cesga.es_8443_CREAM202136267
[cacosta@ui02 ce-jobs]$ cat test31.egi.cesga.es_8443_CREAM202136267/uname.err
[cacosta@ui02 ce-jobs]$ cat test31.egi.cesga.es_8443_CREAM202136267/uname.out
I am a simple echo job test

```

Cancelling jobs

```

$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_short job-sleep.jdl
https://test31.egi.cesga.es:8443/CREAM396773003
[cacosta@ui02 ce-jobs]$ glite-ce-job-status
https://test31.egi.cesga.es:8443/CREAM396773003

***** JobID=[https://test31.egi.cesga.es:8443/CREAM396773003]
      Status      = [REALLY-RUNNING]

$ glite-ce-job-cancel https://test31.egi.cesga.es:8443/CREAM396773003

Are you sure you want to cancel specified job(s) [y/n]: y
$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM396773003

***** JobID=[https://test31.egi.cesga.es:8443/CREAM396773003]
      Status      = [CANCELLED]
      ExitCode    = []
      Description  = [Cancelled by user]

```

4 OK Information retrieval with several jobs submitted

It is mandatory that the ldap user has access to all the partitions (AllowGroups=...,ldap in slurm.conf for instance).

```

$ squeue
JOBID PARTITION  NAME  USER ST  TIME  NODES NODELIST(REASON)
 853 test_long  cream_45 dteam048 PD   0:00    1 (Priority)
 852 test_long  cream_76 dteam048 PD   0:00    1 (Priority)
 851 test_long  cream_85 dteam048 PD   0:00    1 (Priority)
 850 test_long  cream_57 dteam048 PD   0:00    1 (Priority)
 849 test_long  cream_13 dteam048 PD   0:00    1 (Priority)
 848 test_long  cream_56 dteam048 PD   0:00    1 (Priority)
 847 test_long  cream_41 dteam048 PD   0:00    1 (Priority)
 846 test_long  cream_74 dteam048 PD   0:00    1 (Priority)
 845 test_long  cream_22 dteam048 PD   0:00    1 (Priority)
 844 test_long  cream_60 dteam048 PD   0:00    1 (Resources)
 843 test_long  cream_77 dteam048 R    8:56    1 test02

```

```
842 test_long cream_26 dteam048 R 9:00 1 test01
```

```
$ ldapsearch -LLL -x -H ldap://test31.egi.cesga.es:2170 -b 'Mds-Vo-Name=resource,o=grid'
'objectClass=GlueCE' GlueCEInfoTotalCPUs GlueCEStateFreeCPUs GlueCEStateTotalJobs
GlueCEStateRunningJobs GlueCEStateWaitingJobs GlueCEPo
licyAssignedJobSlots
dn: GlueCEUniqueID=test31.egi.cesga.es:8443/cream-slurm-test_short,Mds-Vo-name
=resource,o=grid
GlueCEStateTotalJobs: 0
GlueCEStateFreeCPUs: 0
GlueCEStateRunningJobs: 0
GlueCEStateWaitingJobs: 0
GlueCEPolicyAssignedJobSlots: 2
GlueCEInfoTotalCPUs: 2

dn: GlueCEUniqueID=test31.egi.cesga.es:8443/cream-slurm-test_long,Mds-Vo-name=
resource,o=grid
GlueCEStateFreeCPUs: 0
GlueCEInfoTotalCPUs: 2
GlueCEStateRunningJobs: 2
GlueCEPolicyAssignedJobSlots: 2
GlueCEStateTotalJobs: 12
GlueCEStateWaitingJobs: 10
```

5 OK Check for autodisabling in the ce

We specify a limit of 2 jobs into the cream CE. Then, we submit 2 long jobs:

```
[root@test31 ~]# /usr/bin/glite_cream_load_monitor
/etc/glite-ce-cream-utils/glite_cream_load_monitor.conf --show
Threshold for Load Average(1 min): 40 => Detected value for Load Average(1 min): 0.04
Threshold for Load Average(5 min): 40 => Detected value for Load Average(5 min): 0.05
Threshold for Load Average(15 min): 20 => Detected value for Load Average(15 min): 0.01
Threshold for Memory Usage: 95 => Detected value for Memory Usage: 45.20%
Threshold for Swap Usage: 95 => Detected value for Swap Usage: 2.18%
Threshold for Free FD: 500 => Detected value for Free FD: 97978
Threshold for tomcat FD: 800 => Detected value for Tomcat FD: 162
Threshold for FTP Connection: 30 => Detected value for FTP Connection: 1
Threshold for Number of active jobs: 2 => Detected value for Number of active jobs: 2
Threshold for Number of pending commands: -1 => Detected value for Number of pending
commands: 0
Threshold for Disk Usage: 95% => Detected value for Partition / : 10%

$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_long job-long.jdl
https://test31.egi.cesga.es:8443/CREAM982696556
$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_long job-long.jdl
https://test31.egi.cesga.es:8443/CREAM277737768

[root@test31 ~]# squeue
JOBID PARTITION NAME USER ST TIME NODES NODELIST(REASON)
401 test_long cream_27 dteam048 R 1:11 1 test02
400 test_long cream_98 dteam048 R 1:15 1 test01
```

After a while:

```
$ glite-ce-service-info test31.egi.cesga.es:8443
Interface Version = [2.1]
Service Version = [1.15 - EMI version: 3.1.1-1]
Description = [CREAM 2]
Started at = [Wed Jul 24 16:40:08 2013]
Submission enabled = [NO]
Status = [RUNNING]
```

```
$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_long job-long.jdl
2013-07-25 12:30:11,004 FATAL - MethodName=[jobRegister] ErrorCode=[0]
Description=[The CREAM service cannot accept jobs at the moment]
FaultCause=[Submissions are disabled!] Timestamp=[Thu 25 Jul 2013 12:30:10]
```

When the jobs finishes and after a while:

```
$ glite-ce-service-info test31.egi.cesga.es:8443
Interface Version = [2.1]
Service Version = [1.15 - EMI version: 3.1.1-1]
Description = [CREAM 2]
Started at = [Wed Jul 24 16:40:08 2013]
Submission enabled = [YES]
Status = [RUNNING]
$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_long job-long.jdl
https://test31.egi.cesga.es:8443/CREAM976655181
[cacosta@ui02 ce-jobs]$ glite-ce-job-status
https://test31.egi.cesga.es:8443/CREAM976655181

***** JobID=[https://test31.egi.cesga.es:8443/CREAM976655181]
Status = [REALLY-RUNNING]
```

6 OK Parallel jobs submission

To submit MPI jobs is required the package glite-ce-blahp-1.20.4-1, older versions do not present the MPI extension.

Moreover, a line on /etc/mpi-start/ssh.filelist has to be changed (line 39) adding “-s”. This file is provided by the package mpi-start-1.5.0-1.el6.noarch.

```
38 for MPI_START_REMOTE_NODE in `cat $MPI_START_HOSTFILE`; do
39     if test $MPI_START_REMOTE_NODE = `hostname -s` -o $MPI_START_REMOTE_NODE =
`hostname -f` -o $MPI_START_REMOTE_NODE = "localhost" ; then
```

Then, you can submit MPI jobs:

```
$ glite-ce-job-submit -a -r test31.egi.cesga.es:8443/cream-slurm-test_long job-mpi.jdl
https://test31.egi.cesga.es:8443/CREAM288350490

$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM288350490

***** JobID=[https://test31.egi.cesga.es:8443/CREAM288350490]
Status = [REALLY-RUNNING]

[root@test31 ~]# squeue
JOBID PARTITION NAME USER ST TIME NODES NODELIST(REASON)
409 test_long cream_28 dteam048 R 0:06 2 test[01-02]

$ glite-ce-job-status https://test31.egi.cesga.es:8443/CREAM288350490

***** JobID=[https://test31.egi.cesga.es:8443/CREAM288350490]
Status = [DONE-OK]
ExitCode = [0]
```

Retrieving the output:

```
$ glite-ce-job-output https://test31.egi.cesga.es:8443/CREAM288350490
```



```

2013-07-25 14:42:05,907 INFO - For JobID
[https://test31.egi.cesga.es:8443/CREAM288350490] output will be stored in the dir
./test31.egi.cesga.es_8443_CREAM288350490
[cacosta@ui02 mpi]$ cat test31.egi.cesga.es_8443_CREAM288350490/mpi-test.out
Compiling /var/tmp/home_cream_288350490/CREAM288350490/mpi-test-B
/usr/lib64/compat-openmpi/bin/mpicc -o
/var/tmp/home_cream_288350490/CREAM288350490/mpi-test-B
/var/tmp/home_cream_288350490/CREAM288350490/mpi-test-B.c
Successfully compiled /var/tmp/home_cream_288350490/CREAM288350490/mpi-test-B
=[START]=====
=====
Hello world from processor test01.egi.cesga.es, rank 0 out of 2 processors
Hello world from processor test02.egi.cesga.es, rank 1 out of 2 processors
=[FINISHED]=====
=====
Executing post hook.
Finished the post hook.
Host key verification failed

$ cat test31.egi.cesga.es_8443_CREAM288350490/mpi-test.err
mpi-start [INFO ]: *****
mpi-start [INFO ]: UID = dteam048
mpi-start [INFO ]: HOST = test01.egi.cesga.es
mpi-start [INFO ]: DATE = Thu Jul 25 14:34:13 CEST 2013
mpi-start [INFO ]: VERSION = 1.5.0
mpi-start [INFO ]: *****
mpi-start [INFO ]: search for scheduler
mpi-start [INFO ]: activate support for slurm
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
/etc/mpi-start/openmp.hook: line 29: test: -eq: unary operator expected
/var/tmp/home_cream_288350490/CREAM288350490/mpi-test-B.c: In function âmainâ:
/var/tmp/home_cream_288350490/CREAM288350490/mpi-test-B.c:20: warning: incompatible
implicit declaration of built-in function âprintfâ
mpi-start [ERROR ]: failed to remove directory on remote machine

```

There is a minor issue to take into account. As it is stated in standard error file the /var/tmp directory is not removed after the job is finished in the second WN.

```

[root@test02 ~]# ls -lrth /var/tmp/home_cream_288350490/
total 16K
-rw----- 1 dteam048 dteam 9.0K Jul 25 14:34 cream_288350490.proxy
drwxr-xr-x 2 dteam048 dteam 4.0K Jul 25 14:34 CREAM288350490

```

7 OK APEL

To parse a log text file, it is necessary to create it with the next command:

```

/usr/bin/sacct -P -n
--format=JobID,JobName,User,Group,Start,End,Elapsed,CPUTimeRAW,Partition,NCPUS,NNodes
,NodeList,MaxRSS,MaxVMSize,State -S $start_date -E $end_date

```

Then, the APEL parser is working fine:

```

2013-07-25 00:05:01,709 - apel.db.backends.mysql - INFO - Connected to
test07.egi.cesga.es:3306
2013-07-25 00:05:01,709 - apel.db.backends.mysql - INFO - Database: apelclient; username:
apel
2013-07-25 00:05:01,709 - parser - INFO - Connection to DB established

```

```
2013-07-25 00:05:01,709 - parser - INFO -
=====
2013-07-25 00:05:01,710 - parser - INFO - Setting up parser for blah files
2013-07-25 00:05:01,715 - apel.parsers.parser - INFO - Site: SITE_NAME=UMD-VERIFICATION;
batch system: test31.egi.cesga.es
2013-07-25 00:05:01,715 - parser - INFO - Scanning directory: /var/log/cream/accounting
2013-07-25 00:05:01,716 - parser - INFO - /var/log/cream/accounting/blahp.log-20130719
already parsed, omitting
2013-07-25 00:05:01,717 - parser - INFO - /var/log/cream/accounting/blahp.log-20130716
already parsed, omitting
2013-07-25 00:05:01,718 - parser - INFO - /var/log/cream/accounting/blahp.log-20130722
already parsed, omitting
2013-07-25 00:05:01,719 - parser - INFO - /var/log/cream/accounting/blahp.log-20130620
already parsed, omitting
2013-07-25 00:05:01,719 - parser - INFO - /var/log/cream/accounting/blahp.log-20130527
already parsed, omitting
2013-07-25 00:05:01,720 - parser - INFO - /var/log/cream/accounting/blahp.log-20130721
already parsed, omitting
2013-07-25 00:05:01,720 - parser - INFO - /var/log/cream/accounting/blahp.log-20130619
already parsed, omitting
2013-07-25 00:05:01,721 - parser - INFO - /var/log/cream/accounting/blahp.log-20130605
already parsed, omitting
2013-07-25 00:05:01,721 - parser - INFO - Parsing file:
/var/log/cream/accounting/blahp.log-20130724
2013-07-25 00:05:01,763 - parser - INFO - Parsed 24 lines
2013-07-25 00:05:01,763 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-07-25 00:05:01,763 - parser - INFO - Failed to parse 0 lines
2013-07-25 00:05:01,764 - parser - INFO - /var/log/cream/accounting/blahp.log-20130704
already parsed, omitting
2013-07-25 00:05:01,764 - parser - INFO - /var/log/cream/accounting/blahp.log-20130628
already parsed, omitting
2013-07-25 00:05:01,765 - parser - INFO - /var/log/cream/accounting/blahp.log-20130621
already parsed, omitting
2013-07-25 00:05:01,766 - parser - INFO - /var/log/cream/accounting/blahp.log-20130720
already parsed, omitting
2013-07-25 00:05:01,766 - parser - INFO - /var/log/cream/accounting/blahp.log-20130603
already parsed, omitting
2013-07-25 00:05:01,767 - parser - INFO - /var/log/cream/accounting/blahp.log-20130702
already parsed, omitting
2013-07-25 00:05:01,767 - parser - INFO - /var/log/cream/accounting/blahp.log-20130617
already parsed, omitting
2013-07-25 00:05:01,768 - parser - INFO - Parsing file:
/var/log/cream/accounting/blahp.log-20130723
2013-07-25 00:05:01,814 - parser - INFO - Parsed 34 lines
2013-07-25 00:05:01,814 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-07-25 00:05:01,815 - parser - INFO - Failed to parse 0 lines
2013-07-25 00:05:01,815 - parser - INFO - /var/log/cream/accounting/blahp.log-20130718
already parsed, omitting
2013-07-25 00:05:01,816 - parser - INFO - /var/log/cream/accounting/blahp.log-20130611
already parsed, omitting
2013-07-25 00:05:01,817 - parser - INFO - /var/log/cream/accounting/blahp.log-20130606
already parsed, omitting
2013-07-25 00:05:01,817 - parser - INFO - /var/log/cream/accounting/blahp.log-20130717
already parsed, omitting
2013-07-25 00:05:01,818 - parser - INFO - /var/log/cream/accounting/blahp.log-20130531
already parsed, omitting
2013-07-25 00:05:01,834 - parser - INFO - Finished parsing blah log files.
2013-07-25 00:05:01,834 - parser - INFO -
=====
2013-07-25 00:05:01,834 - parser - INFO - Setting up parser for SLURM files
2013-07-25 00:05:01,839 - apel.parsers.slurm - INFO - Site: SITE_NAME=UMD-VERIFICATION;
batch system: test31.egi.cesga.es
2013-07-25 00:05:01,839 - apel.parsers.slurm - INFO - Site: SITE_NAME=UMD-VERIFICATION;
batch system: test31.egi.cesga.es
2013-07-25 00:05:01,839 - parser - INFO - Scanning directory: /var/log/apel/
2013-07-25 00:05:01,840 - parser - INFO - /var/log/apel/072313 already parsed, omitting
```

```
2013-07-25 00:05:01,840 - parser - INFO - Parsing file: /var/log/apel/072413
2013-07-25 00:05:01,904 - parser - INFO - Parsed 54 lines
2013-07-25 00:05:01,905 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-07-25 00:05:01,905 - parser - INFO - Failed to parse 0 lines
2013-07-25 00:05:01,906 - parser - INFO - /var/log/apel/072113 already parsed, omitting
2013-07-25 00:05:01,907 - parser - INFO - /var/log/apel/071813 already parsed, omitting
2013-07-25 00:05:01,908 - parser - INFO - /var/log/apel/071713 already parsed, omitting
2013-07-25 00:05:01,908 - parser - INFO - /var/log/apel/071513 already parsed, omitting
2013-07-25 00:05:01,909 - parser - INFO - /var/log/apel/072013 already parsed, omitting
2013-07-25 00:05:01,909 - parser - INFO - /var/log/apel/071913 already parsed, omitting
2013-07-25 00:05:01,910 - parser - INFO - /var/log/apel/June-13 already parsed, omitting
2013-07-25 00:05:01,911 - parser - INFO - /var/log/apel/071613 already parsed, omitting
2013-07-25 00:05:01,912 - parser - INFO - /var/log/apel/072213 already parsed, omitting
2013-07-25 00:05:01,919 - parser - INFO - Finished parsing SLURM log files.
2013-07-25 00:05:01,920 - parser - INFO - Parser has completed.
2013-07-25 00:05:01,920 - parser - INFO -
=====
```

New Features/Fixed Bugs

The new feature tested is the SLURM integration with the cream CE. Please look above in the basic tests for more information. The fixed issues are, basically: 1) the parallel submission which requires a change in /etc/mpirun/ssh.files and 2) the creation of the text log file to parse it for the accounting. Other problems have been solved thank you to CREAM-BLAH unit. Refer to GGUS tickets 96171 and 95751 for more information.

Additional Info

Installation was done without special issues.

Relevant packages were installed.

```
[root@test31 ~]# rpm -qa |grep glite
glite-yaim-core-5.1.2-1.sl6.noarch
glite-ce-cream-core-1.16.1-2.el6.noarch
glite-initscript-globus-gridftp-1.0.4-1.sl6.noarch
glite-ce-blahp-1.20.4-1.x86_64
glite-ce-monitor-api-java-1.16.1-2.el6.noarch
glite-yaim-mpi-1.1.12-1.el6.noarch
glite-jobid-api-c-2.2.10-1.el6.x86_64
glite-lbjp-common-gss-3.2.13-1.el6.x86_64
glite-lb-common-9.0.7-1.el6.x86_64
glite-lbjp-common-log-1.3.8-1.el6.x86_64
glite-jobid-api-java-1.3.6-1.el6.noarch
glite-ce-monitor-1.16.1-2.el6.noarch
glite-jdl-api-java-3.3.2-2.el6.noarch
glite-ce-job-plugin-1.16.1-2.el6.noarch
glite-yaim-slurm-utils-1.0.0-2.sl6.noarch
glite-lbjp-common-trio-2.3.10-1.el6.x86_64
glite-lb-logger-2.4.20-1.el6.x86_64
glite-ce-yaim-cream-ce-4.4.4-2.el6.noarch
glite-lb-client-java-2.0.4-1.el6.x86_64
glite-ce-cream-api-java-1.16.1-2.el6.noarch
glite-ce-cream-es-1.16.1-2.el6.noarch
glite-ce-cream-utils-1.3.2-2.el6.x86_64
glite-yaim-bdii-4.3.14-1.el6.noarch
glite-ce-common-java-1.16.1-2.el6.noarch
glite-info-provider-service-1.13.1-1.el6.noarch
glite-ce-cream-1.16.1-2.el6.noarch
```

```
[root@test31 ~]# rpm -qa |grep emi
emi-cream-ce-1.2.2-2.el6.noarch
emi-version-3.5.0-1.el6.x86_64
emi-slurm-utils-1.0.1-1.sl6.noarch
axis2-1.6.1-1.emi.noarch
emi-mpi-1.0.2-1.el6.noarch
```

Slurm installation

Required packages:

```
gcc
readline-devel
openssl-devel
pam-devel
munge
munge-devel
mysql-5.1.67-1.el6_3.x86_64
mysql-devel-5.1.67-1.el6_3.x86_64
mysql-server-5.1.67-1.el6_3.x86_64
mysql-libs-5.1.67-1.el6_3.x86_64
```

Installed packages on the cream CE:

```
slurm-2.5.4-1.el6.x86_64
slurm-torque-2.5.4-1.el6.x86_64
slurm-plugins-2.5.4-1.el6.x86_64
slurm-perlapi-2.5.4-1.el6.x86_64
slurm-slurmdbd-2.5.4-1.el6.x86_64
slurm-munge-2.5.4-1.el6.x86_64
slurm-sql-2.5.4-1.el6.x86_64
```

Configuration files:

/etc/slurm/slurm.conf

```
#
# Example slurm.conf file. Please run configurator.html
# (in doc/html) to build a configuration file customized
# for your environment.
#
#
# slurm.conf file generated by configurator.html.
#
# See the slurm.conf man page for more information.
#
ControlMachine=test31
#ControlAddr=
#BackupController=
#BackupAddr=

#AUTH
AuthType          = auth/munge
CacheGroups       = 0
CryptoType        = crypto/munge

#CheckpointType=checkpoint/none
```

```
##DisableRootJobs=NO
##EnforcePartLimits=NO
##Epilog=
##EpilogSlurmctld=
##FirstJobId=1
##MaxJobId=999999
##GresTypes=
##GroupUpdateForce=0
##GroupUpdateTime=600
##JobCheckpointDir=/var/slurm/checkpoint
##JobCredentialPrivateKey=
##JobCredentialPublicKey=
##JobFileAppend=0
##JobRequeue=1
##JobSubmitPlugins=1
##KillOnBadExit=0
##Licenses=foo*4,bar
##MailProg=/bin/mail
##MaxJobCount=5000
##MaxStepCount=40000
##MaxTasksPerNode=128

#MPI
MpiDefault          = none
#MpiParams=ports=#-#

#PluginDir=
#PlugStackConfig=
#PrivateData=jobs
ProctrackType       = proctrack/pgid
#Prolog=
#PrologSlurmctld=
#PropagatePrioProcess=0
#PropagateResourceLimits=
#PropagateResourceLimitsExcept=
ReturnToService     = 1
#SallocDefaultCommand=
SlurmctldPidFile    = /var/run/slurmctld.pid
SlurmctldPort       = 6817
SlurmdPidFile       = /var/run/slurmd.pid
SlurmdPort          = 6818
SlurmdSpoolDir      = /tmp/slurmd
SlurmUser           = slurm
#SlurmdUser=root
#SrunEpilog=
#SrunProlog=

StateSaveLocation   = /tmp
SwitchType          = switch/none
#TaskEpilog=
TaskPlugin          = task/none
#TaskPluginParam=
#TaskProlog=
#TopologyPlugin=topology/tree
#TmpFs=/tmp
#TrackWCKey=no
#TreeWidth=
#UnkillableStepProgram=
#UsePAM=0

# TIMERS
#BatchStartTimeout=10
#CompleteWait=0
#EpilogMsgTime=2000
#GetEnvTimeout=2
```

```

#HealthCheckInterval=0
#HealthCheckProgram=
InactiveLimit      = 0
KillWait          = 30
#MessageTimeout=10
#ResvOverRun=0
MinJobAge         = 300
#OverTimeLimit=0
SlurmctlTimeout   = 120
SlurmdTimeout     = 300
#UnkillableStepTimeout=60
#VSizeFactor=0
Waittime          = 0

# SCHEDULING
#DefMemPerCPU=0
FastSchedule      = 0
#MaxMemPerCPU=0
#SchedulerRootFilter=1
#SchedulerTimeSlice=30
SchedulerType     = sched/builtin
SchedulerPort     = 7321
SelectType        = select/cons_res
SelectTypeParameters = CR_CPU
SchedulerParameters = default_queue_depth=1000,defer=300

# JOB PRIORITY
PriorityType      = priority/multifactor
PriorityDecayHalfLife = 4
PriorityCalcPeriod = 5
PriorityFavorSmall = NO
PriorityWeightAge = 0
PriorityWeightFairshare = 1
PriorityWeightJobSize = 0
PriorityWeightPartition = 1
PriorityWeightQOS = 1

# LOGGING AND ACCOUNTING
#AccountingStorageEnforce=0
#AccountingStorageHost=
AccountingStorageLoc = slurmdbd
#AccountingStoragePass=
#AccountingStoragePort=
AccountingStorageType = accounting_storage/slurmdbd
#AccountingStorageUser=
AccountingStoreJobComment= YES
ClusterName          = test
#DebugFlags=
#JobCompHost=
JobCompLoc           = /usr/share/apel/slurm_acc.sh
#JobCompPass=
#JobCompPort=
JobCompType          = jobcomp/script
#JobCompUser=
JobAcctGatherFrequency = 30
JobAcctGatherType    = jobacct_gather/linux
SlurmctlDebug        = 3
SlurmctlLogFile      = /var/log/slurm/slurmctl.log
SlurmdDebug          = 3
SlurmdLogFile        = /var/log/slurm/slurmd.log
SlurmSchedLogFile    = /var/log/slurm/slurmsched.log
SlurmSchedLogLevel   = 1

# POWER SAVE SUPPORT FOR IDLE NODES (optional)

```

```

#SuspendProgram=
#ResumeProgram=
#SuspendTimeout=
#ResumeTimeout=
#ResumeRate=
#SuspendExcNodes=
#SuspendExcParts=
#SuspendRate=
#SuspendTime=

# COMPUTE NODES
#NodeName=slurm-test CPUs=1 RealMemory=1024 State=UNKNOWN
NodeName=test01 CPUs=1 State=UNKNOWN
NodeName=test02 CPUs=1 State=UNKNOWN

# PARTITIONS QUEUES
PartitionName=test_long AllocNodes=test31 AllowGroups=dteam,ldap Default=YES Disable-
RootJobs=NO GraceTime=0 Hidden=NO MaxNodes=Unlimited MaxTime=2-00:00:00 MinN-
odes=1 Nodes=test[01-02] Priority=1 RootOnly=NO ReqResv=NO Shared=NO Preempt-
Mode=OFF State=UP

PartitionName=test_short AllocNodes=test31 AllowGroups=dteam,ldap Default=YES Disable-
RootJobs=NO GraceTime=0 Hidden=NO MaxNodes=Unlimited MaxTime=02:00:00
MinNodes=1 Nodes=test[01-02] Priority=1 RootOnly=NO ReqResv=NO Shared=NO Preempt-
Mode=OFF State=UP

```

/etc/slurm/slurmdbd.conf (slurmdbd is needed to establish FairShare priorities)

```

# Example slurmdbd.conf file.
#
# See the slurmdbd.conf man page for more information.
#
# Archive info
#ArchiveJobs=yes
#ArchiveDir="/tmp"
#ArchiveSteps=yes
#ArchiveScript=
#JobPurge=12
#StepPurge=1
#
# Authentication info
AuthType=auth/munge
#AuthInfo=/var/run/munge/munge.socket.2
#
# slurmDBD info
DbdAddr=localhost
DbdHost=localhost
#DbdPort=7031
SlurmUser=slurm
#MessageTimeout=300
DebugLevel=4
#DefaultQOS=normal,standby
LogFile=/var/log/slurm/slurmdbd.log
PidFile=/var/run/slurmdbd.pid
#PluginDir=/usr/lib/slurm
#PrivateData=accounts,users,usage,jobs
#TrackWCKey=yes
#
# Database info
StorageType=accounting_storage/mysql
#StorageHost=localhost
#StoragePort=1234
StoragePass=password
StorageUser=slurm

```

```
#StorageLoc=slurm_acct_db
```

Configuration

General configuration is done by YAIM. See the output:

```
INFO: Configuring HOST: test31.egi.cesga.es
INFO: Using site configuration file: /opt/localconf/gLite/yaim/site-info.def
INFO: Sourcing service specific configuration file:
/opt/localconf/gLite/yaim/services/glite-creamce
INFO: Sourcing node specific configuration file:
/opt/localconf/gLite/yaim/nodes/test31.egi.cesga.es
INFO:

#####
#####

.      /'.-' )
.  yA,-"-,( ,m,:/ ) .oo.  oo  o   ooo o.  .oo
.  /   .-Y a a Y-.  8. .8'  8'8.  8  8b d'8
.  /      ~ ~ /    8'  .8oo88.  8  8 8' 8
.  (/_      '====='  8  .8'  8.  8  8 Y 8
.  Y,-'"-,Yy,-,./   o8o o8o  o88o o8o o8o  o8o
.  l_))_ ) l_))_

current working directory: /root
site-info.def date: Jul 22 12:06 /opt/localconf/gLite/yaim/site-info.def
yaim command: -c -s /opt/localconf/gLite/yaim/site-info.def -n MPI_CE -n creamCE -n
SLURM_utils
log file: /opt/glite/yaim/bin/./log/yaimlog
Mon Dec  2 16:56:12 CET 2013 : /opt/glite/yaim/bin/yaim

Installed YAIM versions:
glite-ce-yaim-cream-ce 4.4.4-2
glite-yaim-bdii 4.3.14-1
glite-yaim-core 5.1.2-1
glite-yaim-mpi 1.1.12-1
glite-yaim-slurm-utils 1.0.0-2.sl6

#####
#####

INFO: The default location of the grid-env.(c)sh files will be: /usr/libexec
INFO: Sourcing the utilities in /opt/glite/yaim/functions/utils
INFO: Detecting environment
INFO: Executing function: config_mpi_ce_check
INFO: Executing function: config_cream_detect_tomcat_check
INFO: Executing function: config_cream_stop_check
INFO: Executing function: config_canl_java_tomcat_check
INFO: Detecting TOMCAT
INFO: Executing function: config_cream_db_check
INFO: Executing function: config_cream_emies_scratch_reinstall_check
INFO: Executing function: config_cream_emies_db_check
INFO: Executing function: config_add_pool_env_check
INFO: Executing function: config_host_certs_check
INFO: Executing function: config_vommdir_check
INFO: Executing function: config_vomses_check
INFO: Executing function: config_users check
```



```
INFO: Executing function: config_edgusers_check
INFO: Executing function: config_cream_glexec_user_check
INFO: Executing function: config_cream_clean_sudoers_check
INFO: Executing function: config_cream_sudoers_check
INFO: Executing function: config_vomsmmap_check
INFO: Executing function: config_cream_remove_subcluster_ce_check
INFO: Executing function: config_lcas_lcmmaps_gt4_check
INFO: Executing function: config_globus_gridftp_check
INFO: Executing function: config_cream_glexec_check
INFO: Executing function: config_cream_blah_check
INFO: Executing function: config_cream_ce_check
INFO: Executing function: config_cream_emies_check
INFO: Executing function: config_cream_cemon_check
INFO: Executing function: config_cream_start_check
INFO: Executing function: config_cream_logrotation_check
INFO: Executing function: config_bdii_5.2_check
INFO: Executing function: config_cream_gip_info_dynamic_check
INFO: Executing function: config_cream_gip_check
INFO: Executing function: config_cream_gip_glue2_check
INFO: Executing function: config_cream_gip_scheduler_plugin_check
INFO: Executing function: config_cream_gip_software_plugin_check
INFO: Executing function: config_cream_vo_tag_dir_check
INFO: Executing function: config_info_service_cream_ce_check
INFO: Executing function: config_info_service_cemon_check
INFO: Executing function: config_cream_info_service_rtepublish_check
INFO: Executing function: config_cream_gliteservices_check
INFO: Executing function: config_cream_locallogger_check
INFO: Executing function: config_glite_locallogger_check
INFO: Executing function: config_slurm_gip_sched_plugin_check
INFO: Executing function: config_slurm_ssh_check
INFO: Executing function: config_mpi_ce_setenv
INFO: Executing function: config_mpi_ce
INFO: Executing function: config_cream_detect_tomcat_setenv
INFO: Executing function: config_cream_detect_tomcat
INFO: Detecting TOMCAT
INFO: Executing function: config_cream_stop_setenv
INFO: Executing function: config_cream_stop
INFO: Stopping tomcat
Stopping tomcat6: ^[[60G[^[[0;32m OK ^[[0;39m]^M
INFO: Stopping blah
Shutting down BNotifier: ^[[60G[^[[0;32m OK ^[[0;39m]^M
Shutting down BUpdaterSLURM: ^[[60G[^[[0;32m OK ^[[0;39m]^M
INFO: Stopping lb processes
glite-lb-locallogger: no process killed
Stopping glite-lb-logd ... done
Stopping glite-lb-interlogd ... not running
INFO: Executing function: config_canl_java_tomcat_setenv
INFO: Executing function: config_canl_java_tomcat
INFO: Stop tomcat in case it's running
tomcat6 is stopped ^[[60G[^[[0;32m OK ^[[0;39m]^M
INFO: Copying hostcert to /etc/grid-security/tomcat-cert.pem for tomcat:root.....
INFO: Copying hostkey to /etc/grid-security/tomcat-key.pem for tomcat:root...
ERROR: Bad update time interval 2h, default used
INFO: Configuring /etc/tomcat6/server.xml...
INFO: Linking /usr/share/java/bcprov-1.46.jar to tomcat server lib directory..
INFO: Linking /usr/share/java/canl.jar to tomcat server lib directory..
INFO: Linking /usr/share/java/canl-java-tomcat.jar to tomcat server lib directory..
INFO: Linking /usr/share/java/commons-io.jar to tomcat server lib directory..
INFO: Defining JAVA_HOME in the Tomcat configuration file
INFO: Starting Tomcat
INFO: Executing function: config_cream_db_setenv
INFO: Executing function: config_cream_db
creamdb version requested by the service is 2.6
The version retrieved from the creamdb database is 2.6
The creamdb database is synchronized with the one requested by the service
INFO: creamdb.db info table updated.
```

```
delegationcreamdb version requested by the service is 2.6
The version retrieved from the delegationcreamdb database is 2.6
The delegationcreamdb database is synchronized with the one requested by the service
INFO: Executing function: config_cream_emies_scratch_reinstall_setenv
INFO: Executing function: config_cream_emies_scratch_reinstall
INFO: Executing function: config_cream_emies_db_setenv
INFO: Executing function: config_cream_emies_db
INFO: Executing function: config_add_pool_env_setenv
INFO: Executing function: config_add_pool_env
INFO: Executing function: config_ldconf
INFO: config_ldconf: function not needed anymore, left empty waiting to be removed
INFO: Executing function: config_sysconfig_edg
INFO: Executing function: config_host_certs
INFO: Executing function: config_crl
INFO: Now updating the CRLs - this may take a few minutes...
WARNING: /usr/libexec/fetch-crl.sh didn't finish successfully
WARNING: CRLs may not be updated, please have a look !
Enabling periodic fetch-crl: ^[[60G[^[[0;32m OK ^[[0;39m]^M
INFO: Executing function: config_vommdir_setenv
INFO: Executing function: config_vommdir
INFO: Executing function: config_vomses
INFO: Executing function: config_users
INFO: Executing function: config_edgusers
INFO: Executing function: config_cream_glexec_user_setenv
INFO: Executing function: config_cream_glexec_user
INFO: CONFIG_USERS is set to yes
INFO: Executing function: config_cream_clean_sudoers_setenv
INFO: Executing function: config_cream_clean_sudoers
INFO: /etc/sudoers file already clean. Probably installation from scratch
INFO: Executing function: config_cream_sudoers_setenv
INFO: Executing function: config_cream_sudoers
INFO: Executing function: config_vomsmap_setenv
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
INFO: Copying the /etc/grid-security/voms-grid-mapfile in the standard location
/etc/grid-security/grid-mapfile
INFO: Executing function: config_cream_remove_subcluster_ce_setenv
INFO: Executing function: config_cream_remove_subcluster_ce
INFO: Executing function: config_lcas_lcmaps_gt4_setenv
INFO: Executing function: config_lcas_lcmaps_gt4
INFO: Creating LCAS_DB_FILE in /etc/lcas/lcas.db
INFO: Creating LCMAPS_DB_FILE in /etc/lcmaps/lcmaps.db
INFO: Executing function: config_globus_gridftp_setenv
INFO: Executing function: config_globus_gridftp
INFO: Starting gridftp service :
Stopping globus-gridftp-server: ^[[60G[^[[0;32m OK ^[[0;39m]^M
Starting globus-gridftp-server: ^[[60G[^[[0;32m OK ^[[0;39m]^M
INFO: Executing function: config_cream_glexec_setenv
INFO: Executing function: config_cream_glexec
INFO: Executing function: config_cream_blah_setenv
INFO: Executing function: config_cream_blah
INFO: Executing function: config_cream_ce_setenv
INFO: Executing function: config_cream_ce
INFO: File /etc/glite-ce-cream/cream-config.xml backed-up in
/etc/glite-ce-cream/cream-config.xml.bak_20131202_165759
INFO: Executing function: config_cream_emies_setenv
INFO: Executing function: config_cream_emies
INFO: Executing function: config_cream_cemon_setenv
INFO: Executing function: config_cream_cemon
INFO: Executing function: config_cream_start_setenv
INFO: Executing function: config_cream_start
INFO: Starting blparser
Starting BNotifier: ^[[60G[^[[0;32m OK ^[[0;39m]^M
Starting BUUpdaterSLURM: ^[[60G[^[[0;32m OK ^[[0;39m]^M
```

```
INFO: blah not running
INFO: Starting tomcat
Starting tomcat6: ^[[60G[^[[0;32m OK ^[[0;39m]^M
INFO: Executing function: config_cream_logrotation_setenv
INFO: Executing function: config_cream_logrotation
INFO: Executing function: config_bdii_5.2
Stopping BDII update process: ^[[60G[^[[0;32m OK ^[[0;39m]^M
Stopping BDII slapd: ^[[60G[^[[0;32m OK ^[[0;39m]^M
Starting BDII slapd: ^[[60G[^[[0;32m OK ^[[0;39m]^M
Starting BDII update process: ^[[60G[^[[0;32m OK ^[[0;39m]^M
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 test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_short was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long was enabled for one or more FQANs which specify an entire VO
WARNING: Queue test_long 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
INFO: File /etc/glite-ce-glue2/glite-ce-glue2.conf backed-up in
/etc/glite-ce-glue2/glite-ce-glue2.conf.bak_20131202_165816
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_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/run/glite/glite-lb-interlogd.pid for glite-lb-interlogd
Warning: stale /var/run/glite/glite-lb-interlogger.sock for glite-lb-interlogd
Starting glite-lb-interlogd ... done
INFO: Executing function: config_cream_glite_initd
INFO: Executing function: config_slurm_gip_sched_plugin_setenv
INFO: Executing function: config_slurm_gip_sched_plugin
INFO: Executing function: config_slurm_ssh_setenv
INFO: Executing function: config_slurm_ssh
^[[80G[ ^[[1;32mOK^[[0;39m ]^M INFO: Configuration Complete.
```

INFO: YAIM terminated succesfully.