

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

Name of the component			
Release	EMI.mpi.sl5.x86_64-1.2.0	RT Ticket: <a href="https://rt.egi.eu/guest/Ticket/Display.html?id=3252">https://rt.egi.eu/guest/Ticket/Display.html?id=3252</a>	
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	18 hours		
Component st	<b>VERIFIED</b>	Date	
Verification start date	16/01/12	Verification end date	18/01/12

**Summary:**

EMI-MPI was installed from UMD repository without any important issue in a fresh installation together with creamCE + Torque + Maui installed from the EMI Production repository

There is still two open bugs which was found during the first UMD verification of WN/Torque + EMI-MPI.1.0. It is a torque/maui problem that affects to MPI jobs but is not exclusive of that kind of jobs. As mentioned in the release notes, Maui versions prior to 3.3.4 do not allocate correctly all the nodes for the execution of jobs. The maui version provided as third-party in EMI/UMD at this moment is maui-3.2.6p21-snap.1234905291.5.el5. I am afraid until there is a new version of MAUI package available in the repository is not going to be possible submit parallel jobs requesting more than one processor in a installation with MPI + creamCE + Torque + Maui. See open ggus tickets below. Apart from the open previous bugs, during this verification process was opened the ggus ticket, [https://ggus.eu/ws/ticket\\_info.php?ticket=78348](https://ggus.eu/ws/ticket_info.php?ticket=78348), because when submitting MPI jobs - requesting mpi-start and openmpi it is not possible to get per job more than the number of cores available in a single machine.

If a machine has 2 cores it is only possible to request a maximum of 2 nodes in the jdl. But even this issue is solved, the MPI jobs will not work due to Maui versions prior to 3.3.4 do not allocate correctly all the nodes for the execution of jobs.

This will be also mentioned in “Comments for SR “section”.

**GGUS Tickets:**

- [https://ggus.eu/ws/ticket\\_info.php?ticket=57828](https://ggus.eu/ws/ticket_info.php?ticket=57828)
- [https://ggus.eu/ws/ticket\\_info.php?ticket=67870](https://ggus.eu/ws/ticket_info.php?ticket=67870)
- [https://ggus.eu/ws/ticket\\_info.php?ticket=78348](https://ggus.eu/ws/ticket_info.php?ticket=78348)

**Summary of Quality Criteria verification:**

	Generic Quality Criteria Total (Critical/Non critical)			
	Passed	Not passed	Not Applicable	Total
<b>TP</b>				
<b>VLD</b>	11			11
	Specific Quality Criteria			
<b>TP</b>				
<b>VLD</b>	4			4

**Quality Criteria verification cheatsheet:**

<Insert filled excel cheatsheet>

Criteria	Accepted (Y/N/NA)	Tested (TP/VLD)	Comments
<b>Generic QC</b>			
GENERIC_DOC_1 (Functional Description)	Y	VLD	<a href="http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils#Functional">http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils#Functional</a>
GENERIC_DOC_2 (Release Notes)	Y	VLD	<a href="http://www.eu-emi.eu/emi-1-kebnekaise-updates/-/asset_publicis">http://www.eu-emi.eu/emi-1-kebnekaise-updates/-/asset_publicis</a>
GENERIC_DOC_3 (User Documentation)	Y	VLD	<a href="http://grid.ifca.es/wiki/Middleware/MpiStart/UserDocumentation">http://grid.ifca.es/wiki/Middleware/MpiStart/UserDocumentation</a>
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	<a href="http://grid.ifca.es/wiki/Middleware/MpiStart">http://grid.ifca.es/wiki/Middleware/MpiStart</a>
GENERIC_DOC_6 (Administrator Documentation)	Y	VLD	<a href="http://grid.ifca.es/wiki/Middleware/MpiStart">http://grid.ifca.es/wiki/Middleware/MpiStart</a>
GENERIC_DOC_8 (Software License)	Y	VLD	GPL
GENERIC_DOC_9 (Release changes testing)	Y	VLD	<a href="http://www.eu-emi.eu/emi-1-kebnekaise-updates/-/asset_publicis">http://www.eu-emi.eu/emi-1-kebnekaise-updates/-/asset_publicis</a>
GENERIC_DIST_1 (Source Code Availability)	Y	VLD	<a href="http://emisofit.web.cern.ch/emisofit/dist/EMI/1/sl5/SRPMS/update">http://emisofit.web.cern.ch/emisofit/dist/EMI/1/sl5/SRPMS/update</a>
GENERIC_DIST_2 (Source Distribution)	Y	VLD	<a href="http://emisofit.web.cern.ch/emisofit/dist/EMI/1/sl5/SRPMS/update">http://emisofit.web.cern.ch/emisofit/dist/EMI/1/sl5/SRPMS/update</a>
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	<a href="http://emisofit.web.cern.ch/emisofit/dist/EMI/1/sl5/x86_64/update">http://emisofit.web.cern.ch/emisofit/dist/EMI/1/sl5/x86_64/update</a>
GENERIC_MISC_2 (Bug Tracking System)	Y	VLD	<a href="https://ggus.eu/pages/home.php">https://ggus.eu/pages/home.php</a>
<b>Compute Capabilities QC</b>			
PARALLEL_MPI_1 (Precompiled MPI job Execution)	Y	VLD	<b>Job submitted without issues for openmpi but (see GGUS #67870 and GGUS #57828).</b>
PARALLEL_MPI_2 (MPI job Execution from source.)	Y	VLD	<b>Job submitted without issues for openmpi but (see GGUS #67870 and GGUS #57828).</b>
PARALLEL_OMP_1 (Precompiled OpenMP job Execution)	Y	VLD	<b>Job submitted without issues for openmpi but (see GGUS #67870 and GGUS #57828).</b>
PARALLEL_OMP_2 (OpenMP job Execution from source)	Y	VLD	<b>Job submitted without issues for openmpi but (see GGUS #67870 and GGUS #57828).</b>
<b>Operations Capabilities QC</b>			
MON_PROBE_GENERIC_2 (Service Probe)			

**Validator comments:**

emi.mpi was installed on creamCE and on the WNs without problems, the complete list of used repositories from UMD is this:

```
[root@test06 yum.repos.d]# cat EMI.mpi.s15.x86_64.repo
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -
(3252,405,327)
```

```
[EMI.mpi.s15.x86_64]
name=EMI.mpi.s15.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/emi.mpi.s15.x86_64/1/2/0/
enabled=1
protect=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/1/RPM-GPG-KEY-emi
```

***EMI-MPI was installed from UMD repository without any important issue in a fresh installation together with creamCE + Torque + Maui installed from the EMI Production repository. Therefore, I am going to put the complete installation.***

==== Installing ====

\* Installing the CAs

```
{ { {
```

```
yum install ca-policy-egi-core
```

```
yum install lcg-CA
```

```
} } }
```

==== Installing the CREAM-CE software =====

```
{ { {
```

```
[root@test06 yum.repos.d]# rpm -qa | grep java
```

```
java-1.4.2-gcj-compat-1.4.2.0-40jpp.115
```

```
} } }
```

```
* yum install xml-commons-apis
```

```
{{{
```

```
Installed:
```

```
xml-commons-apis.x86_64:1.3.02-0.b2.7jpp.10
```

```
Dependency Installed:
```

```
xml-commons.x86_64 0:1.3.02-0.b2.7jpp.10
```

```
* Install the CREAM-CE metapackage:
```

```
* yum install emi-cream-ce
```

```
{{{
```

```
=====
```

Package	Size	Arch	Version
---------	------	------	---------

```
=====
```

```
Installing:
```

```
emi-cream-ce x86_64 1.0.0-  
1.sl5 UMD-1-base 2.3 k
```

```
Installing for dependencies:
```

```
ant x86_64 1.6.5-  
2jpp.2 sl-base 2.3 M  
argus-gsi-pep-callout x86_64  
1.2.1-1.sl5 UMD-1-base 39 k  
argus-pep-api-c x86_64 2.0.2-  
1.sl5 UMD-1-base 53 k  
avahi x86_64 0.6.16-  
10.el5_6 sl-security 257 k  
avahi-compat-libdns_sd x86_64  
0.6.16-10.el5_6 sl-security 24 k
```

axis	x86_64	1.2.1-
2jpp.6	sl-base	3.6 M
bcel	x86_64	5.1-8jpp.1
sl-base	1.1 M	
bdii	noarch	5.2.5-2.el5
UMD-1-updates	20 k	
bouncycastle	x86_64	1.45-
6.el5	epel	4.0 M
c-ares	x86_64	1.6.0-
5.el5	sl-security	49 k
classads	x86_64	1.0.8-
1.el5	epel	453 k
classpathx-jaf	x86_64	1.0-
9jpp.1	sl-base	111 k
classpathx-mail	x86_64	1.1.1-
4jpp.2	sl-base	1.2 M
cleanup-grid-accounts	noarch	
2.0.0-1	UMD-1-base	6.9 k
cups	x86_64	1:1.3.7-
18.el5_5.8	sl-security	3.1 M
eclipse-ecj	x86_64	1:3.2.1-
19.el5	sl-base	9.0 M
emi-trustmanager	noarch	3.0.5-
1.sl5	UMD-1-updates	276 k
emi-trustmanager-tomcat	noarch	
3.0.0-1.sl5	UMD-1-base	30 k
emi-version	x86_64	1.6.0-
1.sl5	UMD-1-updates	2.0 k
expect	x86_64	5.43.0-
5.1	sl-base	160 k
fetch-crl	noarch	2.8.5-1.el5
epel	24 k	
geronimo-specs	x86_64	1.0-
0.M2.2jpp.12	sl-base	258 k
geronimo-specs-compat	x86_64	
1.0-0.M2.2jpp.12	sl-base	5.4 k
giflib	x86_64	4.1.3-
7.1.el5_3.1	sl-base	39 k
glexec	x86_64	0.8.10-
1.sl5	UMD-1-base	58 k
glite-apel-core	noarch	2.0.14-
4.sl5	UMD-1-updates	1.0 M
glite-ce-blahp	x86_64	1.16.2-
3.sl5	UMD-1-base	431 k
glite-ce-ce-plugin	noarch	1.13.1-
3.sl5	UMD-1-base	16 k
glite-ce-cream	noarch	1.13.3-
1.sl5	UMD-1-updates	5.7 M
glite-ce-cream-utils	x86_64	1.1.0-
3.sl5	UMD-1-base	26 k

glite-ce-job-plugin	noarch	
1.13.1-3.sl5	UMD-1-base	26 k
glite-ce-monitor	noarch	1.13.3-
1.sl5	UMD-1-updates	5.1 M
glite-ce-yaim-cream-ce	x86_64	
4.2.0-3.sl5	UMD-1-base	42 k
glite-info-provider-service	noarch	
1.7.0-1.el5	UMD-1-updates	53
k		
glite-initscript-globus-gridftp	noarch	
1.0.4-1.sl5	UMD-1-base	3.5 k
glite-jobid-api-c	x86_64	2.0.3-
1.sl5	UMD-1-updates	19 k
glite-lb-common	x86_64	
8.0.6-1.sl5	UMD-1-updates	397
k		
glite-lb-logger	x86_64	2.2.6-
1.sl5	UMD-1-updates	95 k
glite-lbjp-common-gss	x86_64	
3.0.4-1.sl5	UMD-1-updates	43
k		
glite-lbjp-common-log	x86_64	
1.1.2-6.sl5	UMD-1-base	11 k
glite-lbjp-common-trio	x86_64	
2.1.2-7.sl5	UMD-1-updates	71
k		
glite-yaim-bdii	noarch	4.3.4-
1.el5	UMD-1-updates	10 k
glite-yaim-core	noarch	5.0.2-
1.sl5	UMD-1-updates	116 k
globus-authz	x86_64	0.7-
4.el5	UMD-1-updates	13 k
globus-authz-callout-error	x86_64	
0.5-3.el5	UMD-1-updates	10 k
globus-callout	x86_64	0.7-
8.el5	UMD-1-updates	16 k
globus-common	x86_64	
11.6-5.el5	UMD-1-updates	109
k		
globus-ftp-control	x86_64	2.12-
2.el5	UMD-1-updates	67 k
globus-gfork	x86_64	0.2-
6.el5	UMD-1-updates	18 k
globus-gridftp-server	x86_64	
3.33-2.1.el5	UMD-1-updates	119
k		
globus-gridftp-server-control	x86_64	
0.46-1.el5	UMD-1-updates	59
k		

globus-gridftp-server-progs 3.33-2.1.el5 k	x86_64 UMD-1-updates	41
globus-gridmap-callout-error 0.3-2.el5	x86_64 UMD-1-updates	10 k
globus-gsi-callback 2.el5	x86_64 UMD-1-updates	2.8- 38 k
globus-gsi-cert-utils 2.el5	x86_64 UMD-1-updates	6.7- 18 k
globus-gsi-credential 3.el5	x86_64 UMD-1-updates	3.5- 32 k
globus-gsi-openssl-error 0.14-8.el5 k	x86_64 UMD-1-updates	15
globus-gsi-proxy-core 4.7-2.el5	x86_64 UMD-1-updates	33 k
globus-gsi-proxy-ssl 3.el5	x86_64 UMD-1-updates	2.3- 17 k
globus-gsi-sysconfig 1.el5	x86_64 UMD-1-updates	3.2- 28 k
globus-gss-assist 1.el5	x86_64 UMD-1-updates	5.10- 31 k
globus-gssapi-error 8.el5	x86_64 UMD-1-updates	2.5- 13 k
globus-gssapi-gsi 1.el5	x86_64 UMD-1-updates	7.8- 54 k
globus-io UMD-1-updates	x86_64	6.3-6.el5 43 k
globus-libtool 4.el5	x86_64 UMD-1-updates	1.2- 4.1 k
globus-openssl 2.el5	x86_64 UMD-1-updates	5.1- 4.4 k
globus-openssl-module 1.3-3.el5	x86_64 UMD-1-updates	13 k
globus-proxy-utils 1.el5	x86_64 UMD-1-updates	3.10- 45 k
globus-usage 2.el5	x86_64 UMD-1-updates	1.4- 15 k
globus-xio 4.el5	x86_64 UMD-1-updates	2.8- 123 k
globus-xio-gsi-driver 7.el5	x86_64 UMD-1-updates	0.6- 29 k
globus-xio-pipe-driver 3.el5	x86_64 UMD-1-updates	0.1- 13 k
glue-schema 1.el5	noarch UMD-1-updates	2.0.8- 33 k
gridsite-shared 2.sl5	x86_64 UMD-1-updates	1.7.15- 131 k
jakarta-commons-beanutils 1.7.0-5jpp.1	x86_64 sl-base	567 k

jakarta-commons-collections 3.2-2jpp.3	sl-base	x86_64	1.2 M
jakarta-commons-daemon 1:1.0.1-6jpp.1	sl-base	x86_64	46 k
jakarta-commons-dbcp 1.2.1-7jpp.1	sl-base	x86_64	278 k
jakarta-commons-digester 1.7-5jpp.1	sl-base	x86_64	349 k
jakarta-commons-discovery 1:0.3-4jpp.1	sl-base	x86_64	150 k
jakarta-commons-el 7jpp.1	sl-base	x86_64	1.0- 269 k
jakarta-commons-fileupload 1:1.0-6jpp.1	sl-base	x86_64	53 k
jakarta-commons-httpclient 1:3.0-7jpp.1	sl-base	x86_64	595 k
jakarta-commons-launcher 0.9-6jpp.1	sl-base	x86_64	97 k
jakarta-commons-logging 1.0.4-6jpp.1	sl-base	x86_64	115 k
jakarta-commons-modeler 1.1-8jpp.3.el5	sl-base	x86_64	259 k
jakarta-commons-pool 1.3-5jpp.1	sl-base	x86_64	142 k
java-1.6.0-openjdk 1:1.6.0.0-1.23.1.9.10.el5_7	sl-security	x86_64	37 M
java-1.6.0-openjdk-devel 1:1.6.0.0-1.23.1.9.10.el5_7	sl-security	x86_64	12 M
lcas 1.sl5	UMD-1-base	x86_64	1.3.13- 34 k
lcas-lcmapi-gt4-interface 0.1.4-1.sl5	UMD-1-base	x86_64	16 k
lcas-plugins-basic 1.sl5	UMD-1-base	x86_64	1.3.4- 22 k
lcas-plugins-check-executable 1.2.2-1.sl5	UMD-1-base	x86_64	9.2 k
lcas-plugins-voms 1.3.7-1.sl5	UMD-1-base	x86_64	29 k
lcg-expiregridmapdir 3.0.1-1	UMD-1-base	noarch	6.7 k
lcg-info-dynamic-scheduler-generic 2.3.5-1.sl5	UMD-1-base	noarch	47 k
lcg-info-dynamic-software 1.0.5-1.sl5	UMD-1-base	noarch	3.2 k
lcmapi 1.sl5	UMD-1-base	x86_64	1.4.29- 98 k
lcmapi-plugins-basic 1.4.5-1.sl5	UMD-1-base	x86_64	48 k



lcmaps-plugins-verify-proxy	x86_64	
1.4.12-2.sl5	UMD-1-updates	25
k		
lcmaps-plugins-voms	x86_64	
1.4.3-1.sl5	UMD-1-base	39 k
libtool-ltdl	x86_64	1.5.22-
7.el5_4	sl-base	38 k
log4c	x86_64	1.2.1-
7.el5	epel	35 k
log4j	x86_64	1.2.13-
3jpp.2	sl-base	729 k
mx4j	x86_64	1:3.0.1-
6jpp.4	sl-base	2.7 M
mysql	x86_64	5.0.77-
4.el5_5.4	sl-security	4.8 M
mysql-connector-java	x86_64	
1:5.1.12-2.el5	epel	2.5 M
mysql-server	x86_64	5.0.77-
4.el5_5.4	sl-security	9.8 M
openldap-clients	x86_64	
2.3.43-12.el5_6.7	sl-security	223 k
openldap-servers	x86_64	
2.3.43-12.el5_6.7	sl-security	2.2 M
perl-Compress-Zlib	x86_64	
1.42-1.fc6	sl-base	52 k
perl-DBD-MySQL	x86_64	
3.0007-2.el5	sl-base	147 k
perl-DBI	x86_64	1.52-
2.el5	sl-base	605 k
perl-HTML-Parser	x86_64	
3.55-1.fc6	sl-base	91 k
perl-HTML-Tagset	noarch	
3.10-2.1.1	sl-base	14 k
perl-URI	noarch	1.35-3
sl-base		116 k
perl-XML-Parser	x86_64	
2.34-6.1.2.2.1	sl-base	209 k
perl-XML-Simple	noarch	
2.14-4.fc6	sl-base	68 k
perl-libwww-perl	noarch	
5.805-1.1.1	sl-base	375 k
redhat-lsb	x86_64	3.1-
12.3.EL	sl-base	21 k
regexp	x86_64	1.4-
2jpp.2	sl-base	102 k
tomcat5	x86_64	5.5.23-
0jpp.22.el5_7	sl-security	362 k
tomcat5-common-lib	x86_64	
5.5.23-0jpp.22.el5_7	sl-security	225
k		

tomcat5-jasper	x86_64	
5.5.23-0jpp.22.el5_7	sl-security	1.1
M		
tomcat5-jsp-2.0-api	x86_64	
5.5.23-0jpp.22.el5_7	sl-security	103
k		
tomcat5-server-lib	x86_64	
5.5.23-0jpp.22.el5_7	sl-security	4.1
M		
tomcat5-servlet-2.4-api	x86_64	
5.5.23-0jpp.22.el5_7	sl-security	163
k		
tzdata-java	x86_64	20111-
4.el5	sl-security	180 k
voms	x86_64	2.0.2-
1.sl5	UMD-1-base	165 k
voms-clients	x86_64	2.0.0-
1.sl5	UMD-1-base	178 k
wSDL4j	x86_64	1.5.2-
4jpp.1	sl-base	428 k
xalan-j2	x86_64	2.7.0-
6jpp.1	sl-base	4.6 M
xerces-j2	x86_64	2.7.1-
7jpp.2.el5_4.2	sl-base	3.1 M
xml-commons-resolver	x86_64	
1.1-1jpp.12	sl-base	170 k

### Transaction Summary

```

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}}}
```

=====  
Installation of the batch system specific software  
=====

\* If you are running Torque, and your CREAM CE node is the torque master, install the emi-torque-server and emi-torque-utils metapackages:

\* yum install emi-torque-server

```

{{{
=====
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=====
=====
=====
```

Package	Arch	Version
Repository	Size	

```

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

Installing:

emi-torque-server		x86_64	1.0.0-
1.sl5		UMD-1-base	1.7 k
Installing for dependencies:			
glite-yaim-torque-server		noarch	5.0.0-
1.sl5		UMD-1-base	5.9 k
glite-yaim-torque-utils		noarch	5.0.0-
1.sl5		UMD-1-base	7.5 k
libtorque		x86_64	2.5.7-7.el5
epel	93 k		
maui		x86_64	3.2.6p21-
snap.1234905291.5.el5		UMD-1-base	
5.7 k			
maui-client		x86_64	3.2.6p21-
snap.1234905291.5.el5		UMD-1-base	
910 k			
maui-server		x86_64	3.2.6p21-
snap.1234905291.5.el5		UMD-1-base	
500 k			
munge		x86_64	0.5.8-8.el5
epel	114 k		
munge-libs		x86_64	0.5.8-8.el5
epel	25 k		
torque		x86_64	2.5.7-7.el5
epel	49 k		
torque-client		x86_64	2.5.7-7.el5
epel	199 k		
torque-server		x86_64	2.5.7-7.el5
epel	184 k		

Transaction Summary

}}}

\* yum install emi-torque-utils

{{{

Package	Arch	Repository	Size
Version			

```

=====
Installing:
emi-torque-utils                x86_64
1.0.0-1.sl5                    UMD-1-base                1.8 k
Installing for dependencies:
glite-apel-pbs                 noarch
2.0.6-6.sl5                   UMD-1-base                24 k
lcg-info-dynamic-pbs          noarch
2.0.0-1.sl5                   UMD-1-base                3.7 k
lcg-info-dynamic-scheduler-pbs noarch
2.2.1-1.sl5                   UMD-1-base                22 k
lcg-pbs-utils                 x86_64
2.0.0-1.sl5                   UMD-1-base                4.0 k

```

Transaction Summary

```

}}}

```

=====  
Installation the MPI specific software on the CE  
=====

- \* Installing the MPI software on CreamCe (Install the mpi metapackage):
- \* yum install mpi-start

```

{{{

```

```

Installing:
mpi-start                      noarch                    1.1.0-1
UMD-1-updates                  35 k

```

Transaction Summary

```

}}}

```

- \* yum install glite-yaim-mpi

```

{{{

```

Package Repository	Arch Size	Version
-----------------------	--------------	---------

```

Installing:
glite-yaim-mpi          noarch          1.1.9-
1.s15                  UMD-1-updates 16 k

```

Transaction Summary

```

}}}
* yum install glite-mpi
{{{

```

Package Repository	Arch Size	Version
-----------------------	--------------	---------

```

Installing:
glite-mpi              noarch          1.0.1-0.s15
UMD-1-updates          1.5 k

```

Transaction Summary

```

}}}

```

==== Installing the WNs =====

```

* yum install emi-wn

```

```

{{{

```

Package Repository	Arch Size	Version
Installing:		
emi-wn 0.sl5	x86_64 UMD-1-base	1.0.0- 2.7 k
Installing for dependencies:		
CGSI_gSOAP_2.7 1.3.4-2.sl5	x86_64 UMD-1-base	92 k
SAGA.lsu-cpp.engine 1.3.3-4.sl5	x86_64 UMD-1-base	55 M
a1_grid_env 3.0.2-1.sl5	x86_64 UMD-1-base	3.3 k
boost 10.el5	x86_64 sl-base	1.33.1- 879 k
c-ares 5.el5	x86_64 sl-security	1.6.0- 49 k
c-check 1.sl5	x86_64 UMD-1-base	0.9.8- 146 k
classads 1.el5	x86_64 epel	1.0.8- 453 k
cleanup-grid-accounts 2.0.0-1	noarch UMD-1-base	6.9 k
dcache-srmclient 1.9.5-23	noarch UMD-1-base	7.2 M
dcap UMD-1-base	x86_64 65 k	2.47.5-1
delegation-api-c 2.1.0-1.sl5	x86_64 UMD-1-base	105 k
delegation-cli 1.sl5	x86_64 UMD-1-base	2.1.0- 56 k
dpm 2sec.sl5	x86_64 UMD-1-base	1.8.1- 4.5 M
dpm-devel 2sec.sl5	x86_64 UMD-1-base	1.8.1- 665 k
dpm-libs 2sec.sl5	x86_64 UMD-1-base	1.8.1- 321 k
e2fsprogs-devel 1.39-23.el5	x86_64 sl-base	633 k
editline 1.sl5	x86_64 UMD-1-base	2.9- 271 k
emi.amga.amga-cli 2.1.2-1.sl5	x86_64 UMD-1-base	404 k
emi.saga-adapter.context-cpp 1.0.2-2.sl5	x86_64 UMD-1-base	323 k
emi.saga-adapter.isn-common 1.0.1-2.sl5	noarch UMD-1-base	17 k

emi.saga-adapter.isn-cpp	x86_64		
1.0.2-1.sl5	UMD-1-base		860 k
emi.saga-adapter.sd-cpp	x86_64		
1.0.3-1.sl5	UMD-1-base		4.8 M
fetch-curl	noarch		2.8.5-
1.el5	epel		24 k
gfal	x86_64		1.11.19-
3.sl5	UMD-1-updates		1.2 M
gfal-py26	x86_64		
1.11.19-3.sl5	UMD-1-updates		1.2
M			
glib2-devel	x86_64		
2.12.3-4.el5_3.1	sl-base		1.3 M
glite-jobid-api-c	x86_64		
2.0.3-1.sl5	UMD-1-updates		19 k
glite-jobid-api-cpp	x86_64		
1.1.3-1.sl5	UMD-1-updates		4.3 k
glite-lb-client	x86_64		5.0.8-
1.sl5	UMD-1-updates		1.1 M
glite-lb-common	x86_64		
8.0.6-1.sl5	UMD-1-updates		397 k
glite-lbjp-common-gss	x86_64		
3.0.4-1.sl5	UMD-1-updates		43 k
glite-lbjp-common-trio	x86_64		
2.1.2-7.sl5	UMD-1-updates		71 k
glite-service-discovery-api-c	x86_64		
2.2.3-1.sl5	UMD-1-base		47 k
glite-wms-brokerinfo-access	x86_64		
3.3.2-3.sl5	UMD-1-base		62 k
glite-wn-info	noarch		1.0.3-
2.sl5	UMD-1-base		5.5 k
glite-yaim-clients	noarch		
5.0.0-1.sl5	UMD-1-base		21 k
glite-yaim-core	noarch		
5.0.2-1.sl5	UMD-1-updates		116 k
globus-callout	x86_64		0.7-
8.el5	UMD-1-updates		16 k
globus-common	x86_64		
11.6-5.el5	UMD-1-updates		109 k
globus-ftp-client	x86_64		6.0-
2.el5	UMD-1-updates		92 k
globus-ftp-control	x86_64		
2.12-2.el5	UMD-1-updates		67 k
globus-gass-copy	x86_64		
5.14-3.el5	UMD-1-updates		37 k
globus-gass-copy-progs	x86_64		
5.14-3.el5	UMD-1-updates		43 k
globus-gass-transfer	x86_64		
4.3-3.el5	UMD-1-updates		40 k

globus-gsi-callback	x86_64	
2.8-2.el5	UMD-1-updates	38 k
globus-gsi-cert-utils	x86_64	6.7-
2.el5	UMD-1-updates	18 k
globus-gsi-credential	x86_64	
3.5-3.el5	UMD-1-updates	32 k
globus-gsi-openssl-error	x86_64	
0.14-8.el5	UMD-1-updates	15 k
globus-gsi-proxy-core	x86_64	
4.7-2.el5	UMD-1-updates	33 k
globus-gsi-proxy-ssl	x86_64	
2.3-3.el5	UMD-1-updates	17 k
globus-gsi-sysconfig	x86_64	
3.2-1.el5	UMD-1-updates	28 k
globus-gss-assist	x86_64	
5.10-1.el5	UMD-1-updates	31 k
globus-gssapi-error	x86_64	
2.5-8.el5	UMD-1-updates	13 k
globus-gssapi-gsi	x86_64	7.8-
1.el5	UMD-1-updates	54 k
globus-io	x86_64	6.3-
6.el5	UMD-1-updates	43 k
globus-libtool	x86_64	1.2-
4.el5	UMD-1-updates	4.1 k
globus-openssl	x86_64	5.1-
2.el5	UMD-1-updates	4.4 k
globus-openssl-module	x86_64	
1.3-3.el5	UMD-1-updates	13 k
globus-proxy-utils	x86_64	
3.10-1.el5	UMD-1-updates	45 k
globus-xio	x86_64	2.8-
4.el5	UMD-1-updates	123 k
globus-xio-gsi-driver	x86_64	
0.6-7.el5	UMD-1-updates	29 k
globus-xio-popen-driver	x86_64	
0.9-3.el5	UMD-1-updates	17 k
gridftp-ifce	x86_64	2.1.1-
1.sl5	UMD-1-updates	35 k
gridsite-shared	x86_64	
1.7.15-2.sl5	UMD-1-updates	131 k
gsoap	x86_64	2.7.13-
4.el5	epel	444 k
is-interface	x86_64	1.1.3-
1.sl5	UMD-1-updates	68 k
jclassads	noarch	2.4.0-
2.sl5	UMD-1-base	95 k
jdk	x86_64	
2000:1.6.0_29-fcs	sl-security	68 M
keyutils-libs-devel	x86_64	1.2-
1.el5	sl-base	27 k



krb5-devel	x86_64	1.6.1-
63.el5_7	sl-security	1.9 M
lcg-ManageVOTag	noarch	
4.0.0-1	UMD-1-base	4.8 k
lcg-info	noarch	1.12.2-
1.el5	UMD-1-base	13 k
lcg-infosites	noarch	3.1.0-
1.el5	UMD-1-base	10 k
lcg-tags	noarch	0.4.0-2
UMD-1-base	8.7 k	
lcg-util	x86_64	1.11.19-
3.sl5	UMD-1-updates	420 k
lcg-util-py26	x86_64	
1.11.19-3.sl5	UMD-1-updates	416
k		
lcgdm-devel	x86_64	
1.8.1-2sec.sl5	UMD-1-base	197 k
lcgdm-libs	x86_64	1.8.2-
3sec.sl5	UMD-1-updates	163 k
lfc	x86_64	1.8.1-
2sec.sl5	UMD-1-base	1.5 M
lfc-devel	x86_64	1.8.1-
2sec.sl5	UMD-1-base	320 k
lfc-libs	x86_64	1.8.1-
2sec.sl5	UMD-1-base	100 k
libdcap	x86_64	2.47.5-
1	UMD-1-base	107 k
libdcap-devel	x86_64	
2.47.5-1	UMD-1-base	144 k
libdcap-tunnel-gsi	x86_64	
2.47.5-1	UMD-1-base	18 k
libdcap-tunnel-krb	x86_64	
2.47.5-1	UMD-1-base	17 k
libdcap-tunnel-ssl	x86_64	
2.47.5-1	UMD-1-base	8.6 k
libdcap-tunnel-telnet	x86_64	
2.47.5-1	UMD-1-base	9.8 k
libicu	x86_64	3.6-
5.16.1	sl-security	5.2 M
libselinux-devel	x86_64	
1.33.4-5.7.el5	sl-security	149 k
libsepol-devel	x86_64	
1.15.2-3.el5	sl-base	192 k
libtool-ltdl	x86_64	1.5.22-
7.el5_4	sl-base	38 k
openssl-devel	x86_64	
0.9.8e-12.el5_5.7	sl-security	1.9 M
perl-Compress-Zlib	x86_64	
1.42-1.fc6	sl-base	52 k

perl-Convert-ASN1		noarch	
0.20-1.1	sl-base		41 k
perl-HTML-Parser		x86_64	
3.55-1.fc6	sl-base		91 k
perl-HTML-Tagset		noarch	
3.10-2.1.1	sl-base		14 k
perl-IO-Socket-SSL		noarch	
1.01-1.fc6	sl-base		49 k
perl-LDAP		noarch	
1:0.33-3.fc6	sl-base		316 k
perl-Net-SSLeay		x86_64	
1.30-4.fc6	sl-base		192 k
perl-URI		noarch	1.35-3
sl-base	116 k		
perl-XML-Namespacesupport		noarch	
1.09-1.2.1	sl-base		15 k
perl-XML-SAX		noarch	
0.14-8	sl-base		77 k
perl-dpm		x86_64	1.8.1-
2sec.sl5	UMD-1-base		427 k
perl-lfc		x86_64	1.8.1-
2sec.sl5	UMD-1-base		324 k
perl-libwww-perl		noarch	
5.805-1.1.1	sl-base		375 k
pkgconfig		x86_64	
1:0.21-2.el5	sl-base		61 k
python-dpm		x86_64	
1.8.1-2sec.sl5	UMD-1-base		622 k
python-lfc		x86_64	1.8.1-
2sec.sl5	UMD-1-base		1.0 M
python26-dpm		x86_64	
1.8.1-2sec.sl5	UMD-1-base		597 k
python26-lfc		x86_64	
1.8.1-2sec.sl5	UMD-1-base		1.0 M
srm-ifce		x86_64	1.1.0-
1.sl5	UMD-1-updates		699 k
transfer-cli		x86_64	4.0.0-
1.sl5	UMD-1-base		1.1 M
transfer-interface		noarch	
3.7.1-1.sl5	UMD-1-base		136 k
uberftp		x86_64	2.4-
4.el5	epel		85 k
util-c		x86_64	1.3.0-
1.sl5	UMD-1-base		40 k
voms		x86_64	2.0.2-
1.sl5	UMD-1-base		165 k
voms-clients		x86_64	
2.0.0-1.sl5	UMD-1-base		178 k
voms-devel		x86_64	
2.0.0-1.sl5	UMD-1-base		18 k

xerces-c		x86_64		2.7.0-
8.el5	epel		1.3 M	
zlib-devel		x86_64		1.2.3-3
sl-base			102 k	

Transaction Summary

```

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

```

}}}

\* yum install emi-wn emi-torque-client

```

{{{
Package                Arch                Version
Repository              Size
=====
=====
=====
=====

```

Installing:

emi-torque-client		x86_64	
1.0.0-1.sl5	UMD-1-base		1.7 k

Installing for dependencies:

emi-version		x86_64		1.6.0-
1.sl5	UMD-1-updates			2.0 k
glite-yaim-torque-client		noarch		
5.0.0-1.sl5	UMD-1-base			5.0 k
glite-yaim-torque-utils		noarch		
5.0.0-1.sl5	UMD-1-base			7.5 k
lcg-info-dynamic-pbs		noarch		
2.0.0-1.sl5	UMD-1-base			3.7 k
lcg-pbs-utils		x86_64		2.0.0-
1.sl5	UMD-1-base			4.0 k
libtorque		x86_64		2.5.7-
7.el5	epel		93 k	
munge		x86_64		0.5.8-
8.el5	epel		114 k	
munge-libs		x86_64		0.5.8-
8.el5	epel		25 k	
torque		x86_64		2.5.7-
7.el5	epel		49 k	
torque-client		x86_64		2.5.7-
7.el5	epel		199 k	
torque-mom		x86_64		
2.5.7-7.el5	epel			164 k

Transaction Summary

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

```
}}}
```

```
===== Installation the MPI specific software on the WNs =====
```

```
* yum install mpi-start
```

```
{{{
```

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

Package Repository	Arch Size	Version

```
Installing:
mpi-start                noarch                1.1.0-1
UMD-1-updates           35 k
```

```
Transaction Summary
```

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

```
}}}
```

```
* yum install glite-mpi
```

```
{{{
```

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

Package Repository	Arch Size	Version

```
Installing:
glite-mpi                noarch                1.0.1-0.s15
UMD-1-updates           1.5 k
Installing for dependencies:
```

glite-yaim-mpi  
1.sl5

noarch  
UMD-1-updates

1.1.9-  
16 k

Transaction Summary

}}}

\* yum install openmpi openmpi-devel

{{{

Package Repository	Arch Size	Version
Installing:		
openmpi	i386	1.4-4.el5
sl-base	139 k	
openmpi	x86_64	1.4-4.el5
sl-base	140 k	
openmpi-devel	i386	1.4-4.el5
sl-base	2.2 M	
openmpi-devel	x86_64	1.4-
4.el5	sl-base	2.2 M
Installing for dependencies:		
libgfortran	i386	4.1.2-50.el5
sl-security	231 k	
libgfortran	x86_64	4.1.2-
50.el5	sl-security	243 k
libgomp	i386	4.4.0-6.el5
sl-base	70 k	
libgomp	x86_64	4.4.0-6.el5
sl-base	68 k	
libibcm	i386	1.0.5-1.el5
sl-base	19 k	
libibcm	x86_64	1.0.5-1.el5
sl-base	19 k	
libibverbs	i386	1.1.3-2.el5
sl-base	45 k	
libibverbs	x86_64	1.1.3-2.el5
sl-base	44 k	

libnes	i386	0.9.0-2.el5
sl-base	13 k	
librdmacm	i386	1.0.10-
1.el5	sl-base	23 k
librdmacm	x86_64	1.0.10-
1.el5	sl-base	23 k
mpi-selector	noarch	1.0.2-
1.el5	sl-base	25 k
openib	noarch	1.4.1-5.el5
sl-base	20 k	
openmpi-libs	i386	1.4-4.el5
sl-base	1.5 M	
openmpi-libs	x86_64	1.4-4.el5
sl-base	1.6 M	

### Transaction Summary

```

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

```

}}}

(!) The devel packages of the MPI packages do not include the compiler as dependency!  
 You should install it also if you want to support the compilation of MPI applications  
 (e.g. gcc, gcc-gfortran, gcc-g++)

```

* yum install gcc-gfortran gcc.x86_64 gcc-c++.x86_64 compat-gcc-34.x86_64 compat-
gcc-34-c++.x86_64 compat-gcc-34-g77.x86_64
{{{

```

```

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

```

Package	Arch	Version
Repository	Size	

```

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

```

### Installing:

compat-gcc-34	x86_64	3.4.6-4
sl-base	4.4 M	
compat-gcc-34-c++	x86_64	
3.4.6-4	sl-base	13 M
compat-gcc-34-g77	x86_64	3.4.6-
4	sl-base	2.4 M
gcc	x86_64	4.1.2-50.el5
sl-security	5.3 M	

gcc-c++	x86_64	4.1.2-
50.el5	sl-security	3.8 M
gcc-gfortran	x86_64	4.1.2-
50.el5	sl-security	3.5 M
Installing for dependencies:		
compat-libf2c-34	x86_64	3.4.6-4
sl-base	56 k	
cpp	x86_64	4.1.2-50.el5
sl-security	2.9 M	
glibc-devel	x86_64	2.5-
58.el5_6.3	sl-security	2.4 M
glibc-headers	x86_64	2.5-
58.el5_6.3	sl-security	594 k
gmp	x86_64	4.1.4-10.el5
sl-base	201 k	
kernel-headers	x86_64	2.6.18-
274.17.1.el5	sl-security	1.3 M
libstdc++-devel	x86_64	4.1.2-
50.el5	sl-security	2.8 M

#### 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=lx7607.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=lcpbs
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/authorz"
###CREAM_PEPD_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 leg-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 environment 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.ibergrid.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?/dteam/'
```

```
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:84
43/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/iberi
beu
VO_IBER_VO_IBERGRID_EU_QUEUES="GRID_iberibeu"
VO_IBER_VO_IBERGRID_EU_VOMS_SERVERS="vomss://voms02.ncg.ingrid.pt:8
443/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](https://twiki.cern.ch/twiki/bin/view/LCG/Site-info_configuration_variables#cream_CE)]

(!) 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
[ ..... ]
Stopping glite-lb-logd ... not running
Stopping glite-lb-interlogd ... not running
Starting glite-lb-logd ... This is LocalLogger, part of Workload Management System in
EU DataGrid & EGEE.
done
Warning: stale /var/cream_lb/glite-lb-interlogd.pid for glite-lb-interlogd
Warning: stale /tmp/interlogger.sock for glite-lb-interlogd
Starting glite-lb-interlogd ... done
  DEBUG: Skipping function: config_glite_initd_setenv because it is not defined
  INFO: Executing function: config_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
  DEBUG: Add all the pbs services...
  DEBUG: Define the batch server name
  DEBUG: Create the node list
  DEBUG: Saving the existing nodes configuration
  DEBUG: (Re)start the torque server
  INFO: Re-starting the torque server
Shutting down TORQUE Server:                [ OK ]
/var/torque/server_priv/serverdb
Starting TORQUE Server:                      [ OK ]
  DEBUG: Create the pbs queues
  DEBUG: Queue "GRID_ops" already exists, it won't be created.
  DEBUG: Queue "GRID_dteam" already exists, it won't be created.
  DEBUG: Queue "GRID_opsibeu" already exists, it won't be created.
  DEBUG: Queue "GRID_iberibeu" already exists, it won't be created.
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
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
  DEBUG: Mapping: ops --> ops
  DEBUG: Mapping: /VO=ops/GROUP=/ops/ROLE=lcgadmin --> opssgm
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
  DEBUG: Mapping: dteam --> dteam
  DEBUG: Mapping: /VO=dteam/GROUP=/dteam/ROLE=lcgadmin --> dteamsm
Max open servers: 9
set queue GRID_opsibeu queue_type = Execution
  DEBUG: Mapping: ops.vo.ibergrid.eu --> opsibeu
  DEBUG: Mapping: /VO=ops.vo.ibergrid.eu/GROUP=/ops.vo.ibergrid.eu/ROLE=VO-
Admin --> opsibeusgm
  DEBUG: Mapping:
/VO=ops.vo.ibergrid.eu/GROUP=/ops.vo.ibergrid.eu/ROLE=Production --> opsibeuprd
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
  DEBUG: Mapping: iber.vo.ibergrid.eu --> ibeibeu
  DEBUG: Mapping:
/VO=iber.vo.ibergrid.eu/GROUP=/iber.vo.ibergrid.eu/ROLE=VO-Admin -->
ibeibeusgm
  DEBUG: Mapping:
/VO=iber.vo.ibergrid.eu/GROUP=/iber.vo.ibergrid.eu/ROLE=Production -->
ibeibeuprd
Shutting down TORQUE Server:          [ OK ]
/var/torque/server_priv/serverdb
Starting TORQUE Server:                [ OK ]
  DEBUG: zip server log
  INFO: Executing function: config_mai_cfg_setenv
  DEBUG: Currently this function doesn't set any environment variables.
  INFO: Executing function: config_mai_cfg
  INFO: configuring maui ...
  DEBUG: Saving the existing maui configuration
MPI_CE creamCE TORQUE_server TORQUE_utils
  DEBUG: Starting Maui ...
Shutting down MAUI Scheduler:         [ OK ]
Starting MAUI Scheduler:              [ OK ]
  INFO: Executing function: config_apel_pbs_setenv
  DEBUG: This function currently doesn't set any environment variables.
```



```

INFO: Executing function: config_apel_pbs
DEBUG: Check if the parser config template (/etc/glite-apel-pbs/parser-config.xml)
exists, exists if not
DEBUG: Create a parser config xml file (/etc/glite-apel-pbs/parser-config-yaim.xml)
DEBUG: Creating APEL parser configuration in /etc/glite-apel-pbs/parser-config.xml
DEBUG: Change the ownership and permissions of the created config file
DEBUG: Add a cron job (edg-apel-pbs-parser) for periodic configuration.
INFO: Executing function: config_gip_sched_plugin_pbs_setenv
DEBUG: This function currently doesn't set any environment variables.
INFO: Executing function: config_gip_sched_plugin_pbs
DEBUG: Checks if the batch system is correct for this function
DEBUG: Define the 'max jobs' cmd for the VOs
DEBUG: Add BATCH_SERVER to the /var/torque/server_name file to enable torque
clients
DEBUG: Create ERT configuration
DEBUG: Skipping function: config_torque_submitter_ssh_setenv because it is not
defined
INFO: Executing function: config_torque_submitter_ssh
Reloading sshd: [ OK ]
INFO: Configuration Complete. [ OK ]
INFO: YAIM terminated succesfully.

}}}}

```

(!) I needed to configure like 3 times, and start pbs\_server daemon by hand in order to the YAIM configuration finished OK

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

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

(!)

\* Taking the information about how to configure MPI in the WNs 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=lx7607.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=lcpbs  
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_PEPD_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
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, default 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 environment 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
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=umdttest
CREAM_DB_PASSWORD=""
MYSQL_PASSWORD=""
BLPARSER_HOST=test06.egi.cesga.es
```

```
# MPI CONFIGURATION
```

```
#####
MPI_OPENMPI_ENABLE="yes"
## 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"
```

```
# 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.ibergrid.eu/GROUP=/iber.vo.ibergrid.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:84
43/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/iberi
beu

```

```
VO_IBER_VO_IBERGRID_EU_QUEUES="GRID_iberibeu"
VO_IBER_VO_IBERGRID_EU_VOMS_SERVERS=""vomss://voms02.ncg.ingrid.pt:8
443/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"
}}
}}
```

==== Configuring with YAIM the WNs ====

```
{
[root@test14 etc]# /opt/glite/yaim/bin/yaim -c -s /opt/glite/yaim/etc/site-info.def -n
MPI_WN -n WN -n TORQUE_client
```

WARNING:

WARNING:

```
*****
*****
```

WARNING: Your siteinfo directory is world readable. This is generally a bad idea  
WARNING: as configuration files may contain passwords and other sensitive  
information.

WARNING:

```
*****
*****
```

WARNING:

```
DEBUG: Sourcing /opt/glite/yaim/bin/./defaults/site-info.pre
INFO: Using site configuration file: /opt/glite/yaim/etc/site-info.def
DEBUG: Sourcing site-info.def file: /opt/glite/yaim/etc/site-info.def
DEBUG: Sourcing /opt/glite/yaim/bin/./defaults/site-info.post
DEBUG: Sourcing /opt/glite/yaim/bin/./defaults/glite-wn.post
DEBUG: Sourcing /opt/glite/yaim/bin/./defaults/mapping
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
.  I))_ I))_)
```

```
current working directory: /opt/glite/yaim/etc
site-info.def date: Jan 17 10:08 /opt/glite/yaim/etc/site-info.def
yaim command: -c -s /opt/glite/yaim/etc/site-info.def -n MPI_WN -n WN -n
TORQUE_client
```

log file: /opt/glite/yaim/bin/./log/yaimlog  
Tue Jan 17 10:09:04 CET 2012 : /opt/glite/yaim/bin/yaim

Installed YAIM versions:  
glite-yaim-clients 5.0.0-1  
glite-yaim-core 5.0.2-1  
glite-yaim-mpi 1.1-9  
glite-yaim-torque-client 5.0.0-1  
glite-yaim-torque-utils 5.0.0-1  
0

```
#####  
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  
DEBUG: Detect platform: OS flavour detected is: redhat  
DEBUG: Detected architecture is 64BIT  
DEBUG: Detect platform: OS type detected: sl5  
DEBUG: GROUPS_CONF is defined. Adding global groups to the groups.conf temp  
file  
DEBUG: GROUPS_CONF points now to the groups.conf temp file  
DEBUG: GROUPS_CONF=/tmp/yaim.z31986  
DEBUG: Resulted NODE_TYPE_LIST is : MPI_WN WN TORQUE_client  
DEBUG: Setting environment variable GRID_ENV_LOCATION, to value  
"/usr/libexec".  
DEBUG: Unset environment variable GRID_ENV_LOCATION.  
DEBUG: Setting environment variable LCG_LOCATION, to value "/usr".  
DEBUG: Unset environment variable LCG_LOCATION.  
DEBUG: Setting environment variable GLITE_LOCATION, to value "/usr".  
DEBUG: Unset environment variable GLITE_LOCATION.  
DEBUG: Setting environment variable GLITE_LOCATION_VAR, to value "/var".  
DEBUG: Unset environment variable GLITE_LOCATION_VAR.  
DEBUG: Appending value "/bin" to environment variable PATH.  
DEBUG: Deleting value "/bin" from environment variable PATH.  
DEBUG: Appending value "/opt/glite/share/man" to environment variable  
MANPATH.  
DEBUG: Deleting value "/opt/glite/share/man" from environment variable  
MANPATH.  
DEBUG: Sourcing node definition file: /opt/glite/yaim/bin/./node-info.d/glite-  
mpi_wn  
DEBUG: Sourcing node definition file: /opt/glite/yaim/bin/./node-info.d/glite-wn  
DEBUG: Sourcing node definition file: /opt/glite/yaim/bin/./node-info.d/glite-  
torque_client  
INFO: Executing function: config_mpi_wn_check  
DEBUG: This function doesn't currently require any variables.  
DEBUG: Skipping function: config_ldconf_check because it is not defined  
DEBUG: Skipping function: config_sysconfig_edg_check because it is not defined  
DEBUG: Skipping function: config_sysconfig_globus_check because it is not defined  
INFO: Executing function: config_sysconfig_lcg_check  
DEBUG: Skipping function: config_crl_check because it is not defined
```



DEBUG: Skipping function: config\_rfio\_check because it is not defined  
INFO: Executing function: config\_globus\_clients\_check  
INFO: Executing function: config\_lcgenv\_check  
INFO: Executing function: config\_users\_check  
INFO: Executing function: config\_sw\_dir\_check  
DEBUG: Skipping function: config\_fts\_client\_check because it is not defined  
INFO: Executing function: config\_amga\_client\_check  
DEBUG: This function doesn't currently require any variables.  
INFO: Executing function: config\_wn\_check  
INFO: Executing function: config\_vomkdir\_check  
INFO: Executing function: config\_vomses\_check  
INFO: Executing function: config\_glite\_saga\_check  
INFO: Executing function: config\_add\_pool\_env\_check  
INFO: Executing function: config\_wn\_info\_check  
INFO: Executing function: config\_torque\_client\_check  
INFO: Executing function: config\_mpi\_wn\_setenv  
DEBUG: Configuring OPENMPI (Path "" Version "")  
DEBUG: Searching for MPI flavour openmpi  
INFO: Found OPENMPI at /usr/lib64/openmpi/1.4-gcc  
DEBUG: Setting environment variable MPI\_OPENMPI\_PATH, to value  
"/usr/lib64/openmpi/1.4-gcc".  
DEBUG: Unset environment variable MPI\_OPENMPI\_PATH.  
DEBUG: Trying to detect version of OPENMPI installed.  
INFO: Installed version of OPENMPI is 1.4  
DEBUG: Setting environment variable MPI\_OPENMPI\_VERSION, to value "1.4".  
DEBUG: Unset environment variable MPI\_OPENMPI\_VERSION.  
DEBUG: Setting environment variable MPI\_SSH\_HOST\_BASED\_AUTH, to value  
"yes".  
DEBUG: Unset environment variable MPI\_SSH\_HOST\_BASED\_AUTH.  
DEBUG: Setting environment variable I2G\_MPI\_START, to value "/usr/bin/mpi-  
start".  
DEBUG: Unset environment variable I2G\_MPI\_START.  
DEBUG: Setting environment variable MPI\_DEFAULT\_FLAVOUR, to value  
"openmpi".  
DEBUG: Unset environment variable MPI\_DEFAULT\_FLAVOUR.  
INFO: Executing function: config\_mpi\_wn  
DEBUG: Skipping function: config\_ldconf\_setenv because it is not defined  
INFO: Executing function: config\_ldconf  
INFO: config\_ldconf: function not needed anymore, left empty waiting to be removed  
DEBUG: Skipping function: config\_sysconfig\_edg\_setenv because it is not defined  
INFO: Executing function: config\_sysconfig\_edg  
DEBUG: Skipping function: config\_sysconfig\_globus\_setenv because it is not  
defined  
INFO: Executing function: config\_sysconfig\_globus  
DEBUG: Skipping function: config\_sysconfig\_lcg\_setenv because it is not defined  
INFO: Executing function: config\_sysconfig\_lcg  
DEBUG: Skipping function: config\_crl\_setenv because it is not defined  
INFO: Executing function: config\_crl  
INFO: Now updating the CRLs - this may take a few minutes...  
Enabling periodic fetch-crl: [ OK ]

DEBUG: fetch-crl cron enabled  
DEBUG: Skipping function: config\_rfio\_setenv because it is not defined  
INFO: Executing function: config\_rfio  
INFO: Executing function: config\_globus\_clients\_setenv  
DEBUG: Setting environment variable GT\_PROXY\_MODE, to value "old".  
DEBUG: Unset environment variable GT\_PROXY\_MODE.  
INFO: Executing function: config\_globus\_clients  
INFO: Configure the globus service - not needed in EMI  
DEBUG: Skipping function: config\_lcgenv\_setenv because it is not defined  
INFO: Executing function: config\_lcgenv  
DEBUG: Setting environment variable LCG\_GFAL\_INFOSYS, to value "topbdii02.ncg.ingrid.pt:2170".  
DEBUG: Unset environment variable LCG\_GFAL\_INFOSYS.  
DEBUG: Setting environment variable MYPROXY\_SERVER, to value "myproxy.egi.cesga.es".  
DEBUG: Unset environment variable MYPROXY\_SERVER.  
DEBUG: Appending value "/opt/d-cache/srm/bin:/opt/d-cache/dcap/bin" to environment variable PATH.  
DEBUG: Deleting value "/opt/d-cache/srm/bin:/opt/d-cache/dcap/bin" from environment variable PATH.  
DEBUG: Appending value "/opt/d-cache/dcap/lib64" to environment variable LD\_LIBRARY\_PATH.  
DEBUG: Deleting value "/opt/d-cache/dcap/lib64" from environment variable LD\_LIBRARY\_PATH.  
DEBUG: Setting environment variable SRM\_PATH, to value "/opt/d-cache/srm".  
DEBUG: Unset environment variable SRM\_PATH.  
DEBUG: Setting environment variable VO\_OPS\_DEFAULT\_SE, to value "test08.egi.cesga.es".  
DEBUG: Unset environment variable VO\_OPS\_DEFAULT\_SE.  
DEBUG: Setting environment variable VO\_OPS\_SW\_DIR, to value "/opt/exp\_soft/ops".  
DEBUG: Unset environment variable VO\_OPS\_SW\_DIR.  
DEBUG: Setting environment variable VO\_DTEAM\_DEFAULT\_SE, to value "test08.egi.cesga.es".  
DEBUG: Unset environment variable VO\_DTEAM\_DEFAULT\_SE.  
DEBUG: Setting environment variable VO\_DTEAM\_SW\_DIR, to value "/opt/exp\_soft/dteam".  
DEBUG: Unset environment variable VO\_DTEAM\_SW\_DIR.  
DEBUG: Setting environment variable VO\_OPS\_VO\_IBERGRID\_EU\_DEFAULT\_SE, to value "test08.egi.cesga.es".  
DEBUG: Unset environment variable VO\_OPS\_VO\_IBERGRID\_EU\_DEFAULT\_SE.  
DEBUG: Setting environment variable VO\_OPS\_VO\_IBERGRID\_EU\_SW\_DIR, to value "/opt/exp\_soft/opsibeu".  
DEBUG: Unset environment variable VO\_OPS\_VO\_IBERGRID\_EU\_SW\_DIR.  
DEBUG: Setting environment variable VO\_IBER\_VO\_IBERGRID\_EU\_DEFAULT\_SE, to value "test08.egi.cesga.es".  
DEBUG: Unset environment variable VO\_IBER\_VO\_IBERGRID\_EU\_DEFAULT\_SE.

DEBUG: Setting environment variable VO\_IBER\_VO\_IBERGRID\_EU\_SW\_DIR, to value "/opt/exp\_soft/iberibeu".

DEBUG: Unset environment variable VO\_IBER\_VO\_IBERGRID\_EU\_SW\_DIR.

DEBUG: Setting environment variable DPNS\_HOST, to value "test08.egi.cesga.es".

DEBUG: Unset environment variable DPNS\_HOST.

DEBUG: Setting environment variable DPM\_HOST, to value "test08.egi.cesga.es".

DEBUG: Unset environment variable DPM\_HOST.

DEBUG: Skipping function: config\_users\_setenv because it is not defined

INFO: Executing function: config\_users

INFO: Executing function: config\_sw\_dir\_setenv

DEBUG: This function doesn't currently set any environment variables.

INFO: Executing function: config\_sw\_dir

WARNING: YAIM has detected multiple sgm accounts

WARNING: Execute the following command manually: chmod -R ug+rw,o-w /opt/exp\_soft/ops

WARNING: to ensure that the VO software area in /opt/exp\_soft/ops has the correct permissions.

WARNING: YAIM has detected multiple sgm accounts

WARNING: Execute the following command manually: chmod -R ug+rw,o-w /opt/exp\_soft/dteam

WARNING: to ensure that the VO software area in /opt/exp\_soft/dteam has the correct permissions.

WARNING: YAIM has detected multiple sgm accounts

WARNING: Execute the following command manually: chmod -R ug+rw,o-w /opt/exp\_soft/opsibeu

WARNING: to ensure that the VO software area in /opt/exp\_soft/opsibeu has the correct permissions.

WARNING: YAIM has detected multiple sgm accounts

WARNING: Execute the following command manually: chmod -R ug+rw,o-w /opt/exp\_soft/iberibeu

WARNING: to ensure that the VO software area in /opt/exp\_soft/iberibeu has the correct permissions.

DEBUG: Skipping function: config\_fts\_client\_setenv because it is not defined

INFO: Executing function: config\_fts\_client

INFO: Executing function: config\_amga\_client\_setenv

INFO: Executing function: config\_amga\_client

INFO: Executing function: config\_wn\_setenv

DEBUG: Setting environment variable SITE\_NAME, to value "CESGA-EGEE".

DEBUG: Unset environment variable SITE\_NAME.

DEBUG: Setting environment variable GLITE\_ENV\_SET, to value "TRUE".

DEBUG: Unset environment variable GLITE\_ENV\_SET.

DEBUG: Setting environment variable SITE\_GIIS\_URL, to value "sbdi02.ncg.ingrid.pt".

DEBUG: Unset environment variable SITE\_GIIS\_URL.

INFO: Executing function: config\_wn

INFO: Executing function: config\_vomsdir\_setenv

DEBUG: This function currently doesn't set any environment variables.

INFO: Executing function: config\_vomsdir

DEBUG: .lsc file configuration for VO ops...

DEBUG: Create the /etc/grid-security/vomsdir/ops/voms.cern.ch.lsc

DEBUG: Copying /DC=ch/DC=cern/OU=computers/CN=voms.cern.ch in /etc/grid-security/vomsdir/ops/voms.cern.ch.lsc

DEBUG: Copying the voms.cern.ch CA DN /DC=ch/DC=cern/CN=CERN Trusted Certification Authority in /etc/grid-security/vomsdir/ops/voms.cern.ch.lsc

DEBUG: Copying the CA DN /DC=ch/DC=cern/CN=CERN Trusted Certification Authority in /etc/grid-security/vomsdir/ops/.lsc

DEBUG: .lsc file configuration for VO dteam...

DEBUG: Create the /etc/grid-security/vomsdir/dteam/lcg-voms.cern.ch.lsc

DEBUG: Copying /DC=ch/DC=cern/OU=computers/CN=lcg-voms.cern.ch in /etc/grid-security/vomsdir/dteam/lcg-voms.cern.ch.lsc

DEBUG: Create the /etc/grid-security/vomsdir/dteam/voms.cern.ch.lsc

DEBUG: Copying /DC=ch/DC=cern/OU=computers/CN=voms.cern.ch in /etc/grid-security/vomsdir/dteam/voms.cern.ch.lsc

DEBUG: Create the /etc/grid-security/vomsdir/dteam/voms.hellasgrid.gr.lsc

DEBUG: Copying /C=GR/O=HellasGrid/OU=hellasgrid.gr/CN=voms.hellasgrid.gr in /etc/grid-security/vomsdir/dteam/voms.hellasgrid.gr.lsc

DEBUG: Create the /etc/grid-security/vomsdir/dteam/voms2.hellasgrid.gr.lsc

DEBUG: Copying /C=GR/O=HellasGrid/OU=hellasgrid.gr/CN=voms2.hellasgrid.gr in /etc/grid-security/vomsdir/dteam/voms2.hellasgrid.gr.lsc

DEBUG: Copying the lcg-voms.cern.ch CA DN /DC=ch/DC=cern/CN=CERN Trusted Certification Authority in /etc/grid-security/vomsdir/dteam/lcg-voms.cern.ch.lsc

DEBUG: Copying the voms.cern.ch CA DN /DC=ch/DC=cern/CN=CERN Trusted Certification Authority in /etc/grid-security/vomsdir/dteam/voms.cern.ch.lsc

DEBUG: Copying the voms.hellasgrid.gr CA DN /C=GR/O=HellasGrid/OU=Certification Authorities/CN=HellasGrid CA 2006 in /etc/grid-security/vomsdir/dteam/voms.hellasgrid.gr.lsc

DEBUG: Copying the voms2.hellasgrid.gr CA DN /C=GR/O=HellasGrid/OU=Certification Authorities/CN=HellasGrid CA 2006 in /etc/grid-security/vomsdir/dteam/voms2.hellasgrid.gr.lsc

DEBUG: .lsc file configuration for VO ops.vo.ibergrid.eu...

DEBUG: Create the /etc/grid-security/vomsdir/ops.vo.ibergrid.eu/voms02.ncg.ingrid.pt.lsc

DEBUG: Copying /C=PT/O=LIPCA/O=LIP/OU=Lisboa/CN=voms02.ncg.ingrid.pt in /etc/grid-security/vomsdir/ops.vo.ibergrid.eu/voms02.ncg.ingrid.pt.lsc

DEBUG: Copying the voms02.ncg.ingrid.pt CA DN /C=PT/O=LIPCA/CN=LIP Certification Authority in /etc/grid-security/vomsdir/ops.vo.ibergrid.eu/voms02.ncg.ingrid.pt.lsc

DEBUG: .lsc file configuration for VO iber.vo.ibergrid.eu...

DEBUG: Create the /etc/grid-security/vomsdir/iber.vo.ibergrid.eu/voms02.ncg.ingrid.pt.lsc

DEBUG: Copying /C=PT/O=LIPCA/O=LIP/OU=Lisboa/CN=voms02.ncg.ingrid.pt in /etc/grid-security/vomsdir/iber.vo.ibergrid.eu/voms02.ncg.ingrid.pt.lsc

DEBUG: Copying the voms02.ncg.ingrid.pt CA DN /C=PT/O=LIPCA/CN=LIP Certification Authority in /etc/grid-security/vomsdir/iber.vo.ibergrid.eu/voms02.ncg.ingrid.pt.lsc

DEBUG: Skipping function: config\_vomses\_setenv because it is not defined

INFO: Executing function: config\_vomses

INFO: Executing function: config\_glite\_saga\_setenv

INFO: SAGA configuration is not required

INFO: Executing function: config\_glite\_saga

```
INFO: SAGA configuration is not required
INFO: Executing function: config_add_pool_env_setenv
DEBUG: Currently this function doesn't set any environment variables.
INFO: Executing function: config_add_pool_env
DEBUG: Creating links for the grid enviroment in /etc/profile.d/
DEBUG: Skipping function: config_wn_info_setenv because it is not defined
INFO: Executing function: config_wn_info
WARNING: No subcluster has been defined for the WN in the WN_LIST file
/opt/glite/yaim/etc/wn-list.conf
WARNING: YAIM will use the default subcluster id: CE_HOST ->
test06.egi.cesga.es
DEBUG: Skipping function: config_torque_client_setenv because it is not defined
INFO: Executing function: config_torque_client
DEBUG: configuring batch server name
DEBUG: configuring pbs services
DEBUG: ssh configuration
DEBUG: configuring known hosts
DEBUG: configuring pbs
WARNING: /var/torque/mom_priv/config already exists, YAIM will not touch it
INFO: starting pbs_mom...
Shutting down TORQUE Mom: [ OK ]
Starting TORQUE Mom: [ OK ]
DEBUG: creating edg-pbs-knownhosts cron job...
DEBUG: creating mom_logs cron job...
INFO: Configuration Complete. [ OK ]
INFO: YAIM terminated succesfully.
```

```
}}}
```

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

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

```
{{{
```

```
[root@ce2 etc]# ldapsearch -x -H ldap://sbdi02.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
```

```
}}}
```

```
* Checking if MPI has been configured correctly
```

```
{{{
```

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

```
}}}
```

```
{{{
```

```
[root@test06 etc]# cat /var/torque/submit_filter.pl  
cat: /var/torque/submit_filter.pl: No such file or directory  
}}}
```

```
==== 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
Mon Jan 16 17:12:24 CET 2012
```

```
}}}
```

```
(!)
```

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

```
{{{
```

```
[esfreire@test13 ~]$ glite-ce-delegate-proxy -e test06.egi.cesga.es esfreire
2012-01-16 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
2012-01-16 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
}

}}}
* Applying 4 CPUS fails
{{{

```

```

[esfreire@test13 verification]$ glite-ce-job-status -L 2
https://test06.egi.cesga.es:8443/CREAM387628043

```

```

***** JobID=[https://test06.egi.cesga.es:8443/CREAM387628043]
Current Status = [ABORTED]
Working Dir    = [[reserved]]
ExitCode      = []

```

FailureReason = [BLAH error: submission command failed (exit code = 1)  
(stdout:) (stderr:qsub: Job exceeds queue resource limits MSG=cannot locate feasible  
nodes-) N/A (jobId = CREAM387628043)]

Grid JobID = [N/A]

LRMS Abs JobID = [[reserved]]

LRMS JobID = [[reserved]]

Deleg Proxy ID = [esfreire]

DelegProxyInfo = [Valid From : 1/17/12 3:24 PM (GMT)

Valid To : 1/17/12 8:10 PM (GMT)

Holder Subject : /DC=es/DC=irisgrid/O=cesga/CN=javier-lopez

Holder CA : /DC=es/DC=irisgrid/CN=IRISGridCA

VO : ops

AC Issuer :

CN=voms.cern.ch,OU=computers,DC=cern,DC=ch

Attribute : /ops/Role=lcgadmin/Capability=NULL

/ops/NGI/Role=NULL/Capability=NULL

/ops/NGI/Portugal/Role=NULL/Capability=NULL

/ops/NGI/Spain/Role=NULL/Capability=NULL /ops/Role=NULL/Capability=NULL

]

Worker Node = [N/A]

Local User = [opssgm006]

CREAM ISB URI =

[gsiftp://test06.egi.cesga.es/var/cream\_sandbox/opssgm/\_DC\_es\_DC\_irisgrid\_O\_cesga  
\_CN\_javier\_lopez\_ops\_Role\_lcgadmin\_Capability\_NULL\_opssgm006/38/CREAM387  
628043/ISB]

CREAM OSB URI =

[gsiftp://test06.egi.cesga.es/var/cream\_sandbox/opssgm/\_DC\_es\_DC\_irisgrid\_O\_cesga  
\_CN\_javier\_lopez\_ops\_Role\_lcgadmin\_Capability\_NULL\_opssgm006/38/CREAM387  
628043/OSB]

JDL = [[ StdOutput = "std.out"; BatchSystem = "pbs"; QueueName =  
"GRID\_ops"; Executable = "/usr/bin/mpi-start"; Arguments = "-v -pre hooks.sh cpi";  
VirtualOrganisation = "ops"; OutputSandboxBaseDestUri =  
"gsiftp://se2.egi.cesga.es/tmp"; OutputSandbox = { "std.out","std.err" }; InputSandbox  
= { "/home/esfreire/verification/cpi.c","/home/esfreire/verification/hooks.sh" };  
StdError = "std.err"; CPUNumber = 4; Requirements = Member("MPI-  
START",other.GlueHostApplicationSoftwareRunTimeEnvironment) &&  
Member("OPENMPI",other.GlueHostApplicationSoftwareRunTimeEnvironment) ]]

Type = [normal]

Job status changes:

-----  
Status = [REGISTERED] - [Tue 17 Jan 2012 18:12:50] (1326820370)

Status = [PENDING] - [Tue 17 Jan 2012 18:12:52] (1326820372)

Status = [ABORTED] - [Tue 17 Jan 2012 18:12:57] (1326820377)

Issued Commands:

-----  
\*\*\* Command Name = [JOB\_REGISTER]

Command Category = [JOB\_MANAGEMENT]  
Command Status = [SUCCESSFULL]  
Creation Time = [Tue 17 Jan 2012 18:12:50] (1326820370)  
Start Scheduling Time = [Tue 17 Jan 2012 18:12:50] (1326820370)  
Start Processing Time = [Tue 17 Jan 2012 18:12:50] (1326820370)  
Execution Completed Time = [Tue 17 Jan 2012 18:12:50] (1326820370)

\*\*\* Command Name = [JOB\_START]  
Command Category = [JOB\_MANAGEMENT]  
Command Status = [ERROR]  
Command Fail Reason = [BLAH error: submission command failed (exit code = 1) (stdout:) (stderr:qsub: Job exceeds queue resource limits MSG=cannot locate feasible nodes-) N/A (jobId = CREAM387628043)]  
Creation Time = [Tue 17 Jan 2012 18:12:52] (1326820372)  
Start Scheduling Time = [Tue 17 Jan 2012 18:12:52] (1326820372)  
Start Processing Time = [Tue 17 Jan 2012 18:12:52] (1326820372)  
Execution Completed Time = [Tue 17 Jan 2012 18:12:57] (1326820377)

}}}

- It has been open following the following ggus ticket:  
[https://ggus.eu/ws/ticket\\_info.php?ticket=78348](https://ggus.eu/ws/ticket_info.php?ticket=78348)

\* Applying 2 CPUS run but it just uses a CPU

{{{

```
[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 16:29:51 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 = 0.001899
```

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

```
=====
```

```
}}}
```

```
{{{
```

```
[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 = Tue Jan 17 18:17:55 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 = 0.001998
=[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);
}}}

* With more 4 CPUs:
{{{
[esfreire@test13 verification]$ glite-ce-job-submit -r test06.egi.cesga.es:8443/cream-
pbs-GRID_ops -D esfreire job-oldsyntax.jdl
https://test06.egi.cesga.es:8443/CREAM055213399
[esfreire@test13 verification]$ glite-ce-job-status
https://test06.egi.cesga.es:8443/CREAM055213399

```

```
***** JobID=[https://test06.egi.cesga.es:8443/CREAM055213399]
      Status    = [ABORTED]
      ExitCode   = []
      FailureReason = [BLAH error: submission command failed (exit code = 1)
(stdout:) (stderr:qsub: Job exceeds queue resource limits MSG=cannot locate feasible
nodes-) N/A (jobId = CREAM055213399)]

}}}
```

\* With 2 CPUS:

```
{{{
```

```
[esfreire@test13 verification]$ glite-ce-job-submit -r test06.egi.cesga.es:8443/cream-
pbs-GRID_ops -D esfreire job-oldsyntax.jdl
https://test06.egi.cesga.es:8443/CREAM140430493
```

```
[esfreire@test13 verification]$ glite-ce-job-status
https://test06.egi.cesga.es:8443/CREAM140430493
```

```
***** JobID=[https://test06.egi.cesga.es:8443/CREAM140430493]
      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    = Tue Jan 17 18:32:21 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 = 0.001946

=[FINISHED]=====

=====

}}}

==== Checking edg-apel-sge-parser crond =====

{{{

[root@test06 etc]# export APEL\_HOME="/"

[root@test06 etc]# /usr/bin/apel-pbs-log-parser -f /etc/glite-apel-pbs/parser-config-yaim.xml

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Read-in configuration: [quiet, p, inspectTables, c, e, recursiveEventFiles, b, recursiveBlahdFiles] [DBPassword=\*\*\*\*, site=CESGA-EGEE, pbslog=/var/torque/server\_priv/accounting, GIIS=test06.egi.cesga.es, CEhost=test06.egi.cesga.es, blahdlogPrefix=blahp.log-, DBURL=jdbc:mysql://test07.egi.cesga.es:3306/accounting, DBUsername=accounting, timeZone=UTC, blahdlog=/var/log/cream/accounting]

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - ----- Starting the apel application -----

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - \*\*\*\* APEL is examining the schema \*\*\*\*

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the LcgRecords table

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The LcgRecords schema is up-to-date

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the BlahdRecords table

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The BlahdRecords schema is up-to-date

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the LcgProcessedFiles table

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The LcgProcessedFiles schema is up-to-date

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the SpecRecords table for patch 28593

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the SpecRecords table for patch 65723

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The SpecRecords schema is up-to-date

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the GkRecords table

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The GkRecords schema is up-to-date

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the MessageRecords table

Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The MessageRecords schema is up-to-date  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - \*\*\*\* Schema checks complete \*\*\*\*  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Finding CPU spec values from GIIS server: test06.egi.cesga.es  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - LDAP URL: ldap://test06.egi.cesga.es:2170  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The ClusterId : SpecInt pair are latest, no update required test06.egi.cesga.es:8443/cream-pbs-GRID\_dteam:2395  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The ClusterId : SpecInt pair are latest, no update required test06.egi.cesga.es:8443/cream-pbs-GRID\_ops:2395  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The ClusterId : SpecInt pair are latest, no update required test06.egi.cesga.es:8443/cream-pbs-GRID\_iberibeu:2395  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The ClusterId : SpecInt pair are latest, no update required test06.egi.cesga.es:8443/cream-pbs-GRID\_opsibeu:2395  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Reprocess disabled, checking new event logs only  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - \*\*\*\* Updating PBS end event table (EventRecords) \*\*\*\*  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Processing batch log file: test06.egi.cesga.es /var/torque/server\_priv/accounting/20120117  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Ignoring already processed event log file: test06.egi.cesga.es /var/torque/server\_priv/accounting/20120116  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Event records inserted: 7  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Checking the BlahdRecords table  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - The BlahdRecords schema is up-to-date  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Reprocess disabled, checking new event logs only  
Tue Jan 17 17:35:16 UTC 2012: apel-pbs-log-parser - Processing /var/log/cream/accounting/blahp.log-20120117  
Tue Jan 17 17:35:17 UTC 2012: apel-pbs-log-parser - Ignoring already processed accounting log file: test06.egi.cesga.es /var/log/cream/accounting/blahp.log-20120116  
Tue Jan 17 17:35:17 UTC 2012: apel-pbs-log-parser - Blahd records inserted: 7  
Tue Jan 17 17:35:17 UTC 2012: apel-pbs-log-parser - ----- Processing 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):

It has been seen that CREAM/torque + MAUI is not able to execute parallel jobs when it requested more than one processor. There is still two open bugs which was found during the first UMD verification of WN/Torque + EMI-MPI.1.0. It is a torque/maui problem that affects to MPI jobs but is not exclusive of that kind of jobs. As mentioned in the release notes, Maui versions prior to 3.3.4 do not allocate correctly all the nodes for the execution of jobs. More information can be found in the open ggus tickets: Apart from the open previous bugs, during this verification process was opened the ggus ticket, [https://ggus.eu/ws/ticket\\_info.php?ticket=78348](https://ggus.eu/ws/ticket_info.php?ticket=78348), because when submitting MPI jobs - requesting mpi-start and openmpi it is not possible to get per job more than the number of cores available in a single machine. If a machine has 2 cores it is only possible to request a maximum of 2 nodes in the jdl.. But even this issue is solved, the MPI jobs will not work due to Maui versions prior to 3.3.4 do not allocate correctly all the nodes for the execution of jobs.

### GGUS Tickets:

- [https://ggus.eu/ws/ticket\\_info.php?ticket=57828](https://ggus.eu/ws/ticket_info.php?ticket=57828)
- [https://ggus.eu/ws/ticket\\_info.php?ticket=67870](https://ggus.eu/ws/ticket_info.php?ticket=67870)
- [https://ggus.eu/ws/ticket\\_info.php?ticket=78348](https://ggus.eu/ws/ticket_info.php?ticket=78348)

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

### Comments for TP:

