

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

| | | | |
|-------------------------|--------------------------------|---------------------------------------|----------|
| Name of the component | | | |
| Release | EMI.glite-mpi.s15.x86_64-1.4.0 | RT Ticket: | #4497 |
| 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 | 10 hours | | |
| Component st | VERIFIED | Date | |
| Verification start date | 03/01/13 | Verification end date | 08/01/13 |

Summary:

EMI-MPI was updated and installed from scratch using UMD-2 repository without any important issue in a creamCE and Worker Nodes with Torque + Maui.

GGUS Tickets:

Summary of Quality Criteria verification:

| | Generic Quality Criteria Total (Critical/Non critical) | | | |
|------------|--|------------|----------------|-------|
| | Passed | Not passed | Not Applicable | Total |
| TP | | | | |
| VLD | 11 | | | 11 |
| | Specific Quality Criteria | | | |
| TP | | | | |
| VLD | 4 | | | 4 |

Quality Criteria verification cheatsheet:

Generic QC

| | | | |
|---|---|-----|---|
| GENERIC_DOC_1 (Functional Description) | Y | VLD | http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils#Functional_Description |
| GENERIC_DOC_2 (Release Notes) | Y | VLD | https://devel.ifca.es/mpi-start/versions?show=all |
| GENERIC_DOC_3 (User Documentation) | Y | VLD | http://grid.ifca.es/wiki/Middleware/MpiStart/UserDocumentation |
| GENERIC_DOC_4 (Online help (man pages)) | Y | VLD | http://grid.ifca.es/wiki/Middleware/MpiStart |
| GENERIC_DOC_6 (Administrator Documentation) | Y | VLD | http://grid.ifca.es/wiki/Middleware/MpiStart |
| GENERIC_DOC_8 (Software License) | Y | VLD | GPL |
| GENERIC_DOC_9 (Release changes test) | Y | VLD | https://devel.ifca.es/mpi-start/versions?show=all |
| GENERIC_DIST_1 (Source Code Availability) | Y | VLD | https://devel.ifca.es/mpi-start/browser |
| GENERIC_DIST_2 (Source Distribution) | Y | VLD | https://devel.ifca.es/mpi-start/browser |
| GENERIC_DIST_3 (Binary Distribution) | Y | VLD | http://admin-repo.egi.eu/sw/unverified/umd-2.emi.glite-mpi.sl5.x86_64/1/4/0/emi-mpi-1.0.2-1.el5.noarch.rpm |
| GENERIC_MISC_2 (Bug Tracking System) | Y | VLD | https://ggus.eu/pages/home.php |

Compute Capabilities QC

| | | | |
|---------------------------------------|---|-----|--|
| PARALLEL_MPI_1 (Precompiled MPI job) | Y | VLD | Job submitted without issues for openmpi |
| PARALLEL_MPI_2 (MPI job Execution) | Y | VLD | Job submitted without issues for openmpi |
| PARALLEL_OMP_1 (Precompiled OpenMP) | Y | VLD | Job submitted without issues for openmpi |
| PARALLEL_OMP_2 (OpenMP job Execution) | Y | VLD | Job submitted without issues for openmpi |

Operations Capabilities QC

Validator comments:

== EMI_creamCE_Torque + MPI ==

=== Ticket assigned ===

* [<https://rt.egi.eu/guest/Ticket/Display.html?id=4497>]

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

* MPI repo under verification

```
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```

```
[root@test06 yum.repos.d]# cat EMI.glite-mpi.sl5.x86_64.repo
```

```
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) - (4497,751,678)
```

```
[EMI.glite-mpi.sl5.x86_64]
```

```
name=EMI.glite-mpi.sl5.x86_64
```

```
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-2.emi.glite-mpi.sl5.x86_64/1/4/0/
```

```
enabled=1
```

```
protect=1
```

```
priority=1
```

```
gpgcheck=1
```

```
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/2/RPM-GPG-KEY-emi
```

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=== Installing ===

* Installing the CAs

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

```
yum install lcg-CA
```

```
==== Installing the CREAM-CE software ====
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```
* yum install xml-commons-apis
```

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

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

```
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```

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| Package Repository | Size | Arch | Version |
|------------------------------|-------|-------------|-----------------|
| Installing: | | | |
| emi-cream-ce | | x86_64 | 1.1.0-4.sl5 |
| UMD-2-updates | 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 | 1.2.2-1.sl5 |
| UMD-2-updates | 38 k | | |
| argus-pep-api-c | | x86_64 | 2.1.0-3.sl5 |
| UMD-2-base | 53 k | | |
| argus-pep-api-java | | noarch | 2.1.0-1.sl5 |
| UMD-2-updates | 58 k | | |
| argus-pep-common | | noarch | 2.2.0-1.sl5 |
| UMD-2-updates | 265 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 | | |
| axis2 | | noarch | 1.6.1-1.emi |
| UMD-2-updates | 19 M | | |

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|---------------------------|-------|---------|-------------------|
| bcel | | x86_64 | 5.1-8jpp.1 |
| sl-base | 1.1 M | | |
| bdii | | noarch | 5.2.12-1.el5 |
| UMD-2-updates | 22 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-2-base | 6.9 k | | |
| cups | | x86_64 | 1:1.3.7-30.el5 |
| sl-security | 3.1 M | | |
| dynsched-generic | | noarch | 2.4.1-1.sl5 |
| UMD-2-updates | 44 k | | |
| eclipse-ecj | | x86_64 | 1:3.2.1-19.el5 |
| sl-base | 9.0 M | | |
| emi-delegation-java | | noarch | 2.2.0-2.sl5 |
| UMD-2-updates | 96 k | | |
| emi-trustmanager | | noarch | 3.1.4-1.sl5 |
| UMD-2-updates | 277 k | | |
| emi-trustmanager-axis | | noarch | 2.0.2-1.sl5 |
| UMD-2-updates | 28 k | | |
| emi-trustmanager-axis2 | | noarch | 1.0.1-1.sl5 |
| UMD-2-updates | 16 k | | |
| emi-trustmanager-tomcat | | noarch | 3.0.1-1.sl5 |
| UMD-2-base | 30 k | | |
| emi-version | | x86_64 | 2.5.0-1.sl5 |
| UMD-2-updates | 2.0 k | | |
| expect | | x86_64 | 5.43.0-5.1 |
| sl-base | 160 k | | |
| fetch-curl | | 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-compatible | | 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 | 0.9.6-1.el5 |
| UMD-2-updates | 86 k | | |
| glite-apel-core | | noarch | 2.0.14-5.sl5 |
| UMD-2-base | 1.0 M | | |
| glite-ce-blahp | | x86_64 | 1.18.1-2.sl5 |
| UMD-2-updates | 488 k | | |

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|---------------------------------|-------|--------|--------------|
| glite-ce-ce-plugin | | noarch | 1.14.0-4.sl5 |
| UMD-2-updates | 19 k | | |
| glite-ce-common-java | | noarch | 1.14.0-4.sl5 |
| UMD-2-updates | 155 k | | |
| glite-ce-cream | | noarch | 1.14.1-1.sl5 |
| UMD-2-updates | 559 k | | |
| glite-ce-cream-api-java | | noarch | 1.14.1-2.sl5 |
| UMD-2-updates | 2.5 M | | |
| glite-ce-cream-core | | noarch | 1.14.1-1.sl5 |
| UMD-2-updates | 398 k | | |
| glite-ce-cream-es | | noarch | 1.14.1-1.sl5 |
| UMD-2-updates | 59 k | | |
| glite-ce-cream-utils | | x86_64 | 1.2.1-0.sl5 |
| UMD-2-updates | 35 k | | |
| glite-ce-job-plugin | | noarch | 1.14.0-4.sl5 |
| UMD-2-updates | 26 k | | |
| glite-ce-monitor | | noarch | 1.14.0-4.sl5 |
| UMD-2-updates | 90 k | | |
| glite-ce-monitor-api-java | | noarch | 1.14.0-4.sl5 |
| UMD-2-updates | 385 k | | |
| glite-ce-yaim-cream-ce | | noarch | 4.3.0-4.sl5 |
| UMD-2-updates | 45 k | | |
| glite-info-provider-service | | noarch | 1.9.0-5.el5 |
| UMD-2-updates | 66 k | | |
| glite-initscript-globus-gridftp | | noarch | 1.0.4-1.sl5 |
| UMD-2-updates | 3.5 k | | |
| glite-jdl-api-java | | noarch | 3.2.0-3.sl5 |
| UMD-2-updates | 45 k | | |
| glite-jobid-api-c | | x86_64 | 2.1.2-5.el5 |
| UMD-2-updates | 9.1 k | | |
| glite-lb-common | | x86_64 | 8.1.5-1.el5 |
| UMD-2-updates | 116 k | | |
| glite-lb-logger | | x86_64 | 2.3.7-1.el5 |
| UMD-2-updates | 79 k | | |
| glite-lbjp-common-gss | | x86_64 | 3.1.6-1.el5 |
| UMD-2-updates | 18 k | | |
| glite-lbjp-common-log | | x86_64 | 1.2.1-1.el5 |
| UMD-2-updates | 8.9 k | | |
| glite-lbjp-common-trio | | x86_64 | 2.2.3-2.el5 |
| UMD-2-updates | 27 k | | |
| glite-yaim-bdii | | noarch | 4.3.11-1.el5 |
| UMD-2-updates | 9.5 k | | |
| glite-yaim-core | | noarch | 5.1.0-1.sl5 |
| UMD-2-base | 118 k | | |
| globus-authz | | x86_64 | 2.2-1.el5 |
| UMD-2-updates | 14 k | | |
| globus-authz-callout-error | | x86_64 | 2.2-1.el5 |
| UMD-2-updates | 11 k | | |
| globus-callout | | x86_64 | 2.2-1.el5 |
| UMD-2-updates | 17 k | | |

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|-------------------------------|---------------|--------|--------------|
| globus-common | | x86_64 | 14.7-1.el5 |
| UMD-2-updates | 132 k | | |
| globus-ftp-control | | x86_64 | 4.4-1.el5 |
| UMD-2-updates | 73 k | | |
| globus-gfork | | x86_64 | 3.2-1.el5 |
| UMD-2-updates | 20 k | | |
| globus-gridftp-server | | x86_64 | 6.14-1.1.el5 |
| UMD-2-updates | 173 k | | |
| globus-gridftp-server-control | | x86_64 | 2.7-1.el5 |
| UMD-2-updates | 78 k | | |
| globus-gridftp-server-progs | | x86_64 | 6.14- |
| 1.1.el5 | UMD-2-updates | | 48 k |
| globus-gridmap-callout-error | | x86_64 | 1.2-2.el5 |
| UMD-2-updates | 10 k | | |
| globus-gsi-callback | | x86_64 | 4.3-1.el5 |
| UMD-2-updates | 42 k | | |
| globus-gsi-cert-utils | | x86_64 | 8.3-1.el5 |
| UMD-2-updates | 20 k | | |
| globus-gsi-credential | | x86_64 | 5.3-1.el5 |
| UMD-2-updates | 36 k | | |
| globus-gsi-openssl-error | | x86_64 | 2.1-2.el5 |
| UMD-2-updates | 16 k | | |
| globus-gsi-proxy-core | | x86_64 | 6.2-1.el5 |
| UMD-2-updates | 37 k | | |
| globus-gsi-proxy-ssl | | x86_64 | 4.1-2.el5 |
| UMD-2-updates | 18 k | | |
| globus-gsi-sysconfig | | x86_64 | 5.3-1.el5 |
| UMD-2-updates | 31 k | | |
| globus-gss-assist | | x86_64 | 8.6-1.el5 |
| UMD-2-updates | 35 k | | |
| globus-gssapi-error | | x86_64 | 4.1-2.el5 |
| UMD-2-updates | 14 k | | |
| globus-gssapi-gsi | | x86_64 | 10.7-1.el5 |
| UMD-2-updates | 62 k | | |
| globus-io | | x86_64 | 9.3-1.el5 |
| UMD-2-updates | 44 k | | |
| globus-openssl-module | | x86_64 | 3.2-1.el5 |
| UMD-2-updates | 14 k | | |
| globus-proxy-utils | | x86_64 | 5.0-2.el5 |
| UMD-2-updates | 45 k | | |
| globus-usage | | x86_64 | 3.1-2.el5 |
| UMD-2-updates | 17 k | | |
| globus-xio | | x86_64 | 3.3-1.el5 |
| UMD-2-updates | 178 k | | |
| globus-xio-gsi-driver | | x86_64 | 2.3-1.el5 |
| UMD-2-updates | 37 k | | |
| globus-xio-pipe-driver | | x86_64 | 2.2-1.el5 |
| UMD-2-updates | 17 k | | |
| glue-schema | | noarch | 2.0.8-2.el5 |
| UMD-2-updates | 34 k | | |

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|-------------------------------|---------------|--------|-------------------|
| gridsite-libs | | x86_64 | 1.7.24-1.el5 |
| UMD-2-updates | 131 k | | |
| jakarta-commons-beanutils | | x86_64 | 1.7.0- |
| 5jpp.1 | sl-base | | 567 k |
| jakarta-commons-cli | | x86_64 | 1.0- |
| 6jpp_10.el5 | epel | | 76 k |
| jakarta-commons-collections | | x86_64 | 3.2- |
| 2jpp.3 | sl-base | | 1.2 M |
| jakarta-commons-daemon | | x86_64 | 1:1.0.1- |
| 6jpp.1 | sl-base | | 46 k |
| jakarta-commons-dbcp | | x86_64 | 1.2.1- |
| 7jpp.1 | sl-base | | 278 k |
| jakarta-commons-digester | | x86_64 | 1.7-5jpp.1 |
| sl-base | 349 k | | |
| jakarta-commons-discovery | | x86_64 | 1:0.3- |
| 4jpp.1 | sl-base | | 150 k |
| jakarta-commons-el | | x86_64 | 1.0-7jpp.1 |
| sl-base | 269 k | | |
| jakarta-commons-fileupload | | x86_64 | 1:1.0- |
| 6jpp.1 | sl-base | | 53 k |
| jakarta-commons-httpclient | | x86_64 | 1:3.0- |
| 7jpp.1 | sl-base | | 595 k |
| jakarta-commons-lang | | x86_64 | 2.1-5jpp.1 |
| sl-base | 508 k | | |
| jakarta-commons-launcher | | x86_64 | 0.9-6jpp.1 |
| sl-base | 97 k | | |
| jakarta-commons-logging | | x86_64 | 1.0.4- |
| 6jpp.1 | sl-base | | 115 k |
| jakarta-commons-modeler | | x86_64 | 1.1- |
| 8jpp.3.el5 | sl-base | | 259 k |
| jakarta-commons-pool | | x86_64 | 1.3-5jpp.1 |
| sl-base | 142 k | | |
| java-1.6.0-openjdk | | x86_64 | 1:1.6.0.0- |
| 1.28.1.10.10.el5_8 | sl-security | | 36 M |
| java-1.6.0-openjdk-devel | | x86_64 | 1:1.6.0.0- |
| 1.28.1.10.10.el5_8 | sl-security | | 12 M |
| jclassads | noarch | | 2.4.0-2.sl5 |
| UMD-2-updates | 95 k | | |
| jdk | | x86_64 | 2000:1.6.0_37-fcs |
| sl-security | 56 M | | |
| kill-stale-ftp | | noarch | 1.0.1-1.sl5 |
| UMD-2-updates | 3.3 k | | |
| lcas | | x86_64 | 1.3.18-2.el5 |
| UMD-2-base | 25 k | | |
| lcas-lcmapi-gt4-interface | | x86_64 | 0.2.4-2.el5 |
| UMD-2-updates | 20 k | | |
| lcas-plugins-basic | | x86_64 | 1.3.6-1.el5 |
| UMD-2-base | 22 k | | |
| lcas-plugins-check-executable | | x86_64 | 1.2.4- |
| 1.el5 | UMD-2-updates | | 9.4 k |

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|-----------------------------|-------|---------------|------------------|
| lcas-plugins-voms | | x86_64 | 1.3.10-1.el5 |
| UMD-2-base | 29 k | | |
| lcg-expiregridmapdir | | noarch | 3.0.1-1 |
| UMD-2-base | 6.6 k | | |
| lcg-info-dynamic-software | | noarch | 1.0.7- |
| 2.emi.sl5 | | UMD-2-updates | 3.2 k |
| lcmaps | | x86_64 | 1.5.5-1.el5 |
| UMD-2-base | 86 k | | |
| lcmaps-plugins-basic | | x86_64 | 1.5.0-3.el5 |
| UMD-2-base | 38 k | | |
| lcmaps-plugins-verify-proxy | | x86_64 | 1.5.2- |
| 1.el5 | | UMD-2-updates | 28 k |
| lcmaps-plugins-voms | | x86_64 | 1.5.3-1.el5 |
| UMD-2-base | 48 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 | | |
| lrms-python-generic | | noarch | 2.2.1-2.sl5 |
| UMD-2-updates | 8.7 k | | |
| mx4j | | x86_64 | 1:3.0.1-6jpp.4 |
| sl-base | 2.7 M | | |
| mysql | | x86_64 | 5.0.95-1.el5_7.1 |
| sl-security | 4.9 M | | |
| mysql-connector-java | | x86_64 | 1:5.1.12- |
| 2.el5 | epel | | 2.5 M |
| mysql-server | | x86_64 | 5.0.95-1.el5_7.1 |
| sl-security | 9.9 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 | | |

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|-------------------------|-------|-------------|--------------|
| 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.31.el5_8 | | sl-security | 362 k |
| tomcat5-common-lib | | x86_64 | 5.5.23- |
| 0jpp.31.el5_8 | | sl-security | 225 k |
| tomcat5-jasper | | x86_64 | 5.5.23- |
| 0jpp.31.el5_8 | | sl-security | 1.1 M |
| tomcat5-jsp-2.0-api | | x86_64 | 5.5.23- |
| 0jpp.31.el5_8 | | sl-security | 103 k |
| tomcat5-server-lib | | x86_64 | 5.5.23- |
| 0jpp.31.el5_8 | | sl-security | 4.0 M |
| tomcat5-servlet-2.4-api | | x86_64 | 5.5.23- |
| 0jpp.31.el5_8 | | sl-security | 163 k |
| tzdata-java | | x86_64 | 2012i-2.el5 |
| sl-security | 183 k | | |
| voms | | x86_64 | 2.0.8-1.el5 |
| UMD-2-base | 163 k | | |
| voms-api-java | | noarch | 2.0.8-1.el5 |
| UMD-2-base | 154 k | | |
| voms-clients | | x86_64 | 2.0.8-1.el5 |
| UMD-2-base | 171 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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* yum install emi-torque-utils; emi-torque-server

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}}}  
* yum install glite-yaim-mpi  
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=====  


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

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

```
Installing:  
glite-yaim-mpi          noarch          1.1.9-  
1.sl5                  UMD-1-updates  16 k
```

Transaction Summary

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

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

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


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

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

```
Installing:  
glite-mpi              noarch          1.0.1-0.sl5  
UMD-1-updates          1.5 k
```

Transaction Summary

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

```
}}}
```

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

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

(!)

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

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

* There is a point in the previous link pointing to this one, that it is where is explained how to configure YAIM to configure torque + MPI:

<http://grid.ifca.es/wiki/Middleware/MpiStart/MpiUtils>

{{{

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

#####

CE configuration variables

#####

CE_HOST=test06.egi.cesga.es
WMS_HOST=test22.egi.cesga.es
BDII_HOST=topbdii02.ncg.ingrid.pt
SITE_BDII_HOST=sbdii02.ncg.ingrid.pt
##LFC_HOST=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=lcgpbs
BATCH_SERVER=test06.egi.cesga.es
CE_BATCH_SYS=torque
BATCH_LOG_DIR=/var/torque
BATCH_VERSION=torque-2.5.7-7

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

# Database password for the APEL DB.
APEL_MYSQL_HOST=test07.egi.cesga.es
APEL_DB_PASSWORD=""

#####

# ARGUS authorisation framework control #

#####

# Set USE_ARGUS to yes to enable the configuration of ARGUS

###USE_ARGUS=yes
USE_ARGUS=no

# In case ARGUS is to be used the following should be set
# The ARGUS service PEPD endpoints as a space separated list:

###ARGUS_PEPD_ENDPOINTS="https://test10.egi.cesga.es:8154/authz"
###CREAM_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 * 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/MpiUtils 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 * 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=umdttest
```

```
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/opsib
eu
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]

-->quedei aqui

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

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

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

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

Starting glite-lb-interlogd ... done

INFO: Executing function: config_cream_glite_initd

INFO: Executing function: config_torque_server_setenv

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

INFO: Executing function: config_torque_server

INFO: Re-starting the torque server

pbs_server is not running.

/var/torque/server_priv/serverdb

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

Max open servers: 9

create queue GRID_ops

Max open servers: 9

create queue GRID_dteam

Max open servers: 9

create queue GRID_opsibeu

Max open servers: 9

create queue GRID_iberibeu

Max open servers: 9

set server scheduling = True

set server acl_host_enable = False

set server managers = root@test06.egi.cesga.es

set server operators = root@test06.egi.cesga.es

set server default_queue = dteam

set server log_events = 511

set server mail_from = adm

```
set server mail_domain = never
set server query_other_jobs = True
set server scheduler_iteration = 600
set server default_node = lcgpro
set server node_pack = False
set server kill_delay = 10
set server authorized_users = *@test06.egi.cesga.es
Max open servers: 9
set queue GRID_ops queue_type = Execution
set queue GRID_ops resources_max.cput = 48:00:00
set queue GRID_ops resources_max.walltime = 72:00:00
set queue GRID_ops enabled = True
set queue GRID_ops started = True
set queue GRID_ops acl_group_enable = True
Max open servers: 9
set queue GRID_dteam queue_type = Execution
set queue GRID_dteam resources_max.cput = 48:00:00
set queue GRID_dteam resources_max.walltime = 72:00:00
set queue GRID_dteam enabled = True
set queue GRID_dteam started = True
set queue GRID_dteam acl_group_enable = True
Max open servers: 9
set queue GRID_opsibeu queue_type = Execution
set queue GRID_opsibeu resources_max.cput = 48:00:00
set queue GRID_opsibeu resources_max.walltime = 72:00:00
set queue GRID_opsibeu enabled = True
set queue GRID_opsibeu started = True
set queue GRID_opsibeu acl_group_enable = True
Max open servers: 9
set queue GRID_iberibeu queue_type = Execution
set queue GRID_iberibeu resources_max.cput = 48:00:00
set queue GRID_iberibeu resources_max.walltime = 72:00:00
set queue GRID_iberibeu enabled = True
set queue GRID_iberibeu started = True
set queue GRID_iberibeu acl_group_enable = True
Shutting down TORQUE Server: [ OK ]
/var/torque/server_priv/serverdb
Starting TORQUE Server: [ OK ]
  INFO: Executing function: config_mai_cfg_setenv
  INFO: Executing function: config_mai_cfg
  INFO: configuring maui ...
MPI_CE creamCE TORQUE_server TORQUE_utils
MAUI is already stopped: [ OK ]
Starting MAUI Scheduler: [ OK ]
  INFO: Executing function: config_apel_pbs_setenv
  INFO: Executing function: config_apel_pbs
  INFO: Executing function: config_gip_sched_plugin_pbs_setenv
  INFO: Executing function: config_gip_sched_plugin_pbs
  INFO: Executing function: config_torque_submitter_ssh
  WARNING: The munge key /etc/munge/munge.key does not exist.
```

```
WARNING: Munge is required to submit jobs to the torque server.
WARNING: Not starting the munge daemon
Reloading sshd: [ OK ]
INFO: Configuration Complete. [ OK ]
INFO: YAIM terminated succesfully.
[root@test06 etc]#

}}}
```

== Verification of EMI.glite-mpi.sl6 in a EMI_WN_Torque SL5 ==

=== Ticket assigned ===

* [<https://rt.egi.eu/rt/Ticket/Display.html?id=4497>]

=== ggus tickets opened ===

=== Important Documentation ===

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

=== Repositories ===

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

* MPI repo under verification

```
{
{
{
[root@test06 yum.repos.d]# cat EMI.glite-mpi.sl5.x86_64.repo
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -
(4497,751,678)
```

```
[EMI.glite-mpi.sl5.x86_64]
name=EMI.glite-mpi.sl5.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-2.emi.glite-mpi.sl5.x86_64/1/4/0/
enabled=1
protect=1
priority=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/2/RPM-GPG-KEY-emi
```

```
}}}
```

=== Installing ===

* yum install emi-wn

```
{
{
{
```

| Package Repository | Size | Arch | Version |
|------------------------------|---------------|--------|-----------------|
| Installing: | | | |
| emi-wn | | x86_64 | 2.0.1-1.el5 |
| UMD-2-updates | 3.3 k | | |
| Installing for dependencies: | | | |
| CGSI-gSOAP | | i386 | 1.3.5-2.el5 |
| UMD-2-updates | 62 k | | |
| CGSI-gSOAP | | x86_64 | 1.3.5- |
| 2.el5 | UMD-2-base | | 69 k |
| SAGA.lsu-cpp.engine | | x86_64 | 1.6.0- |
| 1.sl5 | UMD-2-updates | | 22 M |
| a1_grid_env | | x86_64 | 3.0.2-1.sl5 |
| UMD-2-updates | 3.3 k | | |
| autoconf | | noarch | 2.59-12 |
| sl-base | 648 k | | |
| automake | | noarch | 1.9.6-2.3.el5 |
| sl-base | 476 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 |
| boost | | x86_64 | 1.33.1-15.el5 |
| sl-security | 863 k | | |
| boost141-python | | x86_64 | 1.41.0- |
| 2.el5 | epel | | 1.1 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 | | |
| cleanup-grid-accounts | | noarch | 2.0.0-1 |
| UMD-2-base | 6.9 k | | |
| cups | | x86_64 | 1:1.3.7-30.el5 |
| sl-security | 3.1 M | | |
| dcache-srmclient | | x86_64 | 2.2.4-2.el5 |
| UMD-2-updates | 15 M | | |
| dcap | | x86_64 | 2.47.7-1.el5 |
| UMD-2-updates | 15 k | | |
| dcap-devel | | x86_64 | 2.47.7-1.el5 |
| UMD-2-updates | 7.4 k | | |
| dcap-libs | | x86_64 | 2.47.7-1.el5 |
| UMD-2-updates | 124 k | | |

| | | | |
|------------------------------|---------------|--------|---------------|
| dcap-tunnel-gsi | | x86_64 | 2.47.7-1.el5 |
| UMD-2-updates | 14 k | | |
| dcap-tunnel-krb | | x86_64 | 2.47.7- |
| 1.el5 | UMD-2-updates | | 14 k |
| dcap-tunnel-ssl | | x86_64 | 2.47.7-1.el5 |
| UMD-2-updates | 8.2 k | | |
| dcap-tunnel-telnet | | x86_64 | 2.47.7- |
| 1.el5 | UMD-2-updates | | 8.9 k |
| dpm | | x86_64 | 1.8.5-1.el5 |
| UMD-2-updates | 217 k | | |
| dpm-devel | | x86_64 | 1.8.5-1.el5 |
| UMD-2-updates | 209 k | | |
| dpm-libs | | i386 | 1.8.5-1.el5 |
| UMD-2-updates | 157 k | | |
| dpm-libs | | x86_64 | 1.8.5-1.el5 |
| UMD-2-updates | 155 k | | |
| dpm-perl | | x86_64 | 1.8.5-1.el5 |
| UMD-2-updates | 230 k | | |
| dpm-python | | x86_64 | 1.8.5-1.el5 |
| UMD-2-updates | 1.2 M | | |
| dpm-python26 | | x86_64 | 1.8.5-1.el5 |
| UMD-2-updates | 274 k | | |
| e2fsprogs-devel | | x86_64 | 1.39-23.el5 |
| sl-base | 633 k | | |
| editline | | x86_64 | 2.9-1.sl5 |
| UMD-2-updates | 271 k | | |
| emi-version | | x86_64 | 2.5.0-1.sl5 |
| UMD-2-updates | 2.0 k | | |
| emi.amga.amga-cli | | x86_64 | 2.3.0- |
| 1.sl5 | UMD-2-updates | | 404 k |
| emi.saga-adapter.context-cpp | | x86_64 | 1.0.2- |
| 3.sl5 | UMD-2-updates | | 354 k |
| emi.saga-adapter.isn-common | | noarch | 1.0.1- |
| 3.sl5 | UMD-2-updates | | 17 k |
| emi.saga-adapter.isn-cpp | | x86_64 | 1.0.3- |
| 1.sl5 | UMD-2-updates | | 900 k |
| emi.saga-adapter.sd-cpp | | x86_64 | 1.0.4- |
| 1.sl5 | UMD-2-updates | | 4.8 M |
| fetch-crl | | noarch | 2.8.5-1.el5 |
| epel | 24 k | | |
| fuse | | x86_64 | 2.7.4-8.el5 |
| sl-base | 83 k | | |
| fuse-libs | | x86_64 | 2.7.4-8.el5 |
| sl-base | 71 k | | |
| gfal | | i386 | 1.13.19-0.el5 |
| UMD-2-updates | 240 k | | |
| gfal | | x86_64 | 1.13.19-0.el5 |
| UMD-2-updates | 235 k | | |
| gfal-python | | x86_64 | 1.13.19-0.el5 |
| UMD-2-updates | 53 k | | |

| | | | |
|---------------------------------|---------------|--------|---------------|
| gfal-python26 | | x86_64 | 1.13.19- |
| 0.el5 | UMD-2-updates | | 53 k |
| gfal2-all | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 3.8 k | | |
| gfal2-core | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 41 k | | |
| gfal2-plugin-dcap | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 11 k | | |
| gfal2-plugin-gridftp | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 42 k | | |
| gfal2-plugin-lfc | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 20 k | | |
| gfal2-plugin-rfio | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 11 k | | |
| gfal2-plugin-srm | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 30 k | | |
| gfal2-python | | x86_64 | 1.0.1-1.el5 |
| UMD-2-updates | 92 k | | |
| gfal2-transfer | | x86_64 | 2.0.0-1.el5 |
| UMD-2-updates | 18 k | | |
| gfalFS | | x86_64 | 1.0.0- |
| 2beta1.el5 | UMD-2-updates | | 13 k |
| glibmm24 | | x86_64 | 2.12.10-1.el5 |
| epel | 146 k | | |
| glite-jobid-api-c | | x86_64 | 2.1.2-5.el5 |
| UMD-2-updates | 9.1 k | | |
| glite-lb-client | | x86_64 | 5.1.6-1.el5 |
| UMD-2-updates | 230 k | | |
| glite-lb-client-progs | | x86_64 | 5.1.6-1.el5 |
| UMD-2-updates | 102 k | | |
| glite-lb-common | | x86_64 | 8.1.5-1.el5 |
| UMD-2-updates | 116 k | | |
| glite-lbjp-common-gss | | x86_64 | 3.1.6- |
| 1.el5 | UMD-2-updates | | 18 k |
| glite-lbjp-common-trio | | x86_64 | 2.2.3- |
| 2.el5 | UMD-2-updates | | 27 k |
| glite-service-discovery-api-c | | x86_64 | 2.2.3- |
| 1.sl5 | UMD-2-updates | | 47 k |
| glite-wms-brokerinfo-access | | x86_64 | 3.4.0- |
| 4.sl5 | UMD-2-updates | | 21 k |
| glite-wms-brokerinfo-access-lib | | x86_64 | 3.4.0- |
| 4.sl5 | UMD-2-updates | | 62 k |
| glite-wn-info | | noarch | 1.0.3-2.sl5 |
| UMD-2-updates | 5.4 k | | |
| glite-yaim-clients | | noarch | 5.0.1-2.sl5 |
| UMD-2-updates | 23 k | | |
| glite-yaim-core | | noarch | 5.1.0-1.sl5 |
| UMD-2-base | 118 k | | |
| globus-callout | | i386 | 2.2-1.el5 |
| UMD-2-updates | 16 k | | |

| | | | |
|--------------------------|---------------|--------|------------|
| globus-callout | | x86_64 | 2.2-1.el5 |
| UMD-2-updates | 17 k | | |
| globus-common | | i386 | 14.7-1.el5 |
| UMD-2-updates | 129 k | | |
| globus-common | | x86_64 | 14.7-1.el5 |
| UMD-2-updates | 132 k | | |
| globus-ftp-client | | i386 | 7.4-1.el5 |
| UMD-2-updates | 104 k | | |
| globus-ftp-client | | x86_64 | 7.4-1.el5 |
| UMD-2-updates | 109 k | | |
| globus-ftp-control | | i386 | 4.4-1.el5 |
| UMD-2-updates | 71 k | | |
| globus-ftp-control | | x86_64 | 4.4-1.el5 |
| UMD-2-updates | 73 k | | |
| globus-gass-copy | | i386 | 8.6-1.el5 |
| UMD-2-updates | 37 k | | |
| globus-gass-copy | | x86_64 | 8.6-1.el5 |
| UMD-2-updates | 38 k | | |
| globus-gass-copy-progs | | x86_64 | 8.6- |
| 1.el5 | UMD-2-updates | | 45 k |
| globus-gass-transfer | | i386 | 7.2-1.el5 |
| UMD-2-updates | 43 k | | |
| globus-gass-transfer | | x86_64 | 7.2-1.el5 |
| UMD-2-updates | 43 k | | |
| globus-gsi-callback | | i386 | 4.3-1.el5 |
| UMD-2-updates | 40 k | | |
| globus-gsi-callback | | x86_64 | 4.3-1.el5 |
| UMD-2-updates | 42 k | | |
| globus-gsi-cert-utils | | i386 | 8.3-1.el5 |
| UMD-2-updates | 19 k | | |
| globus-gsi-cert-utils | | x86_64 | 8.3-1.el5 |
| UMD-2-updates | 20 k | | |
| globus-gsi-credential | | i386 | 5.3-1.el5 |
| UMD-2-updates | 33 k | | |
| globus-gsi-credential | | x86_64 | 5.3-1.el5 |
| UMD-2-updates | 36 k | | |
| globus-gsi-openssl-error | | i386 | 2.1-2.el5 |
| UMD-2-updates | 16 k | | |
| globus-gsi-openssl-error | | x86_64 | 2.1-2.el5 |
| UMD-2-updates | 16 k | | |
| globus-gsi-proxy-core | | i386 | 6.2-1.el5 |
| UMD-2-updates | 33 k | | |
| globus-gsi-proxy-core | | x86_64 | 6.2-1.el5 |
| UMD-2-updates | 37 k | | |
| globus-gsi-proxy-ssl | | i386 | 4.1-2.el5 |
| UMD-2-updates | 17 k | | |
| globus-gsi-proxy-ssl | | x86_64 | 4.1-2.el5 |
| UMD-2-updates | 18 k | | |
| globus-gsi-sysconfig | | i386 | 5.3-1.el5 |
| UMD-2-updates | 28 k | | |

| | | | |
|-------------------------|---------------|--------|--------------|
| globus-gsi-sysconfig | | x86_64 | 5.3-1.el5 |
| UMD-2-updates | 31 k | | |
| globus-gss-assist | | i386 | 8.6-1.el5 |
| UMD-2-updates | 33 k | | |
| globus-gss-assist | | x86_64 | 8.6-1.el5 |
| UMD-2-updates | 35 k | | |
| globus-gssapi-error | | i386 | 4.1-2.el5 |
| UMD-2-updates | 13 k | | |
| globus-gssapi-error | | x86_64 | 4.1-2.el5 |
| UMD-2-updates | 14 k | | |
| globus-gssapi-gsi | | i386 | 10.7-1.el5 |
| UMD-2-updates | 57 k | | |
| globus-gssapi-gsi | | x86_64 | 10.7-1.el5 |
| UMD-2-updates | 62 k | | |
| globus-io | | i386 | 9.3-1.el5 |
| UMD-2-updates | 42 k | | |
| globus-io | | x86_64 | 9.3-1.el5 |
| UMD-2-updates | 44 k | | |
| globus-openssl-module | | i386 | 3.2-1.el5 |
| UMD-2-updates | 13 k | | |
| globus-openssl-module | | x86_64 | 3.2- |
| 1.el5 | UMD-2-updates | | 14 k |
| globus-proxy-utils | | x86_64 | 5.0-2.el5 |
| UMD-2-updates | 45 k | | |
| globus-xio | | i386 | 3.3-1.el5 |
| UMD-2-updates | 154 k | | |
| globus-xio | | x86_64 | 3.3-1.el5 |
| UMD-2-updates | 178 k | | |
| globus-xio-gsi-driver | | x86_64 | 2.3-1.el5 |
| UMD-2-updates | 37 k | | |
| globus-xio-popen-driver | | x86_64 | 2.3- |
| 1.el5 | UMD-2-updates | | 21 k |
| gridftp-ifce | | i386 | 2.2.0-0.el5 |
| UMD-2-updates | 15 k | | |
| gridftp-ifce | | x86_64 | 2.2.0-0.el5 |
| UMD-2-updates | 16 k | | |
| gridsite-libs | | x86_64 | 1.7.24-1.el5 |
| UMD-2-updates | 131 k | | |
| gsoap | | i386 | 2.7.13-4.el5 |
| epel | 451 k | | |
| gsoap | | x86_64 | 2.7.13-4.el5 |
| epel | 444 k | | |
| imake | | x86_64 | 1.0.2-3 |
| sl-base | 318 k | | |
| is-interface | | i386 | 1.13.9-0.el5 |
| UMD-2-updates | 49 k | | |
| is-interface | | x86_64 | 1.13.9-0.el5 |
| UMD-2-updates | 51 k | | |
| jclassads | | noarch | 2.4.0-2.sl5 |
| UMD-2-updates | 95 k | | |

| | | | | |
|---------------------|---------------|--------|------|----------------|
| jdk | | x86_64 | | 2000:1.6.0_37- |
| fcs | sl-security | | 56 M | |
| keyutils-libs-devel | | x86_64 | | 1.2-1.el5 |
| sl-base | 27 k | | | |
| krb5-devel | | x86_64 | | 1.6.1-70.el5 |
| sl-security | 1.9 M | | | |
| lcg-ManageVOTag | | noarch | | 4.0.0-1 |
| UMD-2-updates | 4.8 k | | | |
| lcg-info | | noarch | | 1.12.2-1.el5 |
| UMD-2-updates | 13 k | | | |
| lcg-infosites | | noarch | | 3.1.0-3.el5 |
| UMD-2-updates | 10 k | | | |
| lcg-tags | | noarch | | 0.4.0-2 |
| UMD-2-updates | 8.7 k | | | |
| lcg-util | | x86_64 | | 1.13.9-0.el5 |
| UMD-2-updates | 85 k | | | |
| lcg-util-libs | | i386 | | 1.13.9-0.el5 |
| UMD-2-updates | 59 k | | | |
| lcg-util-libs | | x86_64 | | 1.13.9-0.el5 |
| UMD-2-updates | 58 k | | | |
| lcg-util-python | | x86_64 | | 1.13.9-0.el5 |
| UMD-2-updates | 40 k | | | |
| lcg-util-python26 | | x86_64 | | 1.13.9- |
| 0.el5 | UMD-2-updates | | 39 k | |
| lcgdm-devel | | i386 | | 1.8.5-1.el5 |
| UMD-2-updates | 44 k | | | |
| lcgdm-devel | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 44 k | | | |
| lcgdm-libs | | i386 | | 1.8.5-1.el5 |
| UMD-2-updates | 101 k | | | |
| lcgdm-libs | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 104 k | | | |
| lfc | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 162 k | | | |
| lfc-devel | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 136 k | | | |
| lfc-libs | | i386 | | 1.8.5-1.el5 |
| UMD-2-updates | 46 k | | | |
| lfc-libs | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 45 k | | | |
| lfc-perl | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 167 k | | | |
| lfc-python | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 2.2 M | | | |
| lfc-python26 | | x86_64 | | 1.8.5-1.el5 |
| UMD-2-updates | 436 k | | | |
| libffi | | x86_64 | | 3.0.5-1.el5 |
| epel | 24 k | | | |
| libgomp | | x86_64 | | 4.4.0-6.el5 |
| sl-base | 68 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 | | | |
| libsigc++20 | | x86_64 | | 2.0.18-1.el5 |
| epel | 49 k | | | |
| libtool-ltdl | | i386 | | 1.5.22-7.el5_4 |
| sl-base | 37 k | | | |
| libtool-ltdl | | x86_64 | | 1.5.22-7.el5_4 |
| sl-base | 38 k | | | |
| openldap-clients | | x86_64 | | 2.3.43- |
| 12.el5_6.7 | sl-security | | 223 k | |
| openssl-devel | | x86_64 | | 0.9.8e- |
| 22.el5_8.4 | 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-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-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-libwww-perl | | noarch | | 5.805-1.1.1 |
| sl-base | 375 k | | | |
| python-ldap | | x86_64 | | 2.2.0-2.1 |
| sl-base | 123 k | | | |
| python26 | | x86_64 | | 2.6.8-1.el5 |
| epel | 6.5 M | | | |
| python26-libs | | x86_64 | | 2.6.8-1.el5 |
| epel | 695 k | | | |
| redhat-lsb | | x86_64 | | 3.1-12.3.EL |
| sl-base | 21 k | | | |
| srm-ifce | | i386 | | 1.13.0-0.el5 |
| UMD-2-updates | 206 k | | | |

| | | | |
|---------------|-------|--------|--------------|
| srm-ifce | | x86_64 | 1.13.0-0.el5 |
| UMD-2-updates | 195 k | | |
| uberftp | | x86_64 | 2.4-5.el5 |
| epel | 85 k | | |
| voms | | i386 | 2.0.8-1.el5 |
| UMD-2-updates | 161 k | | |
| voms | | x86_64 | 2.0.8-1.el5 |
| UMD-2-base | 163 k | | |
| voms-clients | | x86_64 | 2.0.8-1.el5 |
| UMD-2-base | 171 k | | |
| voms-devel | | x86_64 | 2.0.8-1.el5 |
| UMD-2-base | 27 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

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}}}

--> aqui

* yum install emi-wn emi-torque-client

{{{

```

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```

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

Installing:

| | | |
|-------------------|--------|-------------|
| emi-torque-client | x86_64 | 1.0.0-2.sl6 |
| UMD-2-updates | 1.8 k | |

Installing for dependencies:

| | | |
|--------------------------|--------|-------------|
| glite-yaim-torque-client | noarch | 5.1.0-1.sl6 |
| UMD-2-updates | 5.4 k | |
| lcg-pbs-utils | x86_64 | 2.0.0-1.sl6 |
| UMD-2-updates | 4.3 k | |

| | | | |
|---------------|-------|--------|---------------|
| munge | | x86_64 | 0.5.10-1.el6 |
| epel | 111 k | | |
| munge-libs | | x86_64 | 0.5.10-1.el6 |
| epel | 32 k | | |
| tcl | | x86_64 | 1:8.5.7-6.el6 |
| sl | 1.9 M | | |
| torque | | x86_64 | 2.5.7-9.el6 |
| epel | 56 k | | |
| torque-client | | x86_64 | 2.5.7-9.el6 |
| epel | 309 k | | |
| torque-libs | | x86_64 | 2.5.7-9.el6 |
| epel | 87 k | | |
| torque-mom | | x86_64 | 2.5.7-9.el6 |
| epel | 168 k | | |

Transaction Summary

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```

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

* yum install mpi-start

```

{{{
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```

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

```

Installing:
mpi-start          noarch          40 k          1.4.0-1.el6
EMI.glite-mpi.sl6.x86_64
```

Transaction Summary

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Installing:
compat-gcc-34                x86_64                3.4.6-
19.el6                       sl                    3.7 M
compat-gcc-34-c++           x86_64                3.4.6-
19.el6                       sl                    10 M
compat-gcc-34-g77          x86_64                3.4.6-
19.el6                       sl                    2.1 M
gcc-c++                     x86_64                4.4.6-4.el6
sl                           4.7 M
Installing for dependencies:
compat-libf2c-34           x86_64                3.4.6-
19.el6                       sl                    50 k
libstdc++-devel           x86_64                4.4.6-4.el6
sl                           1.5 M

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Transaction Summary

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```

==== 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>

```

{{{
[root@test14 etc]# cat site-info.def
# 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
BDII_HOST=topbdii02.ncg.ingrid.pt
LFC_HOST=
PX_HOST=myproxy.egi.cesga.es
MON_HOST=test07.egi.cesga.es

YAIM_LOGGING_LEVEL=INFO

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/lib/torque
TORQUE_VAR_DIR=/var/lib/torque
BATCH_VERSION=torque-2.5.7-9

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=umctest  
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=ladmin"
```

```
GRID_DTEAM_GROUP_ENABLE="dteam
```

```
/VO=dteam/GROUP=/dteam/ROLE=ladmin"
```

```
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"
```

```
#:.....:
#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_small"
#New conf (https://wiki.egi.eu/wiki/Dteam\_vo)
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=Certification Authorities/CN=HellasGrid CA 2006'"
```

```
#:.....:
#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' 'ops lcg-voms.cern.ch
15009 /DC=ch/DC=cern/OU=computers/CN=lcg-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'"
```

IBERGRID VOS

```
# ops.vo.ibergrid.eu
VO_OPS_VO_IBERGRID_EU_SW_DIR=$VO_SW_DIR/opsibeu
VO_OPS_VO_IBERGRID_EU_DEFAULT_SE=$DPM_HOST
VO_OPS_VO_IBERGRID_EU_STORAGE_DIR=$CLASSIC_STORAGE_DIR/opsibeu
VO_OPS_VO_IBERGRID_EU_QUEUES="GRID_opsibeu"
VO_OPS_VO_IBERGRID_EU_VOMS_SERVERS=""vomss://voms02.ncg.ingrid.pt:8443/voms/ops.vo.ibergrid.eu?/ops.vo.ibergrid.eu"
VO_OPS_VO_IBERGRID_EU_VOMSES=""ops.vo.ibergrid.eu voms02.ncg.ingrid.pt
40001 /C=PT/O=LIPCA/O=LIP/OU=Lisboa/CN=voms02.ncg.ingrid.pt
ops.vo.ibergrid.eu"
```

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

```
# iber.vo.ibergrid.eu
VO_IBER_VO_IBERGRID_EU_SW_DIR=$VO_SW_DIR/iberibeu
VO_IBER_VO_IBERGRID_EU_DEFAULT_SE=$DPM_HOST
VO_IBER_VO_IBERGRID_EU_STORAGE_DIR=$CLASSIC_STORAGE_DIR/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""
```

```
##### GLEXEC
GLEXEC_WN_OPMODE=setuid
GLEXEC_WN_SCAS_ENABLED=no
GLEXEC_WN_ARGUS_ENABLED=no
GLEXEC_EXTRA_WHITELIST=.dteam
```

```
}}}
```

```
===== Configuring with YAIM the WNs (OK) =====
```

```
{
{
{
[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
```

```
}}}
```

```
==== 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
```

}}}

==== 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 WN

{

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

}

* Submitting a direct qsub

{

```
[opssgm004@test06 ~]$ vi test.sh  
[opssgm004@test06 ~]$ chmod +x test.sh  
[opssgm004@test06 ~]$ qsub -q GRID_ops -l nodes=test14.egi.cesga.es test.sh  
0.test06.egi.cesga.es  
[opssgm004@test06 ~]$ ls  
test.sh test.sh.e0 test.sh.o0
```

```
[opssgm004@test06 ~]$ cat test.sh.e0
[opssgm004@test06 ~]$ cat test.sh.o0
test14.egi.cesga.es
Thu Jan 10 17:12:24 CET 2013
```

```
}}}
```

```
(!)
```

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

```
{{{
```

```
[esfreire@test13 ~]$ glite-ce-delegate-proxy -e test06.egi.cesga.es esfreire
2013-01-10 17:16:39,606 NOTICE - Proxy with delegation id [esfreire] succesfully
delegated to endpoint [https://test06.egi.cesga.es:8443//ce-cream/services/gridsite-
delegation]
```

```
[esfreire@test13 ~]$ glite-ce-proxy-renew -e test06.egi.cesga.es esfreire
2013-01-10 17:17:51,075 NOTICE - Proxy with delegation id [esfreire] succesfully
renewed to endpoint [https://test06.egi.cesga.es:8443//ce-cream/services/gridsite-
delegation]
```

```
}}}
```

```
{{{
```

```
{{{
[esfreire@test13 ~]$ glite-ce-job-submit -D esfreire -r test06.egi.cesga.es:8443/cream-
pbs-GRID_ops testCream1.jdl
https://test06.egi.cesga.es:8443/CREAM976905590
```

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

```
***** JobID=[https://test06.egi.cesga.es:8443/CREAM976905590]
      Status    = [DONE-OK]
      ExitCode   = [0]
```

```
}}}
```

```
==== Submitting MPI jobs ====
```

```
{{{
```

```
[esfreire@test13 verification]$ cat job1.jdl
CPUNumber    = 4;
Executable   = "/usr/bin/mpi-start";
```

```

Arguments    = "-v -pre hooks.sh cpi";
InputSandbox = {"cpi.c", "hooks.sh"};
StdOutput    = "std.out";
StdError     = "std.err";
OutputSandbox = {"std.out", "std.err"};
##OutputSandboxBaseDestUri = "gsiftp://localhost";
OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";
Requirements =
  Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment)
  &&
  Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);
}}}

```

```

{{{
[esfreire@test13 verification]$ cat cat hooks.sh
#!/bin/sh

```

```

pre_run_hook () {

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

sleep 20

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

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

return 0
}

}}

```

```

[esfreire@test13 verification]$ cat job2.jdl
CPUNumber    = 2;
Executable   = "/usr/bin/mpi-start";
Arguments    = "-t openmpi -v -pre hooks.sh cpi";
InputSandbox = {"cpi.c", "hooks.sh"};
StdOutput    = "std.out";
StdError     = "std.err";
OutputSandbox = {"std.out", "std.err"};
OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";

```

```
Requirements =
  Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment)
  &&
  Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);
```

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

```
***** JobID=[https://test06.egi.cesga.es:8443/CREAM942629962]
        Status    = [DONE-OK]
        ExitCode   = [0]
```

```
}}}
```

```
{{{
```

```
[root@se2 tmp]# cat std.err
```

```
mpi-start [INFO ]:
```

```
*****
```

```
mpi-start [INFO ]: UID    = opssgm006
```

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

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

```
mpi-start [INFO ]: VERSION = 1.1.0
```

```
mpi-start [INFO ]:
```

```
*****
```

```
mpi-start [INFO ]: search for scheduler
```

```
mpi-start [INFO ]: activate support for pbs
```

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

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

```
mpi-start [INFO ]: activate support for openmpi
```

```
mpi-start [INFO ]: call backend MPI implementation
```

```
mpi-start [INFO ]: start program with mpirun
```

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

```
Using 16384 intervals
```

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

```
[root@se2 tmp]# cat std.out
```

```
Compiling cpi
```

```
Successfully compiled cpi
```

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

```
=====
```

```
pi is approximately 3.1415926539002363, Error is 0.0000000003104432
```

```
wall clock time = 0.001998
```

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

```
=====
```

```
}}}
```

```
{{{
```

```
[esfreire@test13 verification]$ cat job3.jdl
NodeNumber = 2;
SMPGranularity = 2;
WholeNodes = True;
Executable = "/usr/bin/mpi-start";
Arguments = "-v -pre hooks.sh cpi";
InputSandbox = {"cpi.c", "hooks.sh"};
StdOutput = "std.out";
StdError = "std.err";
OutputSandbox = {"std.out", "std.err"};
OutputSandboxBaseDestUri = "gsiftp://se2.egi.cesga.es/tmp";
Requirements =
  Member("MPI-START", other.GlueHostApplicationSoftwareRunTimeEnvironment)
  &&
  Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);
```

```
[esfreire@test13 verification]$ glite-ce-job-submit -r test06.egi.cesga.es:8443/cream-
pbs-GRID_ops -D esfreire job3.jdl
https://test06.egi.cesga.es:8443/CREAM342252956
```

```
}}}
```

```
{{{
```

```
[root@se2 tmp]# cat std.err
mpi-start [INFO ]:
*****
mpi-start [INFO ]: UID = opssgm006
mpi-start [INFO ]: HOST = test15.egi.cesga.es
mpi-start [INFO ]: DATE = Tue Jan 17 18:27:14 CET 2012
mpi-start [INFO ]: VERSION = 1.1.0
mpi-start [INFO ]:
*****
mpi-start [INFO ]: search for scheduler
mpi-start [INFO ]: activate support for pbs
mpi-start [INFO ]: Unable to detect number of cores per cpu, assuming 1
mpi-start [INFO ]: Detected 0 CPU socket(s) and 1 core(s) per CPU
mpi-start [INFO ]: activate support for openmpi
mpi-start [INFO ]: call backend MPI implementation
mpi-start [INFO ]: start program with mpirun
Process 0 on test15.egi.cesga.es: n=1
Using 16384 intervals
Process 1 on test15.egi.cesga.es: n=1
[root@se2 tmp]# cat std.out
Compiling cpi
Successfully compiled cpi
=[START]=====
=====
```

pi is approximately 3.1415926539002363, Error is 0.0000000003104432

wall clock time = 0.001926

==[FINISHED]=
=====

=====

}}}

{{{

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

CPUNumber = 4;

Executable = "starter.sh";

Arguments = "cpi OPENMPI";

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

StdOutput = "std.out";

StdError = "std.err";

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

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

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

Requirements =

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

Member("OPENMPI", other.GlueHostApplicationSoftwareRunTimeEnvironment);

}}}

[root@se2 tmp]# cat std.err

mpi-start [INFO]:

mpi-start [INFO]: UID = opssgm006

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

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

mpi-start [INFO]: VERSION = 1.1.0

mpi-start [INFO]:

mpi-start [INFO]: search for scheduler

mpi-start [INFO]: activate support for pbs

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

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

mpi-start [INFO]: activate support for openmpi

mpi-start [INFO]: call backend MPI implementation

mpi-start [INFO]: start program with mpirun

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

Using 16384 intervals

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

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

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

[root@se2 tmp]# cat std.out

Compiling cpi

Successfully compiled cpi

=[START]=====

=====

pi is approximately 3.1415926539002341, Error is 0.0000000003104410

wall clock time = 0.003777

=[FINISHED]=====

=====

}}}

Not applicable Quality Criteria

Specific Functional Tests to be repeated in SR:

| Test number | Description | Motivation |
|-------------|-------------|------------|
| | | |
| | | |
| | | |

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

| Test number | Description | Motivation |
|-------------|-------------|------------|
| | | |
| | | |
| | | |

Comments for UMD QC definition (TSA2.2):

- Review criteria xxxx
- Add criteria xxxx

Comments for SR (TSA1.3):

EMI-MPI was updated and installed from scratch using UMD-2 repository without any important issue in a creamCE and Worker Nodes with Torque + Maui.

Comments for DMSU (TSA2.5):

Comments for TP: