

## Quality Criteria Verification Report

<b>Product</b>	<i>EMI-MPI</i>	<b>Release</b>	<i>1.5.2</i>
<b>Software Provider</b>	<i>EMI</i>	<b>RT Ticket</b>	<i>#6182 #6183</i>
<b>Provider contact</b>	<i>Cristina Aifitimei cristina.aifitimei@pd.infn.it</i>		
<b>Verifier</b>	<i>Alvaro Simon asimon@cesga.es</i>		
<b>Hours worked</b>	<i>3h</i>	<b>Date</b>	<i>17/12/13</i>
<b>Status</b>	<b>Accepted</b>		

### Summary

*No issues found during verification process.*

### Related tickets

*None*

### Documentation Criteria

<b>Document</b>	<b>Link</b>
Release notes	<a href="http://www.eu-emi.eu/releases/emi-3-monte-bianco/updates/-/asset_publisher/5Na8/content/update-9-07-10-2013-v-3-5-2-1#gLite_MPI_v_1_5_2">http://www.eu-emi.eu/releases/emi-3-monte-bianco/updates/-/asset_publisher/5Na8/content/update-9-07-10-2013-v-3-5-2-1#gLite_MPI_v_1_5_2</a>
User Documentation	<a href="https://moin.ifca.es/wiki/Middleware/MpiStart/UserDocumentation">https://moin.ifca.es/wiki/Middleware/MpiStart/UserDocumentation</a>
API Documentation	<a href="https://moin.ifca.es/wiki/Middleware/MpiStart/DeveloperDocumentation">https://moin.ifca.es/wiki/Middleware/MpiStart/DeveloperDocumentation</a>
Admin Documentation	<a href="https://moin.ifca.es/wiki/Middleware/MpiStart/UserDocumentation">https://moin.ifca.es/wiki/Middleware/MpiStart/UserDocumentation</a>
Software License	<i>Apache</i>

### Generic Criteria

<b>Criteria</b>	<b>Status<sup>1</sup></b>	<b>Additional Comments</b>
Binary Distribution	<b>OK</b>	
Upgrade	<b>OK</b>	
X.509 Certificate support	<b>OK</b>	
SHA-2 Certificates Support	<b>OK</b>	
RFC Proxy support	<b>OK</b>	
ARGUS Integration	NT	Minor release
World Writable Files	NT	Minor release
Passwords in world readable files	NT	Minor release
GlueSchema 1.3 Support	NT	Minor release

<sup>1</sup>**OK**, **WARN**, **FAIL**, NA (Not Applicable) or NT (Not Tested)

GlueSchema 2.0 Support	NT	Minor release
Middleware Version Information	NT	Minor release
Service Probes	NT	Minor release
Accounting Records	NT	
Bug Tracking System	<b>OK</b>	

## Specific QC

### Basic Functionality Test

```

* CREAM-CE
/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 -n glite-CLUSTER

* WN
/opt/glite/yaim/bin/yaim -c -s /opt/glite/yaim/etc/site-info.def -n MPI_WN -n WN -n TORQUE_client

$ voms-proxy-init --voms dteam --rfc

$ 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);
}

$ cat job2.jdl
{
  CPUNumber      = 4;
  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);
}

$ glite-ce-job-submit -D asimon_dteam -r test06.egi.cesga.es:8443/cream-pbs-GRID_dteam job2.jdl
https://test06.egi.cesga.es:8443/CREAM760837061

$ glite-ce-job-status -L 2 https://test06.egi.cesga.es:8443/CREAM760837061

***** JobID=[https://test06.egi.cesga.es:8443/CREAM760837061]
Current Status = [DONE-OK]
Working Dir    = [[reserved]]
ExitCode      = [0]
Grid JobID    = [N/A]
LRMS Abs JobID = [[reserved]]
LRMS JobID    = [[reserved]]
Deleg Proxy ID = [asimon_dteam]
DelegProxyInfo = [[ isRFC="true"; valid from="12/17/13 11:06 AM (GMT)"; valid to="12/17/13 11:06 PM (GMT)"];
holder DN="CN=alvarosimon,O=cesga,DC=irisgrid,DC=es"; holder AC
issuer="CN=1483956851,CN=343850531,CN=alvarosimon,O=cesga,DC=irisgrid,DC=es"; VO="dteam"; AC
issuer="CN=voms2.hellasgrid.gr, OU=hellasgrid.gr, O=HellasGrid, C=GR"; VOMS attributes={
/dteam/Role=NULL/Capability=NULL, /dteam/NGI_IBERGRID/Role=NULL/Capability=NULL } ]]
Worker Node   = [test15.egi.cesga.es]
Local User    = [dteam004]
CREAM ISB URI =
[gsiftp://test06.egi.cesga.es/var/cream_sandbox/dteam/CN_alvarosimon_O_cesga_DC_irisgrid_DC_es_dteam_Role_NULL_Capability_NULL_dteam004/76/CREAM760837061/ISB]
CREAM OSB URI =
[gsiftp://test06.egi.cesga.es/var/cream_sandbox/dteam/CN_alvarosimon_O_cesga_DC_irisgrid_DC_es_dteam_Role_NULL_Capability_NULL_dteam004/76/CREAM760837061/OSB]
JDL          = [[ StdOutput = "std.out"; BatchSystem = "pbs"; QueueName = "GRID_dteam"; Executable =
"/usr/bin/mpi-start"; Arguments = "-t openmpi -v -pre hooks.sh cpi"; OutputSandboxBaseDestUri =
"gsiftp://se2.egi.cesga.es/tmp"; OutputSandbox = { "std.out", "std.err" }; InputSandbox =
{ "/home/asimon/mpi_job_grid_verification/cpi.c", "/home/asimon/mpi_job_grid_verification/hooks.sh" }; StdError =
"std.err"; CPUNumber = 2; Requirements = Member("MPI-START",other.GlueHostApplicationSoftwareRunTimeEnvironment) &&
Member("OPENMPI",other.GlueHostApplicationSoftwareRunTimeEnvironment) ]]

```

```

Type = [normal]

Job status changes:
-----
Status = [REGISTERED] - [Tue 17 Dec 2013 12:13:58] (1387278838)
Status = [PENDING] - [Tue 17 Dec 2013 12:13:59] (1387278839)
Status = [RUNNING] - [Tue 17 Dec 2013 12:14:02] (1387278842)
Status = [REALLY-RUNNING] - [Tue 17 Dec 2013 12:14:04] (1387278844)
Status = [DONE-OK] - [Tue 17 Dec 2013 12:14:08] (1387278848)

Issued Commands:
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*** Command Name = [JOB_REGISTER]
Command Category = [JOB_MANAGEMENT]
Command Status = [SUCCESSFULL]
Creation Time = [Tue 17 Dec 2013 12:13:58] (1387278838)
Start Scheduling Time = [Tue 17 Dec 2013 12:13:58] (1387278838)
Start Processing Time = [Tue 17 Dec 2013 12:13:58] (1387278838)
Execution Completed Time = [Tue 17 Dec 2013 12:13:58] (1387278838)

*** Command Name = [JOB_START]
Command Category = [JOB_MANAGEMENT]
Command Status = [CREATED]
Creation Time = [Tue 17 Dec 2013 12:13:59] (1387278839)
Start Scheduling Time = [Tue 17 Dec 2013 12:13:59] (1387278839)
Start Processing Time = [Tue 17 Dec 2013 12:13:59] (1387278839)

```

```

[root@se2 tmp]# cat std.out
Compiling cpi
Successfully compiled cpi
=[START]=====
pi is approximately 3.1415926539002363, Error is 0.000000003104432
wall clock time = 0.000988
=[FINISHED]=====

# cat std.err
mpi-start [INFO ]: *****
mpi-start [INFO ]: UID = dteam004
mpi-start [INFO ]: HOST = test15.egi.cesga.es
mpi-start [INFO ]: DATE = Tue Dec 17 12:16:07 CET 2013
mpi-start [INFO ]: VERSION = 1.5.2
mpi-start [INFO ]: *****
mpi-start [INFO ]: Loading configuration from /etc/mpi-start/mpi-config.el6-x86_64
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=0
Using 16384 intervals
Process 1 on test15.egi.cesga.es: n=0

```

## New Features/Fixed Bugs

## Additional Info

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