

Table of Contents

gLite-CLUSTER Test work plan.....	1
Unit tests.....	1
Deployment tests.....	1
Installation.....	1
Configuration.....	1
System tests.....	1
Basic functionality tests.....	1
gridftp test.....	1
VO tag dir test.....	2
Resource BDII test.....	2
Dynamic information test.....	2
Regression tests.....	3
Performance and scalability tests.....	3
Standard compliance and conformance tests.....	3
Glue 1 compliance.....	3
Glue 2 compliance.....	3

gLite-CLUSTER Test work plan

Unit tests

gLite-CLUSTER is just a set of yaim configuration scripts.

So there are not unit tests.

Deployment tests

Installation

The following should be tested:

- Fresh installation of a gLite-CLUSTER node, doing what is documented in the CREAM System administrator guide (Section: "Installation of a glite-cluster node")
- Update from a previous version of the same EMI major release. This should be tested doing a simple `yum update`.
- Update from a previous EMI major release. TBD

The following installation and update scenarios should be tested:

The following installation and update scenarios should be tested:

- gLite-CLUSTER deployed alone
- gLite-CLUSTER deployed together with a CREAM CE node in cluster mode

Configuration

The configuration via yaim should be tested.

The following scenarios should be tested:

- gLite-CLUSTER deployed alone
- gLite-CLUSTER deployed together with a CREAM CE node in cluster mode

System tests

Basic functionality tests

gridftp test

Try a gridftp (e.g. using `gridftp`) towards the gLite cluster node

The test must be done in the two scenarios:

- when ARGUS is used (`USE_ARGUS=yes`)
- when ARGUS is not used (`USE_ARGUS=no`)

VO tag dir test

Check if under `/opt/glite/var/info` there is a directory for each subcluster.

Check that within each of these directories, there is a directory per VO which contains a file called `<VO name>.list`

Status: Not Implemented

Resource BDII test

Check if the resource bdii publishes all the relevant objectclasses for both glue1 and glue2.

- Check if the resource BDII publishes glue 1 GlueCluster objectclasses. There should be at least one of such objectclasses

```
ldapsearch -h <gLite-CLUSTER hostname> -x -p 2170 -b "o=grid" objectclass=GlueCluster
```

- Check if the resource BDII publishes glue 1 GlueSubCluster objectclasses. There should be at least one of such objectclasses

```
ldapsearch -h <gLite-CUSTER hostname> -x -p 2170 -b "o=grid" objectclass=GlueSubCluster
```

- Check if the resource BDII publishes glue 2 GLUE2ComputingService objectclasses. There should be one GLUE2ComputingService objectclass:

```
ldapsearch -h <gLite-CUSTER hostname> -x -p 2170 -b "o=glue" objectclass=GLUE2ComputingService
```

- Check if the resource BDII publishes glue 2 GLUE2Manager objectclasses. There should be one GLUE2Manager objectclass.

```
ldapsearch -h <gLite-CUSTER hostname> -x -p 2170 -b "o=glue" objectclass=GLUE2Manager
```

- Check if the resource BDII publishes glue 2 GLUE2Share objectclasses. There should be one GLUE2Share objectclass per each VOview.

```
ldapsearch -h <gLite-CUSTER hostname> -x -p 2170 -b "o=glue" objectclass=GLUE2Share
```

- Check if the resource BDII publishes glue 2 GLUE2ExecutionEnvironment objectclasses. There should be at least one GLUE2ExecutionEnvironment objectclass.

```
ldapsearch -h <gLite-CUSTER hostname> -x -p 2170 -b "o=glue" objectclass=GLUE2ExecutionEnvironmen
```

- Check if the resource BDII publishes glue 2 GLUE2ComputingEndPoint objectclasses with GLUE2EndpointInterfaceName equal to `org.glite.ce.ApplicationPublisher`. There should be one of such objectclass.

```
ldapsearch -h <gLite-CUSTER hostname> -x -p 2170 -b "o=glue" "(&(objectclass=GLUE2ComputingEndPo
```

Status: Not Implemented

Dynamic information test

Log as root on the gLite-CLUSTER node and execute:

```
/sbin/runuser -s /bin/sh ldap -c "/var/lib/bdii/gip/plugin/glite-info-dynamic-lrms"
```

This should print some information for the glue2 Glue2Manager objectclass and for each Glue2Share objectclass.

Check if the printed information is correct.

Query the resource BDII of the gLite-CLUSTER and check if the published information is the same as the one returned by the glite-info-dynamic-lrms script.

Status: Not Implemented

Regression tests

See: <http://wiki.italiangrid.it/twiki/bin/view/CREAM/RegressionTestWorkPlan>

Performance and scalability tests

None

Standard compliance and conformance tests

Glue 1 compliance

Glue 1 compliance of the information published by the gLite-CLUSTER resource bdii should be tested. This should be done using GlueValidator .

Status: Implemented in the GlueValidator testsuite

Glue 2 compliance

Glue 2 compliance of the information published by the gLite-CLUSTER resource bdii should be tested. This should be done using GlueValidator .

Status: Implemented in the GlueValidator testsuite

-- MassimoSgaravatto - 2011-12-29

This topic: CREAM > GliteClusterTestWorkPlan

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