WLCG Information System Status

Maria Alandes Pradillo, CERN
CERN IT Department, Grid Technology Group
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GLUE 2.0 deployment status
GLUE 2.0 validation
GLUE 2.0 clients: ginfo
EMI 3 BDII
WLCG Global Information Registry
Next Steps
Glue 2.0 deployment status

GLUE 2.0 Deployment in WLCG
December 2012

- 50 sites publishing GLUE 2.0
- 108 sites not publishing GLUE 2.0

WLCG sites not publishing GLUE 2.0
December 2012

- 10 EGI sites
- 12 OSG sites
- 28 Other sites

GLUE 2.0 Deployment in WLCG
March 2013

- 28 sites publishing GLUE 2.0
- 129 sites not publishing GLUE 2.0

• All EGI sites are now publishing GLUE 2.0
  - ~3000 published endpoints
  - 45 different endpoint types

• Only the 28 OSG sites are missing
glue-validator now implements EGI profile for GLUE 2.0

- [http://go.egi.eu/glue2-profile](http://go.egi.eu/glue2-profile)
  - Final version with minor changes to be available soon
- 129 tests
- Ready to be deployed as a Nagios probe
  - In fact already running in a Nagios testing instance provided by EGI

• This version is not yet released in EMI 3 (see next slide)
GLUE 2.0 validation activity

1. First check bugs in information providers
   - Using services in EMI 3 testbed
   - https://twiki.cern.ch/twiki/bin/view/EGEE/ISproviders#GLUE_2_0_Validation
     - GGUS tickets will be submitted as bugs are found
     - glue-validator is already part of EMI certification
   - Remove tests from validator that fail due to known issues

2. Then release glue-validator in EMI 3

3. Continue validating sites
   - Focusing on site misconfiguration issues
GLUE 2.0 validation status

• Querying the lcg-bdii Top level BDII
  – 273 ERROR messages
    • All related to wrong totals published for the GLUE2StorageShareCapacity and GLUE2StorageServiceCapacity objects
  – 30541 WARNING messages
    • Mainly due to wrong types and mandatory attributes not present
  – 31425 INFO messages
    • Mainly recommended attributes not present and default values (i.e. MaxCPUTime, MaxWallClockTime)

Note that information provider validation is ongoing:
  – Some errors won’t be considered if they come from bugs in the information providers
GLUE 2.0 clients: ginfo

• ginfo is the GLUE 2.0 replacement for lcg-info(sites)
• New version of ginfo available:
  – [http://cern.ch/lfield/ginfo-1.0.0-1.noarch.rpm](http://cern.ch/lfield/ginfo-1.0.0-1.noarch.rpm)
  – Addresses the use cases requested by the experiments:
    • AdminDomain
    • ComputingManager
    • ComputingShare
    • Endpoint
    • ExecutionEnvironment
    • Location
    • MappingPolicy
    • Service
  – Waiting for feedback before release into EPEL
• What’s new on EMI 3 BDII
  – Getting ready for EPEL
    • EMI 3 BDII to be released in EPEL in April
  – ARC integration
  – Service provider bug fixes
  – Updated documentation:
    • https://tomtools.cern.ch/confluence/download/attachments/983044/EMI_BDII_sysadmin.pdf
  – EMI 1 and EMI 2 BDII can upgrade to EMI 3 BDII
WLCG Global Information Registry

Current situation

Pledged resources

Actual resources

Experiment databases
With the WLCG Global Information Registry

Pledged resources

- egi
- Open Science Grid
- GOCDB 4
- OIM

Actual resources

- BDII

Experiment databases

- ALICE
- CMS
- LHCb
WLCG Global Information Registry

REBUS: Endpoint Records

REBUS: Service Pledges

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</table>
WLCG Global Information Registry

- Single entry point to get information about WLCG resources
  - Pledged resources
  - Actual resources
- Integrates resources from OSG and EGI
- Independent from GLUE schema version
  - Although GLUE 2.0 is the internal integration model
- Easier for the experiments to gather the information they need in their databases
  - Saves them from dealing with different sources of information
  - Enables the possibility of changing the sources of information in a transparent way
- Single central repository
  - Single place where information is processed
  - Avoids duplication of effort
  - Reduces inconsistencies
  - Improves quality as the processing is done by experts
  - Easier to update and maintain
Current prototype

- Exposes information needed for Job submission
  http://gsr.cern.ch/apps/gsr/nested/json
  - Addressing the ATLAS use case for integration with AGIS
    - https://twiki.cern.ch/twiki/bin/view/EGEE/WLCGGI_SR
    - Both flat and JSON data feeds available
Next Steps:

• Finish GLUE 2.0 validation
• Validate new version of ginfo
• Release all BDII packages in EPEL
• Towards a WLCG Global Information Registry:
  – Integrate prototype with AGIS
  – Move from prototype to production
  – Explore other use cases