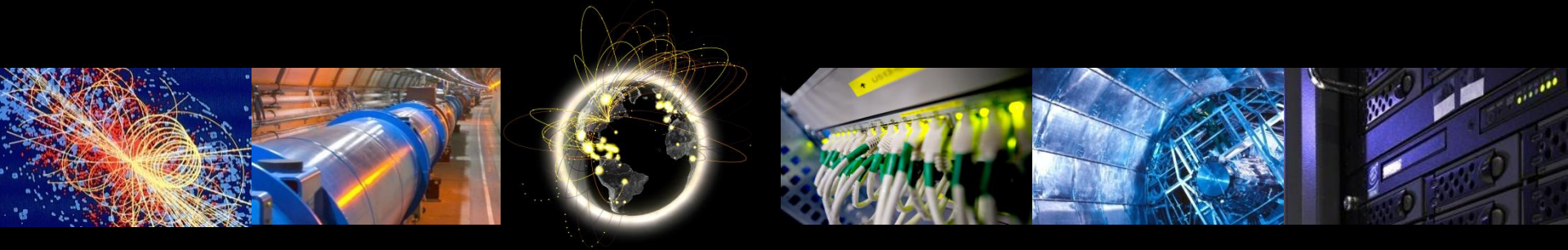


WLCG Information System Status

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CERN IT Department, Grid Technology Group

GDB 13th March 2013

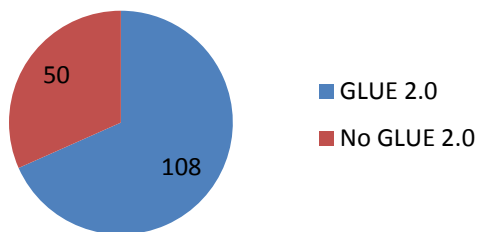


Overview

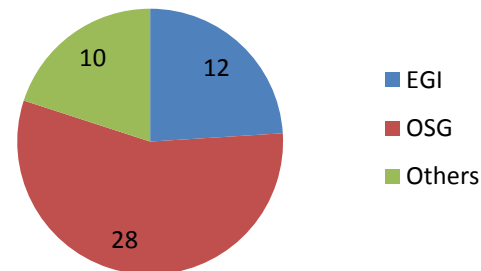
- GLUE 2.0 deployment status
- GLUE 2.0 validation
- GLUE 2.0 clients: gininfo
- EMI 3 BDII
- WLCG Global Information Registry
- Next Steps

Glue 2.0 deployment status

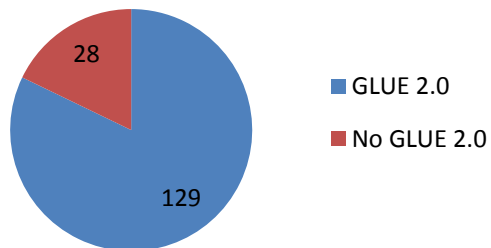
GLUE 2.0 Deployment in WLCG
December 2012



WLCG sites not publishing GLUE 2.0
December 2012



GLUE 2.0 Deployment in WLCG
March 2013



- All EGI sites are now publishing GLUE 2.0
 - ~3000 published endpoints
 - 45 different endpoint types
- Only the 28 OSG sites are missing

GLUE 2.0 validation

- glue-validator now implements EGI profile for GLUE 2.0
 - <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



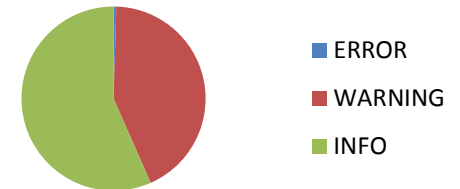
GLUE 2.0 validation status

- 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)

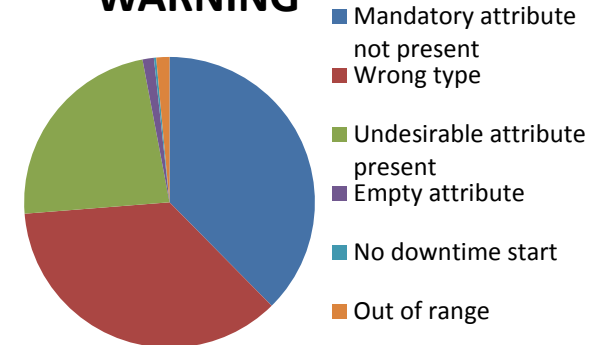
Note that information provider validation is ongoing:

- Some errors won't be considered if they come from bugs in the information providers

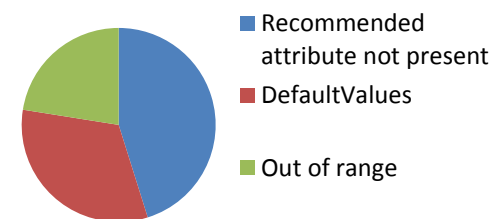
GLUE 2.0 Validation failures



WARNING



INFO



GLUE 2.0 clients: ginfo

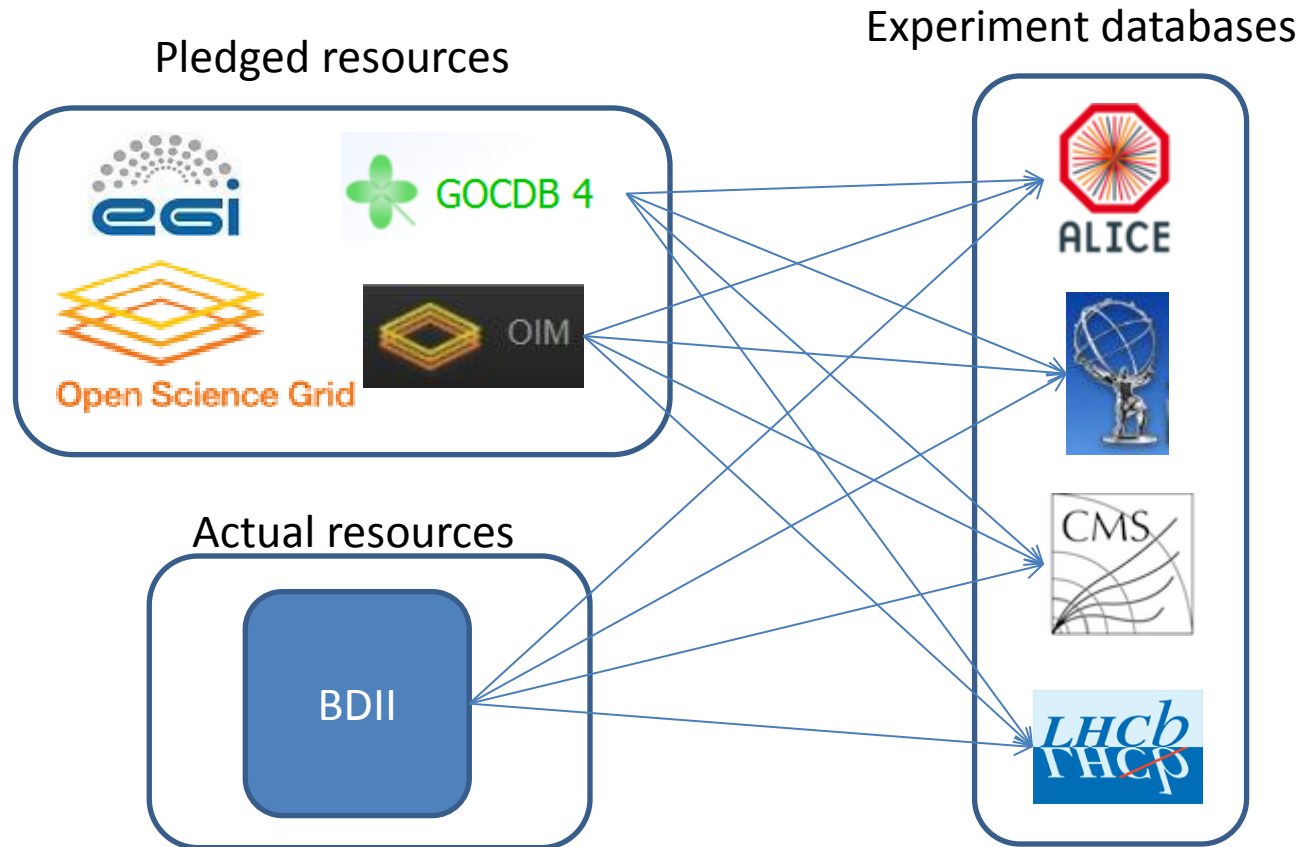
- ginfo is the GLUE 2.0 replacement for lcg-info(sites)
- New version of ginfo available:
 - <http://cern.ch/lfield/ginfo-1.0.0-1.noarch.rpm>
 - Addresses the use cases requested by the experiments:
 - AdminDomain
 - ComputingManager
 - ComputingShare
 - Endpoint
 - ExecutionEnvironment
 - Location
 - MappingPolicy
 - Service
 - Waiting for feedback before release into EPEL

EMI 3 BDII

- 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 BDIIs can upgrade to EMI 3 BDII

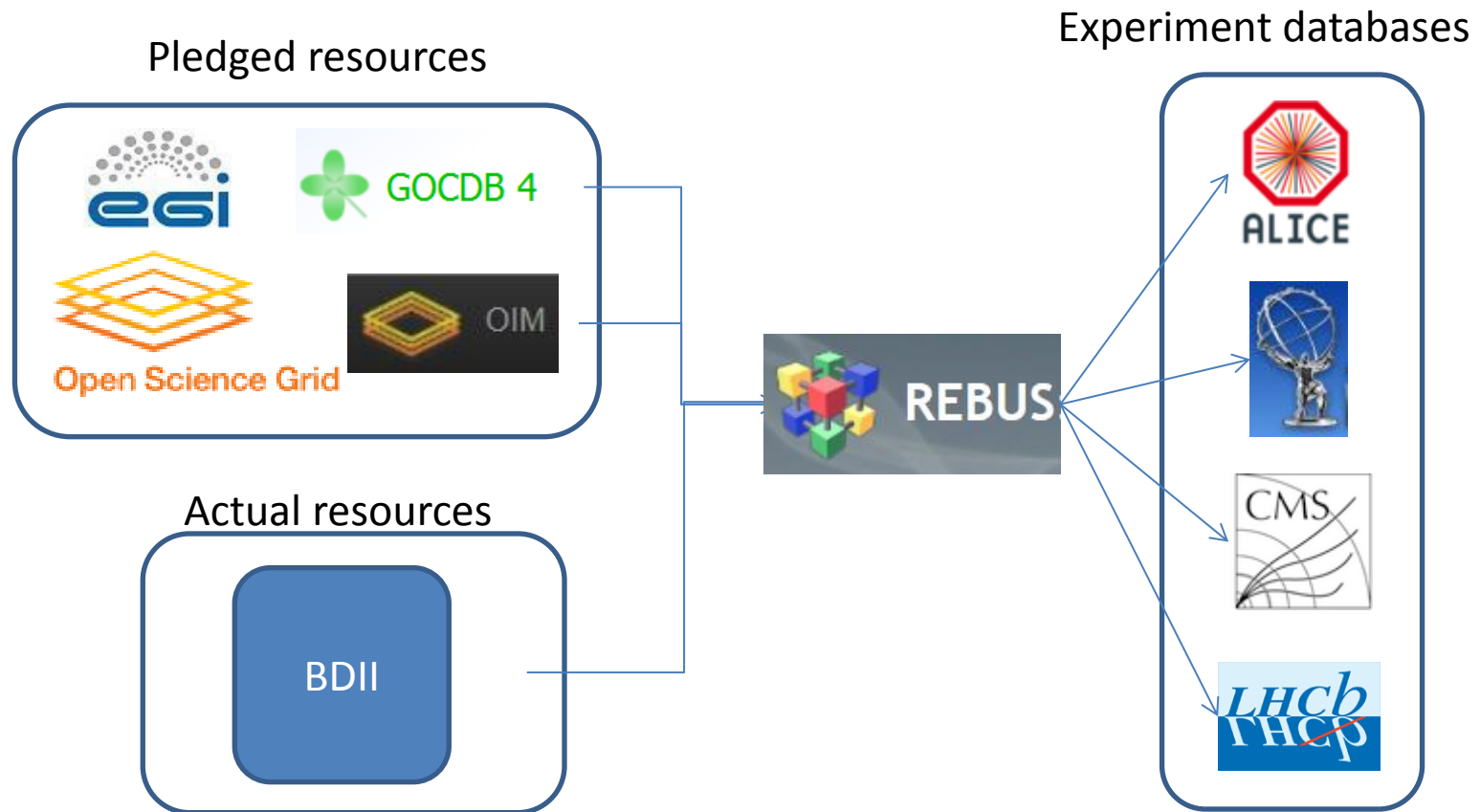
WLCG Global Information Registry

Current situation



WLCG Global Information Registry

With the WLCG Global Information Registry



WLCG Global Information Registry

WLCG REsource, Balance & USage

[WLCG Home](#) | [Contact](#) | [GGUS](#) | [Admin](#)



REBUS: Endpoint Records

Services

[Home](#)



Show 100 entries

WLCG REsource, Balance & USage

[WLCG Home](#) | [Contact](#) | [GGUS](#) | [Admin](#)



REBUS: Service Pledges

Services

[Home](#)



Show 100 entries

Search:

service_id	service_site	service_type	service_quality
abaddon.hec.lancs.ac.uk	UKI-NORTHGRID-LANCS-HEP	CREAM-CE	production
abitibi.sbgrid.org	SBGrid-Harvard-Exp	GridFtp	production
accounting.egi.eu	GRIDOPS-ACCPORTAL	egi.AccountingPortal	production
accounting.ndgf.org	NDGF-T1	SGAS	production
ace.uark.edu	UARK_ACE	CE	production
aesyle-grid.fgi.csc.fi	CSC	ARC-CE	production
agcream1.atlas.unimelb.edu.au	Australia-ATLAS	CREAM-CE	production
agent.tier3.ucdavis.edu	UCD	GUMS Server	production
agh3.atlas.unimelb.edu.au	Australia-ATLAS	SRM	production

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/WLCGGISR>
 - Both flat and JSON data feeds available

```
{
  - AdminDomains: {
    - GRISU-COMETA-INFN-CT: {
      - Services: {
        - infn-se-03.ct.pi2s2.it: {
          - Endpoints: {
            - infn-se-03.ct.pi2s2.it/srm/1.1.0: {
              url: "http://infn-se-03.ct.pi2s2.it:8443/srm/managerv1",
              implementationname: "",
              implementationversion: ""
            },
            - infn-se-03.ct.pi2s2.it/srm/2.2.0: {
              url: "http://infn-se-03.ct.pi2s2.it:8446/srm/managerv2",
              implementationname: "",
              implementationversion: ""
            },
            - infn-se-03.ct.pi2s2.it/webdav: {
              url: https://infn-se-03.ct.pi2s2.it:443,
              implementationname: "",
              implementationversion: ""
            }
          }
        },
      },
    },
  },
  - infn-ce-01.ct.pi2s2.it_ComputingElement: {
    - Managers: {
      - infn-ce-01.ct.pi2s2.it_ComputingElement_Manager: {
        productname: "lsf"
      }
    },
    - Shares: {
      - short_euasia_infn-ce-01.ct.pi2s2.it_ComputingElement: {
        maxcputime: "999999999",
        servingstate: "production",
        maxwalltime: "999999999",
        mappingqueue: "short"
      }
    }
  }
}
```



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