LDAP Rendering state of the art

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Outline

- ARC to Top-BDII integration led to
  - Schema changes
  - Rendering changes

https://twiki.cern.ch/twiki/bin/view/EMI/Glue2LdapStructure

Schema changes

- ✔ OID renumbering
- ✔ Some AUXILIARY objects renamed to STRUCTURAL
- ✔ DirectoryString type reintroduced
- • Partially Failed: renaming GLUE2GroupID to GLUE2GroupName
- ✗ Failed: renaming of attributes that are part of the dn

DIT changes

- ✔ GLUE2GroupID=resource changed to GLUE2GroupID=services
- ● Partially Failed: the DomainID VS DomainName issue
- ✗ Failed: new dn from changed attributes

Schema changes: OID renumbering

- Was inconsistent and not manageable, too unnecessary tight to GDF147
- New one is simply incremental numbers.

Schema changes:
Some AUXILIARY objects renamed to STRUCTURAL

- STRUCTURAL elements can be used to create branching nodes of DIT (but can be leafs)
- ComputingService was AUXILIARY, but is currently definitely a branching node of the three

Schema Changes: DirectoryString type reintroduced

- Type allows UTF8 chars
- Does NOT allow empty strings => empty attributes MUST NOT be published, and this is now enforced by the schema.

DIT changes: GLUE2GroupID=resource changed to GLUE2GroupID=services

- Reflects current GLUE2 main objects: Service(s)
- Agreement between ARC and gLite

DIT changes Partially Failed: the DomainID VS DomainName issue

- Bad habit: we say something but we do the opposite
- DomainID MUST be URI but happens to be String in GLUE2 gLite implementation
- Outcome: ARC follows GDF147, gLite does not:
  ARC: GLUE2DomainID: urn:ad:CERN-PROD
  GLUE2DomainName: CERN-PROD
  gLite: GLUE2DomainID: CERN-PROD
- How will this affect production sites and equivalent XML rendering?
  UPDATE - issues when automatically converting Glue1 'Site' into GLUE2 'Domain': gLite didn't want any URI scheme

Deployment results

- Dropped changes due to backward incompatibility issues. Fix has a minimum common denominator
- Products seemed to seamlessly use the new schema, tests are successful
- Integration goal achieved: consistent way of aggregating data between gLite, ARC, UNICORE
- UPDATE: current EGI grid tools needs update to fully implement this, solution found burdens system administrators

Documents Status

- GLUE2 LDAP schema:
  - Now includes decent versioning
  - Now includes Changelog
  - Now sitting in
    https://github.com/OGF-GLUE/LDAP/tree/EMIrevision
    waiting to sync with official master branch

Documents Status

- GLUE2 LDAP rendering recommendation:
  - I suggest to sync it with state of the art of existing implementors.
  - Since there is no agreement on the DIT, the so-called insertion points (GLUE2GroupID) are the important things to mention

THANKS!

References

- GLUE2 Model
  http://www.ogf.org/gf/docs/gfd.php?gfd=147

Backup Slides

ARC LDAP GLUE2