gLite MatchMaking
VoViews/Voms extension: integration status

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Overview

- *Brief description of BDII – ISM – MM interactions*
- *VoView support*
  - *integration status*
- *VOMS extension*
  - *integration status*

BDII / ISM / MM interactions

- *The BDII is queried by ISM purchasers for acquiring information about CE/SE*
  - *involved CE objectclasses*
    - *gluece*
    - *gluecesebind*
    - *gluecluster*
    - *gluesubcluster*
- *The information gathered are then processed*
  - *ClassAd representation of the CE information is generated and inserted in the ISM*
    - *attributes published in the subschema without the* SINGLE-VALUE *tag specified are converted as ClassAd Expression List*

BDII / ISM / MM interactions

- To perform the actual match-making the gLite Resource Broker relies on the information the ISM supplies with
  - the macth-making is performed by generating a symmetric ClassAd match context where evaluates
    - the requirement expressions of the Request Ad (JDL) and the CE Ad

CE Ad

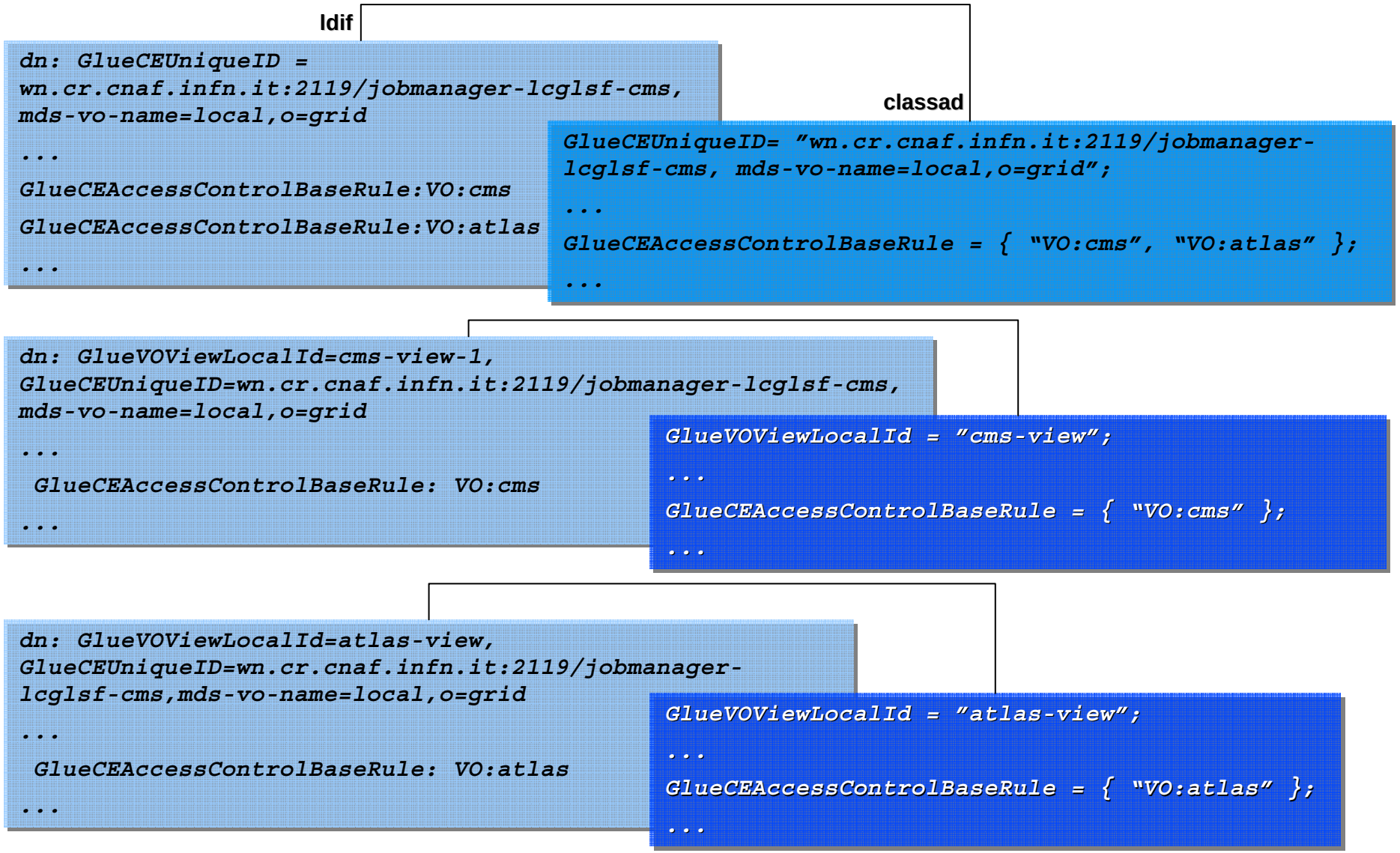
```
...
CloseOutputSECheck = IsUndefined(other.OutputSE) ||
  member(other.OutputSE,GlueCESEBindGroupSEUniqueID);

AuthorizationCheck =
  member(other.CertificateSubject, GlueCEAccessControlBaseRule) ||
  member(strcat("VO:",other.VirtualOrganisation), GlueCEAccessControlBaseRule);

requirements = AuthorizationCheck && CloseOutputSECheck;
...
```

    - the set of matching CEs Ad (suitableCEs) is then passed to GPBOX engine for further filtering

VOView integration status

- ***The VOView support , according to the Glue Schema 1.2 specification, has been integrated in the gLite WMS MM engine***
  - ***object class** gluevoview **queried by the ISM purchaser***
    - ***provides a subset of the CE attribute relevant to the "view"***
  - ***for each VOView***
    - ***a ClassAd representation of the CE information is***
      - ***generated,***
      - ***merged with the VOView attributes***
        - ***CE Ad attributes values are overridden by VOView ones***
      - ***and finally inserted in the ISM***

VOView integration status



VOView integration status

- *The ACBR mapping is "resolved" computing*
  - *<CE>.GlueCEACBR ∩ <View>.GlueCEACBR*

```
GlueCEUniqueID= "wn.cr.cnaf.infn.it:2119/jobmanager-
lcglsf-cms, mds-vo-name=local,o=grid";
...
GlueCEAccessControlBaseRule = { "VO:cms", "VO:atlas" };
...
```

bound to

```
GlueVOViewLocalId = "cms-view";
...
GlueCEAccessControlBaseRule = { "VO:cms" };
...
```

- ***If the intersection is not empty then***
  - ***merge between the CE Ad and the VOView ad is performed***
  - ***resulting ad is inserted in ISM***

yields

```
GlueCEUniqueID= "wn.cr.cnaf.infn.it:2119/jobmanager-
lcglsf-cms, mds-vo-name=local,o=grid";
...
GlueCEAccessControlBaseRule = { "VO:cms" };
...
```

- ***In the end, if some entry in <CE>.ACBR has not been mapped to any VOView, then***
  - ***a CE Ad with ACBR value equal to the list of such entries is inserted in the ISM***

VOMS extension integration status

- *It is not so clear how to proceed*
  - *Are we going to publish ACL rules within the GlueCEAccessControlBaseRule of either the GlueCE or GlueVOView objectclass ?*
    - *"VOMS:/cms/gold"*
    - *"VOMS:/*/silver/Role=*"*
  - *In this case we need an ad hoc comparator which can be used as a classad function in order to "perform" a preliminary filtering of the "candidate" CEs based on the default FQAN*
    - *VOMS_FQAN attribute in the JDL*

```
...
AuthorizationCheck =
  member(other.CertificateSubject, GlueCEAccessControlBaseRule) ||
  member(strcat("VO:",other.VirtualOrganisation), GlueCEAccessControlBaseRule) ||
  FQANmember(strcat("VOMS:",other.VOMS_FQAN), GlueCEAccessControlBaseRule);

requirements = AuthorizationCheck && CloseOutputSECheck;
...
```

    - *a further FQAN/Role filtering will be still demanded to GPBOX engine*