



Enabling Grids for E-science

GLUE schema and JRA4

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Information Society



- **Brief update on where we are with GLUE schema**
 - What is GLUE schema
 - How can JRA4 use it
 - need your feedback on this
 - Issues

- **Purpose**

- Abstraction of real world entities into a form expressible by computationally (an *Information Model*)
- A precise and standard description of Grid resources
- Allow uniform description of different Grids

- **Implementation**

- Information made accessible through GIS (e.g. R-GMA, MDS)
- Not tied to a particular implementation
- Access through GIS interface (e.g. R-GMA: SQL, MDS2.x: LDAP, MDS:3.x: XPath)

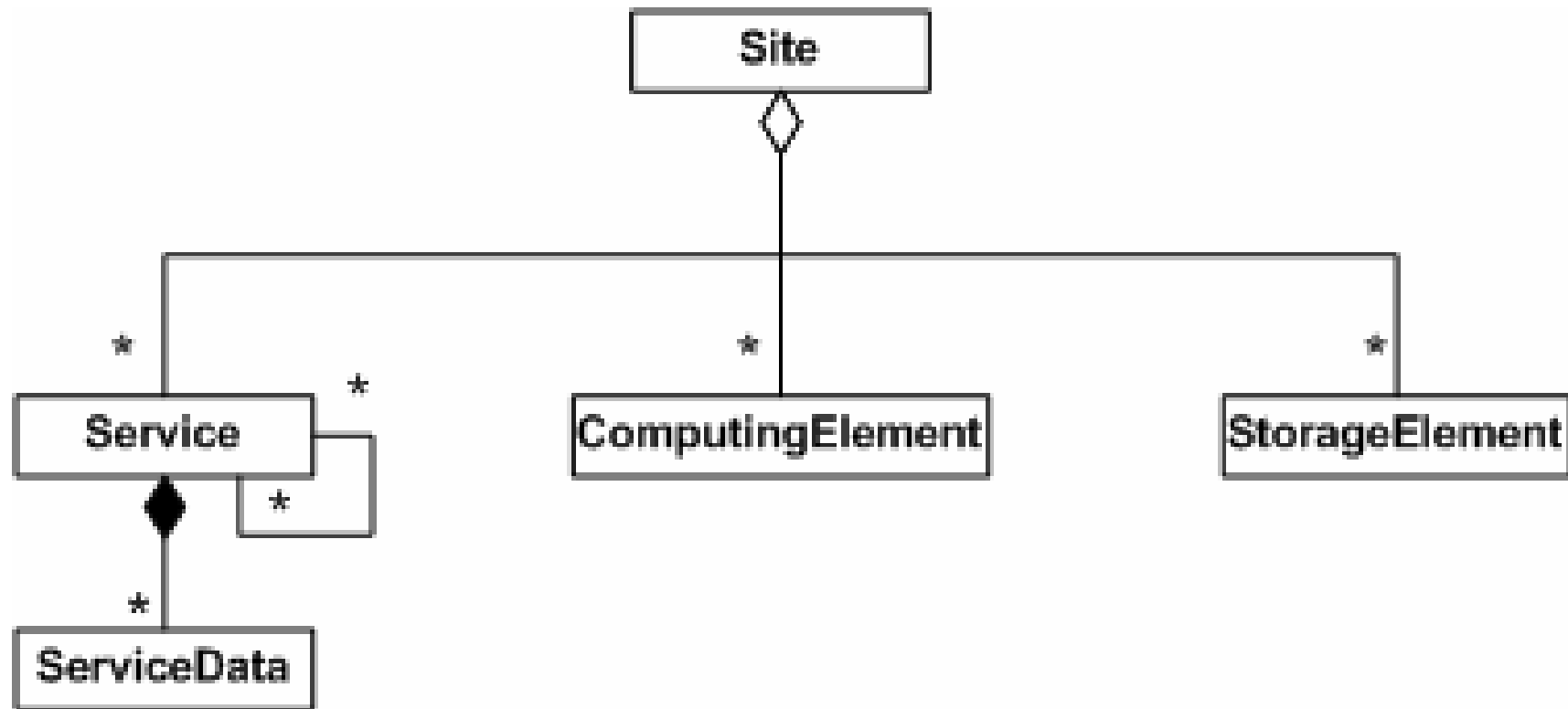
- **From schema specification v1.2 draft 7**
- **Site**
 - set of resources that are installed and managed by the same organization/set of persons
- **Service**
 - abstracted, logical view of actual software components
- **Computing Element**
 - Service that manages jobs and offers them execution environments provided by computing resources. The considered computing resources are those assigned to a single batch queue.
- **Storage Element**
 - abstraction for a storage resource. Group of services, protocols and data sources
- **Others**
 - Cluster, Sub-cluster, ... (see specification for full list)

- **Site**
 - UniqueID
 - Name
 - Description
 - User Support Contact
 - Sys Admin Contact
 - Security Contact
 - Location (geographic)
 - Latitude
 - Longitude
 - Web (info)
 - Sponsor (VO)
 - Other Info (key/value pair)

- **Service**
 - UniqueID
 - Name
 - Type (e.g. org.glite.wms, org.glite.rgma.RegisteryService, gsiftp, MyProxy)
 - Version
 - Endpoint (URI)
 - Status (OK, Warning, Critical, Unknown, Other)
 - Status Info (status explanation)
 - WSDL (URI)
 - Semantics (URL)
 - Start Time
 - Owner (e.g. one or more VO)
- **Service Data**
 - Key/Value pairs

- **CE and SE entities are complex**
- **See specification for details**

- GLUE expresses relationships using UML
- Note: no relationship between Services and CE/SE



- For EGEE JRA4, we can define NPM/BAR services as GLUE.Service entities (monitoring point, BAR)
- For NPM need to associate service with CE/SE
 - but this association does not currently exist
- For BAR?

- **How is information published into GIS?**
- **For LDAP-based GIS**
 - Generic Information Provider
 - publishes static and dynamic data
 - generic, but contains templates for GLUE
- **Others?**
 - doesn't appear to be anything specific to GLUE
 - use GIS's standard APIs (e.g. R-GMA)
- **Status within EGEE**
 - don't know!
 - in contact with Sergio Andreatozzi

- **How do our services gain access to GLUE data?**
- **Depends on where/how data is stored**
- **Status within EGEE?**
 - don't know!
 - in contact with Sergio Andreozzi

- **Looks as if makes sense to view JRA4 services as GLUE.Service entities**
- **Need to associate GLUE.Service with GLUE.CE/SE**
 - but missing relationship in GLUE schema
- **Need to find out how to publish GLUE data**
- **Need to find out how to consume GLUE data**

- **In contact with Sergio Andreozzi**
 - waiting for replies to these questions

- GLUE home page
 - <http://infforge.cnaf.infn.it/glueinfomodel/>
- GLUE Schema Specification version 1.2 draft 7 - 6 Apr '05
 - <http://infforge.cnaf.infn.it/glueinfomodel/index.php/Spec/V12>
- Generic Information Provider
 - <http://lfield.home.cern.ch/lfield/cgi-bin/wiki.cgi?area=gip&page=documentation>