

openMDR

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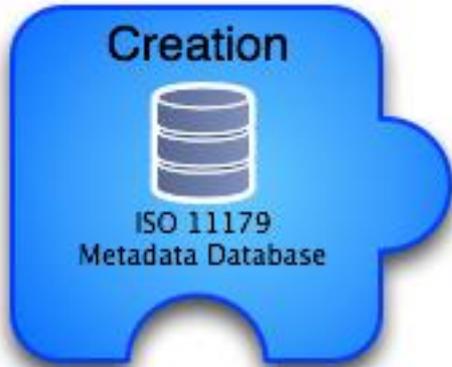
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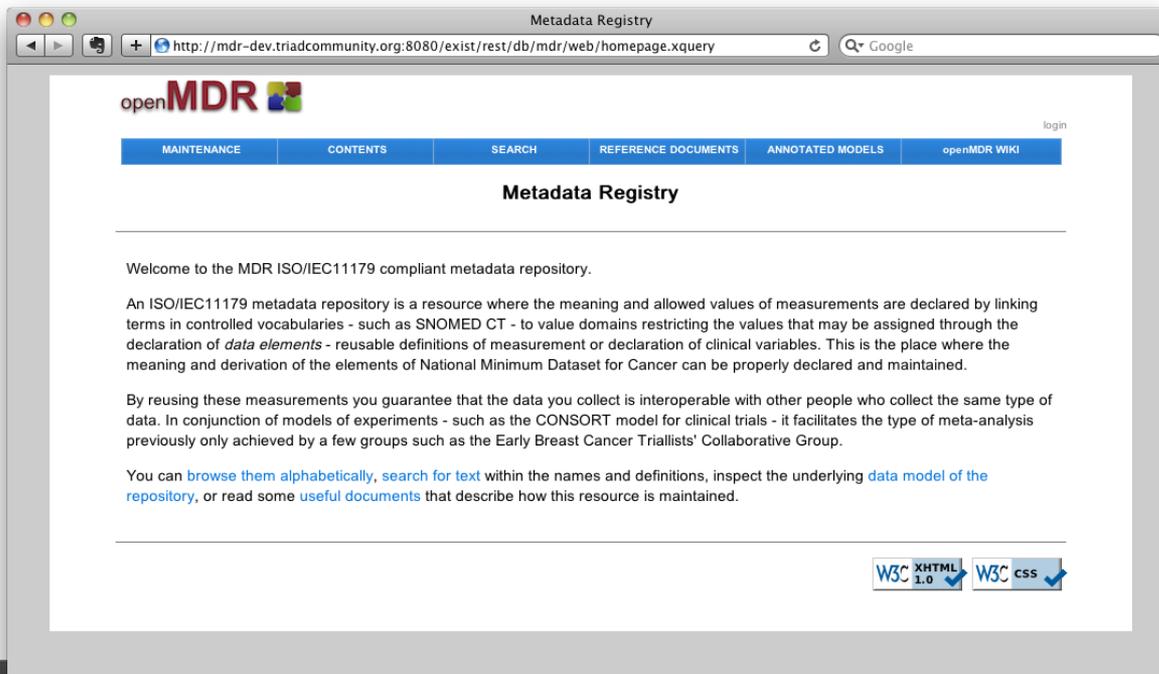
- Suite of software that provides caGrid-compatible Semantic Metadata Management capabilities
- Locally relevant ontology-anchored data elements
 - Rapid and agile development paradigm
- Distributed terminology ecosystem
 - Federated queries across multiple deployments
- Interaction with other semantic management systems
 - ISO 11179 semantic repository
- Integration with industry standard tools

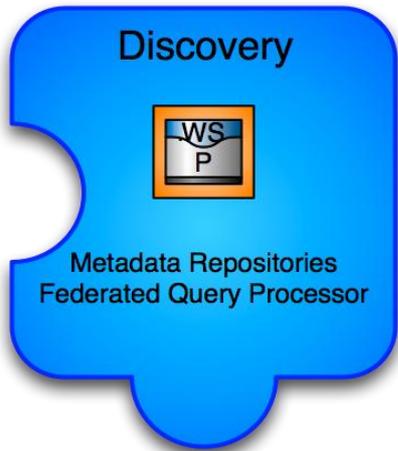
openMDR Components



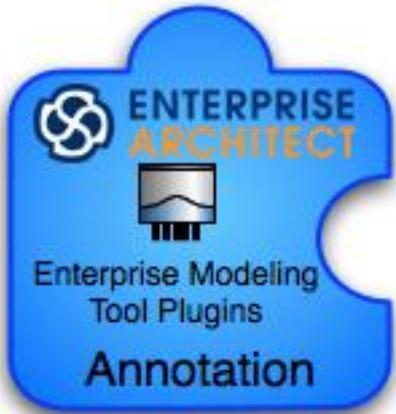


- Metadata Registry – web based
- Extends cgMDR database
- eXist XML database backend
- Metadata is annotated with conceptual information from a local or remote lexEVS/ Biportal system(s).



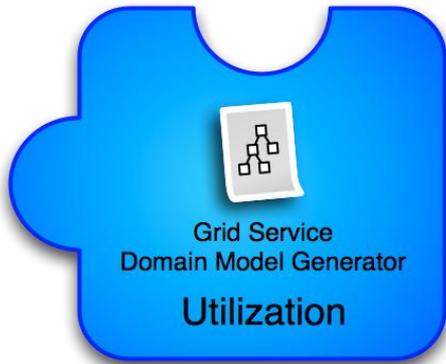


- Facilitates discovery of data elements
- API and Grid Service for querying across many disparate semantic metadata repositories
 - caGrid analytical grid service - capable of querying into caDSR and *many* openMDR systems
 - Enhances and wraps the cgMDR mdrConnector in order to parse the received information into a common format
 - caGrid service enables it to be deployed in any local or production grid environment.
 - Locally configured and modified to query into many semantic metadata systems

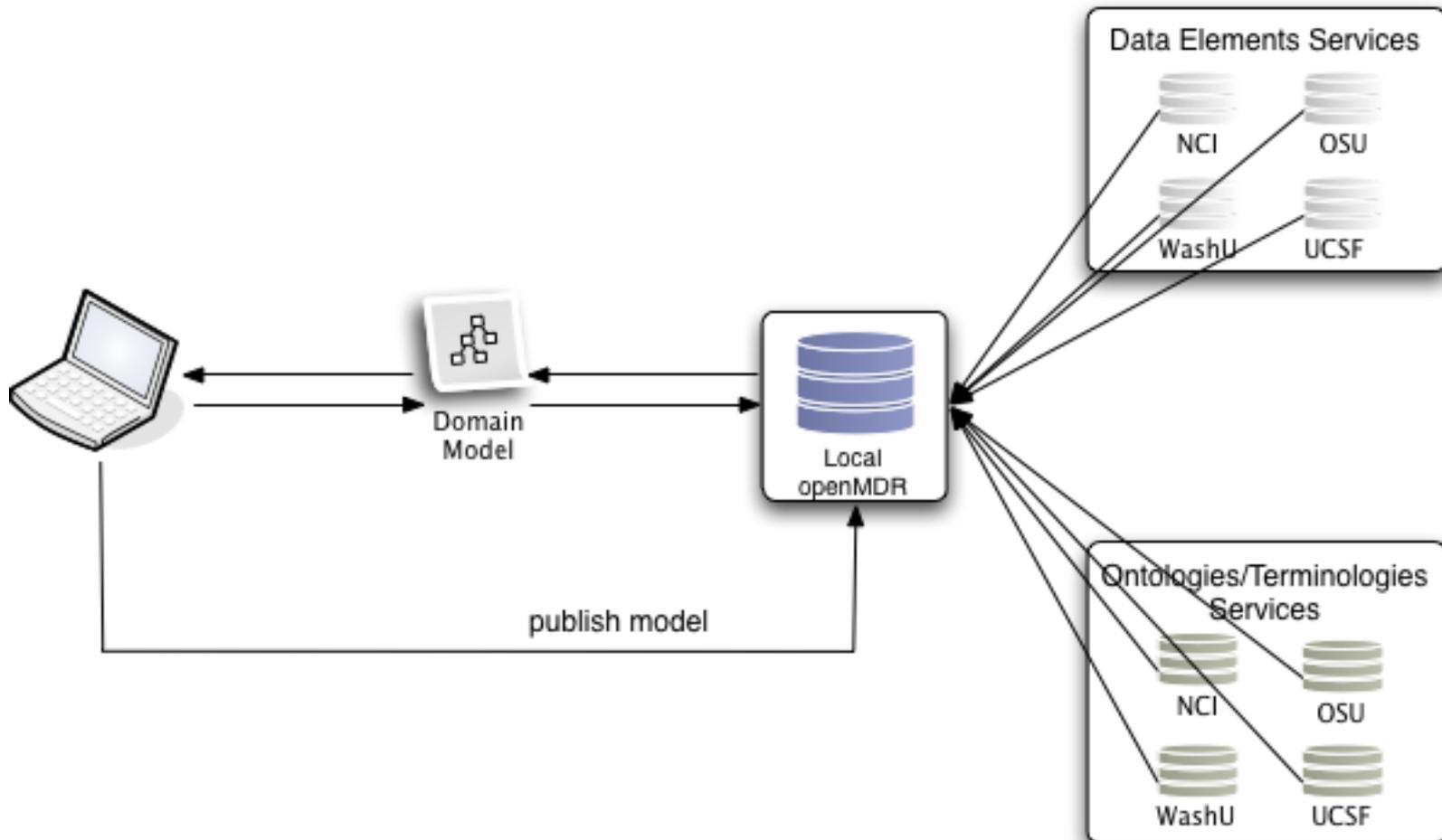


- Semantic Annotation Tool
 - Enables semantic annotation of federated semantics (CDE's)
 - Utilizes MDRQuery service for locating and utilizing CDE's from multiple semantic metadata sources
 - Search Filters
 - Enables Search within "Context"
 - Wildcard terms
 - Specific terms
 - Tags are created that identify CDE via local unique id
- Integration into Enterprise Architect
 - Streamlined, one-tool modeling process

mdrDomainModelGenerator

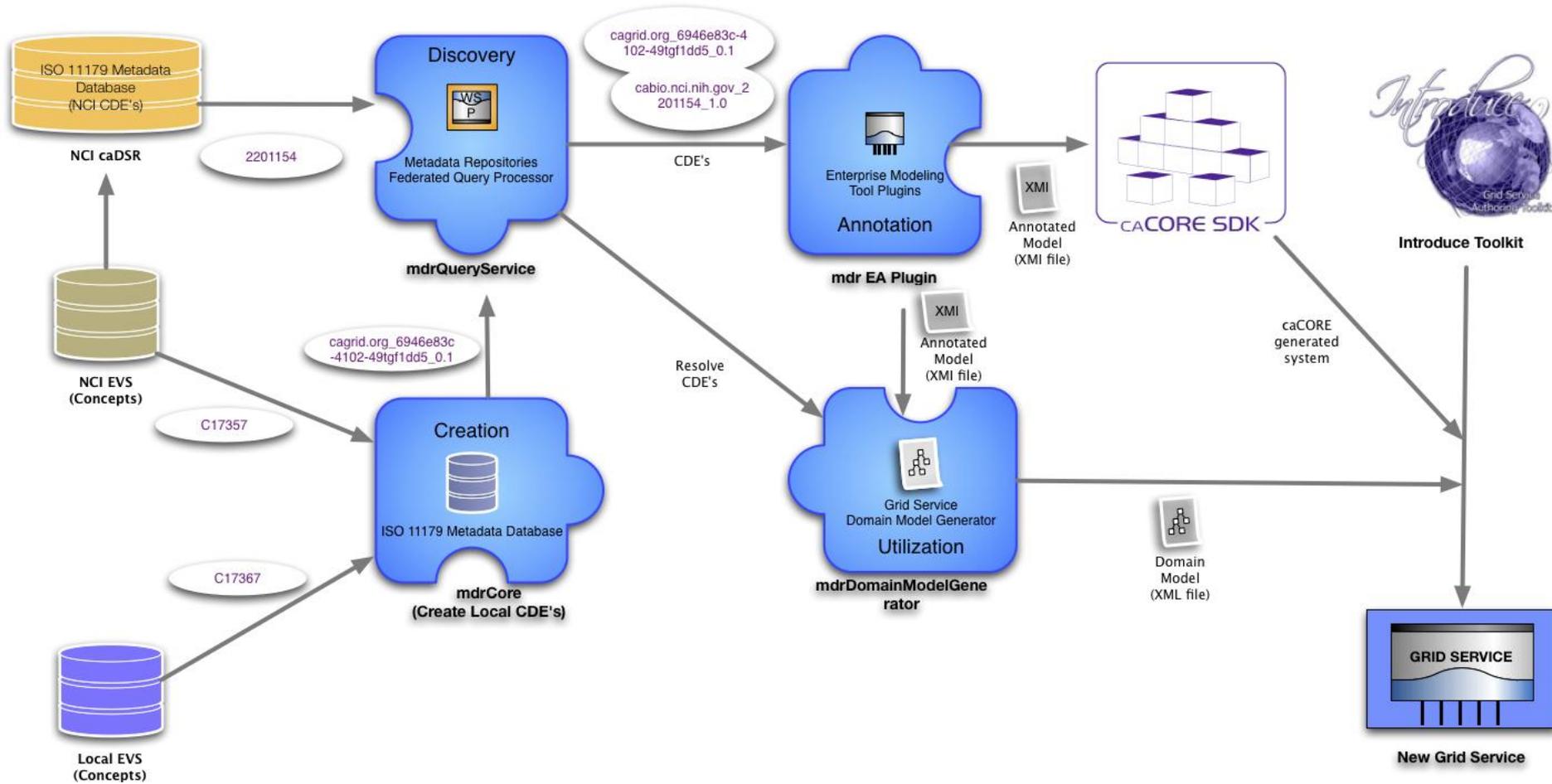


- Entry point into existing grid tools chain
- Processes a model annotated with the MDR EA Plugin
 - Creates the service metadata document which describes the data model and semantic annotations on it.
 - The model is published and is searchable, facilitating discovery and interoperability
 - The metadata can be used to generate a data service using the **Introduce** Data Service Wizard



openMDR - TRIAD based domain modeling and annotation workflow

openMDR and caGrid/TRIAD service creation Workflow



- New Features
 - User Interface usability enhancements
 - Data Element Wizard - user intuitive way of creating data elements
 - Automated versioning for all metadata registry items
 - Storing and validation of Annotated UML Models
 - Conceptual information addition for Value Meanings
 - Addition of Query Resources such as SNOMEDCT, ICD9, GO, HL7 and LOINC
 - Addition of Bioportal as a Terminology Source
 - Automated usage of the most recent coding schemes for LexEVS concepts
 - Versioning of Reference Documents
 - Domain Model includes value domain concepts

- Refactor mdrCore/ mdrEAPPlugin
- Robust backend database
 - XML to RDF
- Use Identifier Services Framework
 - Globally Unique
- Use LexEVS 6.0
 - ValueSet and PickList Services
- Support ISO 21090 Data Types

- Enhance Browse & Search functionality in mdrCore and mdr EA Plugin
- Import/Export from/to multiple registries such as caDSR and openMDR instances – API
- HCI studies to optimize and re-factor all end-user facing knowledge management tools
- Develop Rules/Knowledge Engine

- openMDR:
 - <http://cagrid.org/display/mdr>
- TRIAD
 - General interest: <http://triadcommunity.org>
 - Technical information: <http://wiki.triadcommunity.org>
- Center for IT Innovations in Healthcare (CITIH):
 - <http://citih.osumc.edu>



Thank you for your time and attention