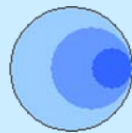


HCLS Demos:

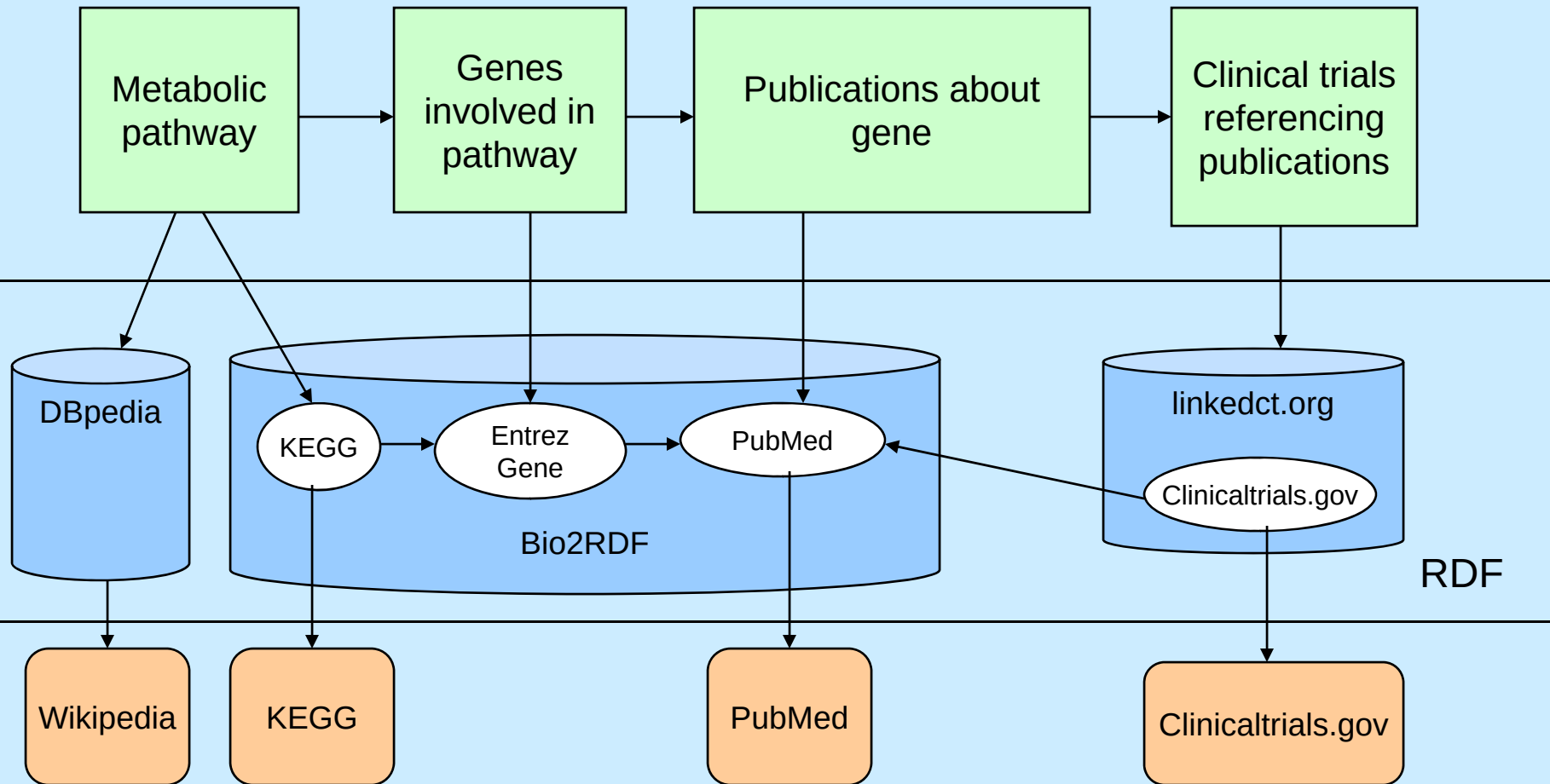
Pathways Explorer

CCR-to-NCI Thesaurus



[VectorC, LLC](#)

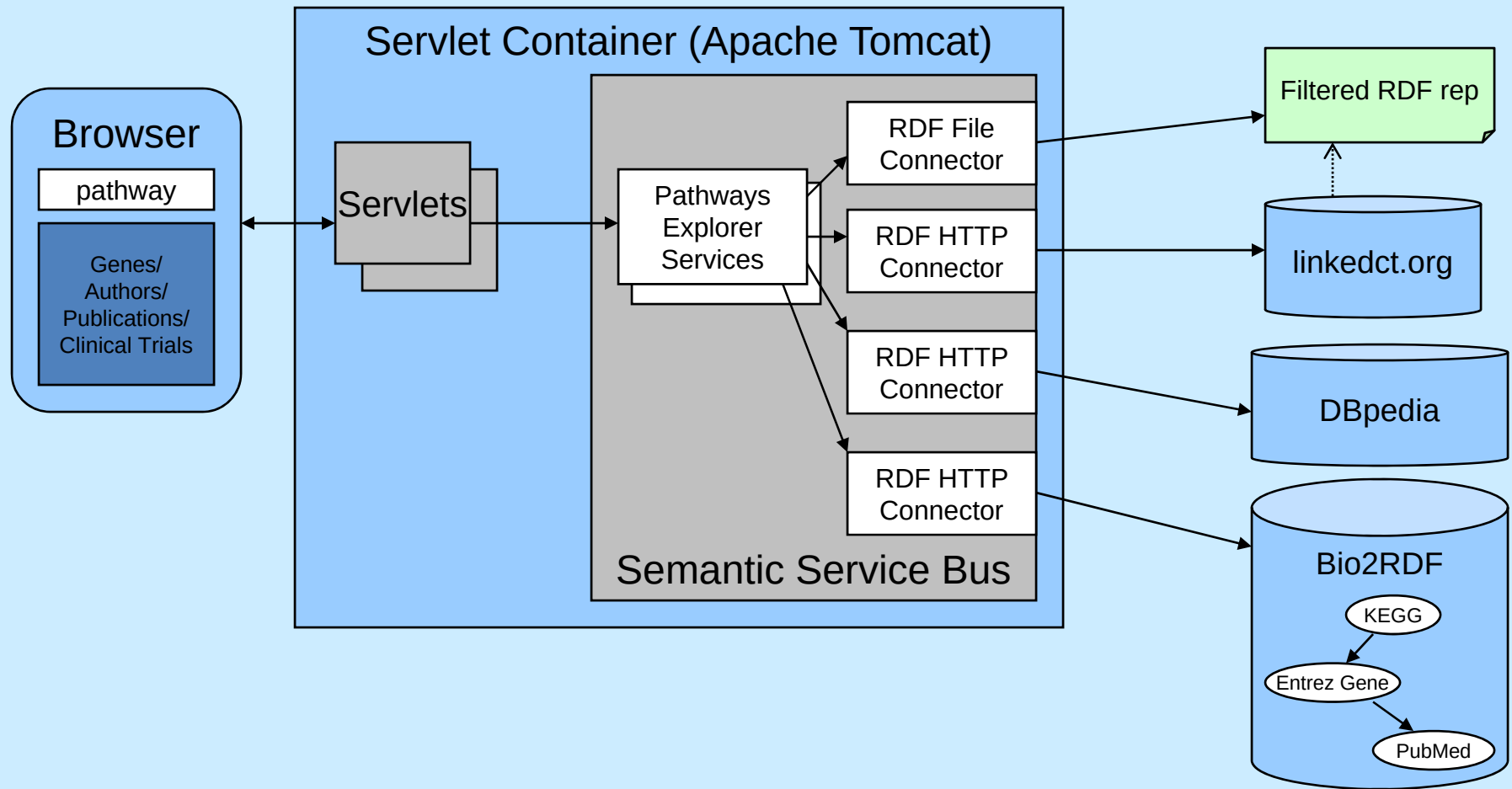
Pathways Explorer



...live demo...

(see screen shots if you can't connect to webinar)

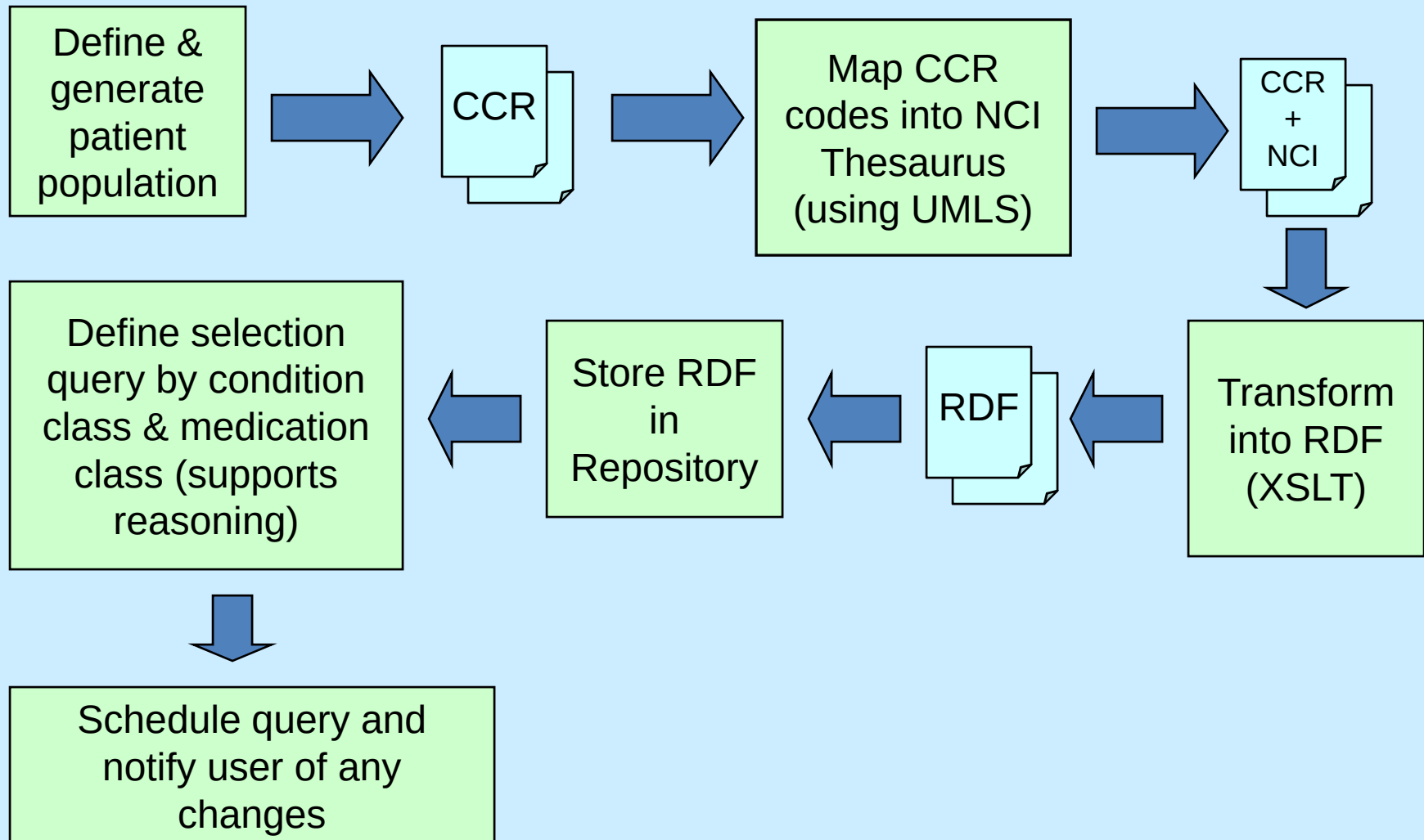
Pathways Explorer Architecture



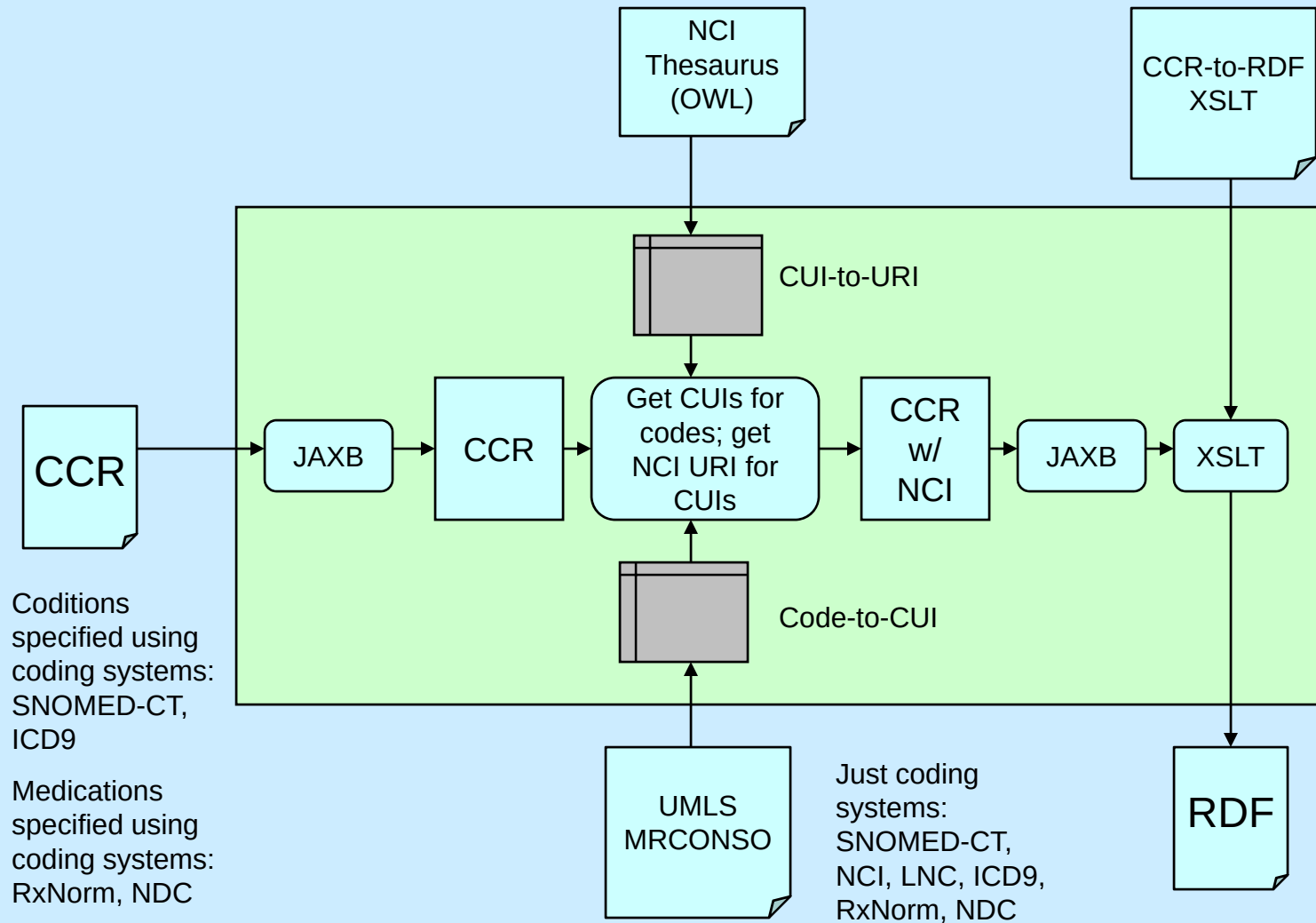
Pathways Explorer: Findings

- Growing number of biomedical RDF datasets creates many app opportunities.
- Key challenges:
 - Data quality/consistency
 - Performance
- RDF-enabled SOA middleware expedites development:
 - Local vs. remote data sources
 - Query decomposition
 - Data processing pipeline

CCR-to-NCI Thesaurus Demo

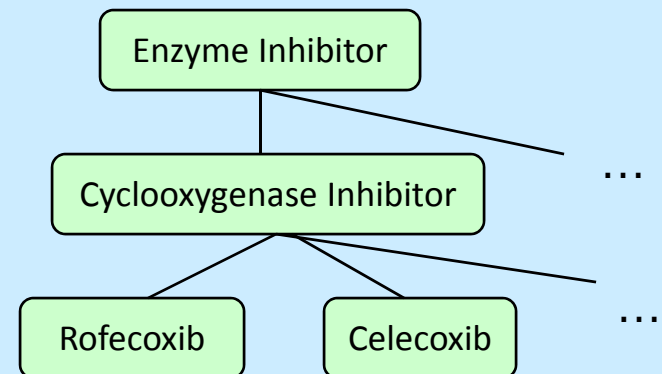
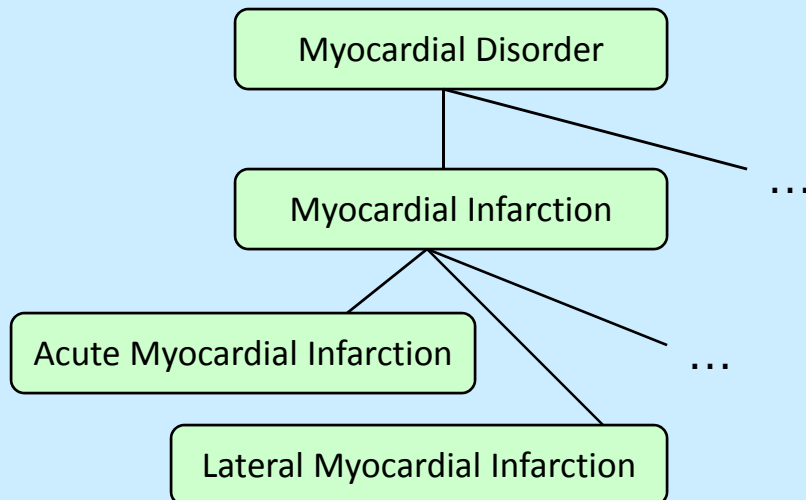


CCR-to-RDF Transformation



Example: Clinical Trial Cohort Selection

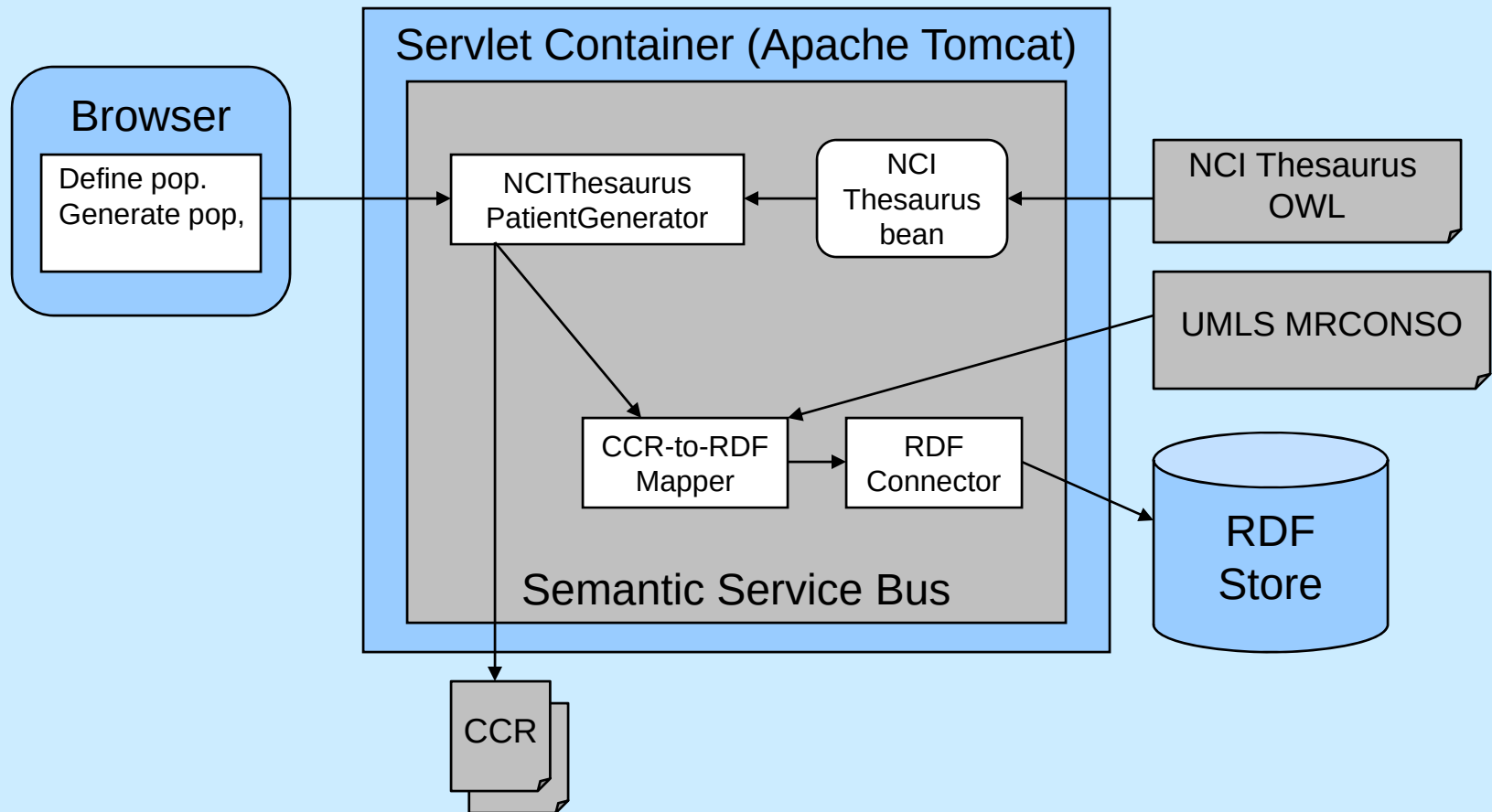
- Scenario: Find patients for a clinical trial related to the impact of rofecoxib (Vioxx) on myocardial infarctions (heart attacks).
- Subsumption reasoning against the NCI Thesaurus supports more powerful queries.



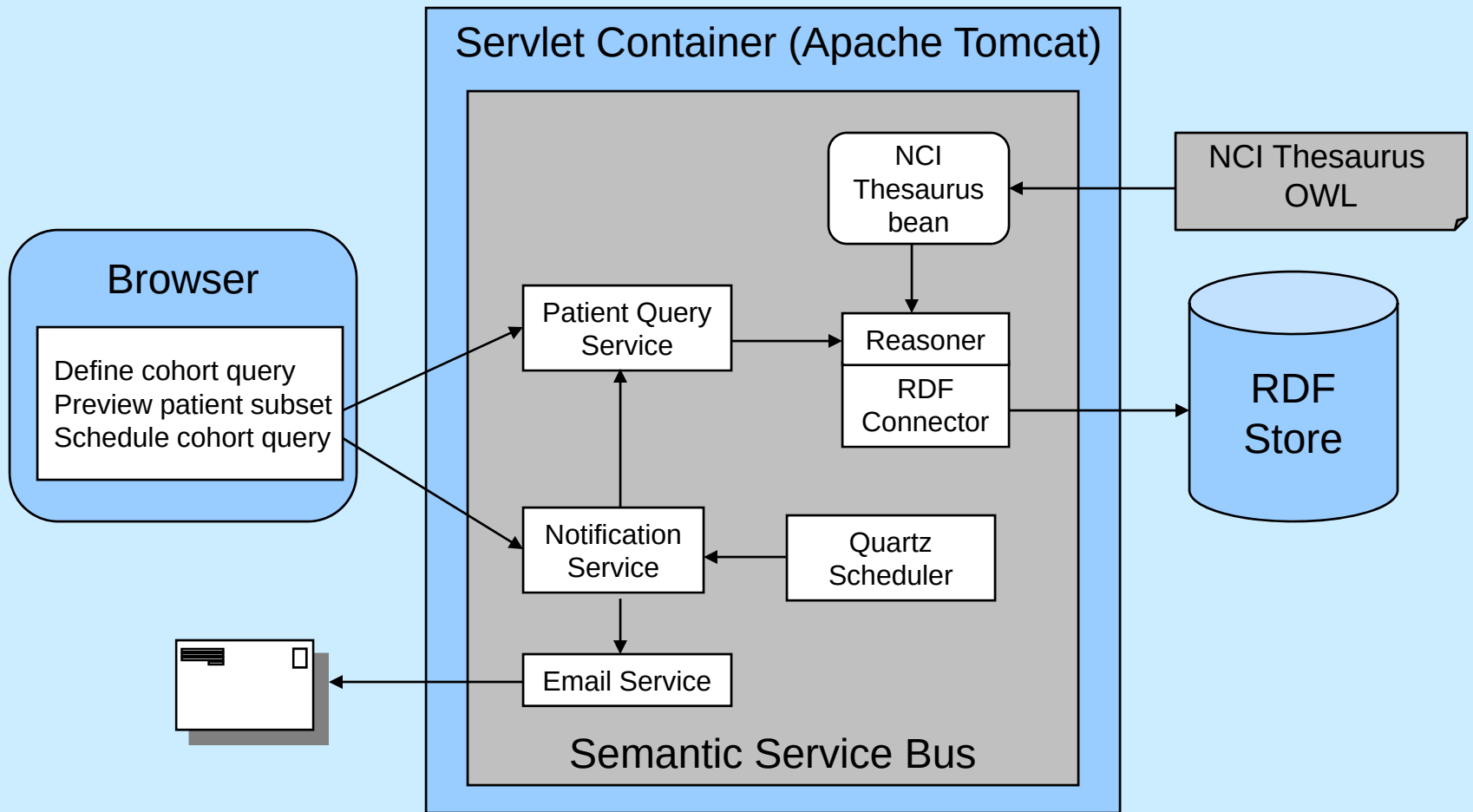
...live demo...

(see screen shots if you can't connect to webinar)

CCR-to-NCI Thesaurus Demo: Patient Generator



CCR-NCI Thesaurus Demo: Query Execution/Scheduling



Extensions for a “Real” App

- Integrate other data sources/destinations (inpatient/ outpatient/ insurance/ non-medical/etc.):
 - Relational databases (via relational-to-RDF tools)
 - XML data (retrieved via a web service, etc.). Mapped to RDF via a XSLT approach, etc.
 - Other (email, JMS, legacy application, etc.).
- Support reasoning against a more comprehensive terminology (e.g. SNOMED-CT mapped to OWL 2 EL)
- Etc.