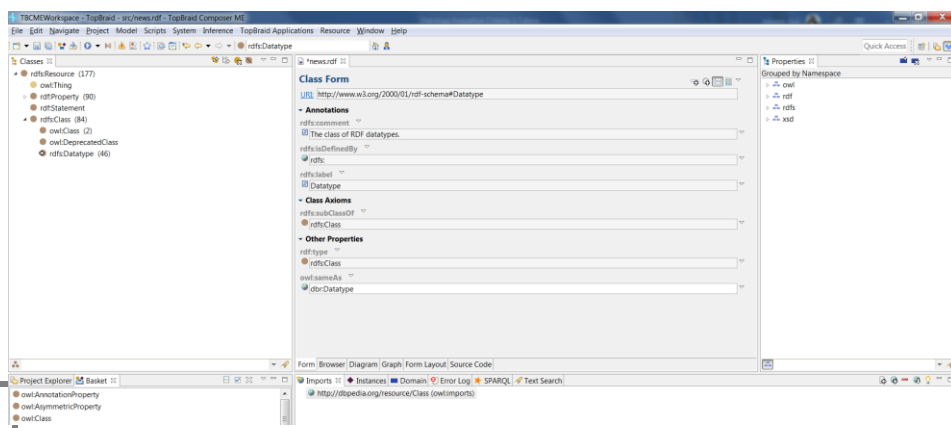


Ontology Creation

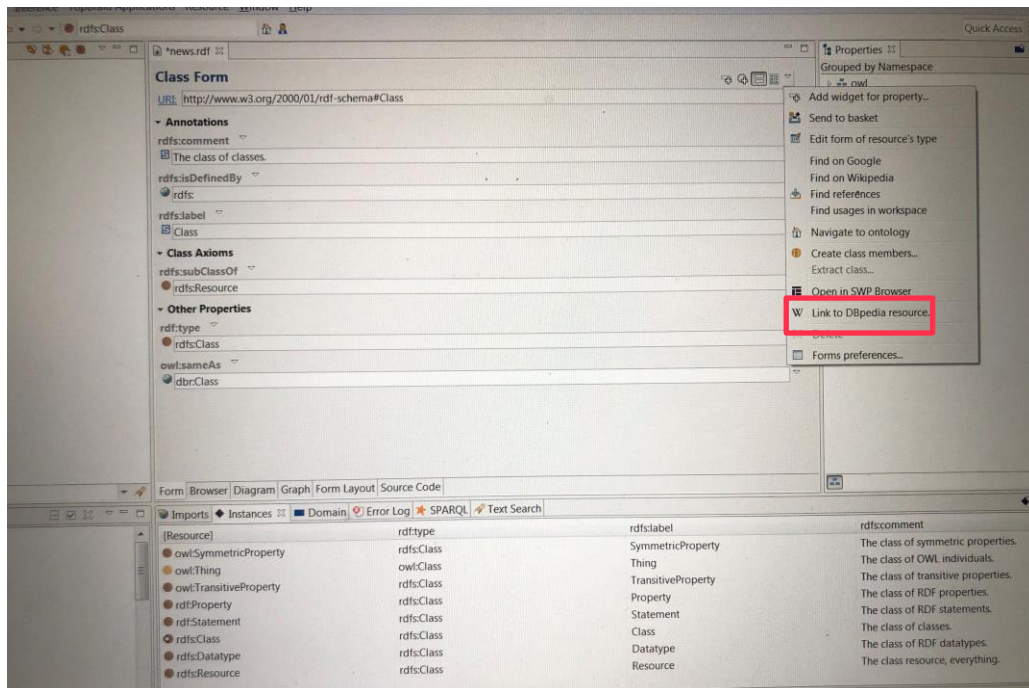
1. Create RDF or OWL from CoreNLP triples.
2. Outside ontology for portal current events: <http://dbpedia.org/page/News>
3. Connect the ontology to outside ontology.
4. Tool for Linking data to dbpedia:
 - Google Open Refine, TopBraid Composer (commercial)
5. Ontology Editor: Cognitum (free)
 - Several commercial and/or free applications for editing OWL ontologies **protégé**(free, open source) available as desktop application and web application <http://protege.stanford.edu/>
 - Fluent editor 2014 (commercial, requires Microsoft Windows)
 - W3C Wiki –Ontology editors page
http://www.w3.org/wiki/Ontology_editors
6. RDF Editor: GraphDB

Top Braid Tool

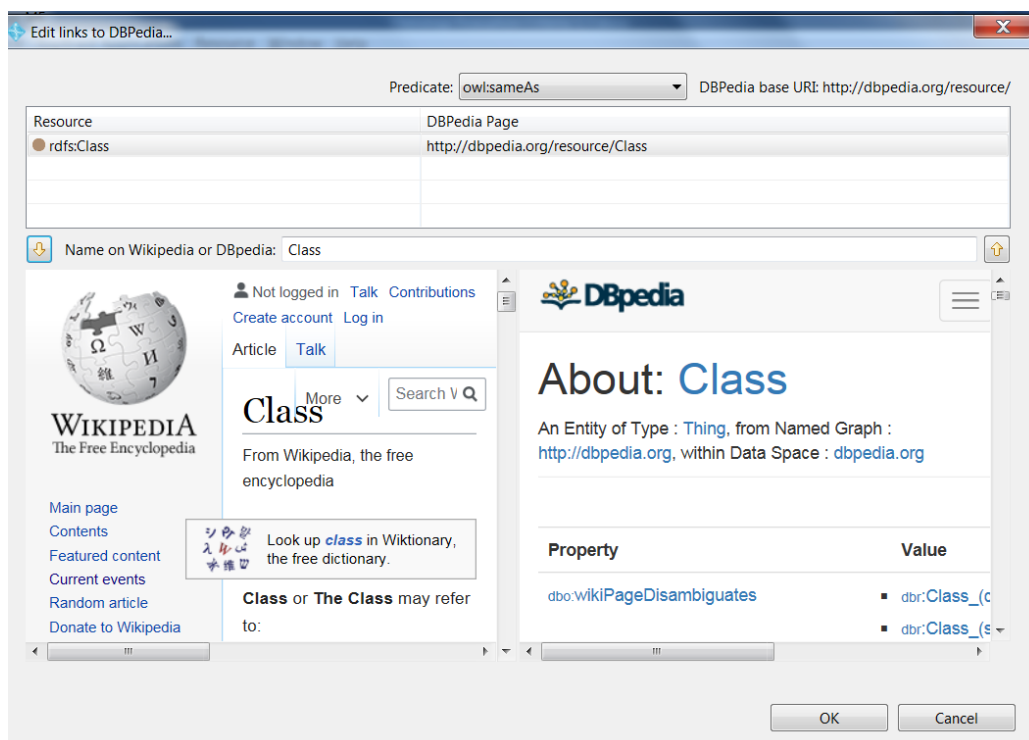
1. First import RDF file in the Workspace.



2. Click on the resource and then click on link to dbpedia



3. Click on the arrow and get a link of outside ontology



4. Now we have create the SAMEAS relationship between our instance and dbpedia.

Class Form

URI:

Annotations

rdfs:comment

rdfs:isDefinedBy

rdfs:label

Class Axioms

rdfs:subClassOf

Other Properties

rdf:type

owl:sameAs

5. Select all instances and put them in a basket

Project Explorer

- owl:AnnotationProperty
- owl:AsymmetricProperty
- owl:Class
- owl:DatatypeProperty
- owl:DeprecatedClass
- owl:DeprecatedProperty
- owl:FunctionalProperty
- owl:InverseFunctionalProperty
- owl:IrreflexiveProperty
- owl:ObjectProperty

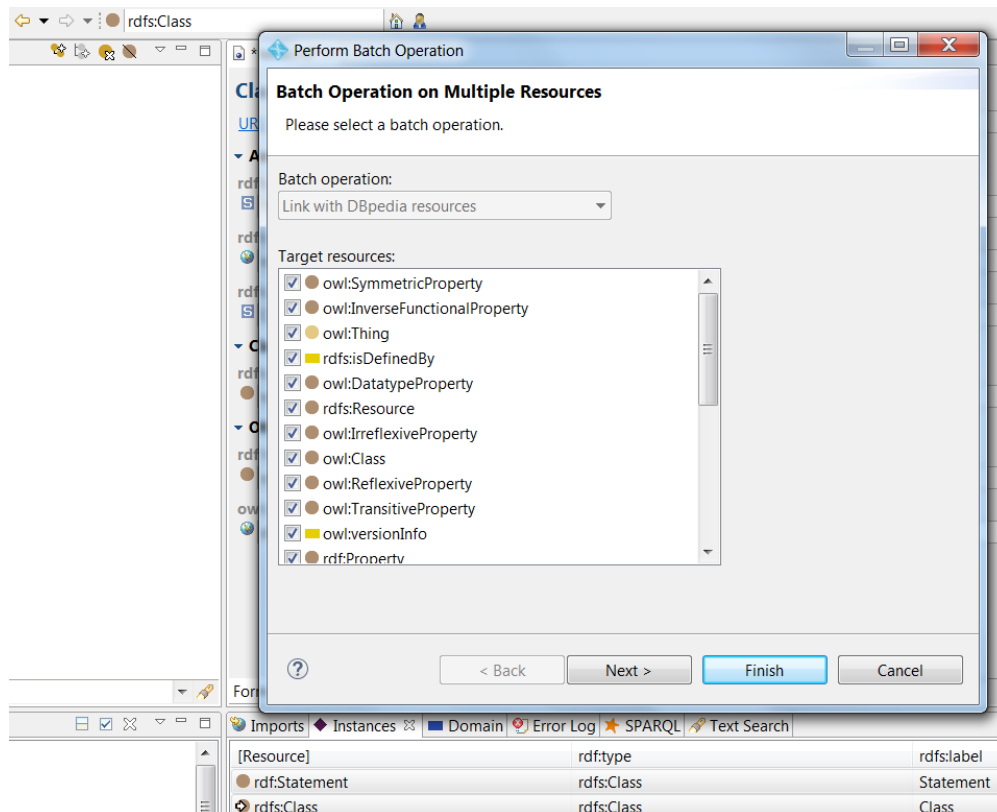
Instances

[Resource]	rdf:type	rdfs:label
rdfs:Statement	rdfs:Class	Statement
rdfs:Class	rdfs:Class	Class
rdfs:Datatype	rdfs:Class	Datatype
rdfs:Resource	rdfs:Class	Resource
rdfs:comment	rdf:Property, owl:AnnotationProperty	comment
rdfs:isDefinedBy	rdf:Property, owl:AnnotationProperty	isDefinedBy
rdfs:label	rdf:Property, owl:AnnotationProperty	label
rdfs:seeAlso	rdf:Property, owl:AnnotationProperty	seeAlso

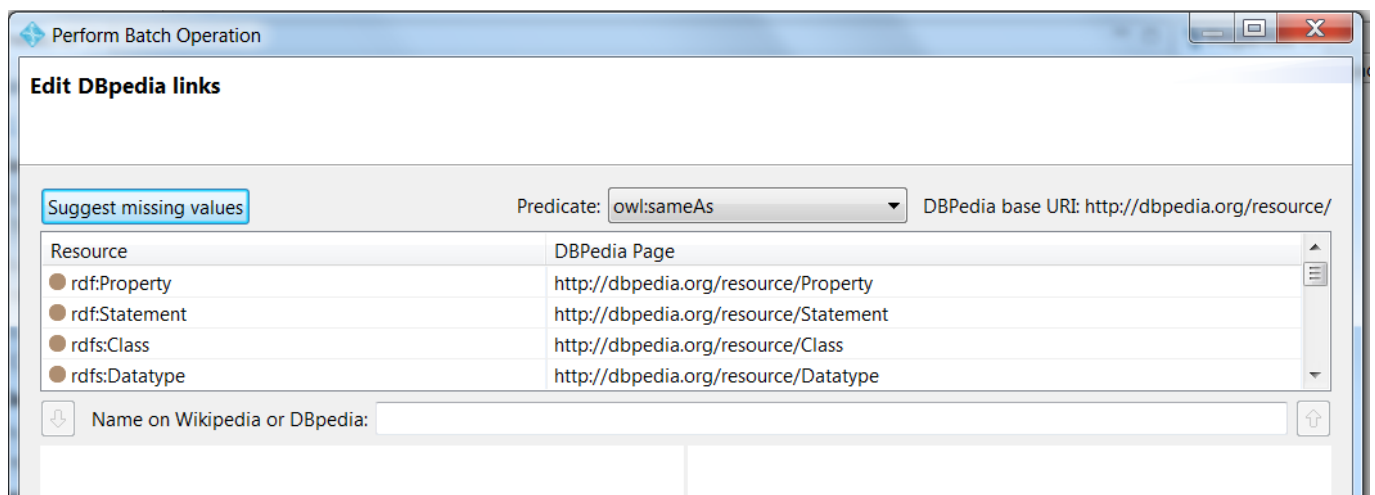
owl:sameAs

dbr:Class

6. Then perform a batch on all instances and get links for all instances



7. Results



Linked Data Driven Web Applications

The easiest way is to make use of a suitable library:

- SPARQL Javascript Library
http://www.thefigtrees.net/lee/blog/2006/04/sparql_calendar_demo_a_sparql.html
- ARC for SPARQL (PHP) <https://github.com/semsol/arc2/wiki>
- dotNetRDF (C#) <http://dotnetrdf.org/>
- Jena/ARQ (Java) <http://jena.sourceforge.net/>
- Sesame (Java) <http://rdf4j.org/>
- SPARQL Wrapper (Python) <http://sparql-wrapper.sourceforge.net/>

Linked Data Links

1. Equivalence links
owl:sameAs connects identical
2. Individuals (entities)
owl:equivalentClass connects equivalent classes