

The screenshot shows the YASGUI web interface. At the top, there's a green arrow icon and a tab labeled 'DBPedia'. The 'Endpoint' field contains 'http://dbpedia.org/sparql'. The 'Output' dropdown is set to 'Table'. Below the query editor, the results are displayed in a table with columns 'sub' and 'obj'.

	sub	obj
1	http://dbpedia.org/resource/Alt_Empord%C3%A0	rdf:type
2	http://dbpedia.org/resource/Alto_Vinalop%C3%B3	rdf:type
3	http://dbpedia.org/resource/Aristotle	http://www.w3.org
4	http://dbpedia.org/resource/Microsoft	http://dbpedia.org/ontology/Company
5	http://www.w3.org/2002/07/owl#imports	http://www.w3.org/2002/07/owl#OntologyProperty
6	http://dbpedia.org/ontology/abstract	http://www.w3.org/2002/07/owl#DatatypeProperty
7	http://dbpedia.org/ontology/birthDate	http://www.w3.org/2002/07/owl#DatatypeProperty
8	http://dbpedia.org/ontology/deathDate	http://www.w3.org/2002/07/owl#DatatypeProperty
9	http://dbpedia.org/ontology/wikiPageID	http://www.w3.org/2002/07/owl#DatatypeProperty
10	http://dbpedia.org/resource/Apple_Inc.	http://dbpedia.org/ontology/Company

At the bottom left, it says 'Yasgui 13.02d'. At the bottom right, there's a 'github' logo and a help icon.

<http://yasgui.laurensrietveld.nl>

(<http://dev.yasgui.laurensrietveld.nl>)

Why do we need another SPARQL client?



Why do WE need another SPARQL client?

Who knows the RDF namespace by heart?

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Who knows the RDF namespace by heart?

<http://www.w3.org/1999/02/22-rdf-syntax-ns#>

4store

SPARQL

```
PREFIX org: <http://www.w3.org/ns/org#>
PREFIX lv: <http://lobid.org/vocab/lobid#>
PREFIX isbd: <http://iflastandards.info/ns/isbd/elements/>
PREFIX mo: <http://purl.org/ontology/mo/>
PREFIX gn: <http://www.geonames.org/ontology#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX rdrel: <http://rdvocab.info/RDARelationshipsWEMI/>
PREFIX wdrs: <http://www.w3.org/2007/05/powder-s#>

SELECT * WHERE {
  ?s ?p ?o
} LIMIT 10
```

Submit

Harris, Steve, Nick Lamb, and Nigel Shadbolt. "4store: The design and implementation of a clustered RDF store." 5th International Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS2009). 2009.

OpenLink Virtuoso

Virtuoso SPARQL Query Editor

[About](#) | [Namespace Prefixes](#) | [Inference rules](#) | [iSPARQL](#)

Default Data Set Name (Graph IRI)

Query Text

```
select distinct ?Concept where {[ ] a ?Concept} LIMIT 100
```

(Security restrictions of this server do not allow you to retrieve remote RDF data, see [details](#).)

Results Format: (The CXML output is disabled, see [details](#))

Execution timeout: milliseconds (values less than 1000 are ignored)

Options: ☒ Strict checking of void variables

(The result can only be sent back to browser, not saved on the server, see [details](#))

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Virtuoso version 06.04.3135 on Linux (x86_64-generic-linux-glibc212-64), Cluster Edition (4 server processes)

Virtuoso, Openlink. "Universal server platform for the real-time enterprise."

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SPARQLer

```
PREFIX books: <http://example.org/book/>
PREFIX dc: <http://purl.org/dc/elements/1.1/>
SELECT ?book ?title
WHERE
{ ?book dc:title ?title }
```

Output: Text ▼

XSLT style sheet (blank for none):

☐ Force the accept header to text/plain regardless

<http://www.sparql.org/query.html>

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Sesame Workbench

Query Repository

Query Language: SPARQL ▼

Query:

```
PREFIX :<http://www.w3.org/2002/07/owl#>
PREFIX rdfs:<http://www.w3.org/2000/01/rdf-schema#>
PREFIX psys:<http://proton.semanticweb.org/protonsys#>
PREFIX etv:<http://eligibility.data2semantics.org/vocab/>
PREFIX owl:<http://www.w3.org/2002/07/owl#>
PREFIX xsd:<http://www.w3.org/2001/XMLSchema#>
PREFIX rdf:<http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX pext:<http://proton.semanticweb.org/protonext#>
PREFIX et:<http://eligibility.data2semantics.org/resource/>

SELECT * WHERE {
?s ?p ?o.
}
```

Limit results:

100 ▼

☒ Include inferred statements

Execute

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Aduna - Semantic Power

Broekstra, Jeen, Arjohn Kampman, and Frank Van Harmelen. "Sesame: A generic architecture for storing and querying rdf and rdf schema." The Semantic Web—ISWC 2002. Springer Berlin Heidelberg, 2002. 54-68.

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SNORQL

SPARQL Explorer for <http://dbpedia.org/sparql>

SPARQL:

```
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX dc: <http://purl.org/dc/elements/1.1/>
PREFIX : <http://dbpedia.org/resource/>
PREFIX dbpedia2: <http://dbpedia.org/property/>
PREFIX dbpedia: <http://dbpedia.org/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
```

```
SELECT ?property ?hasValue ?isValueOf
WHERE {
  { <http://dbpedia.org/resource/OpenLink_Software> ?property ?hasValue }
  UNION
  { ?isValueOf ?property <http://dbpedia.org/resource/OpenLink_Software> }
}
```

Results:

Description of http://dbpedia.org/resource/OpenLink_Software:

property	hasValue	isValueOf
owl:sameAs	-	<http://mpii.de/yago/resource/OpenLink_Software>
dbpedia:ontology/wikiPageDisambiguates	-	:Openlink
dbpedia2:developer	-	:DBpedia
dbpedia2:developer	-	:Virtuoso_Universal_Server
dbpedia2:developer	-	:OpenLink_ODBC_Drivers
dbpedia2:developer	-	:OpenLink_AJAX_Toolkit
dbpedia2:developer	-	:OpenLink_Rails_ODBC_Adapter
dbpedia:ontology/developer	-	:DBpedia
dbpedia:ontology/developer	-	:Virtuoso_Universal_Server
dbpedia:ontology/developer	-	:OpenLink_ODBC_Drivers
dbpedia:ontology/developer	-	:OpenLink_AJAX_Toolkit

<https://github.com/kurtix/SNORQL/>

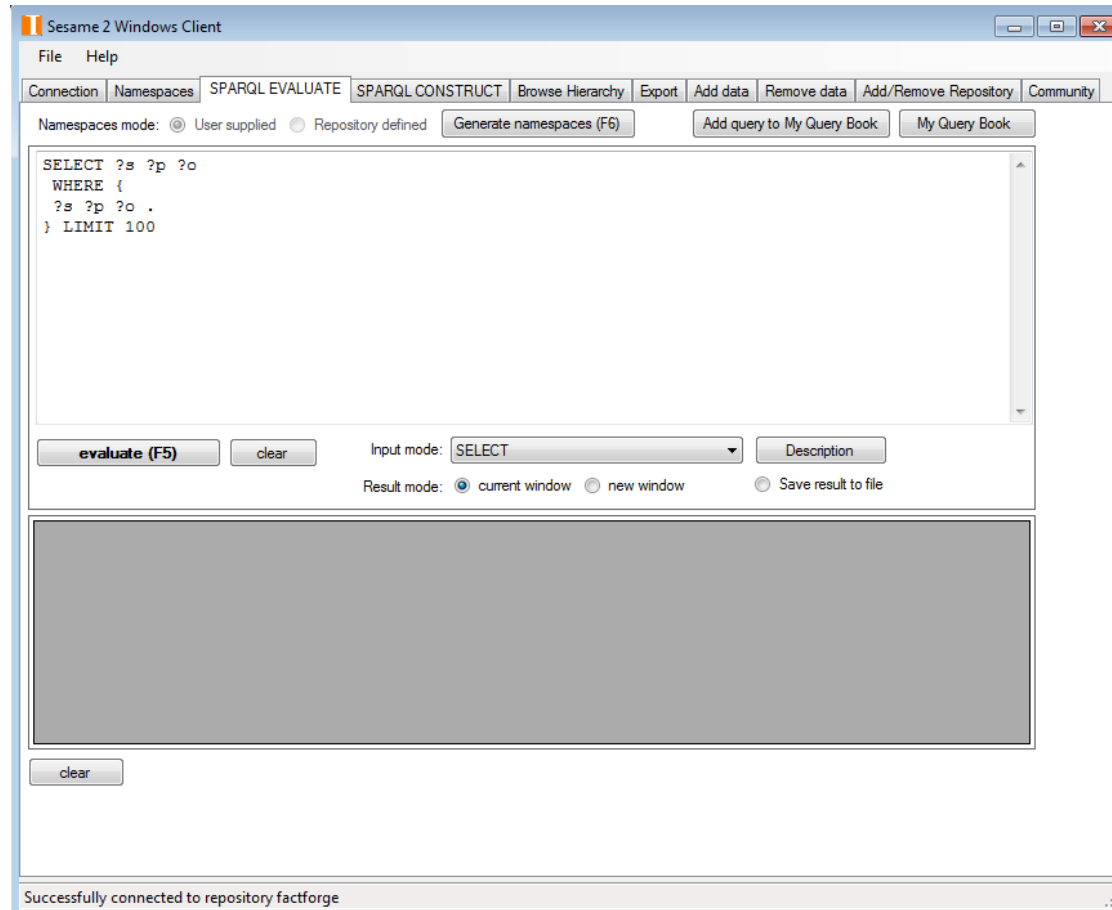
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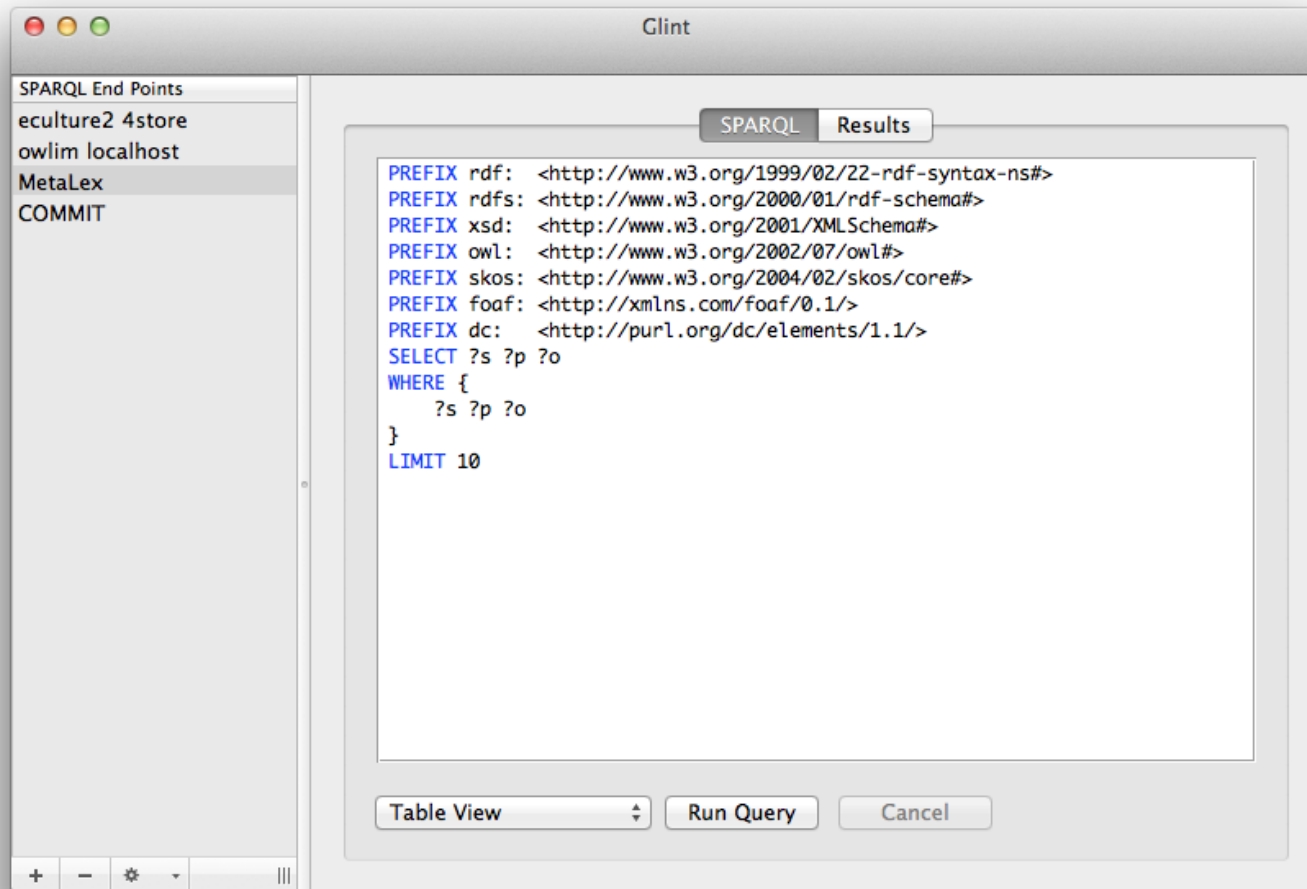
Sesame2 Windows Client



Broekstra, Jeen, Arjohn Kampman, and Frank Van Harmelen. "Sesame: A generic architecture for storing and querying rdf and rdf schema." The Semantic Web—ISWC 2002. Springer Berlin Heidelberg, 2002. 54-68.

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Glint



<https://github.com/MikeJ1971/Glint>

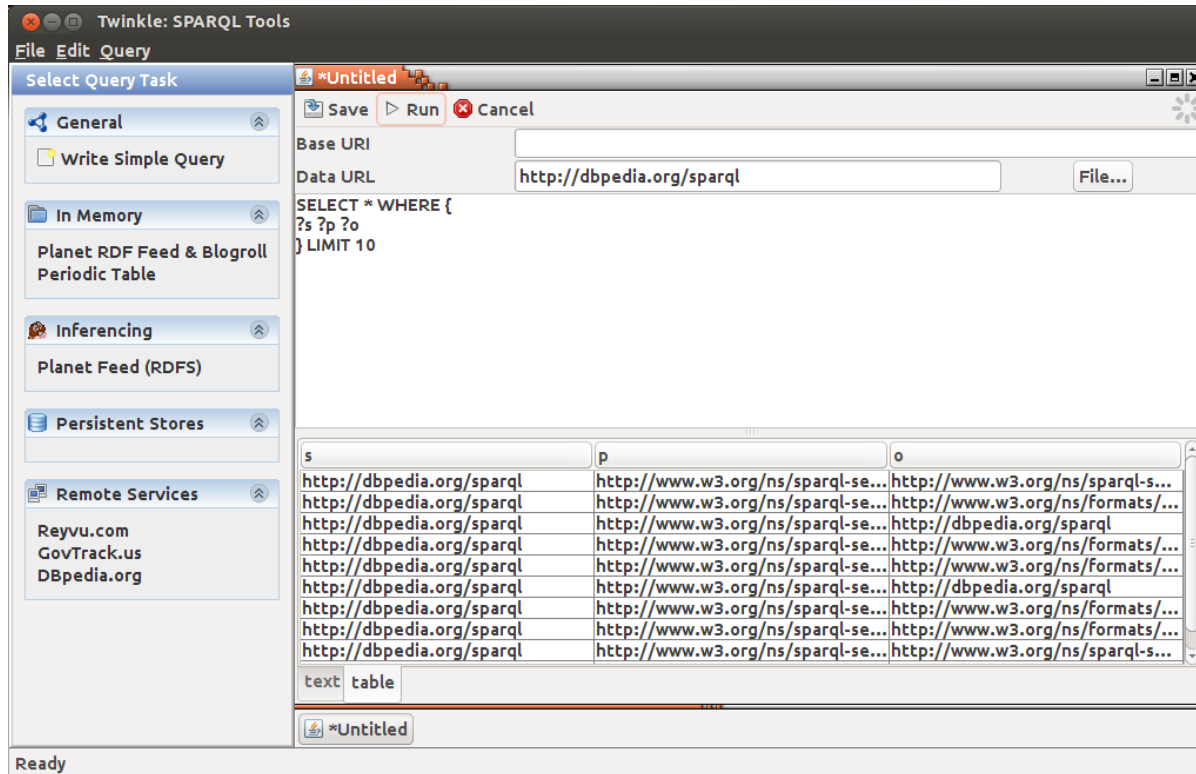
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Twinkle



<http://www.ldodds.com/projects/twinkle/>

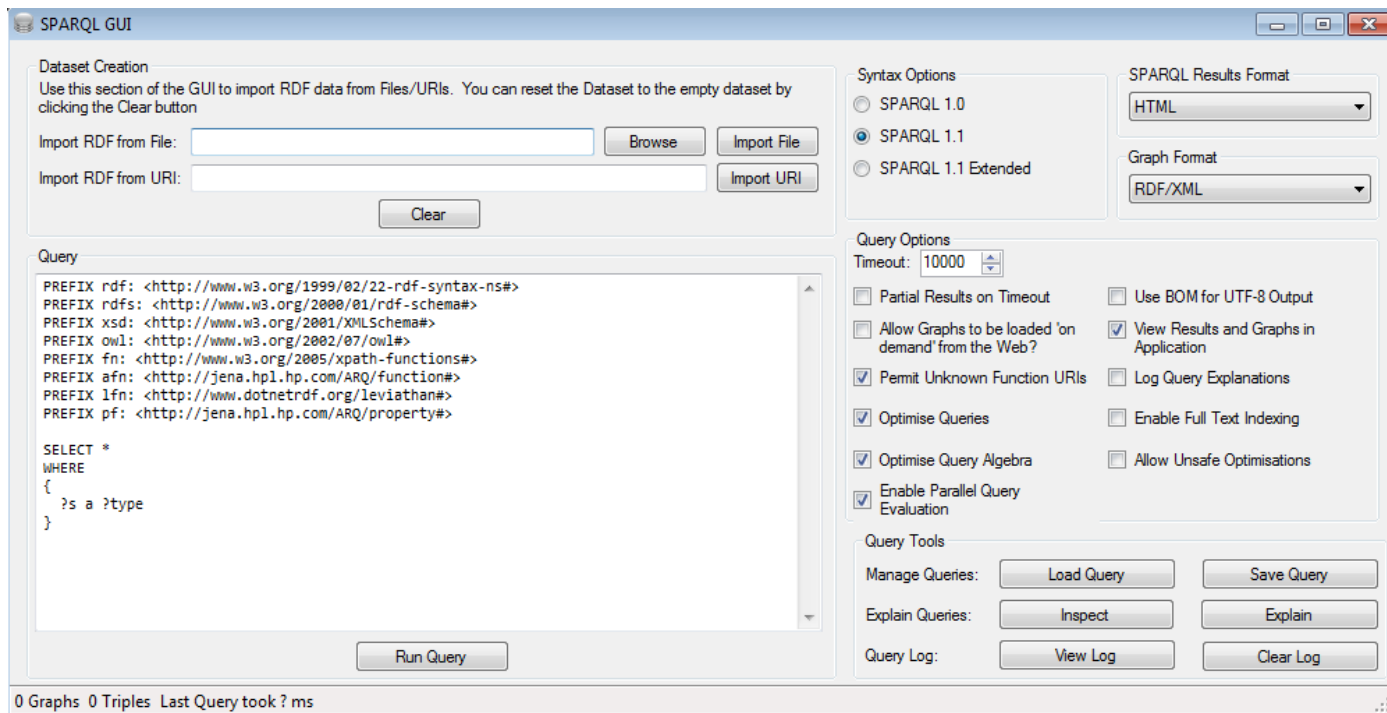
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SparqlGUI



<https://bitbucket.org/dotnetrdf/dotnetrdf/wiki/UserGuide/Tools/SparqlGui>

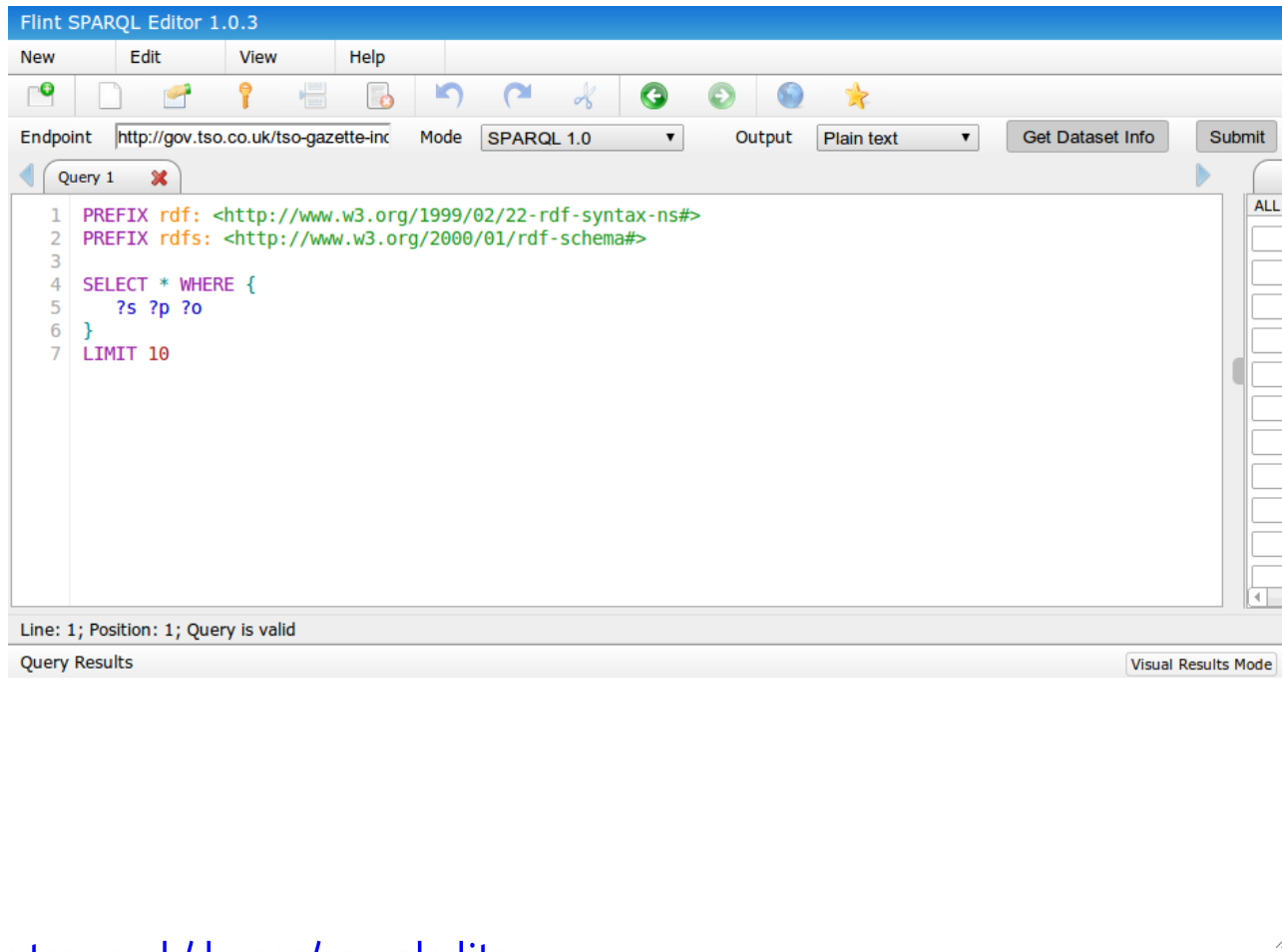
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Flint SPARQL Editor



<http://openuplabs.tso.co.uk/demos/sparqleditor>

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Clients

Feature	#clients
Autocompletion	1
Syntax Highlighting	1
Syntax Checking	1
Query retention	3
File upload	4
Multiple Endpoints	5
Platform independent	7
Results rendering	9
Results downloading	9

YASGUI

<http://dev.yasgui.laurensrietveld.nl>

YASGUI

Feature	#clients	YASGUI
Autocompletion	1	
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Query retention	3	
File upload	4	 
Multiple Endpoints	5	
Platform independent	7	
Results rendering	9	
Results downloading	9	

Challenge: Reliability

- CKAN endpoint down
- Mondeca endpoint returns invalid XML

Challenge: outdated/incorrect information

- CKAN (+ Mondeca)
- Problem with reward model
- Active curation
- Crowd sourcing: requires incentive + low effort

Challenge: standards adherence

- Different error codes
- Error as html page
- Error in SPARQL resultset
- Best practice: http error code + reason phrase

Challenge: graceful degradation

- At most: dependencies break features, not the application
- Consideration: when to external services

Lessons learned

- Usability should have more priority
- This does not cost us much extra
- Abundance of
 - Libraries
 - New Web technologies
 - Services/APIs
- Increase feature set, decrease coding effort

#YASGUI

<http://yasgui.laurensrietveld.nl>

<http://dev.yasgui.laurensrietveld.nl>

About

<http://laurensrietveld.nl/yasgui>

<https://github.com/LaurensRietveld/yasgui/>