

The TONES Ontology Repository

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Why Another Repository?

Analytics based, not modelling based

Interesting samples, versus representative sample

Initial Requirements

- A place to **store ontologies** used for experiments
- View list of stored ontologies, and find them by different **metrics**
 - Easy to select different metrics
 - A simple UI for searching for ontologies based on their metrics

OWL at Manchester (School of Computer Science - The University of Manchester)

http://owl.cs.manchester.ac.uk/

unicode depreas FaCT++ Boeing: Com...rt Planning OWL API OWLAPISVN OWL WG All of Statistics PeopleAndPetsOntology Google Analytics

MANCHESTER 1824

The University of Manchester

Welcome to OWL at Manchester!

Hot: [Upcoming events](#) [Calendar](#)

Topics

- [Explanation in OWL](#) *Best paper award at [ISWC 2008](#)*
- [Modularity tutorial](#)
- [Probabilistic OWL](#)
- [List of description logic reasoners](#)

Services



- [Ontology Repository](#)
- [Ontology Browser](#)
- [OWL Syntax Converter](#)
- [OWL Metrics](#)
- [OWL Module Extractor](#)
- [Description Logic Complexity Navigator](#)

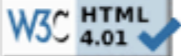

Software

- [Protégé 4.0](#)
- [The OWL API](#)

<http://owl.cs.manchester.ac.uk/repository/>

- [People](#)
- [Recent and past tutorials](#)
- [Papers and reports](#)

Questions or feedback?  
Contact [Thomas Schneider](#)

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Browsing

Ontology Repository

Ontologies

Displaying 222 of 222 ontologies [Filter](#)

[\[Select metrics\]](#)

DL Expressivity	LogicalAxioms	Ontology	Download
EL++	119560	Fma_obo.obo	RDF/XML Browse
ALCH(D)	94335	Thesaurus	RDF/XML Browse
EL++	46940	NciOncology	RDF/XML Browse
ALCHQ(D)	43973	Pto	RDF/XML Browse
EL++	42656	Gene_ontology_edit.obo	RDF/XML Browse
EL++	36069	Teleost_taxonomy.obo	RDF/XML Browse
EL++	34387	Chabi.obo	RDF/XML Browse

Download RDF/XML version of ontology

Browse ontology in OWL Sight

Metrics

Ontology Repository

Ontologies

Displaying 222 of 222 ontologies [Filter](#)

[\[Select metrics\]](#)

DL Expressivity	LogicalAxioms	Ontology
EL++	119560	Fma_obo.obo
ALCH(D)	94335	Thesaurus
EL++	46940	NciOncology
ALCHQ(D)	43973	Pto
EL++	42656	Gene_ontology_edit.obo
EL++	36069	Teleost_taxonomy.obo
EL++	34387	Chabl.obo

Metrics

Choose the metrics that you want to view in the browser.

- DL Expressivity
- LogicalAxioms
- Classes
- Object properties
- Data properties
- Individuals
- SubClass
- Equivalent classes
- Disjoint classes
- Disjoint union
- Sub object property
- Equivalent object properties
- Disjoint object properties
- Disjoint data properties
- Object property domain
- Object property range
- Functional object property
- Inverse functional object property
- Inverse object properties
- Symmetric object property

Click links to sort by metrics

DL Expressivity	LogicalAxioms	Inverse object properties	Ontology	Download
ALEHIF(D)	9678	454	Opengalen-no-propchains	RDF/XML Browse
ALEHIF+	4736	207	Galen	RDF/XML Browse
ALCHIN(D)	282	71	Sopharm	RDF/XML Browse
ALCRIF(D)	117	59	AirSystem	RDF/XML Browse
SHIN(D)	581	55	DUL	RDF/XML Browse
EL++	0	47	Lkif-core	RDF/XML Browse
SHI	137	45	Norm	RDF/XML Browse
SHIN(D)	596	42	Tambis-full	RDF/XML Browse
SHIN	595	42	Tambis-patched	RDF/XML Browse
ALUHIF(D)	82	40	Time-modification	RDF/XML Browse
SHIF	351	39	DOLCE_Lite_397	RDF/XML Browse
ALCHI	176	38	Expression	RDF/XML Browse
ALC	45	38	Legal-action	RDF/XML Browse

Filtering

Ontologies

Displaying 51 of 222 ontologies

[\[Select metrics\]](#)

DL Expressivity	LogicalAxioms	Inverse object properties	Ontology	Download
<input type="text"/>	> <input type="text"/>	> <input type="text" value="10"/>		
<input type="button" value="Apply filter"/>				
SHIN(D)	2712	11	1.2	RDF/XML Browse
ALCHIN	41	22	Action	RDF/XML Browse
ALCRIF(D)	117	59	AirSystem	RDF/XML Browse
ALCR	52	28	Biochemical-reaction-complex	RDF/XML Browse
ALC	136	29	Biochemistry-complex	RDF/XML Browse
ALI+	20	28	Bro	RDF/XML Browse
sR	5	28	Bro-owl11	RDF/XML Browse
ALHI+	80	28	Bro-primitive	RDF/XML Browse

Ability to Bookmark Filters and Searches

Ontologies

Displaying 20 of 222 ontologies [Filter](#)

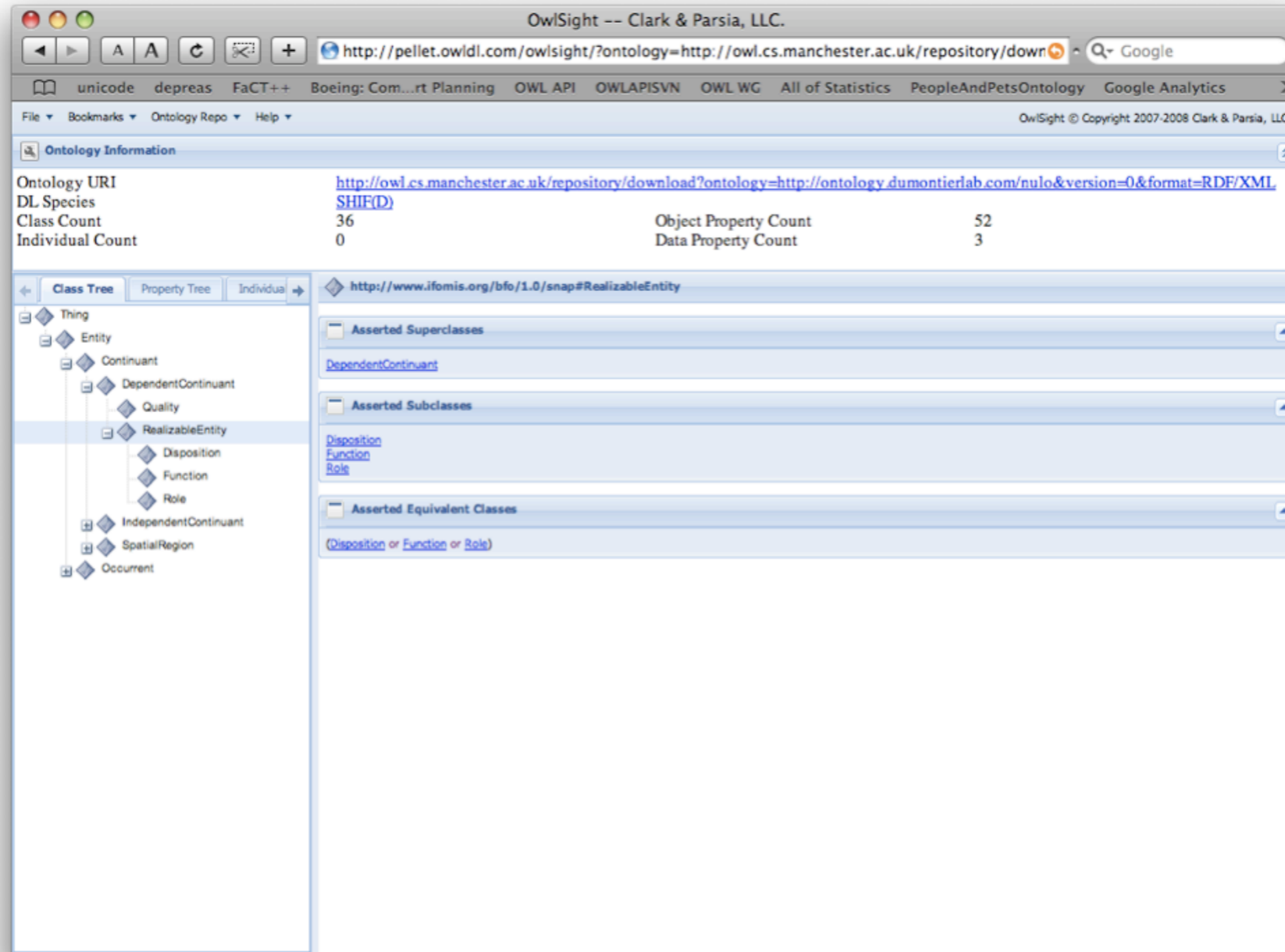
[\[Select metrics\]](#)

DL Expressivity	LogicalAxioms	Ontology	Download
<input type="text" value="EL++"/>	> <input type="text" value="2000"/>		
Apply filter			
EL++	3464	Adult_mouse_anatomy.obo	RDF/XML Browse
EL++	34387	Chebi.obo	RDF/XML Browse
EL++	13730	EMAP.obo	RDF/XML Browse
EL++	10471	Fly_anatomy.obo	RDF/XML Browse
EL++	6587	Fly_taxonomy.obo	RDF/XML Browse
FI++	119560	Fma_obo.obo	RDF/XML Browse

<http://owl.cs.manchester.ac.uk/repository/browser?DL+Expressivity=EL%2B%2B&facet-LogicalAxioms=%3E&LogicalAxioms=2000&fr=Apply+filter>

Browsing Ontologies

All delegated to third party tools



OwlSight -- Clark & Parsia, LLC.

http://pellet.owdl.com/owlsight/?ontology=http://owl.cs.manchester.ac.uk/repository/download?ontology=http://ontology.dumontierlab.com/nulo&version=0&format=RDF/XML

unicode depreas FaCT++ Boeing: Com...rt Planning OWL API OWLAPISVN OWL WG All of Statistics PeopleAndPetsOntology Google Analytics

File Bookmarks Ontology Repo Help

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Ontology Information

Ontology URI	http://owl.cs.manchester.ac.uk/repository/download?ontology=http://ontology.dumontierlab.com/nulo&version=0&format=RDF/XML		
DL Species	SHIE(D)		
Class Count	36	Object Property Count	52
Individual Count	0	Data Property Count	3

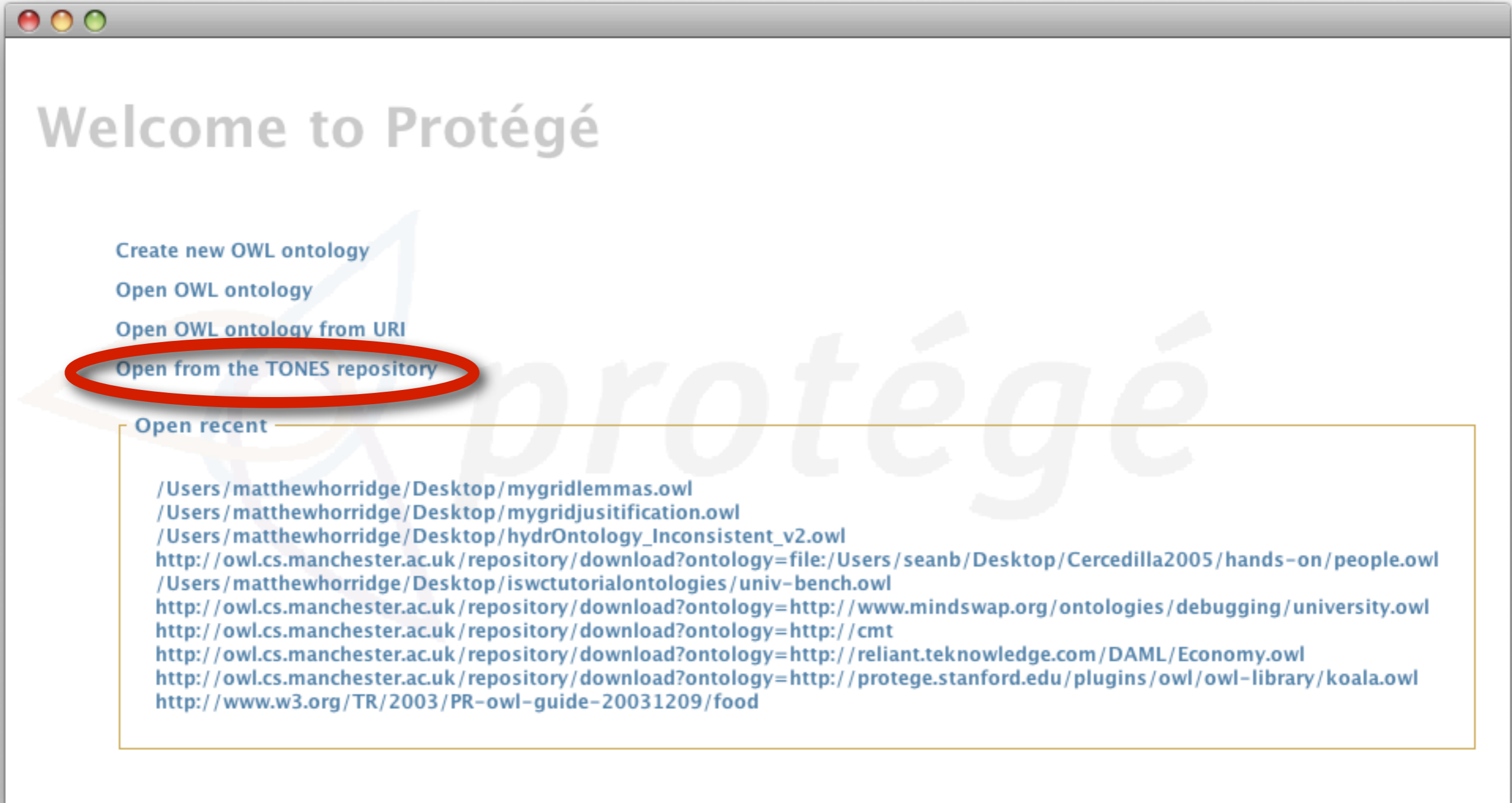
Class Tree

- Thing
 - Entity
 - Continuant
 - DependentContinuant
 - Quality
 - RealizableEntity
 - Disposition
 - Function
 - Role
 - IndependentContinuant
 - SpatialRegion
 - Occurent

Class Details: <http://www.ifomis.org/bfo/1.0/snap#RealizableEntity>

- Asserted Superclasses
 - [DependentContinuant](#)
- Asserted Subclasses
 - [Disposition](#)
 - [Function](#)
 - [Role](#)
- Asserted Equivalent Classes
 - [\(Disposition or Function or Role\)](#)

Protégé 4



Welcome to Protégé

- Create new OWL ontology
- Open OWL ontology
- Open OWL ontology from URI
- Open from the TONES repository**
- Open recent

protégé

- [/Users/matthewhorridge/Desktop/mygridlemmas.owl](#)
- [/Users/matthewhorridge/Desktop/mygridjustification.owl](#)
- [/Users/matthewhorridge/Desktop/hydrOntology_Inconsistent_v2.owl](#)
- <http://owl.cs.manchester.ac.uk/repository/download?ontology=file:/Users/seanb/Desktop/Cercedilla2005/hands-on/people.owl>
- [/Users/matthewhorridge/Desktop/iswctutorialontologies/univ-bench.owl](#)
- <http://owl.cs.manchester.ac.uk/repository/download?ontology=http://www.mindswap.org/ontologies/debugging/university.owl>
- <http://owl.cs.manchester.ac.uk/repository/download?ontology=http://cmt>
- <http://owl.cs.manchester.ac.uk/repository/download?ontology=http://reliant.teknowledge.com/DAML/Economy.owl>
- <http://owl.cs.manchester.ac.uk/repository/download?ontology=http://protege.stanford.edu/plugins/owl/owl-library/koala.owl>
- <http://www.w3.org/TR/2003/PR-owl-guide-20031209/food>

Name	Ontology URI
Biological-measure-primitive	http://ontology.dumontierlab.com/biological-measure-primitive
Biopax-level2	http://www.biopax.org/release/biopax-level2.owl
Biosphere	http://sweet.jpl.nasa.gov/1.1/biosphere.owl
Biosphere	http://sweet.jpl.nasa.gov/ontology/biosphere.owl
Bro	http://ontology.dumontierlab.com/bro
Bro-owl11	http://ontology.dumontierlab.com/bro-owl11
Bro-primitive	http://ontology.dumontierlab.com/bro-primitive
BrokenPizza	http://www.co-ode.org/ontologies/brokenPizza/2005/07/06...
BuildingsAndPlaces	http://www.ordnancesurvey.co.uk/ontology/BuildingsAndPlace...
Cancer_cc	http://pellet.owlidl.com/ontologies/cancer_cc.owl
Cancer_ra	http://pellet.owlidl.com/ontologies/cancer_ra.owl
Caro.obo	http://obo.cvs.sourceforge.net/*checkout*/obo/obo/ontology/...
Cell.obo	http://obo.cvs.sourceforge.net/*checkout*/obo/obo/ontology/...
Chebi.obo	http://obo.cvs.sourceforge.net/*checkout*/obo/obo/ontology/...
Chemical	http://www.semanticweb.org/ontologies/chemical
Chemistry-complex	http://ontology.dumontierlab.com/chemistry-complex
Chemistry-primitive	http://ontology.dumontierlab.com/chemistry-primitive
Cl	http://obo.sourceforge.net/cl.owl
Cmt	http://cmt

Cancel OK

Programmatic Access

TONES Ontology Repository

Welcome to the [TONES](#) ontology repository.

[Browse Repository](#)

About

This repository is primarily designed to be a central location for ontologies that might be of use to tools developers for testing purposes.

Usage

The repository can be browsed [here](#). The repository supports a RESTful interface. To access an ontology directly (e.g. to open an ontology from a tool such as Protege 4), the following syntax should be used:

<Repository URL>/download?ontology=<Ontology URI>

Example:

<http://owl.cs.manchester.ac.uk/repository/download?ontology=http://www.co-ode.org/ontologies/pizza/pizza.owl>

Ontology file formats

The default file format that will be served is **RDF/XML**. However, the repository also stores ontologies in **OWL/XML**. To obtain an ontology as OWL/XML, the **format=OWL/XML** parameter should be added

Example:

<http://owl.cs.manchester.ac.uk/repository/download?ontology=http://www.co-ode.org/ontologies/pizza/pizza.owl&format=OWL/XML>

The repository also stores ontologies without entity annotations. For certain ontologies (e.g the NCI Cancer ontology) this make a large difference to the size of the ontology. To request an ontology without annotations, specify a format of RDF/XML-WA.

Future Additions

- Support for multiple **versions** of an ontology
- **More metrics** e.g. Classification time
- Sharable **bookmarks**

Ontology status

Please specify the status of your ontology. Annotations will be added to your ontology to indicate its status. These annotations will make people using the ontology aware of its intended state.

Release

Beta

Alpha

Ontology is uncorrected or contains deliberate mistakes (e.g. unsatisfiable classes, or is inconsistent etc.)

License

Please select a license for your ontology.

None

Copyright

If you would like to add a copyright annotation to your ontology please enter the copyright statement here.

Upload options

Obfuscate ontology (replace class, property and individual names with numeric IDs)

Submit

Going Beyond Ontologies

- Working with a **sets of ontologies defined by metrics**
- Browsing by features instead of ontologies

The TONES Ontology Repository

<http://owl.cs.manchester.ac.uk/repository/>

<http://owl.cs.manchester.ac.uk/>