

## {more} Recent progress on opaquenamespace.org:

triplestore-adapter gem : Blazegraph

rugged gem : Git for tracking data changes

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# Background

linked data service by OSU and UO

persistent URIs for predicates and local authority data in RDF, over 20,000 terms

supporting Oregon Digital and OSU's new Sufia-based IR, Scholars Archive

ControlledVocabularyManager Rails app with triplestore (now Blazegraph)

<https://github.com/OregonDigital/ControlledVocabularyManager>

## Vocabularies

[Create Vocabulary](#)

<a href="#">A vocabulary of disciplines used in Oregon State University degrees.</a>	<a href="http://opaquenamespace.org/ns/disciplines">http://opaquenamespace.org/ns/disciplines</a>
<a href="#">Access Restrictions controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/accessRestrictions">http://opaquenamespace.org/ns/accessRestrictions</a>
<a href="#">Categories for the Description of Works of Art (CDWA)</a>	<a href="http://opaquenamespace.org/ns/cdwa">http://opaquenamespace.org/ns/cdwa</a>
<a href="#">class controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/class">http://opaquenamespace.org/ns/class</a>
<a href="#">commonNames controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/commonNames">http://opaquenamespace.org/ns/commonNames</a>
<a href="#">Creator controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/creator">http://opaquenamespace.org/ns/creator</a>
<a href="#">Culture controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/culture">http://opaquenamespace.org/ns/culture</a>
<a href="#">genus controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/genus">http://opaquenamespace.org/ns/genus</a>
<a href="#">GeoRSS</a>	<a href="http://opaquenamespace.org/ns/georss">http://opaquenamespace.org/ns/georss</a>
<a href="#">Hydra Project Vocabulary</a>	<a href="http://opaquenamespace.org/ns/hydra">http://opaquenamespace.org/ns/hydra</a>
<a href="#">localCollectionName controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/localCollectionName">http://opaquenamespace.org/ns/localCollectionName</a>
<a href="#">Oregon Digital Rights Statements</a>	<a href="http://opaquenamespace.org/ns/odrs">http://opaquenamespace.org/ns/odrs</a>
<a href="#">Oregon State University Buildings</a>	<a href="http://opaquenamespace.org/ns/osuBuildings">http://opaquenamespace.org/ns/osuBuildings</a>
<a href="#">People vocabulary</a>	<a href="http://opaquenamespace.org/ns/people">http://opaquenamespace.org/ns/people</a>
<a href="#">phylum controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/phylum">http://opaquenamespace.org/ns/phylum</a>
<a href="#">publisher controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/publisher">http://opaquenamespace.org/ns/publisher</a>
<a href="#">Repository controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/repository">http://opaquenamespace.org/ns/repository</a>
<a href="#">seriesName controlled vocabulary</a>	<a href="http://opaquenamespace.org/ns/seriesName">http://opaquenamespace.org/ns/seriesName</a>

```
sparql_client
.select
.where([:s, RDF.type, Vocabulary.type])
```

## commonNames controlled vocabulary

<http://opaquenamespace.org/ns/commonNames>

[Create Term](#)[Edit](#)

Title: commonNames controlled vocabulary [English \[en\]](#)

Publisher: Opaque Namespace [English \[en\]](#)

Sub Property Of:

Range:

Domain:

Label:

Alternate Name:

Date:

Comment:

Is Replaced By:

See Also:

Is Defined By:

Same As:

Modified: 2015-07-16

Issued: 2015-07-16

Other Formats: [N-Triples](#), [JSON-LD](#)

### Child Terms

<a href="#">acid kelp</a>	<a href="http://opaquenamespace.org/ns/commonNames/acidkelp">http://opaquenamespace.org/ns/commonNames/acidkelp</a>	<a href="#">Topic</a>
<a href="#">Agazzi's peanut worm</a>	<a href="http://opaquenamespace.org/ns/commonNames/Agazzispeanutworm">http://opaquenamespace.org/ns/commonNames/Agazzispeanutworm</a>	<a href="#">Topic</a>
<a href="#">aggregating anenome</a>	<a href="http://opaquenamespace.org/ns/commonNames/aggregatinganenome">http://opaquenamespace.org/ns/commonNames/aggregatinganenome</a>	<a href="#">Topic</a>
<a href="#">Alkali Heath</a>	<a href="http://opaquenamespace.org/ns/commonNames/AlkalilHeath">http://opaquenamespace.org/ns/commonNames/AlkalilHeath</a>	<a href="#">Topic</a>
<a href="#">American wideoeon</a>	<a href="http://opaquenamespace.org/ns/commonNames/Americanwideoeon">http://opaquenamespace.org/ns/commonNames/Americanwideoeon</a>	<a href="#">Topic</a>

```
parent_uri = "http://opaquenamespace.org/ns/commonNames"
sparql_client
    .query("SELECT * WHERE { ?s ?p ?o .
          FILTER(STRSTARTS(STR(?s),\"#{parent_uri}/\"))}")
```



<https://ruby-lang.org>



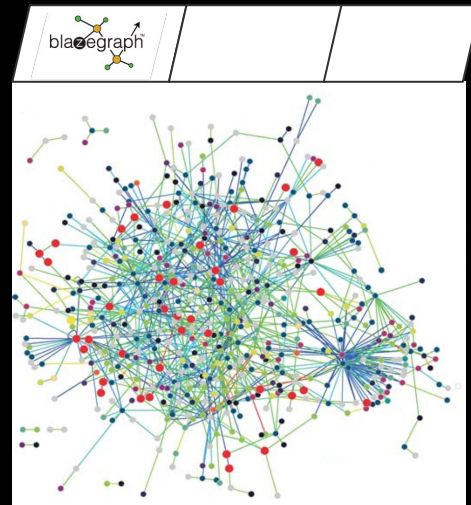
<https://projecthydra.org>



<https://oregondigital.org>



<https://www.flickr.com/photos/slowkodachrome/4314164120>



<https://en.wikipedia.org/wiki/Interactome>

# triplestore-adapter

0.1.0

<https://github.com/osulp/triplestore-adapter>

## app/models/term.rb

- Is the base class
- Types: PersonalName, Geographic, Topic, etc
- Vocabulary and Predicates are somewhat special snowflake types
  - Vocabulary has children terms
  - Predicates have no children, and cannot be a child of a term

# app/services/graph\_to\_terms.rb

- Inspect the graph for the “type” triple, set the right klass
- Default to “Term” if no type triple is found

```
def type_of_graph(triples)
  statements = triples.select { |s| s.predicate == RDF::URI("http://www.w3.org/1999/02/22-rdf-syntax-ns#type")
                                && s.object != RDF::URI("http://www.w3.org/2000/01/rdf-schema#Resource") }

  uris = statements.map { |s| s.object }

  @klass = statements.empty? ? Term : TermType.class_from_types(uris)
end
```

# app/services/graph\_to\_terms.rb

- klass.new and insert the triples from the graph

```
def terms
  graph.each_statement.group_by(&:subject).map do |subject, triples|
    type_of_graph(triples)
    t = klass.new(subject)
    t.insert(*triples)
    t
  end
end
```



## app/services/triplestore\_loader.rb

- Identify & Reconcile differences between .nt and triplestore
- Reload the triplestore with data from git
  - Git is the master data, Triplestore is operational
- Intended to be a Rake task

# BlahBlah

http://opaqueramespace.org/ns/blahblah

Create Term

Edit

Title:	BlahBlah <span>English [en]</span>
Publisher:	
Label:	blahblah <span>English [en]</span>
Alternate name:	blabla <span>English [en]</span>
Date:	
Comment:	
Is replaced by:	
Is defined by:	
Same as:	
Modified:	2016-07-06
Issued:	2016-07-06
Sub property of:	
Range:	

Other Formats: [N-Triples](#), [JSON-LD](#)

## Recent changes:

2016-07-06 09:31:31 -0700  
added: <http://schema.org/alternateName> "blabla"@en .  
added: <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://www.w3.org/2000/01/rdf-schema#Resource> .  
admin magister

## Child Terms

Plenty #TODO

Questions?

Thank you!