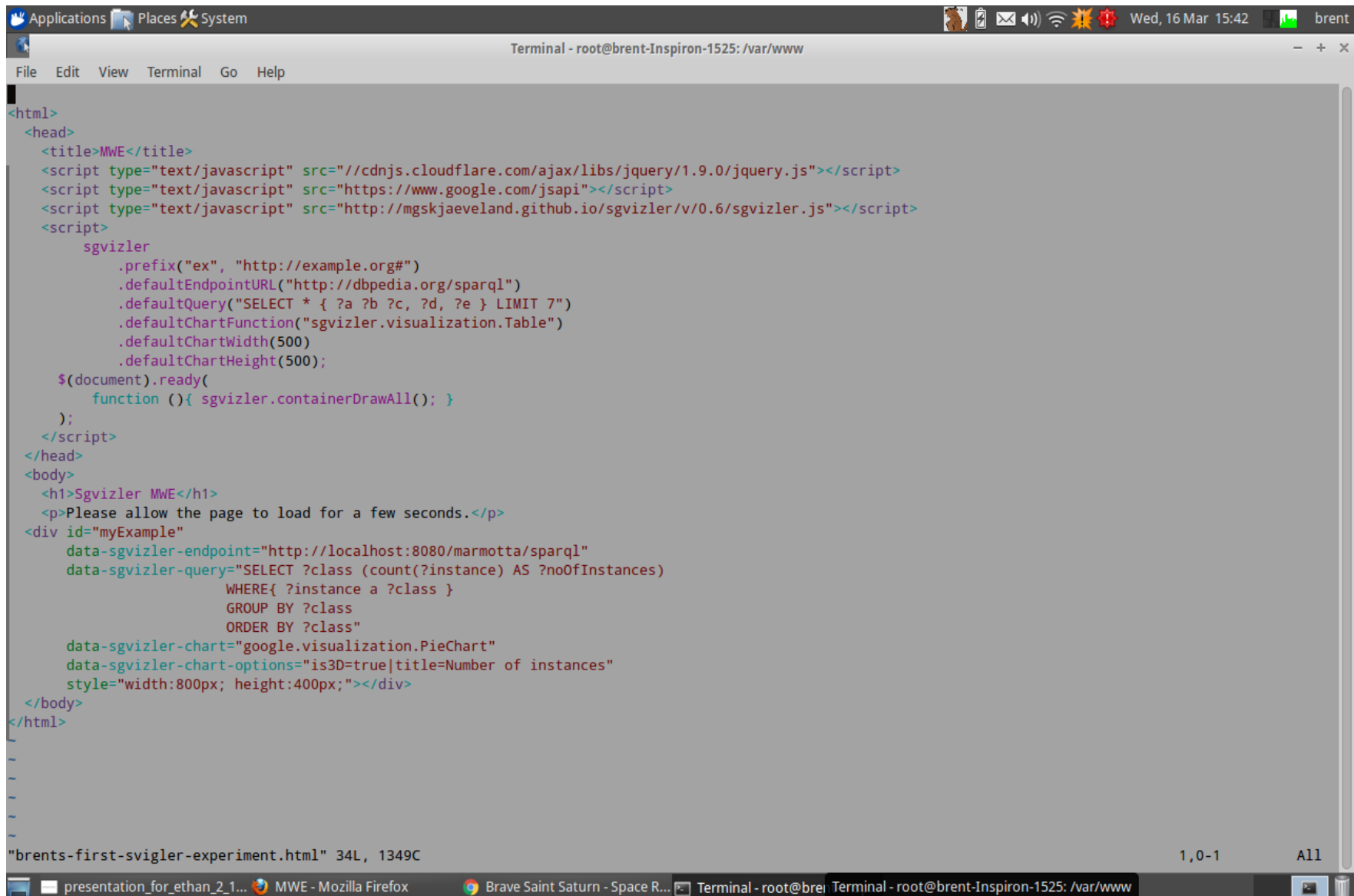


Linked Data Platform, RDF, and Visualization Experiments

Friday, March 18th 2016

First Interface Between Sgvizler and Marmotta

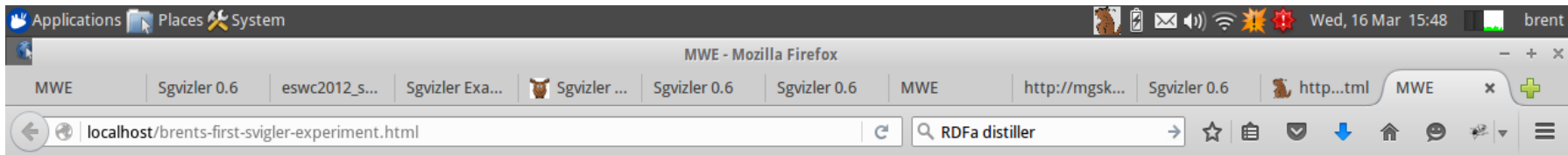


The image shows a terminal window with a dark background and light-colored text. The window title is "Terminal - root@brent-Inspiron-1525: /var/www". The code is written in a monospaced font and is color-coded: HTML tags are in light blue, JavaScript code is in light green, and SQL queries are in light red. The code defines an Sgvizler instance with a prefix, endpoint URL, default query, and chart function. It also includes a ready event listener to draw the container. The body contains a heading, a loading message, and a data visualization container with specific endpoint, query, and chart options.

```
<html>
<head>
  <title>MWE</title>
  <script type="text/javascript" src="//cdnjs.cloudflare.com/ajax/libs/jquery/1.9.0/jquery.js"></script>
  <script type="text/javascript" src="https://www.google.com/jsapi"></script>
  <script type="text/javascript" src="http://mgskjaveland.github.io/sgvizler/v/0.6/sgvizler.js"></script>
  <script>
    sgvizler
      .prefix("ex", "http://example.org#")
      .defaultEndpointURL("http://dbpedia.org/sparql")
      .defaultQuery("SELECT * { ?a ?b ?c, ?d, ?e } LIMIT 7")
      .defaultChartFunction("sgvizler.visualization.Table")
      .defaultChartWidth(500)
      .defaultChartHeight(500);
    $(document).ready(
      function () { sgvizler.containerDrawAll(); }
    );
  </script>
</head>
<body>
  <h1>Sgvizler MWE</h1>
  <p>Please allow the page to load for a few seconds.</p>
  <div id="myExample"
    data-sgvizler-endpoint="http://localhost:8080/marmotta/sparql"
    data-sgvizler-query="SELECT ?class (count(?instance) AS ?noOfInstances)
      WHERE { ?instance a ?class }
      GROUP BY ?class
      ORDER BY ?class"
    data-sgvizler-chart="google.visualization.PieChart"
    data-sgvizler-chart-options="is3D=true|title=Number of instances"
    style="width:800px; height:400px;"></div>
</body>
</html>
```

"brents-first-svizler-experiment.html" 34L, 1349C 1,0-1 All

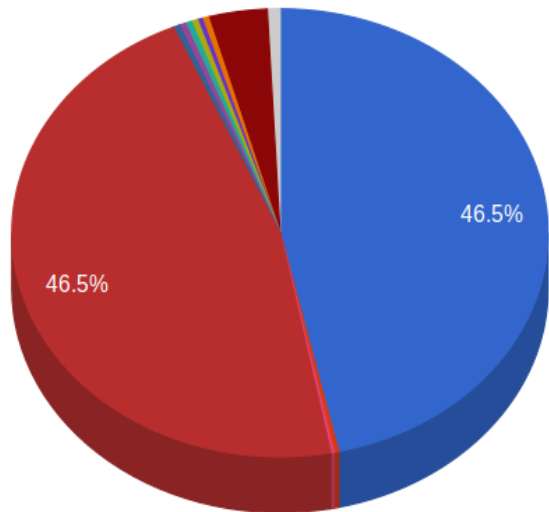
In the Web Browser:



Sgvizler MWE

Please allow the page to load for a few seconds.

Number of instances



- <http://data.nasa.gov/resource/gvk9-iz74>
- <http://purl.org/rss/1.0/channel>
- <http://www.w3.org/2000/01/rdf-schema#Class>
- http://www.w3.org/2003/01/geo/wgs84_pos#SpatialThing
- <http://www.w3.org/ns/ldp#BasicContainer>
- <http://www.w3.org/ns/ldp#Cont...>
- <http://www.w3.org/ns/ldp#RDF...>
- <http://www.w3.org/ns/ldp#Reso...>
- <http://xmlns.com/foaf/0.1/Image>
- <http://xmlns.com/foaf/0.1/Onlin...>
- <http://xmlns.com/foaf/0.1/Person>
- Other

Svizler Table Markup

```
Applications Places System
Terminal - root@brent-Inspiron-1525: /var/www
File Edit View Terminal Go Help

<html>
<head>
  <title>MWE</title>
  <script type="text/javascript" src="//cdnjs.cloudflare.com/ajax/libs/jquery/1.9.0/jquery.js"></script>
  <script type="text/javascript" src="https://www.google.com/jsapi"></script>
  <script type="text/javascript" src="http://mgskjaeveland.github.io/sgvizler/v/0.6/sgvizler.js"></script>
  <script>
    sgvizler
      .prefix("ex", "http://example.org#")
      .defaultEndpointURL("http://dbpedia.org/sparql")
      .defaultQuery("SELECT * { ?a ?b ?c, ?d, ?e } LIMIT 7")
      .defaultChartFunction("sgvizler.visualization.Table")
      .defaultChartWidth(500)
      .defaultChartHeight(500);
    $(document).ready(
      function () { sgvizler.containerDrawAll(); }
    );
  </script>
</head>
<body>
  <h1>Sgvizler MWE</h1>
  <p>Please allow the page to load for a few seconds.</p>
  <div id="myExample"
    data-sgvizler-endpoint="http://localhost:8080/marmotta/sparql"
    data-sgvizler-query="SELECT ?class (count(?instance) AS ?noOfInstances)
      WHERE { ?instance a ?class }
      GROUP BY ?class
      ORDER BY ?class"
    data-sgvizler-chart="sgvizler.visualization.Table"
    data-sgvizler-chart-options="is3D=true|title=Number of instances"
    style="width:800px; height:400px;"></div>
</body>
</html>

"brents-first-svizler-experiment.html" 34L, 1348C
1,0-1 All
[presentation_for_ethan_2_... MWE - Mozilla Firefox sgvizler_with_marmotta.od... I Fell Away - YouTube - Goo... Terminal - root@brent-Insp...
```

Svizler Table in Browser

sgvizler MWE

Please allow the page to load for a few seconds.

class	noOfInstances
http://data.nasa.gov/resource/gvk9-iz74	485
http://purl.org/rss/1.0/channel	3
http://rdfs.org/sioc/ns#Blog	1
http://rdfs.org/sioc/ns#Collection	1
http://rdfs.org/sioc/ns#Post	1
rdf:Property	1
rdfs:Class	2
owl:Ontology	1
http://www.w3.org/2003/01/geo/wgs84_pos#SpatialThing	485
http://www.w3.org/ns/ldp#BasicContainer	4
http://www.w3.org/ns/ldp#Container	4
http://www.w3.org/ns/ldp#RDFSsource	4
http://www.w3.org/ns/ldp#Resource	4
http://xmlns.com/foaf/0.1/Image	3
http://xmlns.com/foaf/0.1/OnlineAccount	4
http://xmlns.com/foaf/0.1/Person	37
http://xmlns.com/foaf/0.1/PersonalProfileDocument	1
http://xmlns.com/wordnet/1.6/Airport	1
http://xmlns.com/wordnet/1.6/Document	1

Sgvizler source

```
Applications Places System
Terminal - root@brent-Inspiron-1525: /var/www
File Edit View Terminal Go Help
<html>
<head>
<title>MWE</title>
<script type="text/javascript" src="//cdnjs.cloudflare.com/ajax/libs/jquery/1.9.0/jquery.js"></script>
<script type="text/javascript" src="https://www.google.com/jsapi"></script>
<script type="text/javascript" src="http://mgskjaveland.github.io/sgvizler/v/0.6/sgvizler.js"></script>
</script>
sgvizler
.prefix("ex", "http://example.org#")
.defaultEndpointURL("http://dbpedia.org/sparql")
.defaultQuery("SELECT * { ?a ?b ?c, ?d, ?e } LIMIT 7")
.defaultChartFunction("sgvizler.visualization.Table")
.defaultChartWidth(500)
.defaultChartHeight(500);
$(document).ready(
function (){ sgvizler.containerDrawAll(); }
);
</script>
</head>
<body>
<h1>Sgvizler MWE</h1>
<p>Please allow the page to load for a few seconds.</p>
<div id="myExample"
data-sgvizler-endpoint="http://localhost:8080/marmotta/sparql"
data-sgvizler-query="SELECT ?class (count(?instance) AS ?noOfInstances)
WHERE{ ?instance a ?class }
GROUP BY ?class
ORDER BY ?class"
data-sgvizler-chart="sgvizler.visualization.D3ForceGraph"
data-sgvizler-chart-options="is3D=true|title=Number of instances"
style="width:800px; height:400px;"></div>
</body>
</html>
"brents-first-svizler-experiment.html" 34L, 1355C
1,0-1 All
[presentation_for_ethan_2_... MWE - Mozilla Firefox sgvizler_with_marmotta.od... Terminal - root@brent-Insp...
```

Svizler source rendered in Browser

Applications Places System MWE - Mozilla Firefox Wed, 16 Mar 16:31 brent

MWE Sgvizler 0.6 eswc2012_s... Sgvizler Exa... Sgvizler ... Sgvizler 0.6 Sgvizler 0.6 MWE http://mgs... Sgvizler 0.6 http...tml MWE

localhost/brents-first-svizler-experiment.html RDFa distiller

Svizler MWE

Please allow the page to load for a few seconds.

http://data.nasa.gov/resource/gvk9-iz74

http://xmlns.com/wordnet/1.6/Airport

http://www.w3.org/2001/07/xmldoc

http://xmlns.com/wordnet/1.6/Document

http://www.w3.org/2000/01/rdf-schema#Class

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

485

http://www.w3.org/ns/ldp#RDFSResource

2

http://purl.org/rss/1.0/channel

1

http://rdfs.org/sioc/ns#Post

http://xmlns.com/foaf/0.1/OnlineAccount

http://www.w3.org/2003/01/geo/wgs84_pos#SpatialThing

http://xmlns.com/foaf/0.1/Person

http://rdfs.org/sioc/ns#Collection

3

http://www.w3.org/ns/ldp#Container

4

http://www.w3.org/ns/ldp#BasicContainer

http://www.w3.org/ns/ldp#Resource

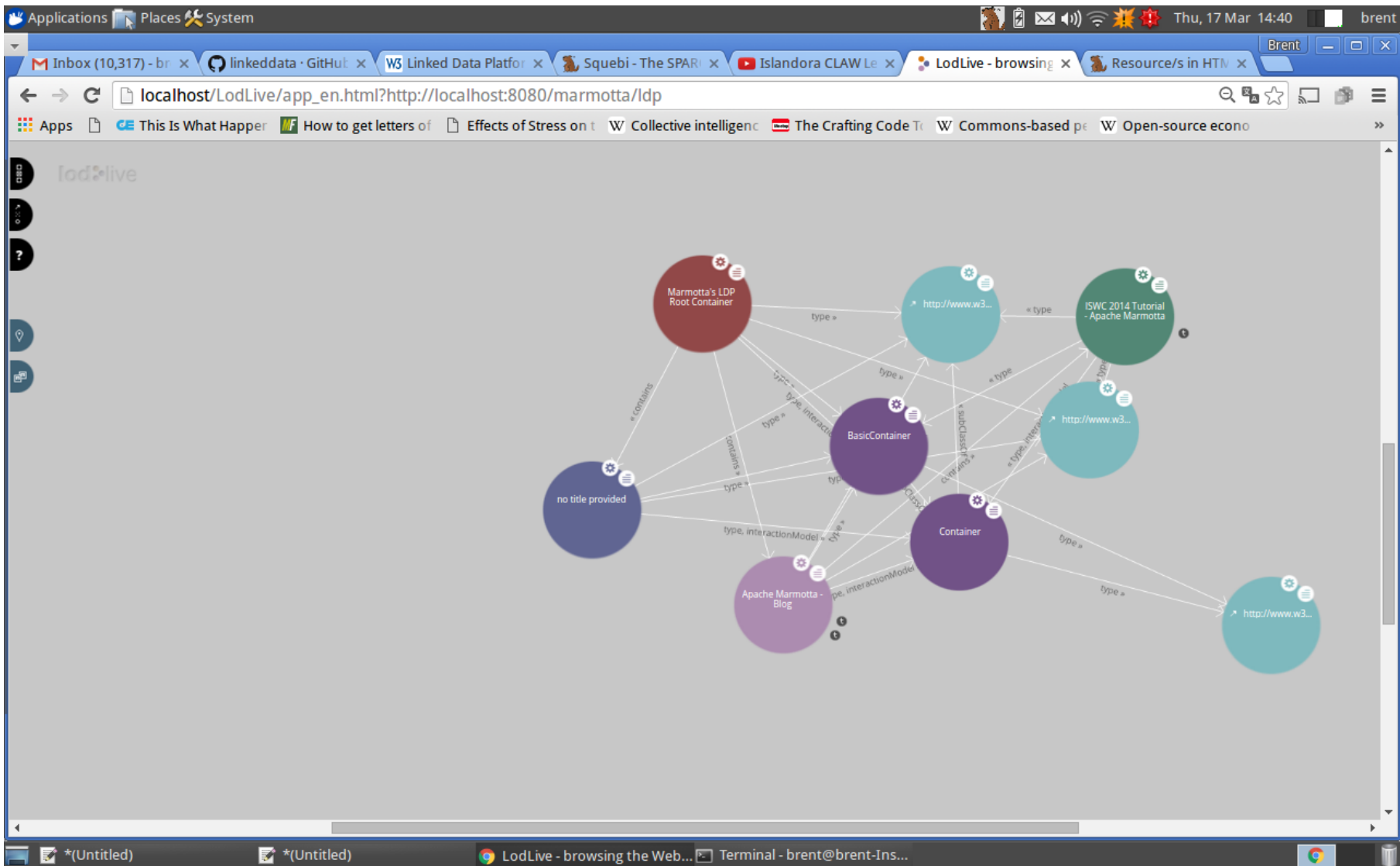
37

http://xmlns.com/foaf/0.1/Image

http://xmlns.com/foaf/0.1/Person

[presentation_for_ethan_2... MWE - Mozilla Firefox sgvizler_with_marmotta.od... Terminal - root@brent-Ins...

Enter LodLive



The screenshot displays the LodLive web application running in a browser. The browser's address bar shows the URL: `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The application interface features a sidebar on the left with navigation icons and the 'lod:live' logo. The main content area presents a network graph of RDF containers, where nodes are represented by colored circles and relationships by labeled arrows. The nodes include:

- Marmotta's LDP Root Container (red)
- no title provided (blue)
- Apache Marmotta - Blog (purple)
- BasicContainer (purple)
- Container (purple)
- http://www.w3... (teal)
- ISWC 2014 Tutorial - Apache Marmotta (green)
- http://www.w3... (teal)
- http://www.w3... (teal)

The relationships between these nodes are labeled with terms such as `type`, `contains`, `interactionModel`, and `subclass`. The browser's taskbar at the bottom shows an open terminal window for `brent@brent-Ins...`.


Enter LodLive

Applications Places System Thu, 17 Mar 14:40 brent

Inbox (10,317) - br x linkeddata - GitHub x W3 Linked Data Platfor x Squebi - The SPAR x Islandora CLAW Le x LodLive - browsing x Resource/s in HTML x

localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial

Apps This Is What Happen How to get letters of Effects of Stress on t Collective intelligenc The Crafting Code T Commons-based pe Open-source econ

Apache Marmotta 

Views
Triples
Inspector

RDF/XML | N3 | Turtle | RDF/JSON | JSON-LD

Inspection of <http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial>

Resource as Subject

Subject	Property	Object	Context
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/1999/02/22-rdf-syntax-ns#type	http://www.w3.org/ns/ldp#Resource	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/1999/02/22-rdf-syntax-ns#type	http://www.w3.org/ns/ldp#RDFSource	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/ns/ldp#interactionModel	http://www.w3.org/ns/ldp#Container	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/1999/02/22-rdf-syntax-ns#type	http://www.w3.org/ns/ldp#Container	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/1999/02/22-rdf-syntax-ns#type	http://www.w3.org/ns/ldp#BasicContainer	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://purl.org/dc/terms/created	"2016-02-02T15:49:47.000-05:00"^^xsd.dateTime	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://purl.org/dc/terms/modified	"2016-02-02T15:49:47.000-05:00"^^xsd.dateTime	http://www.w3.org/ns/ldp#
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/1999/02/22-rdf-syntax-ns#type	http://rdfs.org/sioc/ns#Post	http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://purl.org/dc/terms/title	"ISWC 2014 Tutorial - Apache Marmotta"	http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://purl.org/dc/terms/abstract	"How to use the Linked Data Platform (LDP) in Apache Marmotta"	http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial

Resource as Property

No triples to display

Resource as Object

Subject	Property	Object	Context
http://localhost:8080/marmotta/ldp/Apache-Marmotta-1	http://www.w3.org/ns/ldp#contains	http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial	http://www.w3.org/ns/ldp#

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*(Untitled) *(Untitled) Resource/s in HTML - Googl... Terminal - brent@brent-Ins...

HTTP response

```
curl -i -H "Accept: text/turtle" http://localhost:8080/marmotta/ldp/
HTTP/1.1 200 OK
Server: Apache Marmotta/3.3.0 (build 0)
Accept-Patch: application/rdf-patch
Accept-Post: text/turtle, application/ld+json, application/rdf+xml, text/n3, text/plain, */*
Allow: POST, PATCH, GET, OPTIONS, PUT, HEAD
ETag: W/"1454446050000"
Last-Modified: Tue, 02 Feb 2016 20:47:30 GMT
Link: <http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>; rel="http://www.w3.org/ns/ldp#constrainedBy"
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
Link: <http://www.w3.org/ns/ldp#RDFSsource>; rel="type"
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
Content-Type: text/turtle
Transfer-Encoding: chunked
Date: Thu, 17 Mar 2016 19:24:20 GMT
```

```
@prefix ldp: <http://www.w3.org/ns/ldp#> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix parent: <http://localhost:8080/marmotta/> .
@prefix child: <http://localhost:8080/marmotta/ldp/> .
@prefix this: <http://localhost:8080/marmotta/ldp#> .
```

```
parent:ldp <http://www.w3.org/2000/01/rdf-schema#label> "Marmotta's LDP Root Container" ;
a ldp:Resource , ldp:RDFSsource , ldp:Container , ldp:BasicContainer ;
ldp:interactionModel ldp:Container ;
dcterms:created "2016-02-01T12:31:55.000-05:00"^^xsd:dateTime ;
dcterms:modified "2016-02-02T15:47:30.000-05:00"^^xsd:dateTime ;
ldp:contains child:Apache-Marmotta , child:Apache-Marmotta-1 .
```

HTTP response

HTTP/1.1 200 OK
Server: Apache Marmotta/3.3.0 (build 0)
Accept-Patch: application/rdf-patch
Accept-Post: text/turtle, application/ld+json, application/rdf+xml, text/n3, text/plain, */*
Allow: POST, PATCH, GET, OPTIONS, PUT, HEAD
ETag: W/"1454445286000"
Last-Modified: Tue, 02 Feb 2016 20:34:46 GMT
Link: <http://wiki.apache.org/marmotta/LDPIImplementationReport/2014-09-16>; rel="http://www.w3.org/ns/ldp#constrainedBy"
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
Link: <http://www.w3.org/ns/ldp#RDFSsource>; rel="type"
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
Content-Type: text/turtle
Transfer-Encoding: chunked
Date: Thu, 17 Mar 2016 19:49:03 GMT

@prefix ldp: <http://www.w3.org/ns/ldp#> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix parent: <http://localhost:8080/marmotta/ldp/> .
@prefix child: <http://localhost:8080/marmotta/ldp/apache-marmotta/> .
@prefix this: <http://localhost:8080/marmotta/ldp/apache-marmotta/#> .

parent:apache-marmotta a ldp:Resource , ldp:RDFSsource , ldp:Container , ldp:BasicContainer ;
ldp:interactionModel ldp:Container ;
dcterms:created "2016-02-02T15:34:46.000-05:00"^^xsd:dateTime ;
dcterms:modified "2016-02-02T15:34:46.000-05:00"^^xsd:dateTime .

HTTP response

```
curl -i -H "Accept: text/turtle" http://localhost:8080/marmotta/ldp/apache-marmotta-1
```

```
HTTP/1.1 200 OK
```

```
Server: Apache Marmotta/3.3.0 (build 0)
```

```
Accept-Patch: application/rdf-patch
```

```
Accept-Post: text/turtle, application/ld+json, application/rdf+xml, text/n3, text/plain, */*
```

```
Allow: POST, PATCH, GET, OPTIONS, PUT, HEAD
```

```
ETag: W/"1454446187000"
```

```
Last-Modified: Tue, 02 Feb 2016 20:49:47 GMT
```

```
Link: <http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>; rel="http://www.w3.org/ns/ldp#constrainedBy"
```

```
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
```

```
Link: <http://www.w3.org/ns/ldp#RDFSsource>; rel="type"
```

```
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
```

```
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
```

```
Content-Type: text/turtle
```

```
Transfer-Encoding: chunked
```

```
Date: Thu, 17 Mar 2016 19:50:24 GMT
```

```
@prefix ldp: <http://www.w3.org/ns/ldp#> .
```

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

```
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
```

```
@prefix dcterms: <http://purl.org/dc/terms/> .
```

```
@prefix parent: <http://localhost:8080/marmotta/ldp/> .
```

```
@prefix child: <http://localhost:8080/marmotta/ldp/apache-marmotta-1/> .
```

```
@prefix this: <http://localhost:8080/marmotta/ldp/apache-marmotta-1#> .
```

```
parent:apache-marmotta-1 a ldp:Resource , ldp:RDFSsource , ldp:Container , ldp:BasicContainer ;
```

```
ldp:interactionModel ldp:Container ;
```

```
dcterms:created "2016-02-02T15:47:30.000-05:00"^^xsd:dateTime ;
```

```
dcterms:modified "2016-02-02T15:49:47.000-05:00"^^xsd:dateTime ;
```

```
ldp:contains child:ISWC2014-Tutorial ;
```

```
a <http://rdfs.org/sioc/ns#Blog> , <http://rdfs.org/sioc/ns#Collection> ;
```

```
dcterms:title "Apache Marmotta - Blog" ;
```

```
dcterms:abstract "Apache Marmotta is an Open Platform for Linked Data. The goal of Apache Marmotta is to provide an open implementation of a Linked Data Platform that can be used, extended and deployed easily by organizations who want to publish Linked Data or build custom applications on Linked Data."@en .
```

HTTP response

```
curl -i -H "Accept: text/turtle" http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial/
HTTP/1.1 200 OK
Server: Apache Marmotta/3.3.0 (build 0)
Accept-Patch: application/rdf-patch
Accept-Post: text/turtle, application/ld+json, application/rdf+xml, text/n3, text/plain, */*
Allow: POST, PATCH, GET, OPTIONS, PUT, HEAD
ETag: W/"1454446187000"
Last-Modified: Tue, 02 Feb 2016 20:49:47 GMT
Link: <http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>; rel="http://www.w3.org/ns/ldp#constrainedBy"
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
Link: <http://www.w3.org/ns/ldp#RDFSsource>; rel="type"
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
Content-Type: text/turtle
Transfer-Encoding: chunked
Date: Thu, 17 Mar 2016 19:51:54 GMT
```

```
@prefix ldp: <http://www.w3.org/ns/ldp#> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix parent: <http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/> .
@prefix child: <http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial/> .
@prefix this: <http://localhost:8080/marmotta/ldp/Apache-Marmotta-1/ISWC2014-Tutorial#> .
```

```
parent:ISWC2014-Tutorial a ldp:Resource , ldp:RDFSsource , ldp:Container , ldp:BasicContainer ;
ldp:interactionModel ldp:Container ;
dcterms:created "2016-02-02T15:49:47.000-05:00"^^xsd:dateTime ;
dcterms:modified "2016-02-02T15:49:47.000-05:00"^^xsd:dateTime ;
a <http://rdfs.org/sioc/ns#Post> ;
```

```
dcterms:title "ISWC 2014 Tutorial - Apache Marmotta" ;
```

```
dcterms:abstract "How to use the Linked Data Platform (LDP) in Apache Marmotta" ;
```

```
<http://rdfs.org/sioc/ns#content> "This ISWC2014 tutorial introduces into Apache Marmotta, an open and extensible platform for Linked Data, which provides SPARQL 1.1 and LDP 1.0 support, with many modules and extensions, hosted by the Apache Software Foundation. The tutorial will show in a hands-on workshop how to setup Apache Marmotta, how to use it as a Linked Data Platform server for publishing and maintaining datasets, and how to build and extend Linked Data applications based on this platform. A specific focus will be on Apache Marmotta's semantic media management capabilities with an introduction into the SPARQL-MM multimedia querying extension."@en .
```

- A good short explanation of the Linked Data Platform:

Islandora CLAW Lessons - Week 1: Basics of Fedora 4

<http://www.youtube.com/watch?v=9wTFAwvBRbY&t=25m50s>

SPARQL INSERT of a triple to the Marmotta LDP Server

```
PREFIX dc: <http://purl.org/dc/elements/1.1/>
```

```
INSERT DATA
```

```
{
```

```
  <http://localhost:8080/marmotta/ldp/apache-marmotta-1/ISWC2014-Tutorial> dc:title "A really cool tutorial" .
```

```
}
```

this works (<https://www.w3.org/TR/sparql11-update/#insertData>)

Creating an LDP container that contains an Turtle file that references a remote RDF file

```
curl -iX POST -H "Content-Type: text/turtle" -H "Slug: foaf" --data @/var/www/data/brentfoaf.ttl
http://localhost:8080/marmotta/ldp
HTTP/1.1 201 Created
Server: Apache Marmotta/3.3.0 (build 0)
ETag: W/"1458261914000"
Last-Modified: Fri, 18 Mar 2016 00:45:14 GMT
Link: <http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>;
rel="http://www.w3.org/ns/ldp#constrainedBy"
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
Link: <http://www.w3.org/ns/ldp#RDFSource>; rel="type"
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
Location: http://localhost:8080/marmotta/ldp/foaf-1
Content-Length: 0
Date: Fri, 18 Mar 2016 00:45:14 GMT
```


The Turtle file loaded: brentfoaf.ttl

@prefix dc: <<http://purl.org/dc/terms/>> .

@prefix foaf: <<http://xmlns.com/foaf/0.1/>> .

@prefix rdfs: <<http://www.w3.org/2000/01/rdf-schema#>> .

<> a foaf:PersonalProfileDocument;

foaf:primaryTopic <#me> ;

dc:title 'Brent's FOAF file' .

<#me> a foaf:Person;

foaf:name 'Brent Shambaugh' ;

rdfs:seeAlso <<http://bshambaugh.org/foaf.rdf>> .

The referenced rdf file: foaf.rdf

```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xmlns:foaf="http://xmlns.com/foaf/0.1/"
  xmlns:admin="http://webns.net/mvcb/">
<foaf:PersonalProfileDocument rdf:about="">
  <foaf:maker rdf:resource="#me"/>
  <foaf:primaryTopic rdf:resource="#me"/>
  <admin:generatorAgent rdf:resource="http://www.ldodds.com/foaf/foaf-a-matic"/>
  <admin:errorReportsTo rdf:resource="mailto:leigh@ldodds.com"/>
</foaf:PersonalProfileDocument>
<foaf:Person rdf:ID="me">
<foaf:name>Brent Shambaugh</foaf:name>
<foaf:givenname>Brent</foaf:givenname>
<foaf:family_name>Shambaugh</foaf:family_name>
<foaf:mbox_sha1sum>7002d26943ac0ec18795975c53c7128b3dc710b4</foaf:mbox_sha1sum>
<foaf:homepage rdf:resource="http://bshambaugh.org"/>
<foaf:img rdf:resource="./images/profile.jpg" />
<foaf:knows>
<foaf:Person>
<foaf:name>Melvin Carvalho</foaf:name>
<foaf:mbox_sha1sum>906db708d222dafd459198a372f4c1f774372a75</foaf:mbox_sha1sum>
<rdfs:seeAlso rdf:resource="http://melvincarvalho.com/#me"/></foaf:Person></foaf:knows></foaf:Person>
</rdf:RDF>
```

Visualization of the Results

The screenshot shows a web browser window displaying a network graph visualization of Linked Data results. The browser's address bar shows the URL `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The graph consists of several nodes connected by edges, representing relationships between individuals and classes. A detailed view of a node is shown on the right, displaying the following information:

type	Person
http://bshambaugh.org	
family_name	Shambaugh
givenname	Brent
name	Brent Shambaugh
mbox_sha1sum	7002d26943ac0ec18795975c53c7128b3dc710b4

The graph also includes nodes for `Container`, `BasicContainer`, `no title provided`, and `error: endpoint not available`. The browser's taskbar at the bottom shows several open applications, including `foaf (4).rdf`, `foaf (3).rdf`, `foaf (2).rdf`, `Norman-Tech-Talk...xls`, and `foaf (1).rdf`.

Data pulled from the remote RDF file

The screenshot shows a web browser displaying a network graph of RDF data. The graph consists of various nodes connected by edges. A yellow circle highlights a specific node, and a pop-up window displays its metadata.

The browser's address bar shows the URL: `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The browser's tabs include: Squebi - Th, LodLive - br, Resource/s, ldp Module, W3 Linked Data, Squebi - Th, W3 Linked Data, apache-ma, W3 SKOS Simp, and Brent.

The graph nodes include: "no title provided", "Marmotta's LDP Root Container", "Apache Marmotta - Blog", "error: endpoint not available", "Brent's FOAF file", "Brent Shambaugh", "BasicContainer", "Container", "no title provided", and "Brent Shambaugh".

The pop-up window displays the following metadata:

type	Person
http://bshambaugh.org	
family_name	Shambaugh
givenname	Brent
name	Brent Shambaugh
mbox_sha1sum	7002d26943ac0ec18795975c53c7128b3dc710b4

The browser's taskbar at the bottom shows several open applications: [ethan_chew_email_transc..., *linkeddata_platform_queri..., sgvizler_with_marmotta.o..., LodLive - browsing the We..., Terminal - root@brent-Ins..., Pictures - File Manager].

Posting a LDP container with content in the following slide

```
curl -iX POST -H "Content-Type: text/turtle" -H "Slug: Drupal-7.42" --data
@/var/www/data/drupalcontainer.ttl http://localhost:8080/marmotta/ldp/
HTTP/1.1 201 Created
Server: Apache Marmotta/3.3.0 (build 0)
ETag: W/"1458310694000"
Last-Modified: Fri, 18 Mar 2016 14:18:14 GMT
Link: <http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>;
rel="http://www.w3.org/ns/ldp#constrainedBy"
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
Link: <http://www.w3.org/ns/ldp#RDFSource>; rel="type"
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
Location: http://localhost:8080/marmotta/ldp/Drupal-7-42
Content-Length: 0
Date: Fri, 18 Mar 2016 14:18:14 GMT
```

Trying to hit the sparql endpoint as a URI

```
cat drupalcontainer.ttl
```

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

```
@prefix owl: <http://www.w3.org/2002/07/owl#> .
```

```
@prefix dc: <http://purl.org/dc/terms/> .
```

```
<> a rdf:Resource;
```

```
    owl:sameAs <http://localhost/drupal-7.42/sparql> ;
```

```
    dc:title "A container for the Drupal Site" .
```

Visualizing the Created Drupal Container

The screenshot displays a web browser window with the URL `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The main content area shows an RDF graph visualization with three nodes:

- Marmotta's LDP Root Container** (teal circle): The root node, containing a sub-container.
- A container for the Drupal Site** (blue circle): A sub-container of the root, with a "contains" relationship to the root.
- http://localhost..** (green circle): A resource that is "sameAs" the Drupal container.

Each node has a gear icon for settings and a list icon for details. The "sameAs" relationship is indicated by a double-headed arrow with the label "sameAs".

On the right side, a metadata panel for the selected node shows the following details:

type	Resource Container RDFSResource BasicContainer
created	2016-03-18T10:18:14.000-04:00
modified	2016-03-18T10:18:14.000-04:00
title	A container for the Drupal Site

The browser's address bar and tabs are visible at the top, and the system tray and taskbar are at the bottom.

Creating an LDP container titled Collection over HTTP

```
curl -iX POST -H "Content-Type: text/turtle" -H "Slug: Collection" --data
@/var/www/data/collection.ttl http://localhost:8080/marmotta/ldp/
HTTP/1.1 201 Created
Server: Apache Marmotta/3.3.0 (build 0)
ETag: W/"1458331563000"
Last-Modified: Fri, 18 Mar 2016 20:06:03 GMT
Link: <http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>;
rel="http://www.w3.org/ns/ldp#constrainedBy"
Link: <http://www.w3.org/ns/ldp#Resource>; rel="type"
Link: <http://www.w3.org/ns/ldp#RDFSource>; rel="type"
Link: <http://www.w3.org/ns/ldp#Container>; rel="type"
Link: <http://www.w3.org/ns/ldp#BasicContainer>; rel="type"
Location: http://localhost:8080/marmotta/ldp/Collection
Content-Length: 0
Date: Fri, 18 Mar 2016 20:06:03 GMT
```


The Posted Turtle File

```
:/var/www/data# cat collection.ttl
```

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

```
@prefix dc: <http://purl.org/dc/terms/> .
```

```
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
```

```
@prefix owl: <http://www.w3.org/2002/07/owl#> .
```

```
@prefix dcterms: <http://purl.org/dc/terms/isPartOf> .
```

```
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
```

```
<> a skos:Collection;
```

```
    dc:title 'This is an example of a collection' ;
```

```
    skos:member <#item1> .
```

```
<#item1> dc:title 'Ames Research Center' .
```

Creating a new LDP Container titled NASA Facilities over HTTP

```
:/var/www# curl -iX POST -H "Content-Type: text/turtle" -H "Slug: NASA Facilities" --data  
@/var/www/data/collection2.ttl http://localhost:8080/marmotta/ldp/
```

HTTP/1.1 100 Continue

HTTP/1.1 201 Created

Server: Apache Marmotta/3.3.0 (build 0)

ETag: W/"1458333610000"

Last-Modified: Fri, 18 Mar 2016 20:40:10 GMT

Link: <<http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>>;
rel="http://www.w3.org/ns/ldp#constrainedBy"

Link: <<http://www.w3.org/ns/ldp#Resource>>; rel="type"

Link: <<http://www.w3.org/ns/ldp#RDFSsource>>; rel="type"

Link: <<http://www.w3.org/ns/ldp#Container>>; rel="type"

Link: <<http://www.w3.org/ns/ldp#BasicContainer>>; rel="type"

Location: <http://localhost:8080/marmotta/ldp/NASA-Facilities>

Content-Length: 0

Date: Fri, 18 Mar 2016 20:40:10 GMT

Comment2.ttl

```
:/var/www/data# cat collection2.ttl
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix dc: <http://purl.org/dc/terms/> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix dcterms: <http://purl.org/dc/terms/isPartOf> .
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
@prefix ds: <http://data.nasa.gov/resource/gvk9-iz74/> .
@prefix dsbase: <http://data.nasa.gov/resource/> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix socrata: <http://www.socrata.com/rdf/terms#> .
```

```
<> a skos:Collection;
  dc:title 'NASA Facilities' ;
  skos:member <#1> .
```

```
<#1> dc:title 'Ames Research Center' ;
  owl:sameAs ds:1 .
ds:1 a dsbase:gvk9-iz74 .
```

```
<#1> socrata:rowID "1" ;
  rdfs:member dsbase:gvk9-iz74 ;
  ds:center "Ames Research Center" ;
  ds:center_search_status "Public" ;
  ds:facility "046 - AIRCRAFT MAINTENANCE HANGAR 2" ;
  ds:occupied "1943-01-01T00:00:00" ;
  ds:status "Active" ;
  ds:record_date "2011-10-05T00:00:00" ;
  ds:last_update "2014-09-10T00:00:00" ;
  ds:country "US" ;
  ds:contact "Rocci Caringello" ;
  ds:phone "650 603-9506" ;
  ds:location _:node1ae5ejru5x1 .
```

Viewing Information about NASA Facilities Container

The screenshot shows a web browser window displaying the LodLive interface. The browser's address bar shows the URL `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The interface features a central diagram with three nodes: "Marmotta's LDP Root Container" (purple), "NASA Facilities" (green), and "Ames Research Center" (green). A "contains" relationship arrow points from the Root Container to NASA Facilities, and a "member" relationship arrow points from NASA Facilities to Ames Research Center. A right-hand sidebar displays metadata for the selected "NASA Facilities" container.

type
Resource Container BasicContainer RDFSource

label
Marmotta's LDP Root Container

created
2016-02-01T12:31:55.000-05:00

modified
2016-03-18T16:40:10.000-04:00

The bottom of the browser window shows a file manager with several files: `rdf2rdf-1.0.1-2.3.1.jar`, `sparql (2)`, `rows (3).rdf`, `rows (2).rdf`, and `rows (1).rdf`. The system tray at the very bottom includes icons for a presentation, an untitled document, a terminal, and other background applications.

Visualizing Ames Research Center as a Member of Nasa Facilities

The screenshot displays a web application interface for visualizing data. The main area shows a hierarchical diagram with three nodes: 'Root Container' (purple), 'NASA Facilities' (green), and 'Ames Research Center' (green). The 'Root Container' is connected to 'NASA Facilities' with the relationship 'contains', and 'NASA Facilities' is connected to 'Ames Research Center' with the relationship 'member'. Each node has a gear icon and a list icon. The 'Ames Research Center' node has a 'b' icon and a '\$' icon.

On the right side, there is a detailed metadata panel for the 'Ames Research Center' record:

facility	046 - AIRCRAFT MAINTENANCE HANGAR 2
rowID	1
occupied	1943-01-01T00:00:00
center_search_status	Public
status	Active
center	Ames Research Center
record_date	2011-10-05T00:00:00
last_update	2014-09-10T00:00:00
country	US
contact	

The browser's address bar shows the URL: localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp. The browser tabs include 'Squebi', 'Resource', 'ldp Modu', 'W3 Linked Da', 'apache-r', 'ARC SPAR', 'LodLive', 'RDF2RDF', 'Michael.J.', 'W3 SKOS Sir', and 'Brent'. The system tray at the bottom shows the date and time as 'Fri, 18 Mar 16:54' and the user as 'brent'. The taskbar at the bottom shows several open applications, including 'presentation_for_eth...', 'sgvizler_with_marmot...', 'LodLive - browsing th...', 'Terminal - root@bren...', 'Terminal - brent@bre...', and 'Documents - File Ma...'.

Reference another LDP by creating an LDP container with a Turtle File

```
curl -iX POST -H "Content-Type: text/turtle" -H "Slug: BrentsRWW" --data @/var/www/data/brentwww.ttl  
http://localhost:8080/marmotta/ldp/
```

with

HTTP/1.1 201 Created

Server: Apache Marmotta/3.3.0 (build 0)

ETag: W/"1458340352000"

Last-Modified: Fri, 18 Mar 2016 22:32:32 GMT

Link: <<http://wiki.apache.org/marmotta/LDPImplementationReport/2014-09-16>>;
rel="http://www.w3.org/ns/ldp#constrainedBy"

Link: <<http://www.w3.org/ns/ldp#Resource>>; rel="type"

Link: <<http://www.w3.org/ns/ldp#RDFSSource>>; rel="type"

Link: <<http://www.w3.org/ns/ldp#Container>>; rel="type"

Link: <<http://www.w3.org/ns/ldp#BasicContainer>>; rel="type"

Location: <http://localhost:8080/marmotta/ldp/BrentsRWW-1>

Content-Length: 0

Date: Fri, 18 Mar 2016 22:32:32 GMT

Brentsrww.ttl

```
:/var/www/data# cat brentsrww.ttl
```

```
@prefix dc: <http://purl.org/dc/terms/> .
```

```
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
```

```
@prefix owl: <http://www.w3.org/2002/07/owl#> .
```

```
<> a foaf:PersonalProfileDocument;
```

```
    foaf:primaryTopic <#me> ;
```

```
    dc:title 'Brent Files' .
```

```
<#me> a foaf:Person;
```

```
    foaf:name 'Brent Shambaugh Files' ;
```

```
    owl:sameAs <http://bshambaugh.rww.io> .
```

Thus, I get my RWW.io storage site viewed from Marmotta

Apache Marmotta

Views
Triples
Inspector

RDF/HTML

RDF/XML | N3 | Turtle | RDF/JSON | JSON-LD

Triples

<http://bshambaugh.rww.io/storage/>

property	has value	context	info
rdf:type	http://www.w3.org/ns/posix/stat#Directory	context:cache	
rdf:type	ldp:Container	context:cache	
rdf:type	ldp:BasicContainer	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/very_big_bear	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/seans2.png	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/family_bears/	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/bigbear_thoughts/	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/meta_bigbear_thoughts	context:cache	
http://www.w3.org/ns/posix/stat#mtime	"1422986228"^^xsd:integer	context:cache	
http://www.w3.org/ns/posix/stat#size	"4096"^^xsd:integer	context:cache	

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My rww.io LDP storage site

The screenshot shows a Mozilla Firefox browser window displaying the index of the storage site at `bshambaugh.rww.io/storage/`. The page features a dark header with the site name and a red 'WebID Login' button. Below the header is a navigation bar with icons for refresh, home, and file operations, along with a 'Show hidden files?' link. The main content is a table listing files and directories with columns for Name, Size, Type, Last Modified, and Actions.

Name	Size	Type	Last Modified	Actions
../	-	Directory	2014-10-07 03:06:33 GMT	
bigbear_thoughts/	-	Directory	2014-05-03 03:39:31 GMT	
family_bears/	-	Directory	2015-02-03 17:41:49 GMT	
seans2.png	329.11K	image/png	2015-02-03 17:57:08 GMT	
very_big_bear	62.00B	RDF	2015-02-03 17:34:29 GMT	

At the bottom of the page, there are links for 'GitHub', 'Help?', and 'Show your support' with icons for Bitcoin, Dogecoin, and Peercoin. A 'Performance info...' link is also present.

System tray information: Applications, Places, System, Fri, 18 Mar 19:29, brent

Browser tabs: Resource/s in HTML, bshambaugh.rww.io: I...

Address bar: bshambaugh.rww.io/storage/

System tray: bshambaugh.rww..., *(Untitled), sgvizler_with_mar..., Untitled 1 - LibreO..., [Terminal - root@..., Pictures - File Man..., [ch1.n3 = (/tmp/m...

I see it here...

Apache Marmotta

RDF/HTML

RDF/XML | N3 | Turtle | RDF/JSON | JSON-LD

Views
Triples
Inspector

Triples

<http://bshambaugh.rww.io/storage/>

property	has value	context	info
rdf:type	http://www.w3.org/ns/posix/stat#Directory	context:cache	
rdf:type	ldp:Container	context:cache	
rdf:type	ldp:BasicContainer	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/very_big_bear	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/seans2.png	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/family_bears/	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/bigbear_thoughts/	context:cache	
ldp:contains	http://bshambaugh.rww.io/storage/.meta.bigbear_thoughts	context:cache	
http://www.w3.org/ns/posix/stat#mtime	"1422986228"^^xsd:integer	context:cache	
http://www.w3.org/ns/posix/stat#size	"4096"^^xsd:integer	context:cache	

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But it is actually over here

The screenshot shows a web browser window with the following details:

- Browser: Mozilla Firefox
- Address Bar: `bshambaugh.rww.io/storage/bigbear_thoughts/`
- Page Title: `bshambaugh.rww.io / storage / bigbear_thoughts /`
- Navigation icons: Refresh, Home, Back, Forward, Upload, Download
- WebID Login: [WebID Login](#) / [Get a WebID](#)
- Table of files and directories:

Name	Size	Type	Last Modified	Actions
../	-	Directory	2015-02-03 17:57:08 GMT	
ch1/	-	Directory	2014-05-07 21:18:42 GMT	
following	4.35K	RDF	2014-05-07 21:17:51 GMT	

Additional elements on the page include a [Show hidden files?](#) link, [GitHub](#) | [Help?](#) | [Show your support](#) (with Bitcoin, Ethereum, and PayPal icons), and a [Performance info...](#) link.

I can even visualize contents from both LDP Servers at Once

The screenshot shows a web browser window displaying the LodLive interface. The browser's address bar shows the URL `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The interface features a graph of interconnected nodes representing LDP containers. The nodes are:

- Marmotta's LDP Root Container (teal circle)
- Brent Files (yellow circle)
- Brent Shambaugh Files (orange circle)
- no title provided (dark red circle)
- no title provided (dark red circle)
- http://bshamba... (purple circle)

The relationships between these nodes are:

- Marmotta's LDP Root Container contains Brent Files.
- Brent Files is the primary topic of Brent Shambaugh Files.
- Brent Shambaugh Files is the same as the 'no title provided' node.
- The 'no title provided' node contains another 'no title provided' node.
- The 'no title provided' node contains the 'http://bshamba...' node.

On the right side, a metadata panel is open, showing the following information:

type	Container Directory BasicContainer
mtime	1412651193
size	4096

The browser's taskbar at the bottom shows several open applications, including a terminal window with the prompt `root@brent-Ins...`.

I can even visualize contents from both LDP Servers at Once

The screenshot displays a web browser window titled "LodLive - browsing the Web of Data - Mozilla Firefox". The address bar shows the URL `localhost/LodLive/app_en.html?http://localhost:8080/marmotta/ldp`. The main content area features a graph visualization of Linked Data. The graph includes several nodes represented by colored circles: an orange circle labeled "Brent Shambaugh Files", a red circle labeled "no title provided", and several purple circles representing resources with URLs like `http://bshamba...`. Edges between nodes are labeled with terms such as "contains" and "sameAs". A tooltip on the right side of the graph displays the message: "literal values not found or the resource is missing or not available in the endpoint". At the bottom of the browser window, a console or status bar shows the following text: `http://localhost:8080/marmotta/sparql`, `resource not found`, and `http://bshambaugh.rww.io/storage/bigbear_thoughts/`. The taskbar at the very bottom of the screen shows several open applications, including "LodLive - browsing the We...", "[*(Untitled)]", "[sgvizler_with_marmotta.o...", "[Untitled 1 - LibreOffice Calc]", and "Terminal - root@brent-Ins...".