

Use Case 1.1 - Triples - Explore PROV-O for owner and contributors

[Planning](#) | [Description](#) | [Requirements](#) | [UI Mockup](#) | **[Triples Examples](#)** | [Queries Examples](#)

Table of Contents

- [Ontologies](#)
- [Current Expression of Owner and Contributors using DC](#)
 - [Virtual Collection's owner](#)
 - [Virtual Collection's contributors](#)
- [Proposed Expression of Owner and Contributors using PROV-O](#)
 - [Virtual Collection's owner](#)

Ontologies

The following is a list of all ontologies used by the Triple Examples.

Name	Prefix	URL	Details	Comments
RDF	rdf	http://www.w3.org/1999/02/22-rdf-syntax-ns#	specification	
RDF Schema	rdfs	http://www.w3.org/2000/01/rdf-schema#	specification	
Dublin Core	dc	http://purl.org/dc/elements/1.1/	specification	
Dublin Core Terms	dcterms	http://purl.org/dc/terms	specification	
Dublin Core Types	dctype	http://purl.org/dc/dcmitype	specification	
Friend of a Friend	foaf	http://xmlns.com/foaf/0.1	specification	
PROV-O	prov	http://www.w3.org/ns/prov#	specification	

Current Expression of Owner and Contributors using DC

Note that this does not support:

- any information on when creation or contribution happened – collectively or separately
- any ordering or other differentiation of contribution within the group
- any association of any creator or contributor with any collection item

Also would seem preferable to use the DC Terms ontology properties [creator](#) and [contributor](#) since they have a [dcterms:Agent](#) as the range.

Virtual Collection's owner

Turtle

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

<http://vivo.cornell.edu/individual/individual24416> a foaf:Person, foaf:Agent .
```

```

@prefix dc:      <http://purl.org/dc/elements/1.1/> .
@prefix dcterms: <http://purl.org/dc/terms> .

<http://localhost:3000/individual/vc155>
...
dc:creator      <http://vivo.cornell.edu/individual/individual24416> .

```

Virtual Collection's contributors

```

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

<http://localhost:3000/individual/fg346> a foaf:Agent, foaf:Group .

<http://vivo.cornell.edu/individual/individual24416> a foaf:Person ;
  foaf:member <http://localhost:3000/individual/fg346> .
<http://vivo.cornell.edu/individual/rjv23> a foaf:Person ;
  foaf:member <http://localhost:3000/individual/fg346> .
<http://vivo.cornell.edu/individual/EleanorRayle> a foaf:Person ;
  foaf:member <http://localhost:3000/individual/fg346> .

```

```

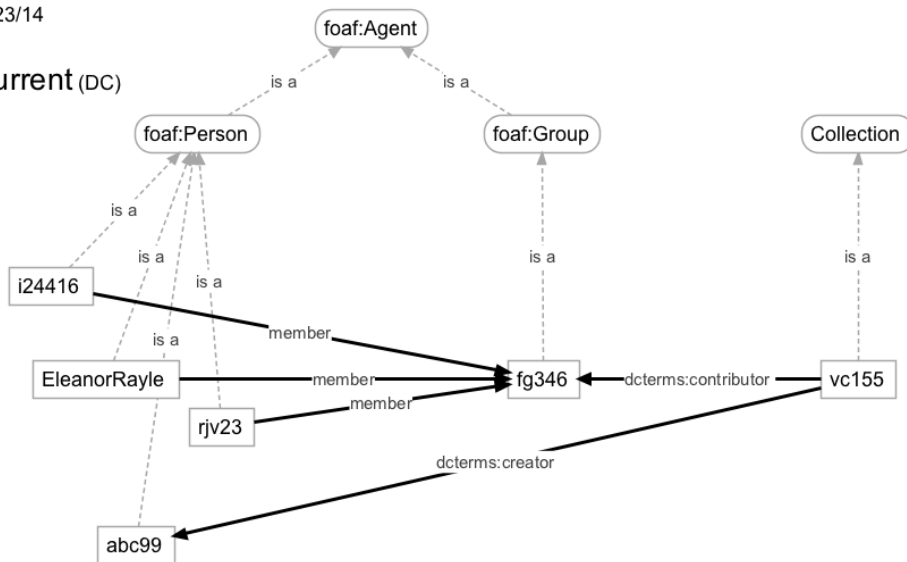
@prefix dc:      <http://purl.org/dc/elements/1.1/> .

<http://localhost:3000/individual/vc155>
...
dc:contributor   <http://localhost:3000/individual/fg346> .

```

9/23/14

Current (DC)



Proposed Expression of Owner and Contributors using PROV-O

Virtual Collection's owner

Turtle

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

<http://vivo.cornell.edu/individual/individual24416> a foaf:Person, foaf:Agent, prov:Agent .
```

```
@prefix dc:        <http://purl.org/dc/elements/1.1/> .
@prefix dcterms:   <http://purl.org/dc/terms> .

<http://localhost:3000/individual/vc155> a ore:Aggregation, prov:Entity
...
prov:wasGeneratedBy <http://localhost:3000/individual/act155> ;
prov:wasAttributedTo <http://vivo.cornell.edu/individual/individual24416> .
```

```
<http://localhost:3000/individual/act155> a prov:Activity ;
prov:startedAtTime      "2014-07-16T02:02:02Z"^^xsd:dateTime ;
prov:wasStartedBy       <http://vivo.cornell.edu/individual/individual24416> ;
prov:generated          <http://localhost:3000/individual/vc155>
prov:endedAtTime        "2014-07-16T03:24:13Z"^^xsd:dateTime ;
prov:wasEndedBy         <http://vivo.cornell.edu/individual/individual24416> .
```

NOTE:

- generated is saying this person created the virtual collection
- endedAtTime will be the last time an item was added to or removed from the virtual collection, effectly representing a modifiedDate
 - What about if the title of the virtual collection changes? Does endedAtTime change?
- wasEndedBy will be the last person to add or remove an item to the virtual collection.

Virtual Collection's contributors

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

<http://localhost:3000/individual/fg346> a foaf:Agent, foaf:Group .

<http://vivo.cornell.edu/individual/individual24416> a foaf:Person ;
foaf:member <http://localhost:3000/individual/fg346> .
<http://vivo.cornell.edu/individual/rjv23> a foaf:Person ;
foaf:member <http://localhost:3000/individual/fg346> .
<http://vivo.cornell.edu/individual/EleanorRayle> a foaf:Person ;
foaf:member <http://localhost:3000/individual/fg346> .
```

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

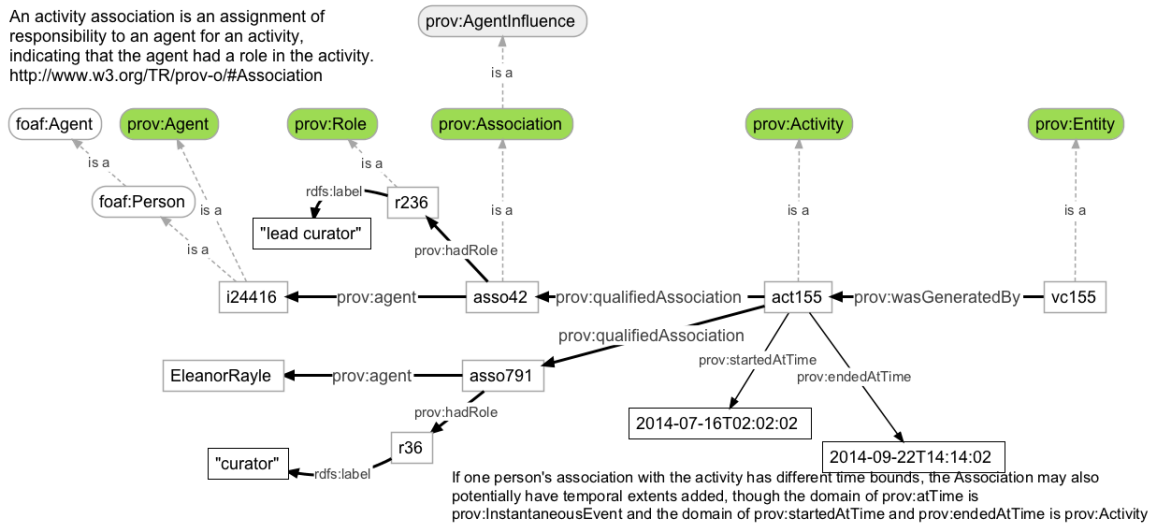
<http://localhost:3000/individual/vc155>
...
TBA
```

9/24/14

Extended (PROV-O)

One approach uses a `prov:Activity` and then links in people via a `prov:Association` supplemented by a `prov:Role` to indicate how the person was associated with the activity

An activity association is an assignment of responsibility to an agent for an activity, indicating that the agent had a role in the activity. <http://www.w3.org/TR/prov-o/#Association>



A simpler approach omits the `prov:Activity` and links in people via a `prov:Attribution` supplemented by a `prov:Role`

Attribution is the ascribing of an entity to an agent. When an entity `e` is attributed to agent `ag`, entity `e` was generated by some unspecified activity that in turn was associated to agent `ag`. Thus, this relation is useful when the activity is not known, or irrelevant. <http://www.w3.org/TR/prov-o/#Attribution>

