

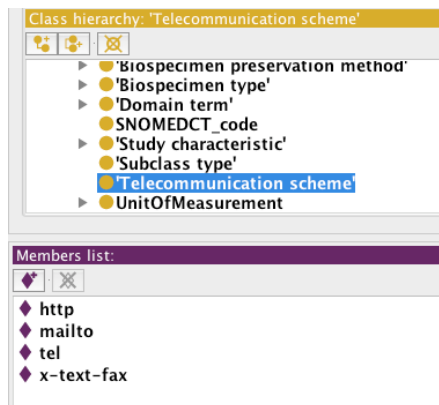
# Query-Based Approach to Value Set Generation

James F. Brinkley and Landon T.  
Detwiler

Structural Informatics Group  
University of Washington

# Overview

- One specific approach to meeting criteria discussed by other panelists
- Dynamic construction of value sets using potentially complex queries over one or more sources
- Flexible enough to adapt to different value set patterns and standards



```

<rdf:Description rdf:about=valset:TelecomScheme>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>x-text-fax</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRE:OCRE400119/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>http</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRE:OCRE400116/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>mailto</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRE:OCRE400117/>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>tel</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRE:OCRE400118/>
</rdf:Description>

```

```

CONSTRUCT {
  valset:TelecomScheme
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <http://purl.org/sig/OCRe>
WHERE
{
  ?root rdfs:label "Telecommunication scheme" .
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

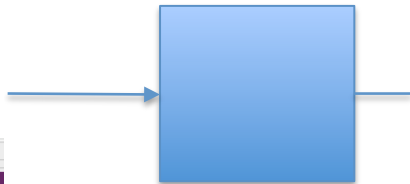
```

```

<rdf:Description rdf:about=valset:TelecomScheme>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>x-text-fax</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400119/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>http</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400116/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>mailto</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRe:OCRE400117/>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>tel</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400118/>
</rdf:Description>

```

The screenshot shows a software interface with two panels. The top panel, titled 'Class hierarchy: "Telecommunication scheme"', displays a tree of classes: 'Biospecimen preservation method', 'Biospecimen type', 'Domain term', 'SNOMEDCT\_code', 'Study characteristic', 'Subclass type', 'Telecommunication scheme' (highlighted in blue), and 'UnitOfMeasurement'. The bottom panel, titled 'Members list:', shows a list of members: 'http', 'mailto', 'tel', and 'x-text-fax', each preceded by a small diamond icon.



```

CONSTRUCT {
  valset:TelecomScheme
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <http://purl.org/sig/OCRe>
WHERE
{
  ?root rdfs:label "Telecommunication scheme" .
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

```

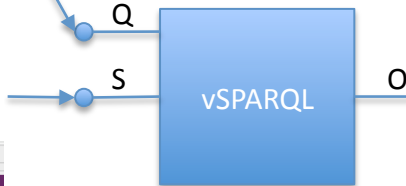
Class hierarchy: 'Telecommunication scheme'

- ▶ 'Biospecimen preservation method'
- ▶ 'Biospecimen type'
- ▶ 'Domain term'
- ▶ SNOMEDCT\_code
- ▶ 'Study characteristic'
- ▶ 'Subclass type'
- ▶ **Telecommunication scheme**
- ▶ UnitOfMeasurement

---

Members list:

- ◆ http
- ◆ mailto
- ◆ tel
- ◆ x-text-fax



```

<rdf:Description rdf:about=valset:TelecomScheme>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>x-text-fax</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400119/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>http</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400116/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>mailto</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRe:OCRE400117/>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>tel</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400118/>
</rdf:Description>

```

```

CONSTRUCT {
  valset:TelecomScheme
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <http://purl.org/sig/OCRe>
WHERE
{
  ?root rdfs:label "Telecommunication scheme" .
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

```

```

<rdf:Description rdf:about=valset:TelecomScheme>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>x-text-fax</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400119/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>http</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400116/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>mailto</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRe:OCRE400117/>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>tel</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400118/>
</rdf:Description>

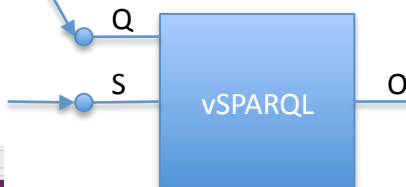
```

Class hierarchy: 'Telecommunication scheme'

- ▶ 'Biospecimen preservation method'
- ▶ 'Biospecimen type'
- ▶ 'Domain term'
- ▶ SNOMEDCT\_code
- ▶ 'Study characteristic'
- ▶ 'Subclass type'
- ▶ **Telecommunication scheme**
- ▶ UnitOfMeasurement

Members list:

- ◆ http
- ◆ mailto
- ◆ tel
- ◆ x-text-fax



```

CONSTRUCT {
  <#0>
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <#1>
WHERE
{
  ?root rdfs:label <#2>.
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

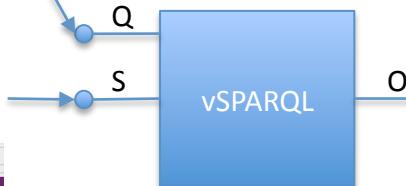
```

Class hierarchy: 'Telecommunication scheme'

- ▶ 'Biospecimen preservation method'
- ▶ 'Biospecimen type'
- ▶ 'Domain term'
- ▶ SNOMEDCT\_code
- ▶ 'Study characteristic'
- ▶ 'Subclass type'
- ▶ **Telecommunication scheme**
- ▶ UnitOfMeasurement

Members list:

- ◆ http
- ◆ mailto
- ◆ tel
- ◆ x-text-fax



```

<rdf:Description rdf:about=valset:TelecomScheme>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>x-text-fax</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRE:OCRE400119/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>http</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRE:OCRE400116/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>mailto</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRE:OCRE400117/>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>tel</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRE:OCRE400118/>
</rdf:Description>

```

```

CONSTRUCT {
  <#0>
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <#1>
WHERE
{
  ?root rdfs:label <#2>.
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

```

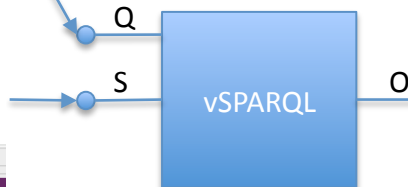
Class hierarchy: 'Telecommunication scheme'

- ▶ 'Biospecimen preservation method'
- ▶ 'Biospecimen type'
- ▶ 'Domain term'
- ▶ 'SNOMEDCT\_code'
- ▶ 'Study characteristic'
- ▶ 'Subclass type'
- ▶ **'Telecommunication scheme'**
- ▶ 'UnitOfMeasurement'

---

Members list:

- ◆ http
- ◆ mailto
- ◆ tel
- ◆ x-text-fax





```

CONSTRUCT {
  <#0>
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <#1>
WHERE
{
  ?root rdfs:label <#2>.
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

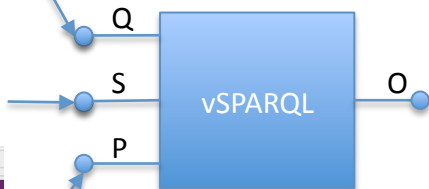
```

Class hierarchy: 'Telecommunication scheme'

- ▶ 'Biospecimen preservation method'
- ▶ 'Biospecimen type'
- ▶ 'Domain term'
- ▶ SNOMEDCT\_code
- ▶ 'Study characteristic'
- ▶ 'Subclass type'
- ▶ **Telecommunication scheme**
- ▶ UnitOfMeasurement

Members list:

- ◆ http
- ◆ mailto
- ◆ tel
- ◆ x-text-fax



```

<#0> = valset:TelecomScheme
<#1> = <http://purl.org/sig/OCRe>
<#2> = "Telecommunication scheme"

```

```

<rdf:Description rdf:about=valset:TelecomScheme>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>x-text-fax</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400119/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>http</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400116/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>mailto</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRe:OCRE400117/>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>tel</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400118/>
</rdf:Description>

```

```

CONSTRUCT {
  <#0>
  valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?inst.
  _:b0 valset:label ?inst_label.}
FROM <#1>
WHERE
{
  ?root rdfs:label <#2>.
  ?inst rdf:type ?root.
  ?inst rdfs:label ?inst_label.
}

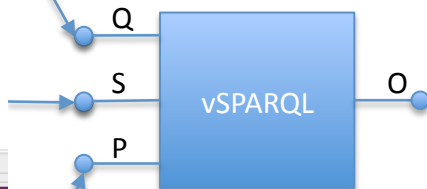
```

Class hierarchy: 'Biospecimen availability'

- 'Biospecimen availability'
  - ▶ ● 'Biospecimen preservation method'
  - ▶ ● 'Biospecimen type'
  - ▶ ● 'Domain term'
  - ▶ ● 'SNOMEDCT\_code'
  - ▶ ● 'Study characteristic'
  - ▶ ● 'Subclass type'
  - ▶ ● 'Telecommunication scheme'

Members list:

- ◆ 'Biospecimen availability NA'
- ◆ 'Biospecimen available'
- ◆ 'Biospecimen not available'



```

<#0> = valset:BiospecimenAvailability
<#1> = <http://purl.org/sig/OCRe>
<#2> = "Biospecimen availability"

```

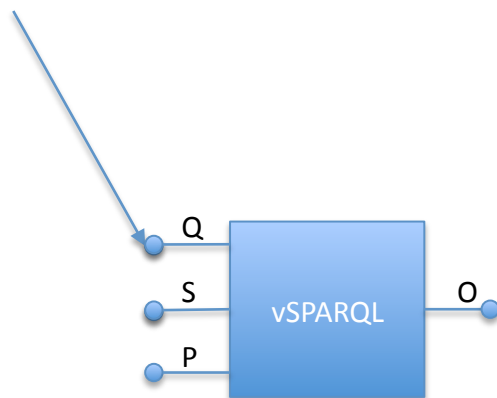
```

<rdf:Description rdf:about=valset:BiospecimenAvailability>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>Biospecimen availability NA</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400120/>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>Biospecimen not available</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400122/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>Biospecimen available</valset:label>
  <rdf:type valset:Member/>
  <valset:URI OCRe:OCRE400121/>
</rdf:Description>

```

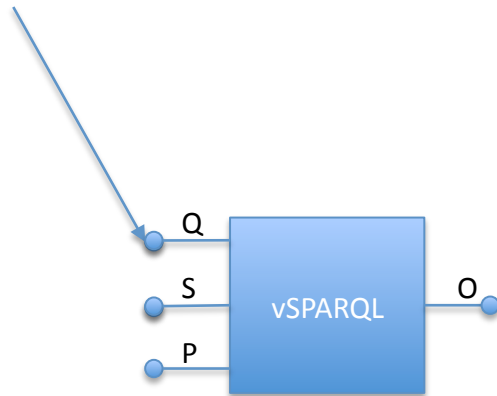
```
CONSTRUCT {  
  <#0>  
  valset:hasMember _:b0.  
  _:b0 rdf:type valset:Member.  
  _:b0 valset:URI ?inst.  
  _:b0 valset:label ?inst_label.}  
FROM <#1>  
WHERE  
{  
  ?root rdfs:label <#2>.  
  ?inst rdf:type ?root.  
  ?inst rdfs:label ?inst_label.  
}
```

## Instance Template



```
CONSTRUCT {  
  <#0> valset:hasMember _:b0.  
  _:b0 rdf:type valset:Member.  
  _:b0 valset:URI ?sub.  
  _:b0 valset:label ?sub_label.  
FROM <#1>  
WHERE  
{  
  ?root rdfs:label <#2> .  
  ?sub rdfs:subClassOf ?root.  
  ?sub rdfs:label ?sub_label.  
}
```

## Subclass Template



```

CONSTRUCT {
  <#0> valset:hasMember _:b0.
  _:b0 rdf:type valset:Member.
  _:b0 valset:URI ?sub.
  _:b0 valset:label ?sub_label.}
FROM <#1>
WHERE
{
  ?root rdfs:label <#2> .
  ?sub rdfs:subClassOf ?root.
  ?sub rdfs:label ?sub_label.
}

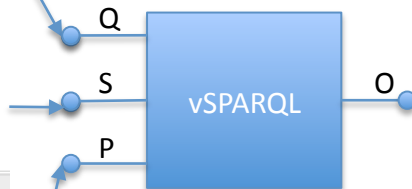
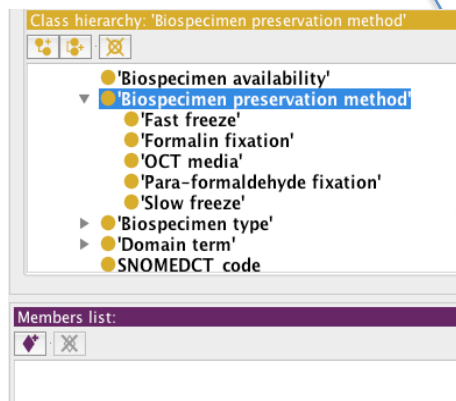
```

## Subclass Template

```

<rdf:Description rdf:about=valset:Biospecimen_preservation_method>
  <valset:hasMember rdf:nodeID="A0"/>
  <valset:hasMember rdf:nodeID="A1"/>
  <valset:hasMember rdf:nodeID="A2"/>
  <valset:hasMember rdf:nodeID="A3"/>
  <valset:hasMember rdf:nodeID="A4"/>
</rdf:Description>
<rdf:Description rdf:nodeID="A0">
  <valset:label>Fast freeze</valset:label>
  <rdf:type valset:Member"/>
  <valset:URI OCRE:OCRE400019/>
</rdf:Description>
<rdf:Description rdf:nodeID="A1">
  <valset:label>Formalin fixation</valset:label>
</rdf:Description>
<rdf:Description rdf:nodeID="A2">
  <valset:label>Para-formaldehyde fixation</valset:label>
</rdf:Description>
<rdf:Description rdf:nodeID="A3">
  <valset:label>Slow freeze</valset:label>
</rdf:Description>
<rdf:Description rdf:nodeID="A4">
  <valset:label>OCT media</valset:label>
</rdf:Description>

```



```

<#0> =
valset:Biospecimen_preservation_method
<#1> = <http://purl.org/sig/OCRe>
<#2> = "Biospecimen preservation method"

```

# More complex value set patterns

- Different source(s) – e.g. SNOMED
- Multiple sources - e.g. composite annotations
- Reasoning
  - Classification
  - Module extraction
  - Restriction (only visible structures in the abdomen)
  - Transitive closure (parts of parts)

Qid=135

Template

Source ontologies

Q  
S  
P

vSPARQL

O

RDF

Qid=136

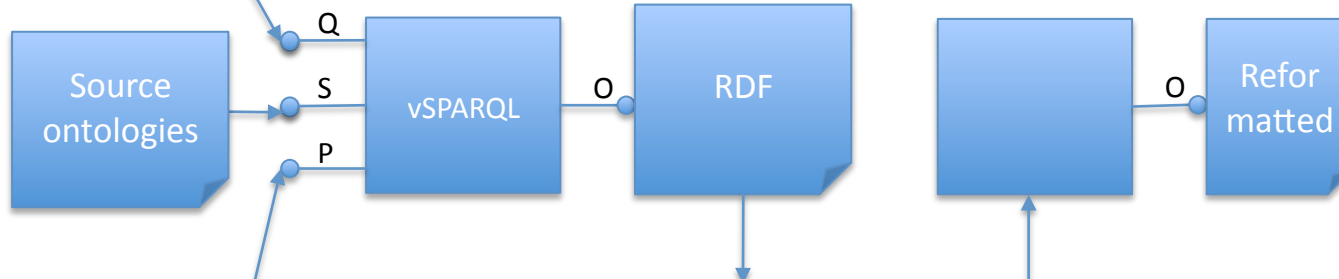
Parameters

<http://synapse.biostr.washington.edu/~brinkley/rdf/TelecomResults.rdf>

```
<rdf:Description rdf:about=valset:TelecomScheme>  
  <valset:hasMember rdf:nodeID="A0"/>  
  <valset:hasMember rdf:nodeID="A1"/>  
  <valset:hasMember rdf:nodeID="A2"/>  
  <valset:hasMember rdf:nodeID="A3"/>  
</rdf:Description>  
<.....
```

Qid=135

Template



Qid=136

Parameters

<http://synapse.biostr.washington.edu/~brinkley/rdf/TelecomResults.rdf>

```
<rdf:Description rdf:about=valset:TelecomScheme>  
<valset:hasMember rdf:nodeID="A0"/>  
<valset:hasMember rdf:nodeID="A1"/>  
<valset:hasMember rdf:nodeID="A2"/>  
<valset:hasMember rdf:nodeID="A3"/>  
</rdf:Description>  
<.....
```



Qid=135

Template

```

let $members := doc('<#0>')//rdf:Description[rdf:type/
    @rdf:resource='http://sig.uw.edu/valueset#Member']
return
...
<xsd:simpleType name="<#1>" OCRE:entityURI="<#0>">
<xsd:restriction base="xsd:string">
{
  for $member in $members
  return
    <xsd:enumeration value="{ $member/valset:label/text()}"
      OCRE:entityURI="{ $member/valset:URI/@rdf:resource}"/>
}
</xsd:restriction>
</xsd:simpleType>
...

```

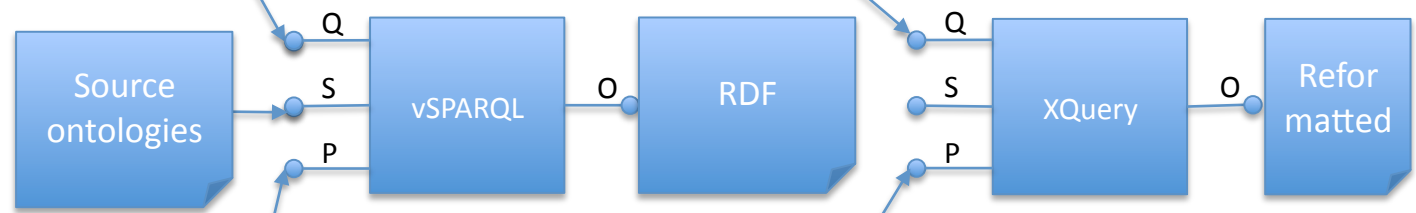
Qid=136

Parameters

```

<#0> = http://synapse.biostr.washington.edu/~brinkley/rdf/TelecomResults.rdf,
<#1> = TelecommunicationScheme

```



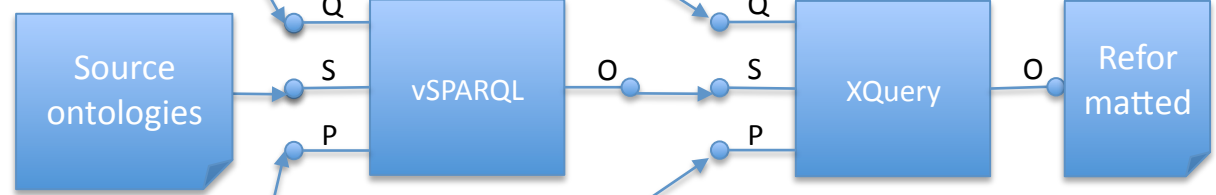
Qid=135

Templates

```

let $members := doc('<#0>')//rdf:Description[rdf:type/
    @rdf:resource='http://sig.uw.edu/valueset#Member']
return
...
<xsd:simpleType name="<#1>" OCRE:entityURI="<#0>">
<xsd:restriction base="xsd:string">
{
  for $member in $members
  return
    <xsd:enumeration value="{ $member/valset:label/text()}"
      OCRE:entityURI="{ $member/valset:URI/@rdf:resource}"/>
}
</xsd:restriction>
</xsd:simpleType>
...

```

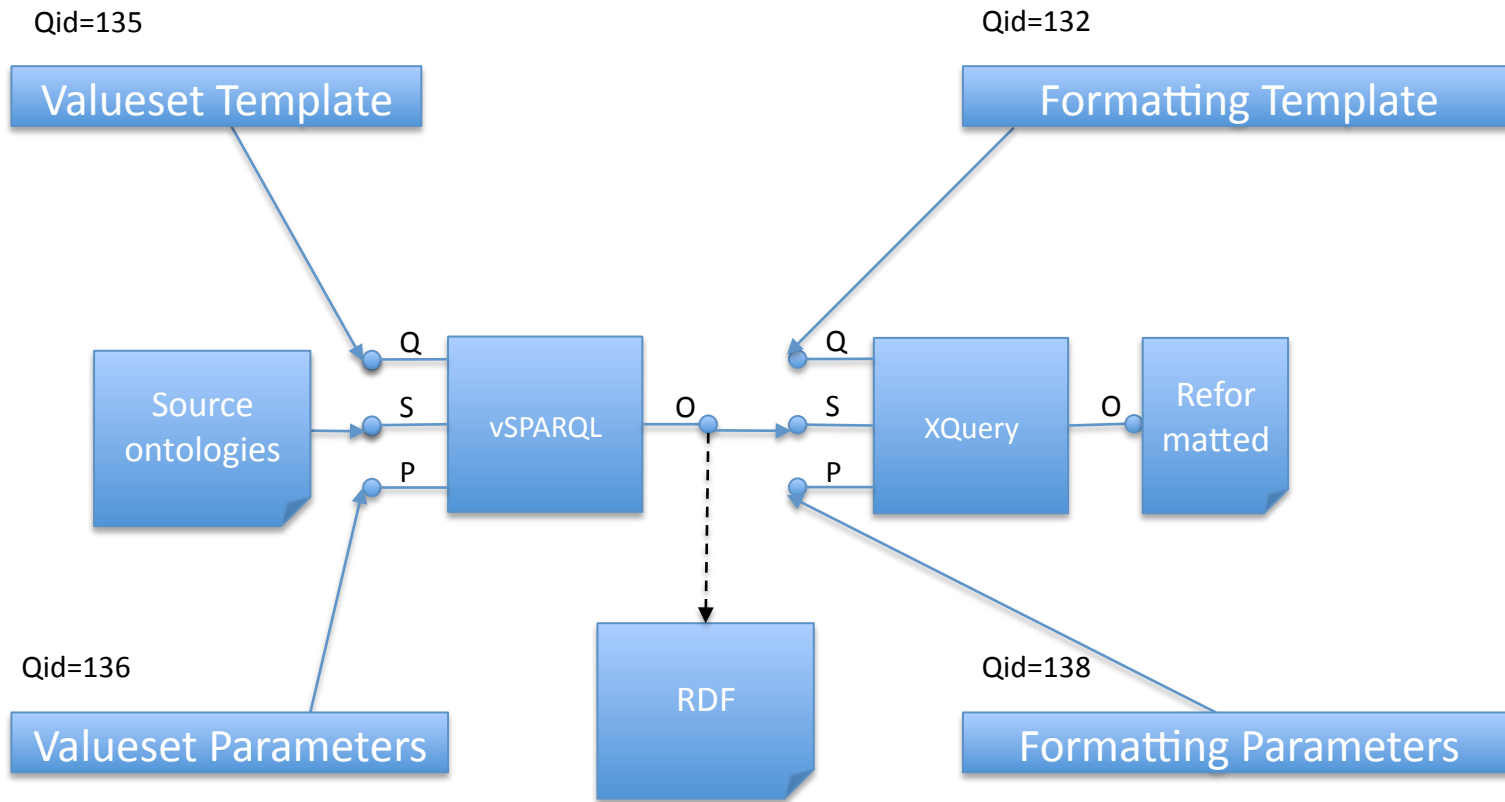


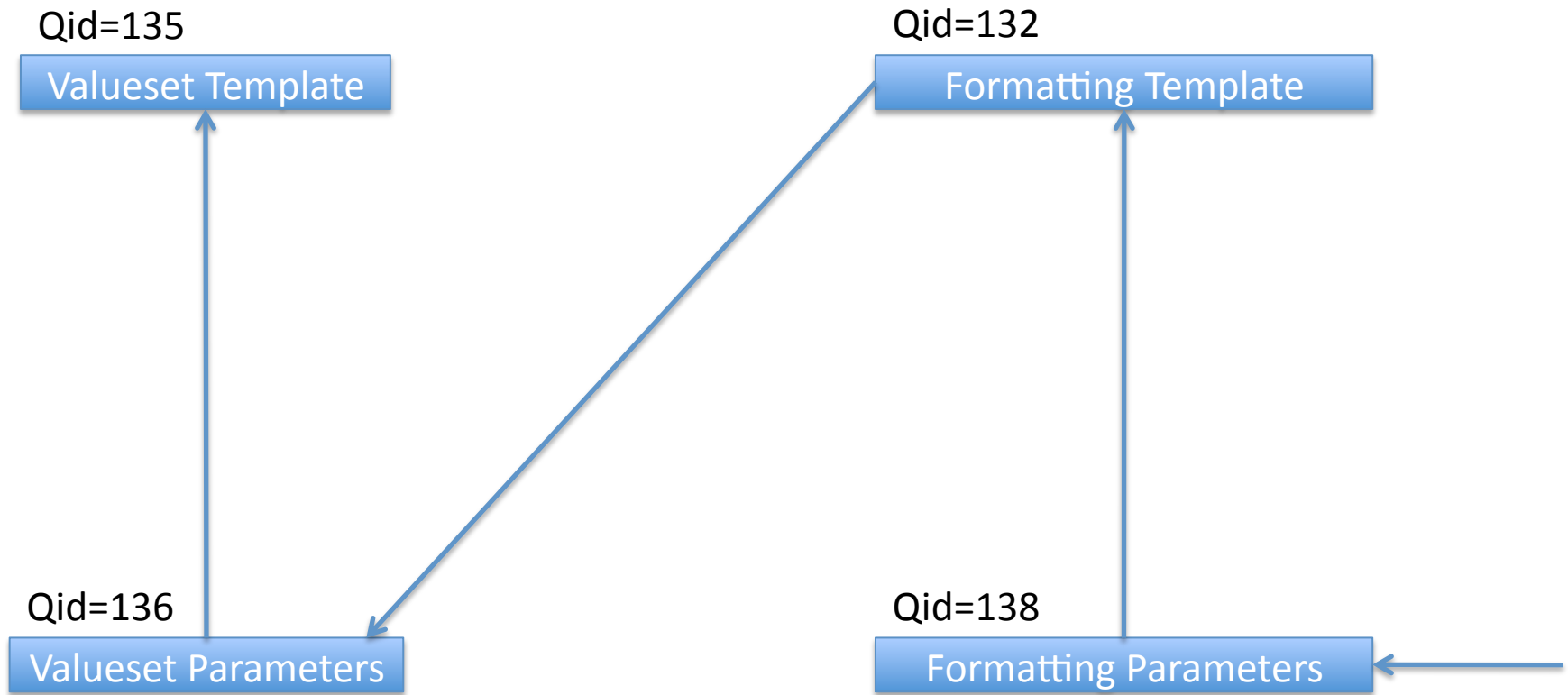
Qid=136

Parameters

<#0> = <http://purl.org/sig/Query?qid=136>  
 <#1> = TelecommunicationScheme

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:OCRe="http://purl.org/net/OCRe">
  <xsd:simpleType OCRe:entityURI="http://purl.org/sig/Query?qid=136"
    name="TelecommunicationScheme">
    <xsd:restriction base="xsd:string">
      <xsd:enumeration OCRe:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400116" value="http"/>
      <xsd:enumeration OCRe:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400119"
        value="x-text-fax"/>
      <xsd:enumeration OCRe:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400117"
        value="mailto"/>
      <xsd:enumeration OCRe:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400118" value="tel"/>
    </xsd:restriction>
  </xsd:simpleType>
</xsd:schema>
```





```

- <xsd:schema>
  <xsd:include schemaLocation="http://xiphoid.biostr.washington.edu:8080/QueryService/QueryResults?qid=138"/>
  - <!--

    <xsd:simpleType name="TelecommunicationScheme" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400005">
      <xsd:restriction base="xsd:string">
        <xsd:enumeration value="Email" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400117"/>
        <xsd:enumeration value="HTTP" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400116"/>
        <xsd:enumeration value="Telephone" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400118"/>
        <xsd:enumeration value="Fax" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400119"/>
      </xsd:restriction>
    </xsd:simpleType>

  -->
+ <xsd:simpleType name="RecruitmentStatus" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400003"></xsd:simpleType>
+ <xsd:complexType name="InstanceIdentifier" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400001"></xsd:complexType>
+ <xsd:complexType name="Address" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400040"></xsd:complexType>
- <xsd:complexType name="TelecommunicationAddress" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400014">
  - <xsd:complexContent>
    - <xsd:extension base="Address" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400040">
      - <xsd:sequence>
        <xsd:element name="TelecommunicationScheme" type="TelecommunicationScheme" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#has_s">
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
+ <xsd:complexType name="PostalAddress" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400014"></xsd:complexType>
+ <xsd:group name="Person" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400076"></xsd:group>
+ <xsd:group name="Organization" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400079"></xsd:group>
+ <xsd:complexType name="PrincipalInvestigator"></xsd:complexType>
+ <xsd:complexType name="IRB" OCRE:entityURI="http://purl.org/net/OCRe/OCRe_ext.owl#OCRE500000"></xsd:complexType>
+ <xsd:complexType name="Sponsor" OCRE:entityURI="http://purl.org/net/OCRe/OCRe_ext.owl#OCRE571000"></xsd:complexType>
+ <xsd:complexType name="Funder" OCRE:entityURI="http://purl.org/net/OCRe/OCRe_ext.owl#OCRE534000"></xsd:complexType>
+ <xsd:complexType name="Funding" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE50034"></xsd:complexType>
+ <xsd:complexType name="PublicQueriesContact"></xsd:complexType>
+ <xsd:complexType name="RecruitmentSite" OCRE:entityURI="http://purl.org/net/OCRe/OCRe_ext.owl#OCRE511747"></xsd:complexType>
+ <xsd:complexType name="Study" OCRE:entityURI="http://purl.org/net/OCRe/research.owl#OCRE400029"></xsd:complexType>
+ <xsd:complexType name="HSDBWeb"></xsd:complexType>
  <xsd:element name="HSDBWeb" type="HSDBWeb"/>
</xsd:schema>

```



http://xiphoid.biostr.washington.edu:8080/QueryManager/QueryManager.html#qid=138



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# Query Manager

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## Title

Saved URL for XSD transformation of OCRE Telecommunication scheme value set

## Description

Saved URL for XSD transformation of OCRE Telecommunication scheme value set. Passes in arguments: <#0> url of query that produces RDF value set, <#1> name of XSD element representing value set.

## Query

http://purl.org/sig/TemplateQuery?qid=132&args=http://purl.org/sig/Query?qid=136,TelecommunicationScheme

Language

[url](#)

[Execute](#)

# Summary

- Value Sets
  - Dynamic generation by vSPARQL queries
  - Value set patterns as parameterized query templates
  - Generates RDF
- Value Set reformatting
  - Xquery to convert RDF to data model standards
  - Reformatting patterns as parameterized query templates
  - Generates XSD
- Implementation
  - Chaining queries together to create complex Internet workflows
  - Query Manager to manage and implement queries and query execution
- End result
  - defined by single REST URL that can be adapted to conform to standards