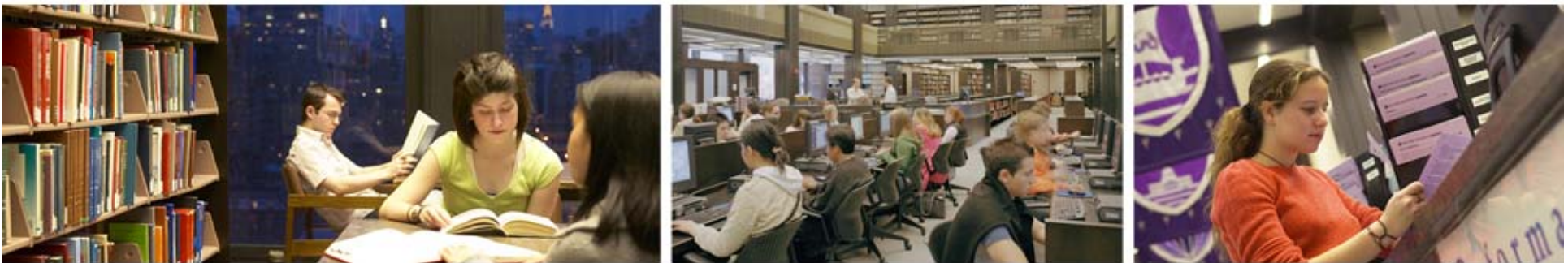


Linked Open Dedup Vectors: An experiment with RDFa in Primo

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- Problem Statement
- How it works
 - The code
 - The output
- Challenges & Next Steps

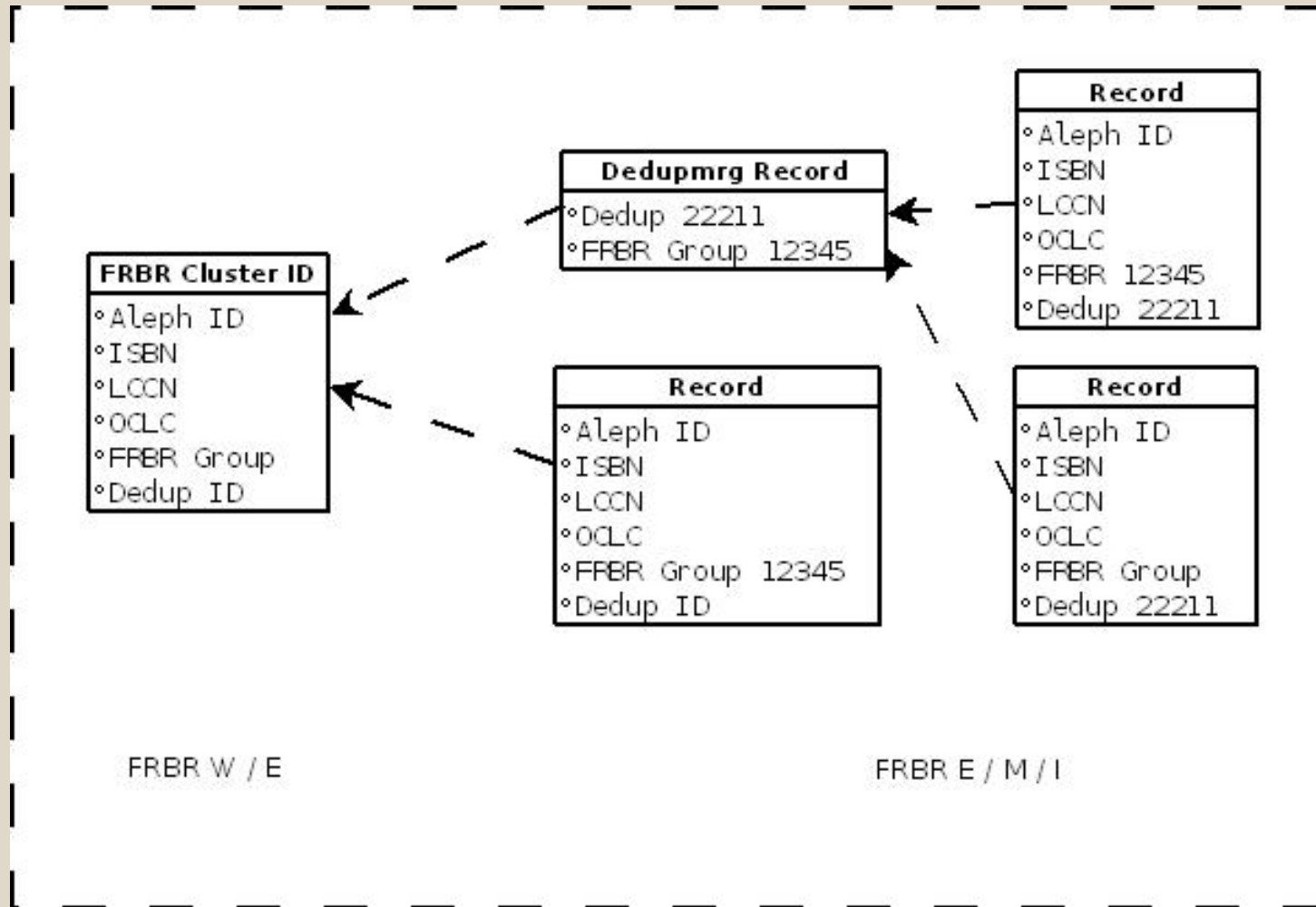


- Leaving off the SEO
- Proof of concept – simplicity
- Value Proposition:
 - FRBR & Dedup Ids
 - Identifier Management & Equivalence
 - Larger network of data sources
 - Integrate selected metadata with other systems



- Understand vendor question of ROI
- Not all investment is “heavy”
- Low barrier to doing linked data
- Problems / fixes tend to be general web design issues:
 - RESTful architecture
 - Persistent IDs
 - “Thoughtful” redirects

Primo “FRBR-ization”





- Manifestations:
 - Singleton Aleph Records
 - DedupMrg Cluster
 - DedupMrg groups have alt manifestations
 - Unfortunately, IDs don't resolve
- FRBR too rigid
- Bibo too flat
- Need Something *in between*

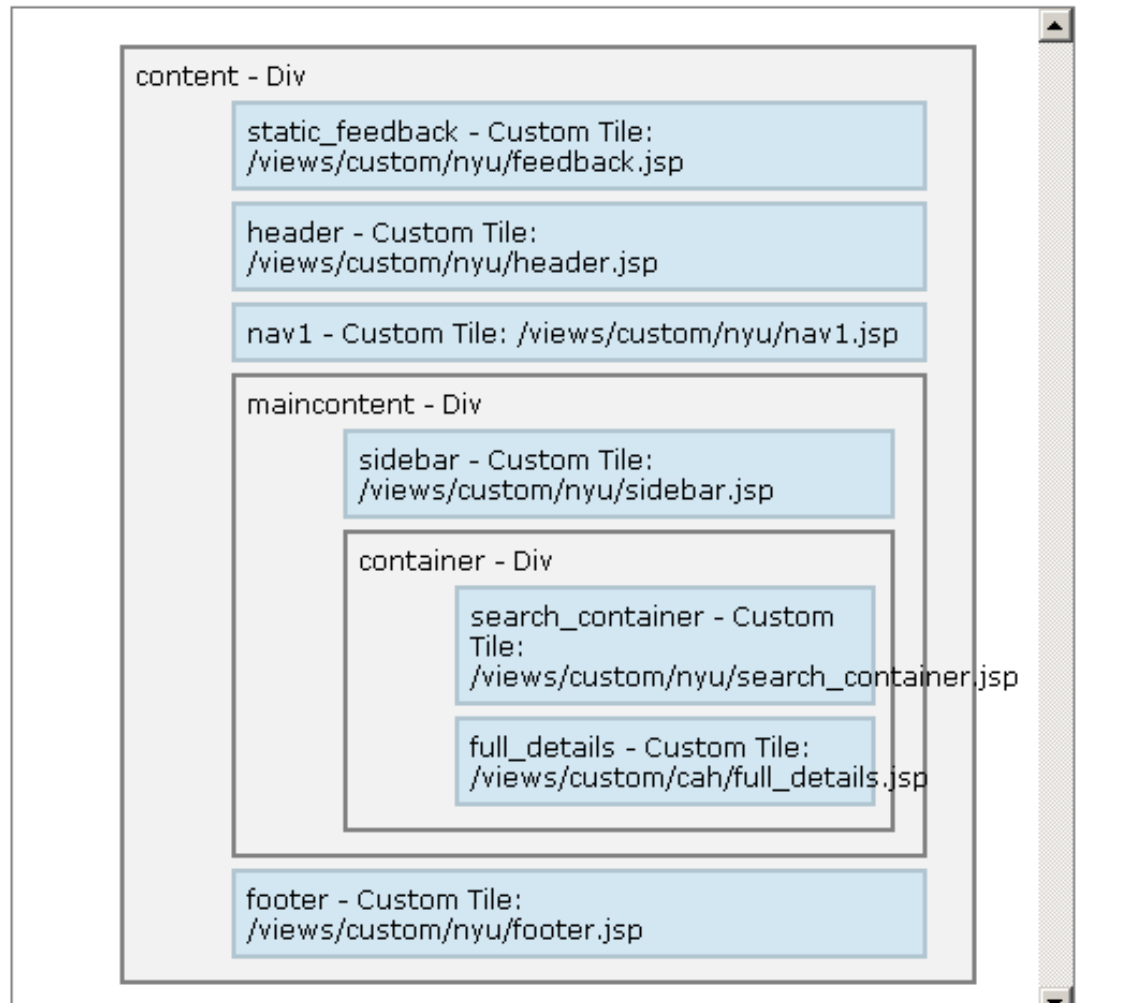


- Custom tileset; edited details.jsp (JSTL)
- Text strings from “display” elements
- Standalone div, property, content tags
- Convert to URIs for rel links?
- JQuery (or more JSP extensions?)
 - Enrich with descriptions of related works / manifestations (TODO)
 - Enrich with external data (TODO)

View Customization



View : NYURDF Page: Full Display



Code Screenshot



```
primodev1.bobst.nyu.edu - PuTTY
-- Inspecting test for RFPs Fun! --
<div xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:dcterms="http://purl.org/dc/terms/" xmlns:rdv="http://rdvocab.info/Elements/" xmlns:rdfrbr="http://rdvocab.info/uri/schema/RFP/entitiesRFP/" xmlns:rdrel="http://rdvocab.info/RFP/relationshipsRFP/" xmlns:bibo="http://purl.org/ontology/bibo/" about="http://primodev1.bobst.nyu.edu/primo_library/libweb/action/diDisplay.do?onCampus=false&docId=${(result,id)}&group=GUEST&vid=NYURDF&institution=NYU&fromLogin=true#book" typeof="rdfrbr:Manifestation">
  <div property="dc:identifier" content="${(result,id)}"></div>
  <div property="dcterms:identifier" content="http://primodev1.bobst.nyu.edu/primo_library/libweb/action/diDisplay.do?onCampus=false&docId=${(result,id)}&group=GUEST&vid=NYURDF&institution=NYU&fromLogin=true#book"></div>
  <div property="dc:title" content="${(result.values['title'])[0]}"></div>
  <div property="dcterms:alternative" content="${(result.values['vertitle'])[0]}"></div>
  <div property="dcterms:extent" content="${(result.values['format'])[0]}"></div>
  <div property="dc:identifier" content="${(result.values['ocloid'])[0]}"></div>
  <div property="dc:identifier" content="${(result.values['lecn'])[0]}"></div>
  <div property="bibo:isbn" content="${(result.values['isbn'])[0]}"></div>
  <div property="dc:publisher" content="${(result.values['publisher'])[0]}"></div>
  <div property="dc:publisher" content="${(result.values['pub'])[0]}"></div>
  <div property="dcterms:created" content="${(result.values['creationdate'])[0]}"></div>
  <div property="dc:subject" content="${(result.values['subject'])[0]}"></div>
  <c:set var="dedupcheck" value="${(result,id)}"></c:set>
  <c:choose>
    <c:when test="!(fn:startsWith(dedupcheck, 'dedupmg'))">
      <div rel="rdrel:equivalenceRelationshipsManifestation">
        <c:forEach items="${(result.values['lds02'])}" var="recid" varStatus="status">
          <!--div property="dc:relation" content="Well, [(recid)]"></div-->
          <div typeof="rdfrbr:Manifestation">
            <div property="dc:identifier" content="${(recid)}"></div>
          </div>
        </c:forEach>
      </div>
    </c:when>
    <c:otherwise>
      <c:forEach items="${(result.values['lds02'])}" var="recid" varStatus="status">

```

Example JSP Code: Making a book



```
<div
  xmlns:dc="purl.org/dc/elements/1.1/"
  xmlns: [many more here]"
  about="http://primodev1.bobst.nyu.edu/primodev1.library/libweb/action/dlDisplay.do?onCampus=false&docId=${result.id}&group=GUEST&vid=NYURDF&institution=NYU&fromLogin=true#book"
  typeof="rdfs:Manifestation">
```

Example JSP Code: Simple Properties



```
<div property="bibo:isbn"  
  content="{result.values['isbn']}[0]}">  
</div>
```

```
<div property="dc:subject"  
  content="{result.values['subject']}[0]}">  
</div>
```

Ex. (Psuedo)-Code: Funkier Business Logic



```
<c:set var=dup val=${results.dedup}>
<c:choose>
  <c:when test="fn:startsWith(dup,dedup)>
    <div rel="equivalentManifestation">
      <c:foreach
        items="${result.values['lds02']}"
        var = "recid">
        <div typeof="rdf:Manifestation">
          <div property="dc:identifier"
            content="${recid}"></div>
        </div>
      </c:forEach>
    </div>
  </c:choose>
```

Distill Screenshot



```
harper.bobst.nyu.edu - PuTTY
7257152 &group=GUEST&vid=NYURDF&institution=NYU&fromLogin=true"
% Total    % Received % Xferd  Average Speed   Time    Time     Current
                                 Dload  Upload    Total   Spent    Left     Speed
  0     0    0 51306    0     0  48155    0  --:--:--  0:00:01  --:--:--  308k
@prefix dc: <http://purl.org/dc/elements/1.1/> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix rdfrbr: <http://rdvocab.info/uri/schema/FRBEntitiesRDA/> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix rdrel: <http://rdvocab.info/RDARelationshipsWEMI/> .
@prefix rdv: <http://rdvocab.info/Elements/> .
@prefix xhv: <http://www.w3.org/1999/xhtml/vocab#> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

<http://harper.bobst.nyu.edu/data/tmp.html> xhv:stylesheet <http://harper.bobst.nyu.edu/css/custom/n
rper.bobst.nyu.edu/locale/en_US/css/Primo_Locale.css> .

<http://primodev1.bobst.nyu.edu/primolibweb/action/dlDisplay.do?onCampus=false&docId=dedupm
=NYURDF&institution=NYU&fromLogin=true#book> a rdfrbr:Manifestation ;
    dc:identifier "1958381"@en_US, "75040254"@en_US, "dedupmrg17257152"@en_US ;
    dc:publisher ""@en_US, "Capricorn"@en_US ;
    dc:title "A history of philosophy in America."@en_US ;
    dcterms:created "1977"@en_US ;
    dcterms:extent "2v. cm."@en_US ;
    dcterms:identifier "http://primodev1.bobst.nyu.edu/primolibweb/action/dlDisplay.do?onC
17257152&group=GUEST&vid=NYURDF&institution=NYU&fromLogin=true#book"@en_US ;
    rdrel:equivalenceRelationshipsManifestation
        [ a rdfrbr:Manifestation ;
          dc:identifier "nyu_aleph000594679"@en_US
        ],
        [ a rdfrbr:Manifestation ;
          dc:identifier "nyu_aleph002013659"@en_US
        ] .
charper@harper:~$
```

Sample N3 Output



```
<#book> a rdfs:Manifestation ;  
  rdfs:equivalentClass rdfs:Manifestation  
  [ a rdfs:Manifestation ; dc:identifier  
    "nyu_aleph000594679"@en_US ],  
  [ a rdfs:Manifestation ; dc:identifier  
    "nyu_aleph002013659"@en_US ] ;  
  rdfs:isWorkOf  
  [ a rdfs:Work ;  
    dc:identifier "21827719"@en_US  
  ].
```



- Request Enhanced DL functionality
- Possible Vocamp at DC2011?
 - Vocabulary for ID Management
 - (More) Lateral FRBR Relationships
- Linking to external data
 - lccn, lcsh, lcnaf, viaf
- More data modeling
- Preparation of raw dumps
- Re-work blank-nodes

Why do this?



- Not for SEO, else I'd use Microdata. 😊
- Primo processing as part of ID Mgt Strategy
 - Related Manifestations / Works =
 - Related *Identifiers!!*
- Other Relationships:
 - EAD to Bib to Collection to Digital Object
 - For certain types of dedups, use LD fields for other identifiers.



Questions?

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