Modeling a Digital Collaboration for America’s National Collections

Digital Public Library of America >>> Beta Sprint

1 September 2011
# America’s National Collections

<table>
<thead>
<tr>
<th>National Archives</th>
<th>Smithsonian Institution</th>
<th>Library of Congress</th>
</tr>
</thead>
<tbody>
<tr>
<td>The National Archives and Records Administration is the nation’s record keeper, safeguarding and preserving the records of the United States Government and ensuring that the American people can discover, use, and learn from this documentary heritage. In addition to the Archives facilities in the Washington, DC area, there are 14 regional Archives facilities and 13 Presidential Libraries around the country. We have over 10 billion records in our holdings. Our holdings occupy over 4 million cubic feet of space and 100 terabytes of electronic storage.</td>
<td>The Smithsonian Institution—the world’s largest museum and research complex — includes 19 museums and galleries and the National Zoological Park. The total number of artifacts, works of art and specimens in the Smithsonian’s collections is estimated at 137 million. The bulk of this material—more than 126 million specimens and artifacts—is part of the National Museum of Natural History. In addition, the Smithsonian Libraries maintains 1.9 million library volumes, including rare books; and 89,000 cubic feet of material are held in archival collections.</td>
<td>Today’s Library of Congress is an unparalleled world resource. The collection of more than 144 million items includes more than 33 million cataloged books and other print materials in 460 languages; more than 63 million manuscripts; the largest rare book collection in North America; and the world's largest collection of legal materials, films, maps, sheet music and sound recordings. By providing these materials online, those who may never come to Washington can gain access to the treasures of the nation’s library.</td>
</tr>
</tbody>
</table>
The importance of participating in the DPLA, and especially of showing the ability of three of the nation's public institutions to collaborate in making their collections accessible drove the project. For the *Beta Sprint*, we selected a small set of records that would show some of the breadth of our collections.

*Abraham Lincoln's Hat*
Smithsonian Institution
Each of our individual collections uniquely contribute to America's National Collections. In the short time of the Beta Sprint, it was not possible to build a fully working implementation of an interface to the disparate collections of the Smithsonian Institution, the Library of Congress, and the National Archives.
For the purpose of the DPLA Beta Sprint, staff from the Smithsonian Institution, the Library of Congress, and the National Archives modeled a faceted search aggregator using the Smithsonian's Enterprise Digital Asset Network (EDAN) as a starting point.

Yankee volunteers marching into Dixie
Library of Congress
Using the Smithsonian's existing EDAN metadata schema for the proof of concept, staff from the Library of Congress and the National Archives selected a small number of records for manual conversion to the schema by Smithsonian staff. These records were then ingested into EDAN for display through the Smithsonian Collections Search Center to show how having content from each of our collections could interact on the same platform.

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**Guidelines for the geoLocation tag**

```
<geoLocation>
  <L1 type=[Continent | Ocean]>
  <L2 type=[Country | Nation | Sea | Gulf | Bay | Sound]>
  <L3 type=[State | Province | Department | Country | District | Republic | Sea | Gulf | Bay]>
  <L4 type=[County | Island]>
  <L5 type=[City | Town]>
  <Other type = [anything: examples = Neighborhood, Street, Desert, Park, etc.>>
  <points label=[text] dates="yyyy-yyy"
    <point>
      <latitude type=[decimal | degrees]>
      <longitude type=[decimal | degrees]>
    </point>
    <point>
      <latitude type=[decimal | degrees]>
      <longitude type=[decimal | degrees]>
    </point>
  </points>
</geoLocation>
```

**Example of a portion of the EDAN XML schema**
As part of this proof of concept, a selection of records, with associated digital assets were drawn from the collections of the Library of Congress and the National Archives. Only a small set from the Library of Congress and National Archives were selected to test data mapping.

The eleven records from NARA represent a sampling of documents from the Online Public Access (OPA) system, including 19th-century photographs, patents, drawings, and correspondence.

Example searches from LC and NARA websites

The ten records from the Library of Congress were drawn from the Performing Arts Encyclopedia, including music manuscripts of composer Johannes Brahms and several pieces of 19th century sheet music.
These joined the 7.44+ million records with 570,000+ images, video and sound files, electronic journals and other resources from the Smithsonian's libraries, archives & museums in a test site for the Beta Sprint.
The following two slides depict a proposed Conceptual and Technical High Level Architecture (HLA) for the faceted search aggregation used in the Beta Sprint.
The World Wide Web

Web & Mobile Applications

User Interface(s)

DPLA
Conceptual High-Level Architecture for a Common Aggregated Search Index and Service Layer, Including an Image Delivery Service

Metadata Delivery Service
Tag Service
Search Index / Metadata Repository
Image Delivery Service (IDS)

Data Transformation

LoC
NARA
SI

Library, Archive and Museum Systems (LAMS) Data Sets
DPLA
Technical High-Level Architecture for a Common Aggregated Search Index and Service Layer, Including an Image Delivery Service – Cloud-hosted –
Screen shots of a proof of concept DPLA faceted search aggregator Library of Congress, National Archives, and Smithsonian data

1. A Digital Public Library of America Search Interface
2. Search results: List view with thumbnails
3. Search Results: Grid view with thumbnails
4. National Archives result, expanded record
5. Library of Congress expanded record
6. National Archives item, detail with image
7. Library of Congress item, detail with image
8. Smithsonian result, expanded record
9. Smithsonian item, detail with image
Search catalogue records with images, video and sound files, electronic journals and other resources from the Smithsonian, Library of Congress and National Archives.

- Only return results with images and media files
- Include visitor tags

Browse Collections

Below is a subset of the most commonly used types in the Smithsonian Collection. You can access the full listing by clicking see all types.

<table>
<thead>
<tr>
<th>Types</th>
<th>Topics</th>
<th>Taxonomy</th>
<th>Place</th>
<th>Name</th>
<th>Culture</th>
<th>Language</th>
<th>Datasource</th>
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<tbody>
<tr>
<td>Books (571450)</td>
<td>Landscapes (189327)</td>
<td>Portraits (181609)</td>
<td>How 189327</td>
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<td>Exhibition catalogs (137216)</td>
<td>Paratypes (137733)</td>
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<td>Taxonomic type specimens (445095)</td>
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<td>Photographs (393727)</td>
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<td></td>
</tr>
</tbody>
</table>
Search Results: List View

Modify Your Search

Search Term

DPLA

Only return results with online media
Include visitor tags

Narrow By

Online Media

Frequency Alphabetical
Images

Type

Frequency Alphabetical
Archival materials
Correspondence
Scores
Manuscripts
Music
Architectural drawings
Patent drawings
Photographs
Pictorial works

Search Results

21 documents - page 1 of 2

DPLA

Caire. Interieur de l'eglise cophte Ste Serge [graphic] / Bonfils

PHOTOGRAPHER:
Maison Bonfils (Beirut, Lebanon)

PHYSICAL DESCRIPTION:
1 photographic print : : albumen : :

TYPE:
Graphics
Albumen prints

PLACE:
Egypt
Cairo

DATE:
1867
1899
"[between 1867 and 1899]"
1860-1900

TOPIC:
Copts--Structures
Iconostases
Churches

NOTES:
DPLA test records
Title from item
No. 1129

SUMMARY:
Interior of St. Sergius Coptic Church with panel of icons over lattice iconostasis

DATA SOURCE:
Library of Congress

Thema mit Variationen / von Johs. Brahms

AUTHOR:
Brahms, Johannes 1833-1897

PHYSICAL DESCRIPTION:
[7] p. of ms. music, bound ; 24 x 33 cm
Search Results: Grid View
Civil War Veterans, Fourth of July or Decoration Day, Ortonville, Minnesota ..., ca. 1880

CREATOR: Farrington, H. L

PHYSICAL DESCRIPTION: 1 photonegative

PLACE: Ortonville (Minn.)

DATE: ca 1880
     1880-1890

TYPE: Two-dimensional graphics

TOPIC: Fourth of July
     Veterans

NOTES: Original negative made into a positive for viewing purposes
     Forms part of: H. L. Farrington Collection, ca. 1900-ca. 1960
     DPLA test records

SEE MORE ITEMS IN: H. L. Farrington Collection, ca. 1900-ca. 1960

DATA SOURCE: National Archives and Records Administration

Walt Whitman, ca. 1860-1865

CREATOR: War Department Office of the Chief Signal Officer

PHYSICAL DESCRIPTION: 1 photonegative

TYPE: Two-dimensional graphics

DATE: ca 1860-1865

DATA SOURCE: National Archives and Records Administration

**AUTHOR:** Brahms, Johannes 1833-1897
Hanslick, Eduard 1825-1904

**SUBJECT:** Brahms, Johannes 1833-1897
Hanslick, Eduard 1825-1904

**PHYSICAL DESCRIPTION:**
1 item

**TYPE:** Correspondence

**PLACE:** Germany

**DATE:** 1894

**TOPIC:** Composers

**NOTES:**
Holograph, signed
An autograph letter of Johannes Brahms, written to Eduard Hanslick, music critic, aesthetician, musicologist, and Austrian civil servant
The material described in this catalog record is located in the Gertrude Clarke Whittall Foundation Collection in the Library of Congress

**DATA SOURCE:** Library of Congress
Richard Henry Lee (1732-1794), (painting)

PAINTER: Peale, Charles Willson 1741-1827
MEDIUM: oil: canvas Oil on canvas
TYPE: Paintings
DATE: 1784
CONTROL NUMBER: IAP 46020191
DATA SOURCE: Art Inventories

Richard Henry Lee (1732-1794), (painting)

PAINTER: Peale, Charles Willson 1741-1827
SUBJECT: Lee, Richard Henry
MEDIUM: oil: canvas Oil on canvas
TYPE: Paintings-Replica
Paintings
ADDRESS: 8th & F Streets, N.W Washington District of Columbia 20560
DATE: 1795
1805
Ca. 1795/1805
TOPIC: Portrait male—Bust
Portrait male—Profile
Occupation—Political—Statesman
CONTROL NUMBER: IAP 08660213
NOTES: Owner, 1975
**Richard Henry Lee (1732-1794), (painting)**

**Catalogued Data:**

<table>
<thead>
<tr>
<th>FIELD</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE</td>
<td>Richard Henry Lee (1732-1794), (painting)</td>
</tr>
<tr>
<td>PAINTER</td>
<td>Peale, Charles Willson 1741-1827</td>
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<tr>
<td>SUBJECT</td>
<td>Lee, Richard Henry</td>
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<tr>
<td>MEDIUM</td>
<td>oil: canvas Oil on canvas</td>
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<td>TYPE</td>
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<td>Occupation—Political—Statesman</td>
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<td>CONTROL NUMBER</td>
<td>IAP 08660213</td>
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<tr>
<td>Owner, 1975</td>
<td>Antiques (Nov. 1974)</td>
</tr>
<tr>
<td>NOTES</td>
<td>Details of Richard Henry Lee</td>
</tr>
</tbody>
</table>

Smithsonian Item Detail record
The demonstration site for the faceted search aggregator is available at:

http://collectionstest.si.edu/search-dpla/

(login: dpla/review)

The demonstration site will be available through 1 November 2011
Image and site credits:  [Proof of Union Service](NARA) ~ [Yankee volunteers marching into Dixie](LC) ~ [Lincoln’s Hat](SI) ~ [Smithsonian Collections Search](SI) ~ [OPA – Online Public Access system](NARA) ~ [Library of Congress Digital Collections](LC)