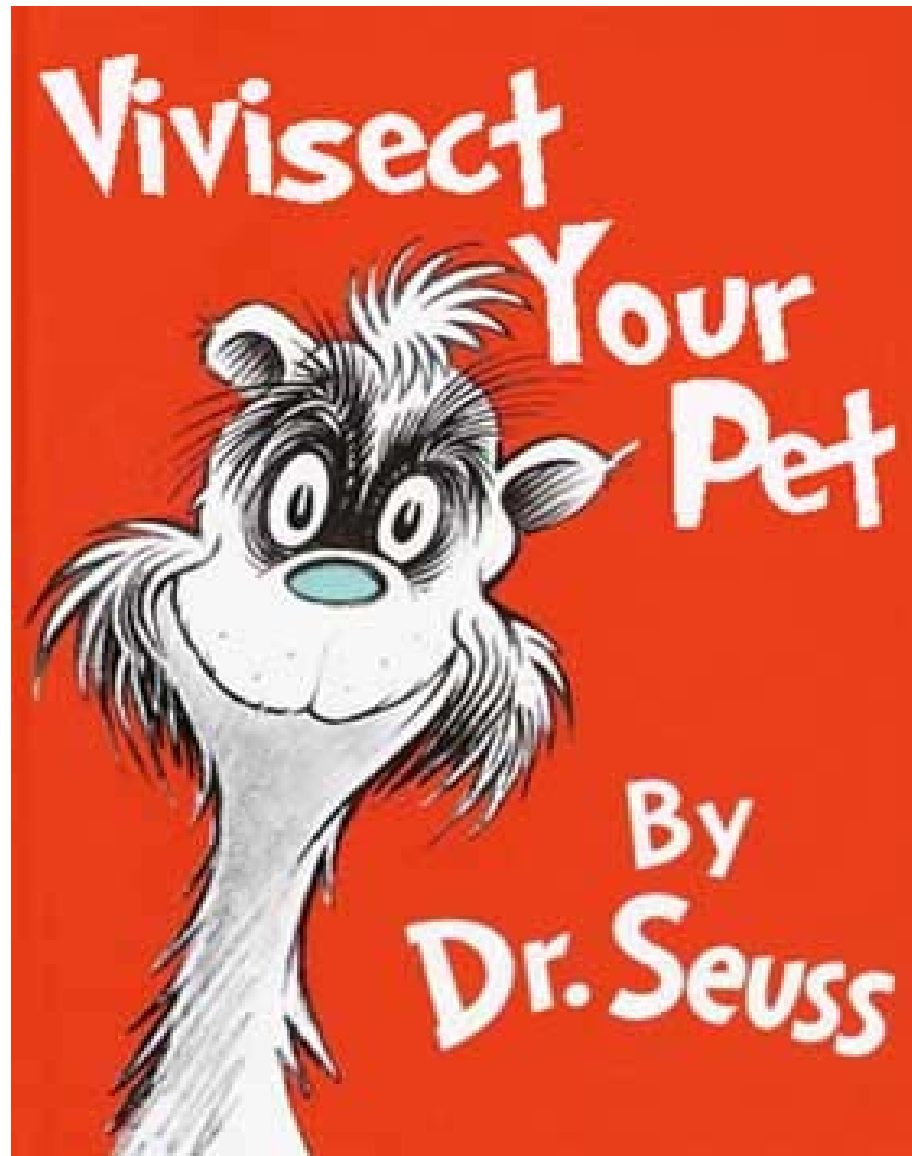


CDL's Interface Customization Tools

Enabling the Ability to Skin and Slice Bodies of Content



Steve Toub, Web Design Manager, California Digital Library
DLF Spring Forum, April 2005, San Diego






The Old Days: CDL Controls UI

- Producers digitized images, texts, archival finding aids; worked w/ CDL to ingest
- They created lovely project web sites (CalHeritage, etc.) that linked into the OAC access system
- CDL stole their primary access path; their institutional investment, their labors of love were presented to the world via CDL interface

☐ Expand Search [\[more info\]](#)

Exact Phrase Search (not Keyword)

Contents of the *Online Archive of California* Collection

-  [Berkeley Art Museum/Pacific Film Archive Finding Aids](#)
-  [California Historical Society Finding Aids](#)
-  [California Institute of Technology Finding Aids](#)
-  [California State Archives Finding Aids](#)
-  [California State Library Finding Aids](#)
-  [California State Parks Finding Aids](#)
-  [California State Railroad Museum Library Finding Aids](#)
-  [California State University, Channel Islands Finding Aids](#)
-  [California State University, Chico Finding Aids](#)
-  [California State University, Dominguez Hills Finding Aids](#)
-  [California State University, Fresno Finding Aids](#)
-  [Center for Mennonite Brethren Studies Finding Aids](#)
-  [Claremont Colleges - Libraries Finding Aids](#)
-  [Fowler Museum of Cultural History \(UCLA\) Finding Aids](#)
-  [Fresno City and County Historical Society Finding Aids](#)
-  [Gay, Lesbian, Bisexual, Transgender Historical Society Finding Aids](#)
-  [Getty Research Institute Finding Aids](#)
-  [Graduate Theological Union Finding Aids](#)
-  [Grunwald Center for the Graphic Arts \(UCLA\) Finding Aids](#)
-  [Historical Sites Society of Arcata Finding Aids](#)
-  [Holocaust Center of Northern California Finding Aids](#)
-  [Hoover Institution Finding Aids](#)

Today: Ability to Customize UI

- Producers digitize stuff; work with CDL to ingest
- Using CDL's templates and documentation, they can tweak a few web files on their own web server and provide their patrons with an integrated, branded experience that they control
- CDL provides tools that help our partner institutions best serve their patrons

Who Benefits?

- CDL does
 - Improve ease of management
 - Decreases deployment time for new skins
- Benefit to our 100+ partners is a very convenient by-product



hibi autumn



Displaying 1 - 2 of 2 images

You may have misspelled something.

Did you mean: **Tip** Search results are sorted by relevance[Autumn Leaves, Melons and Vegetables 96.601.30](#)from [Hisako Hibi Collection](#)Subjects | [Concentration Camps, Topaz](#) | [still life](#) | [melon](#) | [leaves](#) | [vegetables](#)[Topaz High Under Construction 96.601.18](#)from [Hisako Hibi Collection](#)Subjects | [Concentration Camps, Topaz](#) | [barracks](#) | [mountain](#) | [building](#) | [truck](#) | [construction](#) | [Topaz High School](#)



Your search for **hibi autumn** in *Images* found 2 items

Displaying 1 - 2 of 2 images

1.



Title: Autumn Leaves, Melons and Vegetables 96.601.30

Creator: Hibi, Hisako

Date Created: 9/1/1944

Subjects: | [Concentration Camps, Topaz](#) | [still life](#) | [melon](#) | [leaves](#) | [vegetables](#)

[View details...](#)

2.



Title: Topaz High Under Construction 96.601.18

Creator: Hibi, Hisako

Date Created: Autumn 1943

Subjects: | [Concentration Camps, Topaz](#) | [barracks](#) | [mountain](#) | [building](#) | [truck](#) | [construction](#) | [Topaz High School](#)

[View details...](#)

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
- <SearchResults cvs="/ark/code/dor" data="/ark/data" start="1" end="2" pageSize="20" hits="2">
```

```
  <page n="1"/>
```

```
  - <Query swish="oaidc:dc=(hibi autumn) type=(image)">
```

```
    <word index="search">hibi autumn</word>
```

```
    <word index="type">image</word>
```

```
  - <term n="1" word="hibi">
```

```
    <suggest>hi bi</suggest>
```

```
    <suggest>hi-bi</suggest>
```

```
    <suggest>Bibi</suggest>
```

```
    <suggest>Hobie</suggest>
```

```
    <suggest>Hubie</suggest>
```

```
  </term>
```

```
  <term n="2" word="autumn"/>
```

```
</Query>
```

```
- <qdc>
```

```
  <title>Autumn Leaves, Melons and Vegetables 96.601.30</title>
```

```
  <creator>Hibi, Hisako</creator>
```

```
  - <subject>
```

```
    Concentration Camps, Topaz | still life | melon | leaves | vegetables
```

```
  </subject>
```

```
  <subject.series>Hisako Hibi Collection</subject.series>
```

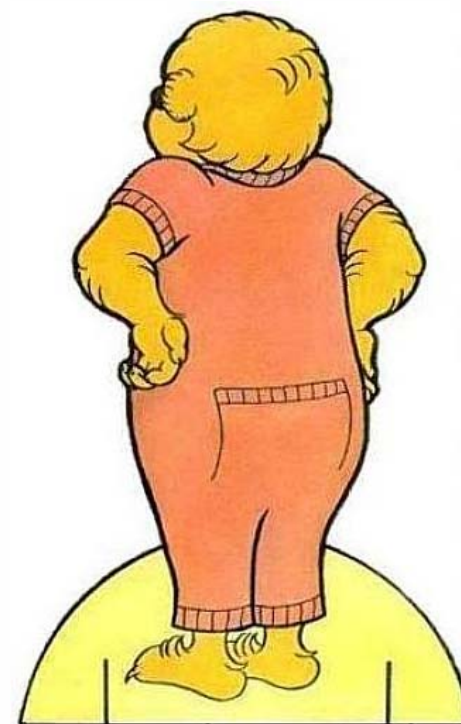
```
  - <description>
```

```
    Description Unframed stretched canvas. Image of still life with melons and turnips and leaves. The colors are red, and green and blue.
```

```
  </description>
```

```
  - <description>
```

```
    Historical Note Hisako Hibi was fond of painting the vegetables and flowers grown in Topaz concentration camp. This still life work incorporates autumn leaves, turnips, and other vegetables. According to the inscription on the back the leaves were given to Hibi by a friend. These kind of leaves were most likely not available in Topaz itself and was possibly sent to Hibi by a friend outside of camp. The arrangement of vegetables and leaves seem to be on top of a grey table; however,
```





Back



Forward



Reload



Home



Stop



New Tab

<http://ark.cdlib.org/?mode=moac-content;>

MOAC

California museums working with libraries and archives
to increase and enhance access to cultural collections

MOAC <http://www.bampfa.berkeley.edu/moac/>

Displaying 1 - 1 of 1 images or collections



Autumn Leaves, Melons and Vegetables 96.601.30

Hibi, Hisako

9/1/1944

painting oil on canvas

Description Unframed stretched canvas. Image of still life with melons and turnips and leaves. The colors are red, and green and blue. Historical Note Hisako Hibi was fond of painting the vegetables and flowers grown in Topaz concentration camp. This still life work incorporates autumn leaves, turnips, and other vegetables. According to the inscription on the back the leaves were given to Hibi by a friend. These kind of leaves were most likely not available in Topaz itself and was possibly sent to Hibi by a friend outside of camp. The arrangement of vegetables and leaves seem to be on top of a grey table; however, the lack of depth makes the table edge ambiguous. The vegetables, thus, seem to be almost sliding off the picture plane. This is possibly due to the heavy influence that Cezanne had on Hibi at this point in her career. Cezanne's still life paintings intentionally depicted the perspective slightly askew, so that objects often appeared as though about to fall off the surface. Hibi's painting seems to be an experimentation with the kind of still life works created by Cezanne.

Subject: | [Concentration Camps, Topaz](#) | [still life](#) | [melon](#) | [leaves](#) | [vegetables](#)

[View Entire Collection In OAC: Hisako Hibi Collection](#)



CALIFORNIA HERITAGE COLLECTION

THE BANCROFT LIBRARY • UNIVERSITY OF CALIFORNIA, BERKELEY

Contents of the California Heritage Collection

[Autumn Leaves, Melons and Vegetables 96.601.30](#)

[Topaz High Under Construction 96.601.18](#)

[Feedback](#) | [Bancroft Library](#) | [UC Berkeley Library](#) | [Home](#)

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Server <http://sunsite.berkeley.edu/> maintained by manager@sunsite.berkeley.edu
The Library, University of California, Berkeley USA 94720-6000



Counting California

[\[Return to search page \]](#)

Your search for "**hibi autumn**" found 2 tables, sorted by relevance. [Change to the brief display.](#)

1. [Autumn Leaves, Melons and Vegetables 96.601.30](#) – Hibi, Hisako

Publication: Table Number: <http://jarda.cdlib.org/>

Publication Date: 9/1/1944

Concepts:

2. [Topaz High Under Construction 96.601.18](#) – Hibi, Hisako

Publication: Table Number: <http://jarda.cdlib.org/>

Publication Date: Autumn 1943

Concepts:

[Comments? Questions?](#)

Counting California tables are published by [CountingCalifornia](#), the [California Digital Library](#)

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The CDL METS Repository

- Digital objects ingested by CDL are
 - transformed into METS
 - assigned ARKs
- Images (>184,000)
- EAD encoded archival & museum finding aids (>8,200)
- DDI-encoded data sets (>8,000)
- TEI encoded texts (>4,200)

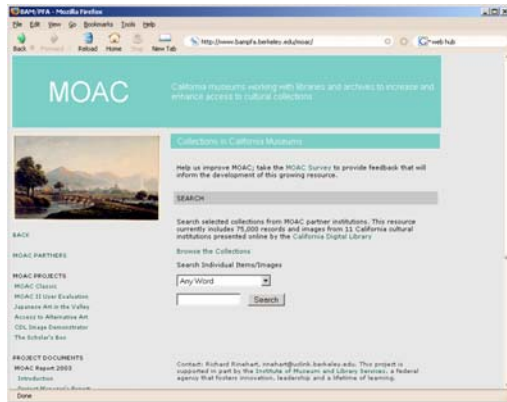
Search & Display: Today

- Descriptive metadata only
 - dmdSec transformed to qDC
 - search results pages, incl. (fake) browse
 - (fake) single image page
- Technology
 - SWISH-E
 - Query syntax is proprietary (but published)
 - XSLT that uses an HTML file for header/footer and other major sections of the page

How it works today

1. Search form on partner's web site queries the CDL METS Repository
2. XML-encoded metadata is delivered from CDL server
3. An xslt= parameter in the query URL dictates which XSLT files to apply
4. XSLT files on their server customize our XML stream for display to their users

1. Search form on their web site queries the CDL METS Repository, providing search and display instructions

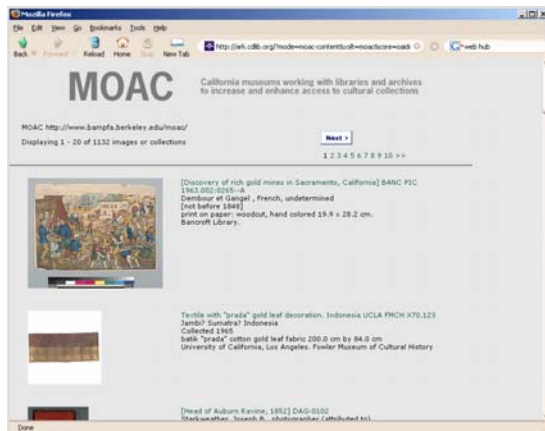


[http://ark.cdlib.org/?
relation=moac;
type=image;
search=gold;
xslt=moac-results](http://ark.cdlib.org/?relation=moac;type=image;search=gold;xslt=moac-results)

2. XML-encoded metadata is delivered from our server



4. XSLT files on your server transform our XML stream for display to your user



3. An xslt= parameter in the query URL dictates which XSLT files to apply

xslt= alias	URL of XSLT file
jarda-image-results	http://jarda.cdlib.org/xslt/image-results.xslt
moac-results	http://www.bampfa.berkeley.edu/moac/xslt/results.xslt
moac-single	http://www.bampfa.berkeley.edu/moac/xslt/single.xslt

How Hard Is It?

- Only the most basic HTML knowledge
 - Easily insert your HTML header/footer to an existing HTML file that we provide
- Working knowledge of XSLT
 - Write your own XSLT and customize to your heart's content
- Somewhere in between
 - Use our templates to show/hide elements of your choice, change labels, etc.

Template Files We Provide

- XSLT
 - Controls the detailed logic behind the page, including which Dublin Core fields to display and what markup to use with them.
- HTML
 - The XSLT file defines a corresponding HTML file that controls the header, footer, and whether or not to display a query box or suggestions for alternative spellings.
- CSS
 - The HTML file may optionally link to an external CSS file, assuming that they will want to control font, colors, etc. globally.

Insert header here.
Edit or comment out the padding, border, margin of .header in the CSS file.

New search:

Your search for **hibi autumn** in *Images* found 2 items

Displaying 1 - 2 of 2 records

You may have misspelled something.

Did you mean:

1.



Title: Autumn Leaves, Melons and Vegetables 96.601.30

Creator: Hibi, Hisako

Date Created: 9/1/1944

Owning Institution: Japanese American National Museum (Los Angeles, Calif.)

Subjects: | Concentration Camps, Topaz | still life | melon | leaves | vegetables

[View details...](#)

2.



Title: Topaz High Under Construction 96.601.18

Creator: Hibi, Hisako

Date Created: Autumn 1943

Owning Institution: Japanese American National Museum (Los Angeles, Calif.)

Subjects: | Concentration Camps, Topaz | barracks | mountain | building | truck | construction | Topaz High School

[View details...](#)

To Modify CDL's Templates...

- 1) Change instructions in templates so they search within your slice
- 2) Edit files to display your skin (header, etc.)
- 3) Make other customizations to your liking: suppress or show metadata, etc.

Terms and Conditions of Use

- **Integrity of metadata:** Don't alter the intended meaning of the metadata of an object; display rights metadata
- **Copyright and conditions of use:** Include
- **Attribution:** "_____ is a service of the [UC Libraries](#), powered by the [CDL](#)."
- **This service may evolve:** But is production-level service today.
- **Technical support:** CDL provide support for server and the templates; no XSLT consulting

Who uses it?



MOAC

California museums working with libraries and archives
to increase and enhance access to cultural collections



[Digital Library Building Blocks](#) > [The CDL METS Repository](#) > [Interface Customization Tools](#)

Interface Customization Tools: Appendix A: Quick Start Checklist

1. Familiarize yourself with the terms and conditions of use and the Interface Customization Tools documentation.
2. Download the CDL-supplied [template files](#), and place them on a public-accessible web server that you maintain. Identify the various kinds of XSLT and HTML files that you will need for your dynamically-generated search result pages in your portal. See [Determining What Kinds of XSLT and HTML Files You Will Need](#) for more information.
3. Submit your request to CDL for an account to utilize the Interface Customization Tools. See [Request an Account](#) for more information.
4. Create your static HTML pages for your Website, such as your home page and subpages.
5. Create a test page or group of HTML pages with a search form (or multiple forms) for querying the CDL repository. The search forms should utilize the test CGI maintained by the CDL. See [Building Queries to Retrieve Your Objects](#) for more information.
6. Create dynamically-generated test search result pages (i.e., to display a search or browse result for multiple items, or to display a single item) using the raw XML delivered back from the search form. These pages are constructed using an XSLT file in conjunction with an HTML file (and an optional CSS file), per [Customizing the Display of Your Objects](#).
7. When your testing is complete, copy the changes from the test files to the production files, or use the test files to completely overwrite the production files. See [Customizing the Display of Your Objects](#) for more information.

Questions? Comments? Request support at any time by contacting the [CDL](#).

Document owner: [Steve Toub](#)

Last reviewed: April 16, 2004

URL: <http://www.cdlib.org/inside/diglib/repository/customize/checklist.html>

- Introduction
 - Description and Scope of Use
 - Staffing and Technical Requirements
 - Terms and Conditions of Use
 - Getting Started
- Building Queries to Retrieve Your Objects
 - Building a Search Form For Your Customized Interface
 - Querying the METS Repository
 - The Query Syntax
 - Search Index Parameters
 - Search Functionality Parameters
 - Search Result Page Functionality Parameters
 - <SearchResults> XML
 - Development and Production Versions of the CGI
 - Sample Query Form
- Customizing the Display of Your Objects
 - Viewing Search Results as Raw XML
 - How To Enable Customization: The xslt = Alias
 - The Components: XSLT, HTML, and CSS Files
 - Test and Production Versions of the XSLT and HTML Files
 - Determining What Kinds of XSLT and HTML Files You Will Need
 - Editing the XSLT Files
 - Editing the HTML Templates
 - Editing the CSS Files
- Ready to Begin? Request an Account
 1. Enter Your Contact Information
 2. Specify Your xslt = Alias
 3. Agree to the Terms and Conditions of Use

Search & Display: Later this year

- Results pages
 - dmdSec (and rights) transformed into qDC
 - better browse functionality
- Content file views
 - Images (w/out cheating), entire TEI & EAD
- Technology
 - XTF (<http://xtf.sourceforge.net/>)
 - Query syntax and search results XML differs from the old system
 - Must emulate (or migrate) so existing skins don't break
 - XSLT calls a branding configuration file

Branding configuration file

```
<?xml version="1.0"?>  
<brand owner="emailaddressOfPersonWhoOwnsValuesInThisFile">  
  
<links>One or more <link> tags, pointing to CSS URI</links>  
  
<header>Well-formed XHTML that includes the masthead and  
navigation bar for this branded user interface</header>  
  
<footer>Well-formed XHTML that includes the footer for this  
branded user interface</footer>  
  
</brand>
```

Branding Configuration File

- The contents of each element must be valid/wellformed portions of the relevant XHTML (e.g., `<link /.>`, `<div>...</div>`)
 - No CDATA allowed
 - Use numeric character references (` `) rather than character entity references (` `)
- If there are any table tags (e.g., `<tr>`, `<td>`) the entire `<table>` should be both opened and closed within the value of the configuration file

How to allow customization of the page body?

- Some options:
 - We predefine options from which customers can choose
 - They spec; we develop
 - Allow them to use XSLT in brand configuration file
 - Allow customers to roll their own XSLT (as they enjoy now)

How to allow customization of the page body?

- Tension between customer freedom to innovate (rolling their own XSLT) and our need to manage a production service
- Stabilizing on our implementation (which our customers want) impedes our ability to rapidly innovate
- Eating our own dog food this summer will inform implementation strategy

Lessons learned from v1.0

- Too many non-modular files to manage was impetus for development of the branding configuration file
- Chicken and egg between releasing early and generating interest vs. providing full functionality
- Customer support, marketing, needs assessment can't be afterthoughts
- "Branding service" shouldn't be platform-specific

Other platforms at CDL

- CDL “Common Framework”
 - Repository services with three different interfaces
 - Web services API via SOAP
 - Java client API
 - Web UI: we’re now using Struts/JSP tags
- Federated search
 - Will build our own UI on top of Ex Libris MetaLib X-Server



Luna Insight? OPAC? Later

Are our XSLT files useful to others?

- XSLT for object views could be applied to other collections, systems
- XSLT for search results (and highlighting of hits in object views) not re-usable until there is a community-wide spec for searching digital collections
 - SRU/SRW/CQL
 - XQuery/XQuery Full-Text
 - CGM (Dienst, Agora, DLXS)
 - A9.com's OpenSearch RSS

Questions?

<http://www.cdlib.org/inside/diglib/repository/customize/>

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