

UVa Library Repository Interface and Tool Evaluation

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DLF Forum
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Repository Service Assumptions

- The Repository would be a curated repository.
- The UVa community are the primary users of the Repository.
- The Repository would have a public interface to support discovery and use of the collections by the UVa community, accompanied by tools for their use in instruction and research.
- All of the UVa Library's digital collections, whether local or remotely hosted, created at UVa or licensed from elsewhere, would eventually be managed and delivered by the Repository.
- The Repository would be part of the solution to create a single point-of-access to the print and digital collections together.

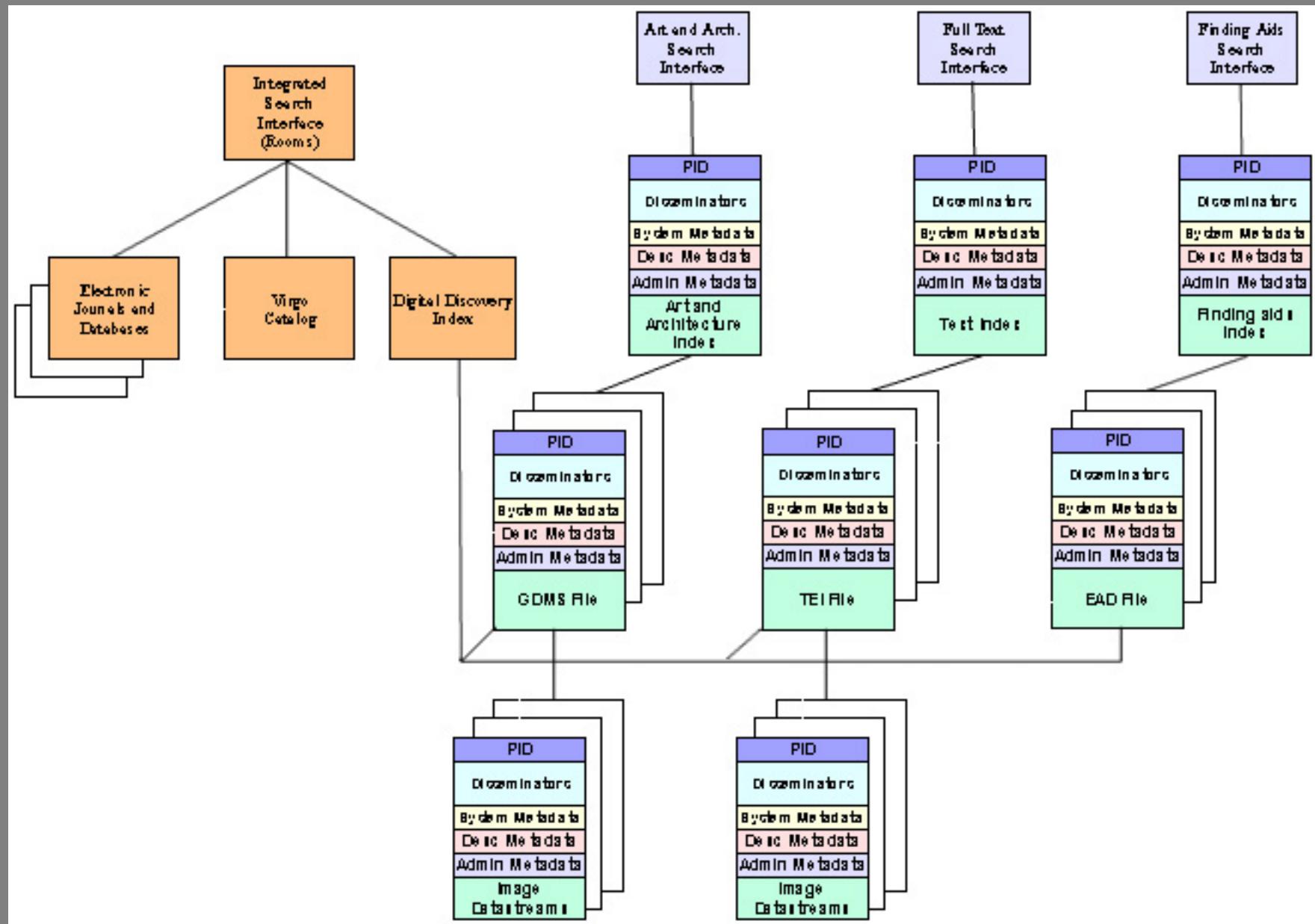
Collecting Functional Requirements

- Repository developers met with subject librarians and user service librarians to understand how users expect to find digital resources and use them.
- Two working groups discussed digital image and electronic text functional delivery requirements.
- Existing EAD delivery was analyzed by Special Collections staff, and the requirements updated.
- Detailed analysis of the formats and configuration of media files and available metadata for the legacy object collections.

Requirements Documentation

- Functional specifications for the searches and for the varying results and delivery screens were documented in a detailed activity-centered screen-by-screen description.
- Combination of the functional requirements and analysis of media files and metadata were used to document *content models*, a core Fedora concept describing classes of objects and the *behaviors* (delivery functionality) and *mechanisms* (delivery programs) that they are bound to.
- Great care was needed to confirm that the desired functionality matched behaviors in the content models, and that the correct number and types of media file and metadata datastreams were present to support those behaviors.

UVa Digital Library Interface Architecture



Repository Development - Phase 1

- In summer 2003 a "Phase 1" prototype was developed to test both the functionality developed through the specifications process and the interface design.
- The prototype included:
 - Electronic texts from the Library's Special Collections:
 - Two editions of the Lewis and Clark Journals.
 - Illustrated volumes on Westward Exploration.
 - Over 100 volumes from the Early American Fiction project.
 - Art, Architecture, and Cultural Documentation Images:
 - Regional Virginia architecture.
 - Architecture and landscape architecture in Barcelona.
 - National Museum of American Art Catlin American Indian paintings.
 - A selection of ethnographic and archeological objects from UCLA's Fowler Museum.

Repository Development - Phase 1

- Over 130 Phase 1 comments from Library staff were distilled into 23 recommendations in four categories:
 - User Interface
 - General User Functionality
 - Image-specific Functionality
 - Text-Specific Functionality
- Heuristic usability testing was undertaken with a small group of Library staff.
- The recommendations were ranked by a number of Councils, Committees, and Working Groups to develop a prioritized list.

Ranked Phase 1 Test Results

1. A "critical mass" of content is required.
2. The ability to limit searching to a single collection (by format or virtual collection).
3. The ability to view a list of virtual collections, and browse all objects within those collections.
4. Improved on-the-fly image viewing and manipulation.
5. A cross-collection search across all formats.
6. A choice of simple or advanced search available across or within the format-based collections.

Ranked Phase 1 Test Results

7. Consistent look & feel and navigation.
8. Consistent functionality for images, whether in the image collections or page images.
9. A "Shopping Cart" to collect items into personal portfolios.
10. Multiple formatting options for viewing search results sets, and multiple sorting options.
11. Illustrated page images should be additionally available as part of the general image collections.
... and six more items with 2 or fewer comments.

Changes for Phase 2 - Interface

- A new graphic design and navigation was systematically applied.
 - Web Standards implementation with CSS.

Phase 1 Main Image Collection and Search Page



Address <http://hatbox.lib.virginia.edu/servlet/SaxonServlet?source=http://www.lib.virginia.edu/digital/collections/template.html&style=http://www.lib.virginia.edu/digital/collections/jc> Go Links >>

Digital Collections

UNIVERSITY OF VIRGINIA LIBRARY



Repository Demo Images Texts Feedback Digital Initiatives Questions? VIRGO

Image Collections

The UVA Library integrated image collection is UVA's first repository that contains digital images and information about them from Library collections, licensed resources, and faculty projects where the resources are available through a single search for use by the UVA community for teaching and research. This system represents the first phase of an ongoing effort and additional collections will be added on a regular basis.

Search All Image Collections

all terms
 any term

Present results as:

Titles only
 Images only

SEARCH

[Advanced Search](#) [Search Tips](#)

Specific Image Collections

[The Architecture of Jefferson Country](#)

UVa survey of the architecture of the county of Albemarle and the city of Charlottesville.

[The Barcelona Collection](#)

University of Virginia image collection for sites and buildings in Barcelona, Spain.

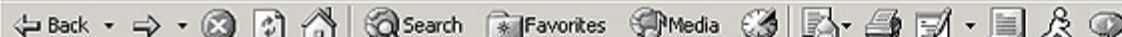
[The UCLA Fowler Museum Collection of African Art](#)

Selected prehistoric, historic, and contemporary African collections, Pre-Columbian ceramics, and textiles from the UCLA collection.

[The Smithsonian American Art Museum Catlin Indian Paintings Collection](#)

Over 400 portraits of Native Americans and cultural documentation landscapes by American artist George Catlin.

Phase 1 Main Text Collection and Search Page



Address <http://etext.lib.virginia.edu/lewis/repodemo.pl> Go Links >>



Digital Collections

[Repository Demo](#) [Images](#) [Texts](#) [Feedback](#) [Digital Initiatives](#) [Questions?](#) [VIRGO](#)

Text Resources -- Search Demo

Enter search word or phrase:

Search within:

Digital Initiatives
University of Virginia
PO Box 400112
Charlottesville, VA 22904-4112

[Digital Initiatives Home](#) • [UVA Library Home](#)

[Search the Library Site](#) • [UVA Home](#)

Maintained by: dl@virginia.edu

© The Rector and Visitors of the [University of Virginia](#)

Phase 2 Main Image Collection and Search Page

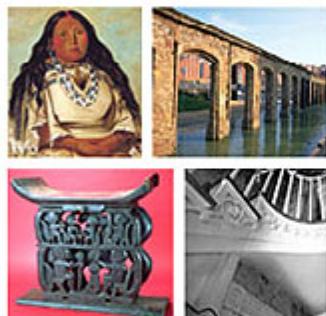


Digital Collections

UVa Library Home Digital Collections Texts Images Finding Aids Feedback Questions VIRGO

Digital Image Collections

[Advanced Search](#) [Help](#)



- [simple search](#) →
- [advanced image search](#)
- [cross-collection search](#)
- [browse collections](#)
- [object collector tool & image viewer](#)
- [about digital image collections](#)
- [software requirements](#)

Search Image Collections

- All words
 Any word

Present results as:

- Images
 Titles

[Search](#)

Featured Image Collections



The UCLA Fowler Museum Collection

Selected prehistoric, historic, and contemporary African collections, Pre-Columbian ceramics, and textiles from the Fowler Museum of Cultural History at the University of California, Los Angeles..



The Smithsonian American Art Museum Catlin Indian Paintings Collection

Over 400 portraits of Native Americans and cultural documentation landscapes by American artist George Catlin.

Phase 2 Main Text Collection and Search Page



Digital Collections

UVa Library Home Digital Collections Texts Images Finding Aids Feedback Questions VIRGO

Text Collections

[Advanced Search](#) [Help](#)



- simple search →
- [advanced text search](#)
- [cross-collection search](#)
- [browse featured collections](#)
- [object collector tool & image viewer](#)
- [about digital text collections](#)
- [software requirements](#)

Featured Text Collections



Lewis & Clark Collection

Full-text and page images of two editions of the Journals of Lewis and Clark (edited by Biddle & Allen in 1814, and by Thwaites in 1904); the published journal (1810) of Patrick Gass, a member of the Corps of Discovery; and the catalog of George Catlin's "Indian Gallery" (1837), painted on his travels with William Clark from 1830-1834.



Westward Exploration

4,500 full-color page image scans of 19th century American materials related to westward exploration after Lewis and Clark available online. Many of the volumes are extensively illustrated, and all are housed in UVa

Search Text Collections

- All words
 Any word

Choose scope of search:

All text collections

Number of results
on each page: 25

Phase 1 Image Results

Digital Collections



Repository Demo Images Texts Feedback Digital Initiatives Questions? VIRGO

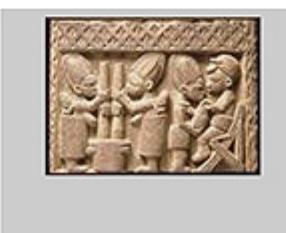
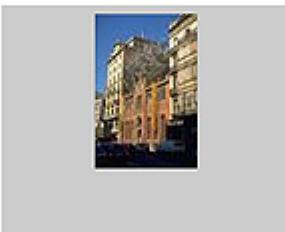
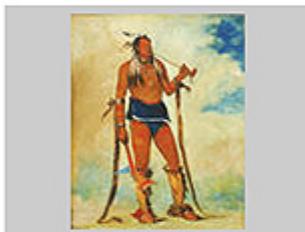
Image Collections Search .. Thumbnail View

[Help](#) | [New Search](#)

Search for: door

1 - 20 of 1707 images

Jump to: [1](#) [427](#) [854](#) [1280](#) [1707](#)



Chair and Cloud

- Full Information
- Image zoom, this window
- Image zoom, new window
- Download image

Phase 2 Image Results

Digital Collections

[UVa Library Home](#) [Digital Collections](#) [Texts](#) [Images](#) [Finding Aids](#) [Feedback](#) [Questions](#) [VIRGO](#)

Search Results

[images & titles](#)

[images only](#)

[titles only](#)

1 - 25 of 50 results

[1](#) [2](#) [next >](#)



Searched the image collections collection for: "parc guell"

- 50 images in 1 objects
- 1 - 25 of 50 results
- results displayed as images and titles

[Show images only](#)
[Show titles only](#)

New Search

All words
 Any word

Present results as:

Images
 Titles

[Search](#)

Phase 1 Text Transcription



Digital Collections

Repository Demo Images Texts Feedback Digital Initiatives Questions? VIRGO

Page 180 [\[view image\]](#)

CHAPTER XXIV

THE START FOR HOME

Lewis's Journal, March 18–April 3, 1806

Clark's journal, March 18–April 3

[Lewis:]

Tuesday March 18th. 1806

DREWWYER was taken last night with a violent pain in his side. Cap^t. Clark bleed him. several of the men are complaining of being unwell. it is truly unfortunate that they should be sick at the moment of our departure. we directed Sergt. Pryor to prepare the two Canoes which Drewyer brought last evening for his mess. they wanted some knees to strengthen them and several cracks corked and payed. he completed them except the latter operation which the frequent showers in the course of the day prevented as the canoes could not be made sufficiently dry even with the assistance of fire. Comowool and two Cathlahmahs visited us today; we suffered them to remain all night. this morning we gave Delashelwilt a certificate of his good deportment &c. and also a list of our names, after which we dispatched him to his

Phase 2 Text Transcription

Digital Collections

[UVa Library Home](#) [Digital Collections](#) [Texts](#) [Images](#) [Finding Aids](#) [Feedback](#) [Questions](#) [VIRGO](#)

Lewis, Meriwether

Original Journals of the Lewis and Clark Expedition, 1804-1806

Vol. 4

[go to ...](#) [table of contents](#) [view page images](#) [entire work](#)

[Basic Search](#) [Advanced Search](#)

Jump to page #

Page 180

view page image:



Chapter XXIV

THE START FOR HOME

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Clark's journal, March 18-April 3

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¹ Biddle relates (ii, p. 204, note) that one of these papers was delivered by the natives to Captain Hill, of the American brig "Lydia." Proceeding to Canton, he apparently presented it to a friend there, who sent a copy of it (with a letter dated January, 1807) to a friend in Philadelphia.—Ed.

Changes for Phase 2 - Functionality

- Multiple search format options were added.
- Simple and advanced searches for a high-level cross-collection search, format-based simple and advanced full-text searches, and advanced search options to limit to virtual collections were added.
- Virtual collection browse capability was added.

Phase 2 Advanced Text Search



Digital Collections

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VIRGO

Basic Search Help

Text Collections

Advanced Search

Search for word or phrase:

Choose scope of search:

All text collections

Constrain by author name:

and/or title:

and/or 'first published' date range:

begin date:

end date:

For compound searching:

Enter second word or phrase:

Choose proximity:

near

within 40 characters of first term



Use this form to search across **text collections** in a more focused manner. You may specify any or all of the following criteria:

- Enter a **word or words** into the search box.
- You may use the **default** "anywhere" to search across all categories of data.
- Limit the search by using the drop-down box to select a specific data category of search (title, name, subject, etc.), or use the "first published" date range.
- **Compound Searching:** You may also combine up to three searches by selecting the functions "and" (must include) or "or" (either/or) to further broaden or narrow your query.
- **Scope:** Choose whether to search across all text collections, or individual collections.
- **Sort results** into groupings by title or by author's name.

Phase 2 Text Search Results

Digital Collections

UVa Library Home Digital Collections Texts Images Finding Aids Feedback Questions VIRGO

Search Results

[Advanced Search](#)

[Help](#)

[all results](#)

1 - 14 of 14 results

1

- | | | |
|---|---|------------------------------|
| T | History of the Expedition Under the Command of Captains Lewis and Clark, to the Sources of the Missouri, Thence Across the Rocky Mountains and Down the River Columbia to the Pacific Ocean | 1404 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | 1269 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | 1256 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | 1219 matches |
| T | History of the Expedition Under the Command of Captains Lewis and Clark, to the Sources of the Missouri, Thence Across the Rocky Mountains and Down the River Columbia to the Pacific Ocean | 1195 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | 1184 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | 1018 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | 869 matches |
| T | Original Journals of the Lewis and Clark Expedition, 1804-1806 | |

Phase 2 Text Results – Hits in Context

UVa Library Digital Collections - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

Customize Links Free Hotmail Windows Media Windows Toward High-Perform...

http://europa.lib.virginia.edu/cocoon/fedora/tel/getDynamicResults.html?behav=getResultsOffset&style=http://text.lib...

Go Google tax corporation"

Digital Collections

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UVa Library Home Digital Collections Texts Images Finding Aids Feedback Questions VIRGO Advanced Search Search Tips

Search Results

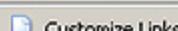
all results

Lewis, Meriwether

Original Journals of the Lewis and Clark Expedition, 1804-1806

1. d. and several bars, river 1 M. wide 7. N. 60°. E.
2. II lower I arrived at the enterance of a river 100 yards wide back of a small island on the South Side. it contains
3. d points passed a river 100 yards wide on the Lard. Side, shallow and the
4. om widens into a handsome prarie. river 110 yds. wide.
5. Establishments on the Assinniboin River 12 or 14 horses, 3 of which Mr. Heney is to ha
6. falls in on the East side. Clark river 120 yds. wide buffaloe river [blank space in M
7. asses out of the Rocky Mountains. river 120 Yds wide bold, rapid and deep. M
8. ds. on it's N. Side river 120 Yds wide, passed a creek on South Side at 6 Miles, one at 22 mil
9. oad passing up on the W. side of Clarks river 13 Miles to the West fork
10. to Maria's River 130 yds. wide 3 feet deep enc
11. Miles to Marias river 130 yards wide 3 feet deep. here Capt Lewis en
12. s itself in two channels. Clark's river 150 yds. wide the East branch from 90 to 120.
13. this evening on N. E. side of the river 2 ms. above our encampment of the 12
14. (rapids) of the Columbia the river 200 yds. wide. their common house at this fish

Phase 2 Advanced Image Search



Digital Collections

UVa Library Home

Digital Collections

Texts

Images

Finding Aids

Feedback

Questions

VIRGO

Image Collections

[Basic Search](#) [Help](#)

Advanced Search

catlin in person's name and buffalo in title and anywhere



Use this form to search across **image collections** in a more focused manner.

- Enter a word or words into the search box.
- You may use the default "anywhere" to search across all categories of data.
- Limit the search by using the drop-down box to select a specific data category of search (title, name, subject, etc.).
- **Compound Searching:** You may also combine up to three searches by selecting the functions "and" (must include) or "or" (either/or) to further broaden or narrow your query.
- It is not necessary use to all the boxes.

Present results as:

- Images
 Titles

SEARCH

See [Help](#) for more detailed instructions.

The images in the Repository may also be searched alongside the other digital collections in a [cross-collection search](#).

Phase 2 Image Results – Titles Only



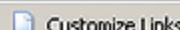
File Edit View Go Bookmarks Tools Help



http://europa.lib.virginia.edu/cocoon/fedora/gdms/getDynamicView.html?behav=getSearchSet&style=http://text.lib.virg



gle tax corporation"



Free Hotmail

Windows Media

Windows

Toward High-Perfor...

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Digital Collections

UVa Library Home Digital Collections Texts Images Finding Aids Feedback Questions VIRGO

Search Results

Advanced Search Help

[images & titles](#)

[images only](#)

[titles only](#)

1 - 25 of 45 results

1 [2](#) [next](#) ▶

Title	# of images
Assiniboine Indians Pursuing Buffalo on Snowshoes	1
Batiste, Bogard, and I, Approaching Buffalo on the Missouri	1
Batiste and I Running Buffalo, Mouth of the Yellowstone	1
Bogard, Batiste, and I, Chasing Buffalo in High Grass on a Missouri Bottom	1
Buffalo Bull, Grazing on the Prairie	1
Buffalo Bulls Fighting in Running Season, Upper Missouri	1
Buffalo Bulls in a Wallow	1
Buffalo Chase, a Single Death	1

Searched the image collections collection for:
"catlin" in agent and
"buffalo" in title

- 45 images in 45 objects
- 1 - 25 of 45 results
- results displayed as **titles only**

[Show images and titles](#)

[Show images only](#)

New Search

All words

Any word

Present results as:

Images

Titles

Changes for Phase 2 - Tools

- An improved ImageViewer that supports zooming, panning, rotation, and other on-the-fly image manipulation was implemented for the image collection and for page images.
- A Digital Object Collector Tool for users to create personal portfolios and generate slide shows or websites that include pointers to the images and metadata in the Repository. The slide shows and web sites deliver the images wrapped in the ImageViewer.
 - Later releases will be generalized to support the collection of other object types.

Phase 1 ImageViewer

UVA Digital Library

http://iris.lib.virginia.edu/mrsid/bin/get_image2.pl?image=/www/doc/image/barcelona2001/max/485 - Microsoft Internet Explorer

File Edit View

Back

File Edit View Favorites Tools Help

Back

Search Favorites Media

Address

http://iris.lib.virginia.edu/mrsid/bin/get_image2.pl?image=/www/doc/image/barcelona2001/max/4859001.sid&size=medium2

Go Links >

Digital
Repository I

Chair a
alternate
alternate
creator:
contribu
subject:
notes: E
identify
location:
creation
medium



Oblique



View of s

Digital Initiat
University of
PO Box 4001



About

Info

100%

Fit to Frame

+25%

75%

-25%

Phase 2 ImageViewer



Digital Collections

UVa Library Home Digital Collections Texts Images Finding Aids Feedback Questions VIRGO

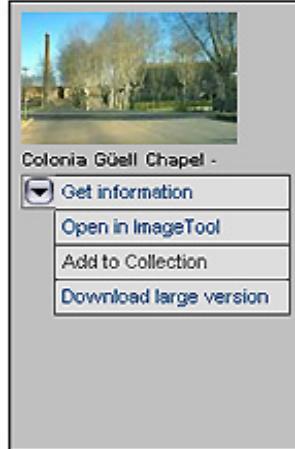
Search Results

Advanced Search Help

Images & titles
images only
titles only

1 - 25 of 62 results

1 2 3 next ▶



Colonia Güell Chapel -

- Get information
- Open in ImageTool
- Add to Collection
- Download large version



Colonia G

Untitled Document - Microsoft Internet Explorer

File Edit View Favorites Tools Help

File View Adjust Help



Finca Güell Pavilions -



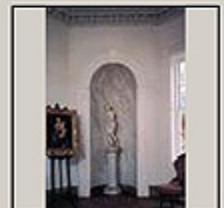
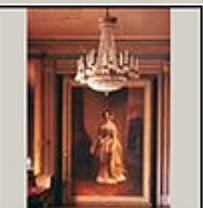
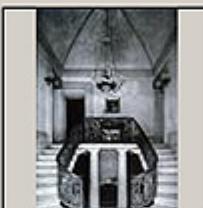
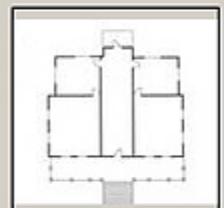
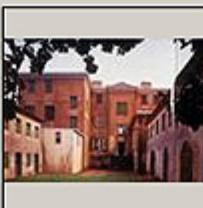
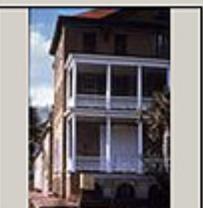
Finca Güe

Working with an Image Collection in the Object Collector Tool

Object Collector Tool

File Edit View Tools Help

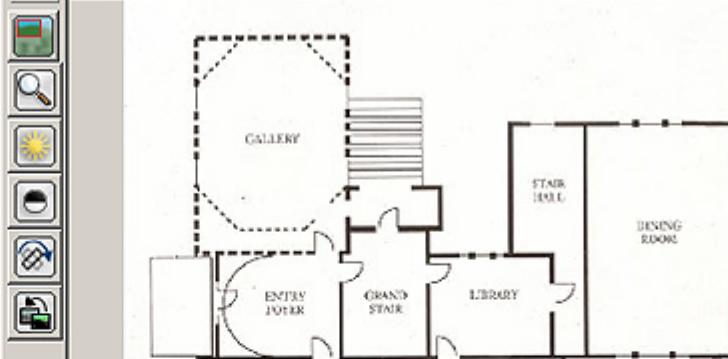
Default Images arch_test |



Aiken-Rhett House : plan (drawing), First floor after 1830s remodeling

File View Adjust Window Help

55 %



Aiken-Rhett House : general view, rear

File View Adjust Window Help

134 %

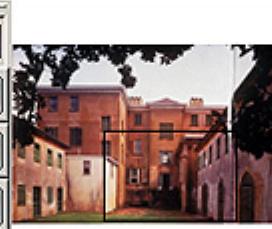


Image Reserve Web Site Created with the Object Collector Tool

Aiken Rhett House



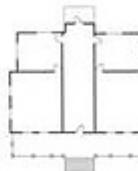
Aiken-Rhett House :
oblique view



Aiken-Rhett House :
exterior, Corner of the
piazza



Aiken-Rhett House :
general view, rear



Aiken-Rhett House :
plan (drawing), First
floor as built in 1818



Aiken-Rhett House :
plan (drawing), First
floor after 1830s
remodeling



Aiken-Rhett House :
interior, Hall and
staircase



Aiken-Rhett House :
interior, Entrance hall
and stair



Aiken-Rhett House :
interior, East drawing
room w/ portrait of
Mrs. Aiken



Aiken-Rhett House :
interior, Twin drawing



Aiken-Rhett House :
interior, Art gallery

Slide Show Generated in the Object Collector Tool



Aiken-Rhett House : general view, rear



Aiken-Rhett House : exterior, Corner of
the piazza

Phase 2 Tested with Library Staff

- Interface issues identified and bugs discovered:
 - Unneeded set page number identifiers removed from small result set displays.
 - Message and search box added to display when no there are no results for a search.
 - Character limit put in place for display of titles in the image grid.
 - Author name added to title in text search results display.
 - Search Term highlighting in results implemented.
 - Advanced Search link added to image collection browse screen.

Changes for Phase 2 - Infrastructure

- To change the interface and functionality, disseminators had to be modified and added.
 - Low-level disseminators: "grunt work" -- getting the structure of document, getting chunks of a document, etc.
 - High-level disseminators: request one or more low level disseminations to generate the content to present, e.g., get the xml and then apply the formatting XSLT and CSS, or pass data to applications.
- "Separation of Concerns" – production encoding must use div and span tags that can be styled by the CSS, and inform the delivery programmer about accepted variation of the content or changes.
- Change from Saxon XSLT Java servlet to Cocoon to support pipeline transformations, multiple pipeline engines, support xinclude, ability to aggregate many xml documents into one under a new root node, etc.
 - Some grunt work now taking place in Cocoon STX with a squid cache.

Phase 2 Tested with Library Staff

- Interface issues identified and bugs, continued:
 - Menu labeling inconsistencies fixed.
 - Updates made to metadata labels and content displayed in Image Full Information screen and in the Collector Tool.
 - Request for the ability to collect page image to be added to thumbnail in transcription view.
 - Issues with indexing of fully transcribed books versus books with page images only and no transcriptions.
 - Menus in Collector Tool renamed and reorganized.
 - Phrase searching and diacritic handling bugs fixed.
 - Duplicate image grid display bug fixed.

Phase 2 Evaluation by Faculty

- Six Faculty members from four departments are testing the image collections in the classroom this term.
 - Architectural History, Art History, Landscape Architecture, and Religious Studies.
- Feedback so far:
 - Image search results should return only the images that match, not objects.
 - Ability to generate a URL for an individual image to use as a pointers.
 - Additional metadata for individual images requested.
 - Ability to add annotations and custom captions to personal collections, and selectively include metadata when creating web pages.
 - Ability to place duplicates of digital images within in a collection.
 - Add a collection list printing feature.
- Bug: Issues with Java and Safari on Macintoshes.

Phase 2 Usability Testing

- Usability testing of the Image Collection interface is just getting underway.
- Focus groups with faculty – two have been held so far with Architecture and Architectural History faculty.
 - Almost all comments so far are requests for additional functionality in the Collector Tool.
- When the cross-collection and EAD searches are added, additional usability testing will take place.

Repository Status

- **The Repository is in its first experimental year.**
The Repository is still under development and subject to updates that may selectively affect functionality and availability.
- Feedback will inform the development of the Repository that will launch in fall 2005 as the official production release.

Thanks to the Implementation Team

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