Spotlight: A Self-Service Tool for Showcasing Digital Collections

Gary Geisler, Jessie Keck, Chris Beer & Stuart Snydman

Stanford University
Outline

• What is Spotlight?
• Why Spotlight?
• Key features and design process
• Demo
• Community-oriented development
• What’s next
What is Spotlight?

Spotlight is software that sits on top of your digital repository and enables librarians, curators, and other content experts to easily build feature-rich websites that showcase collections and objects from the repository.
Why Spotlight?

What are the options for highlighting, showcasing, or publicizing a collection?

- Simple News or Splash Page
- Institutional Repository Record
- Library Catalog Record
- Simple Collection/Exhibit Site
- Feature-Rich Collection Site

- Time and Resources
- Depth and Complexity of Exposure

Institutional Repository/Library Catalog

Custom Site Development

Library Site (CMS)
The Circle of the Sun: a new exhibit in Green Library

by Becky Fischbach | Thursday, January 23, 2014

The secular side of Stanford’s medieval and early modern manuscript collections will be on display in The Circle of the Sun, opening in Green Library’s Peterson Gallery and Munger Rotunda on Feb. 3. The exhibit follows last year’s Scripting the Sacred and is the concluding half of a two-part exhibit designed to show the full spectrum of manuscripts available for teaching and research.

Co-curated by associate curator for paleographical materials David Jordan and senior Sarah Weston, The Circle of the Sun examines the seven liberal arts in cathedral schools and universities; the rise of professions in law, medicine, and commerce; and the emergence of Scholastic philosophy, history, vernacular literature, and Renaissance humanism. Highlights of manuscripts on display, dating from the ninth through seventeenth centuries, include complete codices of ancient works by Ovid, Virgil, and Cicero; illustrated astronomical and legal texts; a portrait of Geoffrey Chaucer; medieval poetry; and fragments of rarely seen treatises on Latin lexicography, etymology, and allegory. Also included are Roman writing implements, coins, and inscriptions as well as goat skins prepared as parchment by a modern artisan.

Curated tours lasting approximately 45 minutes are available to groups (suggested maximum 12) by appointment with David Jordan at 650–723–3866 or dajordan@stanford.edu.

Recent news

June 5, 2014

JBJS Re–Launches on HighWire
June 5, 2014

June 3, 2014

President Toomas Hendrik Ilves lecture is online
June 3, 2014

SUL job opportunities – June 3, 2014
June 3, 2014
Why Spotlight?

Stanford's Maps of Africa Collection became a major research resource in August of 2001 with the acquisition of the Oscar I. Norwich Collection of Maps of Africa and its islands, 1486 – ca. 1900. This acquisition added 315 maps to Stanford's existing holdings of Maps of Africa. The collection was once again augmented in 2010 with the purchase of 294 maps from Caroline Batchelor, and then again in 2011 with a small set of maps from Rodney Shirley. Altogether, the Maps of Africa Collection holds over 700 maps, 632 of which are searchable and viewable through Stanford's Image Gallery.

Acknowledgements

The Maps of Africa collection was built over many decades but its current strengths are largely buoyed by the 2001 acquisition of the Oscar I. Norwich Collection and the most recent purchase of maps from Caroline Batchelor. Acknowledgements for the acquisition of the Norwich collection are detailed on the Dr. Oscar I. Norwich Collections page. The staff at Stanford had significant roles in the processing, preservation, cataloging, digital reproduction and public services. Many thanks go to them for their collective work on this collection.

"A new and most exact map of Africa described by N.I. Vischer and done into English; Enlarged and Corrected according to J. Blaeu and Others, With the Habits of ye people, and ye manner of ye Cheife sitties ye like never before."
## Grand Prix de Spa Grand Touring Race

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Jean Charles Martha (Photographer)</td>
</tr>
<tr>
<td>Date created</td>
<td>1959</td>
</tr>
<tr>
<td>Type of resource</td>
<td>Still image</td>
</tr>
<tr>
<td>Genre</td>
<td>Digital image</td>
</tr>
<tr>
<td>Source note</td>
<td>35 mm slides</td>
</tr>
<tr>
<td>Vehicle Markings</td>
<td>Race Number 4, Race Number 31, Race Number 3</td>
</tr>
<tr>
<td>Description</td>
<td>L to R: Race Number 4, Registration F-3171, Race Number 31, Registration WZ-V777 (Hans Walter, driver, winner), Race Number 3</td>
</tr>
<tr>
<td>Collection</td>
<td>Revs Institute, The Jean Charles Martha Photography Collection of the Revs Institute</td>
</tr>
<tr>
<td>Subject</td>
<td>Automobile &gt; History</td>
</tr>
<tr>
<td>Event</td>
<td>Grand Prix de Spa Grand Touring Race</td>
</tr>
<tr>
<td>Location</td>
<td>Belgium &gt; Spa</td>
</tr>
<tr>
<td>Marque</td>
<td>Alfa Romeo</td>
</tr>
<tr>
<td></td>
<td>Porsche</td>
</tr>
<tr>
<td>Venue</td>
<td>Spa-Francorchamps</td>
</tr>
<tr>
<td>People</td>
<td>Walter, Hans</td>
</tr>
<tr>
<td>Model</td>
<td>Alfa Romeo Giuliaetta Veloce</td>
</tr>
<tr>
<td></td>
<td>Porsche 356 Speedster</td>
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<td></td>
<td>Alfa Romeo Giuliaetta Sprint Veloce Zagato</td>
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<td>Revs ID</td>
<td>2011-039MART-b1_244_0016</td>
</tr>
</tbody>
</table>
Why Spotlight?
Why Spotlight?

What are the options for highlighting, showcasing, or publicizing a collection?

- Feature-Rich Collection Site
- INSTITUTIONAL REPOSITORY/LIBRARY CATALOG
  - Institutional Repository Record
  - Library Catalog Record
  - Simple News or Splash Page
  - Simple Collection/Exhibit Site
- LIBRARY SITE (CMS)
- CUSTOM SITE DEVELOPMENT

Time and Resources vs. Depth and Complexity of Exposure
Why Spotlight?

French Revolution Digital Archive

A collaboration of the Stanford University Libraries and the Bibliothèque nationale de France

| HOME | ARCHIVES PARLEMENTAIRES | IMAGES | ABOUT |

French Revolution Digital Archive

About the collections

The French Revolution Digital Archive (FRDA) is a multi-year collaboration of the Stanford University Libraries and the Bibliothèque nationale de France (BnF) to produce a digital version of the key research sources of the French Revolution and make them available to the international scholarly community. The archive is based around two main resources, the Archives parlementaires and a vast corpus of images first brought together in 1989 and known as the Images de la Révolution française.

Archives parlementaires / Parliamentary archives

The Archives parlementaires is a chronologically-ordered edited collection of sources on the French Revolution. It was conceived in the mid 19th century as a project to produce a definitive record of parliamentary deliberations and also includes letters, reports, speeches, and other first-hand accounts from a great variety of published and archival sources. Because of copyright limitations, FRDA contains the AP volumes covering the years 1787-1794. The text of these volumes has been marked up using TEI so that speakers, places, dates, and terms in the published index can be easily found. Users can see both scanned images of the AP pages or just the texts.

Images de la Révolution française / Images of the French Revolution

The Images are composed of high-resolution digital images of approximately 14,000 individual visual items, primarily prints, but also illustrations, medals, coins, and other objects, which display aspects of the Revolution. These materials were selected, mainly from the collections of the Département des Estampes et de la photographie, but also from other collections throughout the BnF. The images in the Archive have been scanned in 500 dpi resolution and are available at this resolution for use in research, teaching, and for the enjoyment of the general public.
Why Spotlight?

Dedicated collection sites

Revs

200,000+ image collection with image annotation and other community features

Bassi-Veratti

672 item archive digitized, tagged, and integrated with an interactive version of the archive finding aid

FRDA

Combines two foundational research sources: the Archives Parlementaires and 25,000 images from the BnF
Why Spotlight?

What are the options for highlighting, showcasing, or publicizing a collection?

Time and Resources

Depth and Complexity of Exposure

- Custom Site Development
  - Feature-Rich Collection Site

- Institutional Repository/Library Catalog
  - Institutional Repository Record
  - Library Catalog Record

- Library Site (CMS)
  - Simple News or Splash Page
  - Simple Collection/Exhibit Site
Why Spotlight?

What are the options for highlighting, showcasing, or publicizing a collection?

- **Library Site (CMS)**
  - Simple News or Splash Page
  - Simple Collection/Exhibit Site

- **Institutional Repository/Library Catalog**
  - Institutional Repository Record
  - Library Catalog Record

- **Self-Service Exhibit Creation Tool**
  - Spotlight Exhibit Site

- **Custom Site Development**
  - Feature-Rich Collection Site
Why Spotlight?

Full-featured
• Focused website with robust features for highlighting collections

Self-service
• Enables curators and librarians to produce high quality exhibits without programming

Integrated
• Interoperates with existing discovery systems and repository infrastructure

Flexible
• Enables curators to customize exhibit facets, metadata, feature pages, visual themes, menu labels, etc.
Design Process

- Discovery
  - Environmental scan
  - Project objectives
  - User needs
  - Requirements prioritization

- Information Architecture
  - Conceptual models
  - User personas
  - Wireframes

- Interaction & Visual Design
  - Interaction design
  - Visual design
User Personas

Online Exhibits

**Persona Overview**

### Exhibit Users

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dororthy Crane</td>
<td>Campus Visitor</td>
</tr>
<tr>
<td>Marc Evans</td>
<td>Master's Student Art History</td>
</tr>
<tr>
<td>Rebecca Cortez</td>
<td>Associate Professor</td>
</tr>
<tr>
<td></td>
<td>Department of Geography</td>
</tr>
</tbody>
</table>

### Exhibit Builders

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rico Cruz</td>
<td>Exhibition Specialist University Libraries</td>
</tr>
<tr>
<td>Craig Adams &amp; Claire Hopper</td>
<td>Head Librarian, Art Library Professor, Department of Art History</td>
</tr>
<tr>
<td>Megan Byrd</td>
<td>Map and GIS Librarian Earth Sciences and Map Library</td>
</tr>
</tbody>
</table>
## User Personas

### Online Exhibits

#### Exhibit Builder Persona

**Rico Cruz**  
Exhibition Specialist  
University Libraries

Rico prefers working with his hands to sitting in front of a computer but in recent years he has made contributions to the Library's online presence, though nothing more complex than submitting forms to the university events calendar or writing blog posts. Still, he has enjoyed viewing museum sites on the web and understands the potential value of showcasing exhibitions online; he's interested in getting his feet wet.

> "I'm not a computer person but I do want to take advantage of this new way of publicizing and sharing our fantastic exhibitions and collections."

**Concerns and Questions**
- "I don't know HTML. Will I need help to create even a simple exhibit?"
- "SearchWorks and PURL pages I'm familiar with, but how they relate to SDR and bringing in items to an online exhibit is fuzzy to me. I hope I don't have to learn a lot of technical details about the digital infrastructure of the Library to create an exhibit."

### Website Goals

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Scenario</th>
<th>Website Goals</th>
</tr>
</thead>
</table>
| 1 | Quickly create an online exhibit to publicize an upcoming physical exhibition | Rico is planning an exhibition in the main library that will open in less than two months, and wants to put up an online exhibit companion site soon to help publicize the opening. Rico doesn't intend for the online exhibit site to be very extensive; he really just wants to quickly create a simple but polished site that will document and publicize the exhibition, acknowledge the donors and collaborators, and enable him to add interested people to his mailing list. Because he is not very computer-savvy, ideally Rico will be able to do this by cutting and pasting existing text and filling out simple web forms. | • Create a very simple exhibit site, quickly  
• Prominently acknowledge donor and any collaborators  
• Easily upload and add publicity material: press releases, videos, "In the News" links  
• Enable users to easily share links to exhibit: Facebook, Twitter, etc.  
• Enable mailing list signup, with categories of interest users can select |
| 2 | Create an online exhibit that serves as a companion site to a physical exhibition | For a physical exhibition called *Independent Bookbinders of Nova Scotia* later in the year, Rico wants to create a more interactive online companion exhibit. Given his lack of computer skills, he is concerned about being able to produce a complete and visually distinctive site. He is thus happy to find that he is able to simply point to the exhibit's digital collection record in SearchWorks to import all the items into the online exhibit. He's able to easily define three main sections of the exhibit, mirroring the physical exhibition layout, add overview text to each, and assign items to them. The 'Appearance' option enables him to select from different visual themes, giving the online exhibit a different look from the other online exhibit he created earlier in the year. | • Import exhibit items (stacks URL and item metadata) from SearchWorks or SDR  
• Define distinct exhibit 'sections' with titles and introduction text  
• Assign exhibit items to exhibit sections  
• Select from several visual themes, so exhibits don't all look the same  
• Select a visual theme that focuses the site on the exhibit, with limited Stanford/SUL chrome |
| 3 | Enable interaction with exhibit items not possible in a physical exhibition | The Bookbinders exhibition features a range of interesting books but one of the frustrations Rico has had with exhibitions like these is -- given the fragile nature of the volumes -- the inability to allow visitors to see more than one open page of a book. Rico is thus excited to try out any tool that gives the online visitor the chance to have a richer experience with the books. He chooses to add the Flipbook plugin to the exhibit's homepage, using the plugin configuration form to select the book he wants to feature. Because the exhibit items are nearly all books, he also chooses to add the Zip book viewer plugin to each item page so users can display larger views of the books' pages and flip through them. | • Add the Flipbook plugin to the homepage  
• Add the Zip book viewer plugin to the item detail page  
• Create several browse categories ("19th Century Books", "Artist Books") that help users find books by curated theme |
# Requirements Prioritization

## Which end-user features to focus on?

<table>
<thead>
<tr>
<th>Must Have</th>
<th>Should Have</th>
<th>Nice to Have</th>
</tr>
</thead>
</table>
| - Social bookmarking/sharing links to exhibit  
- RSS feed for exhibit updates  
- Easy navigation to different exhibit sections/topic areas  
- Space for branding of donors  
- About pages - exhibit information, related resources, publicity  
- Item call numbers  
- Link item to SearchWorks and/or PURL record  
- Link to source collection(s) of exhibit in SearchWorks  
- Pre-formatted citations  
- Social bookmarking/sharing links to item  
- View high-resolution image/map with zoom and pan  
- Download high-resolution image/map  
- Download map images in geo formats (KML, GEOTIF)  
- Search box  
- Search/browse limited by exhibit-specific facets  
- Results page views: list, gallery, slideshow  
- Browse items by curated themes  
- Report a problem link/form  
- Stanford footer links | - Results page views: map  
- Site responsiveness (optimized display for mobile devices)  
- Browse items by exhibit section  
- Item location in physical exhibition  
- Save items to user workspace (session-based item drop area)  
- View saved items  
- Side-by-side item viewing (from items in user workspace)  
- Item tagging  
- Item favoriting | - Discussion forums  
- Advanced search: narrow by fields; by type, user, collection, tags, geo  
- Related item discovery  
- SUNet auto-login  
- External (non-SUNet) user registration/sign in  
- User profile with bio, activity history  
- Item commenting  
- Image annotation  
- Transcription widget - enable users to transcribe items  
- User-generated gallery  
- User-generated slideshow  
- Embed code - enable embedding item content as an iframe in other sites |
# Requirements Prioritization

## Which exhibit curator features to focus on?

<table>
<thead>
<tr>
<th>Must Have</th>
<th>Should Have</th>
<th>Nice to Have</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibit settings: title, description, creator(s), etc.</td>
<td>Option to include map view of results</td>
<td>CSV import - imports items, tags, etc. from CSV file</td>
</tr>
<tr>
<td>Appearance: select from multiple visual themes</td>
<td>User management (delete users, change user role)</td>
<td>Add Wikipedia citation code to item or collection</td>
</tr>
<tr>
<td>Allow minimal (just basic information with no imported items) to full-featured exhibit</td>
<td>Analytics - easy configuration and viewing of Google Analytics</td>
<td>Link checking - automated link checking reports</td>
</tr>
<tr>
<td>Choose to feature an item/collection/widget on homepage</td>
<td>Site security (editing and uploading): specify allowed file types, HTML elements and attributes</td>
<td>Add form for user to sign up to mailing list, including selection of areas of interest</td>
</tr>
<tr>
<td>Define distinct exhibit 'curated feature pages' with titles and introduction text (hierarchical tree of sections)</td>
<td>Visual page layout (i.e., drag-and-drop page sections or widgets)</td>
<td></td>
</tr>
<tr>
<td>Define arbitrary number of About pages (hierarchical tree of pages)</td>
<td>Limit access to an included widget to SUNet users</td>
<td></td>
</tr>
<tr>
<td>Flexibility in populating pages (add arbitrary widgets to pages, including ImageViewer, Flipbook, etc.)</td>
<td>Some form of digital representation of physical exhibition, with links between items and exhibition representation</td>
<td></td>
</tr>
<tr>
<td>Choice of page layout for customized pages, in terms of full-width pages versus pages with sidebars</td>
<td>Hide selected metadata elements</td>
<td></td>
</tr>
<tr>
<td>Flexible text editing - HTML option, text-wrapping options, image captions, etc.</td>
<td>Add geo-location info to items</td>
<td></td>
</tr>
<tr>
<td>Report a problem/contact form</td>
<td>Add code to display embedded Google Map</td>
<td></td>
</tr>
<tr>
<td>Assign SDR/SearchWorks items to exhibit sections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assign exhibit items to thematic groupings that end-users can use to browse items</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Wireframes

Revs Digital Library Exhibit
Connecting the Past, Present and Future of the Automobile

LIMIT YOUR SEARCH

Year
1955 24
1959 31
1965 24

Format
Marque
Model
Model Year
Collection

SEARCH
Search...

Image of item selected at right

Lime Rock Trans Am
Vacaville Club Race, April 1965
Watkins Glen U.S. Grand Prix
Laguna Seca
Sebring, March 23, 1968
Sebring, March 23, 1968
Sebring, March 23, 1968

EXHIBIT FEATURE: The Marques That Matter


Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Donec ullamcorper nulla non metus auctor fringilla. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Donec ullamcorper nulla non metus auctor fringilla. More >>

This is the first example of a “curated” page, where the content of the main area (not the sidebar) is determined by the site builder.
Development Approach

What is Blacklight?
Blacklight is an open source Ruby on Rails gem that provides a discovery interface for any Solr index. Blacklight provides a default user interface which is customizable via the standard Rails templating mechanisms. Blacklight accommodates heterogeneous data, allowing different information displays for different types of objects.

What are some of the features?
Blacklight uses Apache Solr, an enterprise-scale index for its search engine. Blacklight features faceted browsing, relevance based searching (with the ability to locally control the relevancy algorithms), bookmarkable items, permanent URLs for every item, user tagging of items.

Who uses it?
The University of Virginia, Stanford University, Johns Hopkins University, and WGBH are the principal contributors to the code base and use it heavily at their institutions. There are dozens of sites worldwide that use Blacklight; you can see a list of some of them on our Examples page.

How do I get started?
Try installing Blacklight and indexing the sample data — our goal is for you to be able to get a demo running very quickly. Read the FAQ, join the mailing list, and come talk to us on IRC. If you want to jump right in, installing Blacklight is as simple as following the instructions on the Quickstart Instructions.

Spotlight extends Blacklight
Development Approach

Spotlight extends Blacklight

1. Base Rails app
2. App with app-specific Solr index
3. App with default Exhibits components
4. Exhibit app with customized settings
5. Exhibit app with curated content
6. Exhibit website made public

- Rails app
- Blacklight
- Spotlight gem
- Admin configuration
- Field and feature customization
- User management
- Curator editing
- Page creation
- Widgets
- End-user features
- Item discovery
- Exhibit website
Demo - Tour of Completed Exhibit

Maps of Africa: An Online Exhibit
A digital collection of African Maps at the Stanford University Libraries

Stanford’s Maps of Africa Collection became a major research resource in August of 2001 with the acquisition of the Oscar I. Norwich Collection of Maps of Africa and its islands, 1486 – ca. 1900. This acquisition added 316 maps to Stanford’s existing holdings of Maps of Africa. The collection was once again augmented in 2010 with the purchase of 294 maps from Caroline Batchelor, and then again in 2011 with a small set of maps from Rodney Shirley. The Norwich, Batchelor collections, as well as the maps from Shirley represent some of the most important maps collected by these well-known collectors. In addition, Stanford currently has, in digital-only form, 771 maps from the Barry Lawrence Ruderman Collection and the David Rumsey Map Collection; also slated for scanning are other maps of Africa from Stanford’s Special Collections.

Maps Portraying the Continent
Demo - How to Create an Exhibit
Spotlight Roadmap

Phase 2 development starts soon

- Guided paths through feature pages
- Support for more content types
- Selection and indexing tools
- Visual theming
- Repository integration

More exhibits at Stanford
More adopters
More contributors
Community-Focused Agile Development

Enable local institution customization and community contributions

- Widget framework, visual themes (soon)
Community-Focused Agile Development

Code is publicly-available on Github
Community-Focused Agile Development

Sprint Focus

This sprint will continue to focus on enhancing and polishing the Spotlight UI and interaction, with more emphasis on the end-user side of the application. A major area of focus will be the visual design and interaction with the widget framework: page-level widget display issues (spacing, layout relationships between widgets) and widget configuration display. Another major area we hope to improve this sprint is the Item Detail page, to which we plan to add support for viewing multi-image items among other enhancements.

Features

New Features
- Selected item preview on widget configuration panels
- Multi-image item display
- Links to item in PURL and Searchworks (example of local institution customization)

Enhancements and Bug Fixes
- Improved visual design of carousel widget
- Restrict search results widget on homepage; single instance elsewhere
- Make sidebar display default for new feature pages
- Allow any result view type to be selected in search result widget
- Ensure browse category autocomplete is scoped to its saved search results
- Various styling improvements throughout application

Detailed release notes

Work tickets
Interested?

Maps of Africa exhibit
https://exhibits.stanford.edu

Project code repository
https://github.com/sul-dlss/spotlight

More about Blacklight
http://projectblacklight.org

Feedback
exhibits-feedback@lists.stanford.edu

Configuration

Blacklight configuration
Spotlight uses your application’s Blacklight configuration to provide default values for an exhibit. The Blacklight configuration options are documented on the Blacklight wiki.

Default ActionMailer configuration
Spotlight introduces functionality that depends on being able to send emails to exhibit curators and contacts. Be sure to configure your application’s environments appropriately (See the Rails Guide for Action Mailer Configuration).

Solr Indexing
Spotlight needs the ability to write exhibit-specific content to your Solr index. The default indexing strategy uses Atomic Updates, introduced in Solr 4.x. Note the caveats, limitations and required configuration necessary to use this feature. The rake task spotlight:check:solr will test if your Solr configuration is suitable for Atomic Updates.

If you are unable to use the Atomic Update strategy, your SolrDocument class must implement a #index method that can update the document in Solr with the exhibit-specific data provided by #to_solr.

To set up your development environment
Note: rake commands MAY need to be prefixed with bundle exec, depending on your environment.

1. Clone this repo, cd in and run $ bundle install
2. Get and configure Jetty/Solr:
   i. $ rake jetty:download
   ii. $ rake jetty:unzip
   iii. $ rake spotlight:configure_jetty
3. Generate the internal test application (will be in spec/internal): $ rake engine:generate

Spotlight readme on Github
Why Not Just Use Omeka?

Integrating with Blacklight provides

- More robust discovery environment
- More focus on the object versus the narrative
- Better integration with Hydra applications
- Better leverage of developer skills (keep focus on Ruby, not PHP)