Simplified Dynamic Map Administration

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What Does Dynamic Mapping Do in a Voyager Catalog?

- Draws a graphic map that people can use to find a specific location in the building where a volume or resource is located
  - Can identify a physical location (example: Reserve)
  - Can help searchers to identify needed floor, branch, or other location
  - Helps searchers find the call number range
More About The Maps

- If a title is in multiple locations the map will show this.
- Helps searchers find “new” parts of the collection (such as Compact Shelving).
- Moving line on the map shows direction to turn when you leave the elevator.
- Printable.
Why had we wanted to do this kind of a map?

- Main library layout can be confusing – and we also have branch libraries
- Unfamiliar terminology (What is a Folio?)
- Traditional maps and signs existed, but were often overlooked or not understood
- There were limits to the WebVoyage customization we could do – length of message, amount of detail
Challenges that needed to be overcome in dynamic mapping

- Multiple classifications – LC, SUDOC, Other
- Same work in different locations with more than one call number
- Where to pull the call number from (holdings, not bibliographic record)
- What if there is no call number?
- We started with the basics (main stacks), then built from there
After Three Years What Have We Learned?

- Dynamic maps continue to be VERY popular with patrons and staff. People wouldn’t want to lose this feature of our catalog.
- We still get the WOW! response.
- The mapping is really reliable.
- We are so grateful that Hongfei Li figured out how to do dynamic mapping, but:
Changes Are Needed

- Keeping the maps up to date is a real challenge. It’s amazing how often we “create” new locations or shift.
- The “background” programming is complicated, and in the past has required a lot of assistance from University Computing.
- We needed to get the program on a more appropriate server.
- Not everything needs to be mapped!
What’s special about dynamic mapping

A broader context:
- Linking the information universe and integrating users’ search experience;
- Integrating discovery tools, external web services and programming to the ILS;
- Presentation and visualization techniques are a supplementary way to transform the OPAC and improve user experience.

Shelving maps at other universities
- “Location” label in the OPAC search result linked to a list of floor maps (Example at Worcester Polytechnic University Library)
- “Location” label linked to specific floor maps (2D map example at Rochester Institute of Technology) (3D example at California State University San Marcos)
- Location aware mobile service (University of Oulu documentation)
- Virtual 3D map (using Google Earth, no book search yet, NUS Libraries)
What’s special about dynamic mapping

Dynamic shelving maps at WSU Libraries:

- **“Dynamic”** interpretation:
  - Dynamic mapping with point-to-point directions;
  - Animated directional path (Version 1);
  - Virtual 3D floors, shelves and patron... (Version 2)
- Holding level map handles complex shelving situations.

Value:

- Augment user experience in locating materials;
- Enrich OPAC by adding external programs/services.
- “The gold standard is Wichita State.” - Steve Toub, Michael Doran (NGC4L list)
Dynamic Map Display

- Dynamic map display examples
  - By location
    - Government documents *(example)*
    - Special Collections
    - Music Library, Chemistry Library
    - Reserves, reference materials, folio...
  - By call number ranges
    - Stacks (3D examples: M, PZ)
Dynamic Map Display

- Electronic resources (location)
  - Multiple formats or multiple urls (example)
  - Single url

- Multiple maps
  - For different locations (e.g. a book in Special Collection and general stacks)
  - For different formats (e.g. books with accompanying CD/DVDs)
How to handle shelving changes in dynamic maps (version 1)

- The package (in server LIBMedia):
  - Processing scripts
  - Access database
  - Map images
  - (Voyager in another server libcat)

- New locations
  - Wichita art museum, Early English books...

- Adjustment of LC call no. ranges
  - Compacting shelving impact
How to handle shelving changes in dynamic maps

- How to make changes (in Version 1)
  - Redefine call no. ranges in mapquerylist (.asp) and update corresponding images (animated gif);
  - Add new locations in Voyager and create location maps based on location IDs.

- The obstacles in dynamic map administration
  - Extensive animated image update in Photoshop CS2 and ImageReady (time-consuming);
    - Solution: switch to Google Sketchup and Antics...
  - Require server access and coding change for update.
    - Solution: Erik’s simplified map administration...
Technical Details

- Java 6/Tomcat 6
- .war file deployment strategy
- Support jars included in webapp war
- Uses jdbc
Map Processing

bibId

Result Set
(XML Object)

Map Engine

Map gif
Administration

- System
  - Database Server
  - Database SID
  - Port
  - Database User
  - Password
  - Image Directory
  - Google Maps Key
  - Street Address
Administration

- Users
  - One user: map admin
  - Potentially could support more
- Test Bib Ids
  - Check map display
Administration

- Maps
  - Map Object Name
  - Location
  - LC Codes
  - Offsite Address
  - Image

- Program download
  - http://library.wichita.edu/techserv/dynamicmap.html
Contact Information

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Thank you!