I’ve been coming to code4lib for ten years and increasingly the talks have become more about the human aspect of technology and how community and relationships play a vital role in the success or failure of project. So I’m here today to tell you the story of a project I’ve been working on at OCLC for the last 4 months from the perspective of the people who have been knowing or unknowing participants.
Not that long ago and friend and colleague of mine Amanda called to discuss her desire to provide a better experience for her library users in terms of searching. We discuss options. Amanda works at a small community college and has quite a bit of technical know how. But tech is only a small part of her job and resources are limited. She wanted to be able to customize the UI some and programming skills are in PHP. Eventually our conversation reach a head where she said “I’d love to use VuFind but I can’t export my MARC records”. This got me thinking. How awesome would it be if a library could use VuFind without exporting their MARC records.
As it happened my OCLC former colleague Steve Meyer and I happened to be working on the WorldCat Discovery API at the time. During our conversations about the use cases for the API he said something similar “wouldn’t it be interesting to have the WorldCat Discovery API power Blacklight” Yes, it would I thought but I’m not a Ruby programmer so my mind shifted to “Wouldn’t it be interesting to have the WorldCat Discovery API power VuFind”
With that in mind and because I was hoping to make it easier for PHP coders to use the WorldCat Discovery API I built a PHP code library to interact with it. Then I asked Demian Katz if I could come give a talk about the library and what it made possible in VuFind at the VuFind Summit. On the second day of the summit, I asked Demian if he would help me with the integration work.
I didn’t know VuFind I said, I was lost in the code. I don’t know anything about the WorldCat Discovery API Demian said but I can help with the Vufind stuff. That first day we got basic searching and returning results and the full record display working. Over the next month we added the capability to do advance searches and display facets.
In December I showed the basics to our Developer House participants and asked if anyone would like to work with me in a group to further extend the function. Janina Sarol from University of Illinois Champain Urbana and Sarah Johnston from St. Olaf’s decided they were up for the challenge.
At the same time many of the other Developer House participants were using the code library and sending me bug fixes. I refactored the code completely and optimized in making improvements that trickled into VuFind as a result.
At the same time, Sarah and I worked on improving the full record display of VuFind by added a Linked Data representation of the record for staff, showing library holdings and displaying links to full text.
Janina enhanced the author pages with Linked Data from VIAF and Wikipedia. She also built enhanced the subject display to show broader, narrower and related terms from FAST
Now that the searching aspects of the integration were coming together. I wanted to see what a more complete integration with patron functionality such as placing holds and showing account information would look like. So I enlisted my go to NCIP expert from OCLC, John Bodfish. With his help I was able to make VuFind perform patron operations with the WMS Sandbox institution. This also meant asking Demian’s help with extending VuFind to support OAuth. He created a model using Facebook and I leveraged this to write integration using the OCLC OAuth.
So four month, nearly 30 people and about 160 code hours later we have a functional prototype for VuFind and WorldCat Discovery API. Thank you community! You make me smile. We think this integration meets lots of use cases beyond my original – VuFind without MARC Export scenario. Libraries can use WorldCat Discovery API to
- power searching materials held locally.
- or show search results for article content in the VuFind UI
- Or show search results for materials held by other libraries (worldwide, in your consortia, or nearby)
- Or improve the "Author" page view in VuFind
- or improve subject access

With all that we’ve accomplished got more to do. Connecting WorldCat Discovery Api with drivers for local ILS’s like ALEPH for example. We’re look for feedback and thoughts from YOU! So if your interested, curious or skeptical come find me so we can talk.
Photo Credits

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