Alma APIs

Jeremy McWilliams
Lewis & Clark
Outline

- API basics
- Developer Network Demo
- Cover each Alma API & survey (6/30) results, including:
  - What it does
  - Who’s using it
  - Half baked ideas for use
- Some light Q&A
What is an API?

API is short for *Application Programming Interface*. 

An API is the interface implemented by an application which allows other applications to communicate with it. Like a backdoor, but different.
REST and HTTP protocols

REST is short for REpresentational State Transfer

REST APIs can use these HTTP protocols:

GET (read data)
POST (write data)
PUT (update/replace data)
DELETE (delete data)

Sample GET request for Google Books API
Ex Libris Developer Network

Demo:

- Set up an application & key
- Run a test query
- Get some sample code

https://developers.exlibrisgroup.com
With a little additional code...

```php
$today = date("Y-m-d") . "Z";
$data = simplexml_load_string($response);
foreach ($data->day as $day) {
    $date = $day->date;
    if ($date == $today) {
        $dow = $day->day_of_week->attributes()->desc;
        $from = date("g:i a", strtotime($day->hours->hour->from));
        $to = date("g:i a", strtotime($day->hours->hour->to));
        echo "<p>Today's hours: $from - $to</p>";
    }
}
```
...you get this

Today's hours: 8:00 am - 9:00 pm
Alma REST APIs

- Acquisitions
- Analytics
- Bibs
- Configuration

- Courses
- Resource Sharing Partners
- Task Lists
- Users
Alliance API usage

Alma APIs I/we use (13 responses)

- Acquisitions: 4 (30.8%)
- Analytics: 6 (46.2%)
- Bibs: 7 (53.8%)
- Configuration: 3 (23.1%)
- Courses: 3 (23.1%)
- Resource Sharing: 0 (0%)
- Task Lists: 0 (0%)
- Users: 6 (46.2%)
Acquisitions API

**Purpose:**
Get/Post/Delete PO Lines & Vendors
Get Fund Codes, Invoices, Licenses

**Who’s using it?**
WU, UW, UPS
PCC: update replacement cost in Alma items based on cost in the POL, (but it doesn't work)

**Half baked idea:**
Create PO Line for titles purchased from Amazon (w/Amazon API)
Analytics API

Purpose:
Get published Analytics report

Who’s using it?
Lane, Reed: Display new books

Half baked ideas:
Fund code report for librarians
Improve visualizations of data using Google Chart API or D3

Fun fact:
Doesn’t work on the first try
Bibs API

Purpose:
Get/Post/Update/Delete Bib, Item, Holding, Request, Loan, Collection, Dig. Rep.

Who’s using it?
PSU: show item info in patron portal
UW: Grabbing data for reporting to repositories
L&C: Get RTA for reserve items on reserves interface
WOU: metadata cleanup
COCC: Display study room availability

Half baked idea: “Scan In” for updating location, or anything
Configuration API

Purpose:
Get org. units, code tables, hours. Get/post import profiles & jobs

Who’s using it?
PSU: Display Hours (soon)
UW: Display Hours

Half baked ideas:
Run any manual job programmatically / on a cron
Use MD Import to load records for an import profile
Courses API

Purpose:
Get/post/update/delete courses, reading lists, citations

Who’s using it?
L&C: front-end interface for viewing items by course
PCC, PSU: Links to reserves from LMS

Half baked ideas:
Develop staff front-end for course reserves management
Allow faculty to place items on reserve from Primo GES link
Resource Sharing Partners API

Purpose:
Get a list of Resource Sharing Partners

Who’s using it?
??

Half baked ideas:
Uh....get a list of resource sharing partners
Resource Sharing Partners API

Relais ILL Training Institution Auto-Graphics Test Sample 1 Test Sample 2 Test Sample 3 LADD Aleph v.20 OCLC NRE British Library York University

Birmingham University LADD test ILLiad Oregon Health and Science Evergreen

State Lender 1 Lender 2 Lender 3 NA00 Training CCTest HQ-ISO Wisconsin

Library 2 INNREACH alephex Copy of alephex BBR Test Aleph v.22 Support

Sandbox Alma University ILL Last Resort TEST OCLC Navigator ILL Test ILL Test ILL TEST 2015 BT-ILL-Test illtest ILL TEST ILLTEST Test Partner

LH NCIIPtest TEST Library 2015 test Exercise 1 Pacific Northwest National Laboratory TestILL TS 2015 Berea - DELETE ME - TEST Kronosdoc Umin test GTBib ZZ test ÅfÅ…rstad videregÅƒhende skole - Biblioteket fÄ llen Clio

LADD Test Training_1 BLDSS Bargteheide Library Hamburger Buecherhalle

NILDE ZZ Brent Test ZZ Brent Test worldshare ILLiad-3 ZZ Brent Test
Task Lists

Purpose:
Get lists of current borrowing or lending requests
Mark them as “printed”

Who’s using it?
??

Half baked ideas:
Create custom interface for viewing & updating lending & borrowing requests
Users API

Purpose:
Interact with user data, including fines, loans, requests

Who’s using it?
GFU: Load patrons
PSU: User portal
WOU: User portal w/Alma & Clio (ILL) items, place Summit req for VP
UW: Patron stuff

Half baked ideas:
DIY self-checkout system (w/Bibs API)
Pay fines with PayPal, Apple Pay, Google Wallet, Amazon Payments
API Survey Q&A

Q: Curious if the Courses API is getting any better.
A: No

Q: How can I use them w/o a server?
A: Set up a local machine to run PHP (or other language). Set up an AWS server. Alliance Proxy to support ajax/js/CORS headers.

Q: How do I pull analytics report and embed?
A: Linda is up next!
Thanks

Jeremy McWilliams
Watzek Library
jeremym@lclark.edu