APIs: A Tool for Many Things, including Collections Analysis
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What is an API?
Application Programming Interface

• A structured way of accessing data from a database or website
• Provides data without any presentation markup, in a machine-readable format
• Allows data from one system to be repackaged for use in another system (e.g., database or website)

Example API Query
Written in R Programming Language
Queries WorldCat by Accession Number
~ Snippet only ~

Steps
• Reads a CSV file (600 books)
• Looks up each OCLC number
• Returns list of holdings in each state
• Compare holdings to a list of PALCI libraries
• Counts how many PALCI libraries have holdings
• Outputs a list to CSV

Results
Returned in 29 minutes

Benefits to Using APIs In Collections Analysis
• Faster than manual searching
• Scripts can run in the background or overnight, allowing staff to work on other tasks
• Can output results to CSV, no need to be present when the query finishes running

Collections Projects
Textbooks
• Decision: which to purchase
• Which API: Alma+ Primo
• Data Retrieved: current holdings

Missing Books
• Decision: which to replace
• Which API: Primo
• Data Retrieved: current holdings (to check for duplicates)
• Which API: WorldCat
• Data Retrieved: consortial holdings

Damaged Books
• Decision: which to replace
• Which API: WorldCat
• Data Retrieved: in-state holdings

Note: The Primo API sometimes misses electronic holdings. I use the ILS reporting tool for this.

APIs Used
WorldCat Search API
  Search byISBN or Accession Number
  ReturnsTotal number of holdings
           Number of in-state holdings
Alma Bibs API
  Search by record ID
  Returns local holdings, location, and availability
Primo REST API
  Search byISBN
  Returns local record IDs, availability
  * Not as reliable for electronic holdings

My Code
https://github.com/karenkohn/API-queries

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