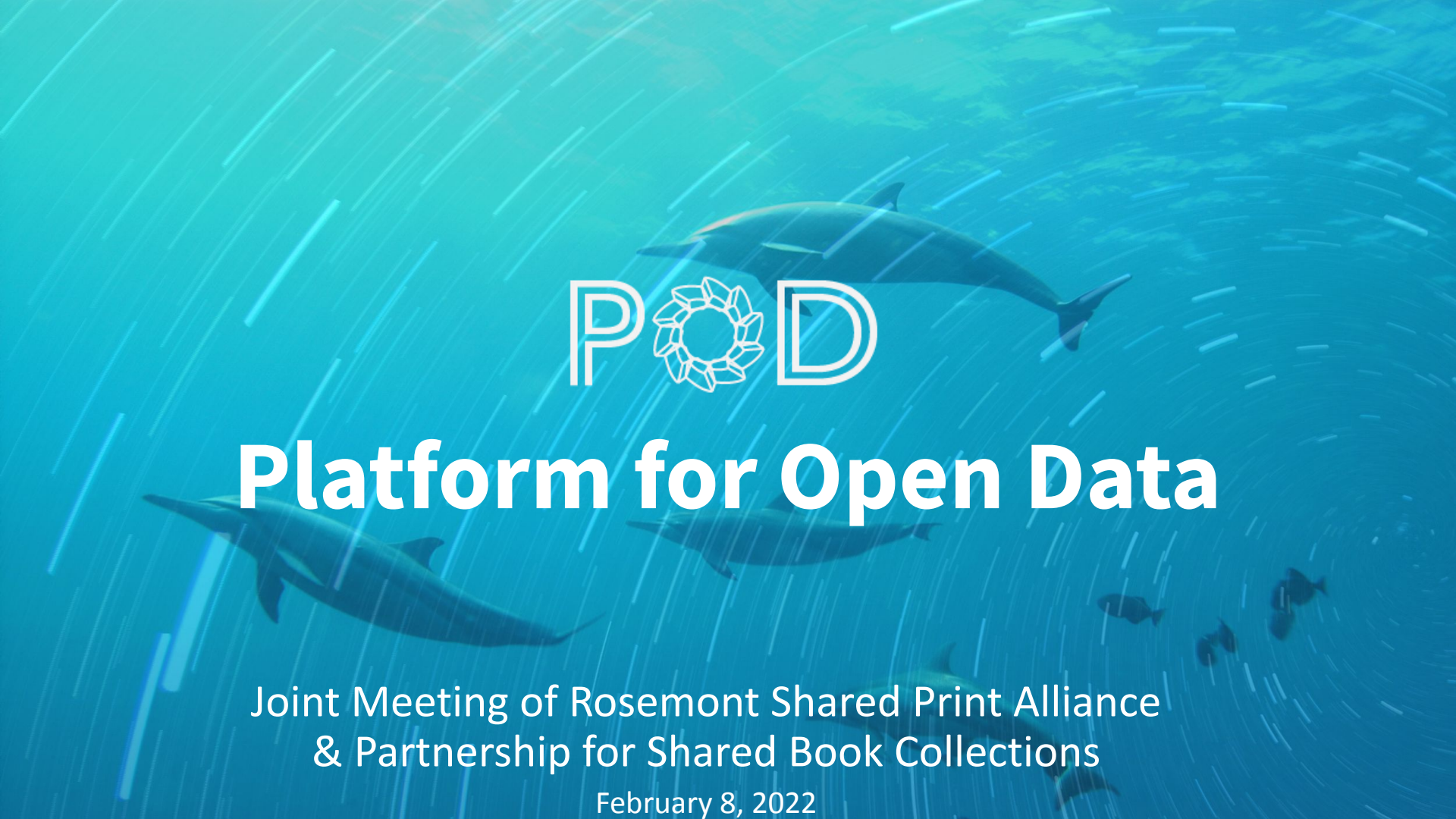
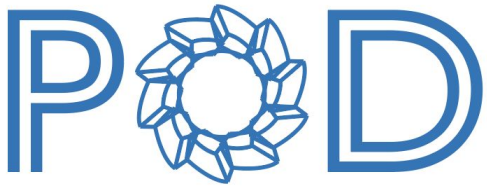


Platform for Open Data

Joint Meeting of Rosemont Shared Print Alliance
& Partnership for Shared Book Collections

February 8, 2022



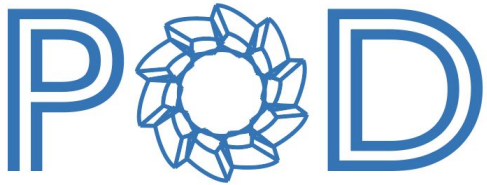
PLATFORM FOR OPEN DATA

In 2019, the Ivy Plus Libraries Confederation (IPLC) launched a concerted effort to enhance discovery for its inter-library loan program, BorrowDirect.

The challenge: what is the best way to aggregate data from 13 institutions to meet IPLC's consortial needs?

PLATFORM FOR OPEN DATA

POD is working to create a **platform** that positions **data reuse** and **service integration** as strategic assets. Through ***open, iterative development*** and leveraging the investment in our libraries' internal capacities, we will meet multiple library needs and enable innovation in ways that cannot be done through a series of one-off solutions or relying on vendors and external systems.



IN OTHER WORDS...

1. **Gather** data from IPLC institutions
2. **Pool** the data for easy reuse
3. **Enrich** the aggregated data
4. **Deploy** to support varying needs

and do this in a way that...

5. **Enables innovation** by reducing friction
6. **Builds capacity** within IPLC
7. Recognizes **data as a reusable asset**

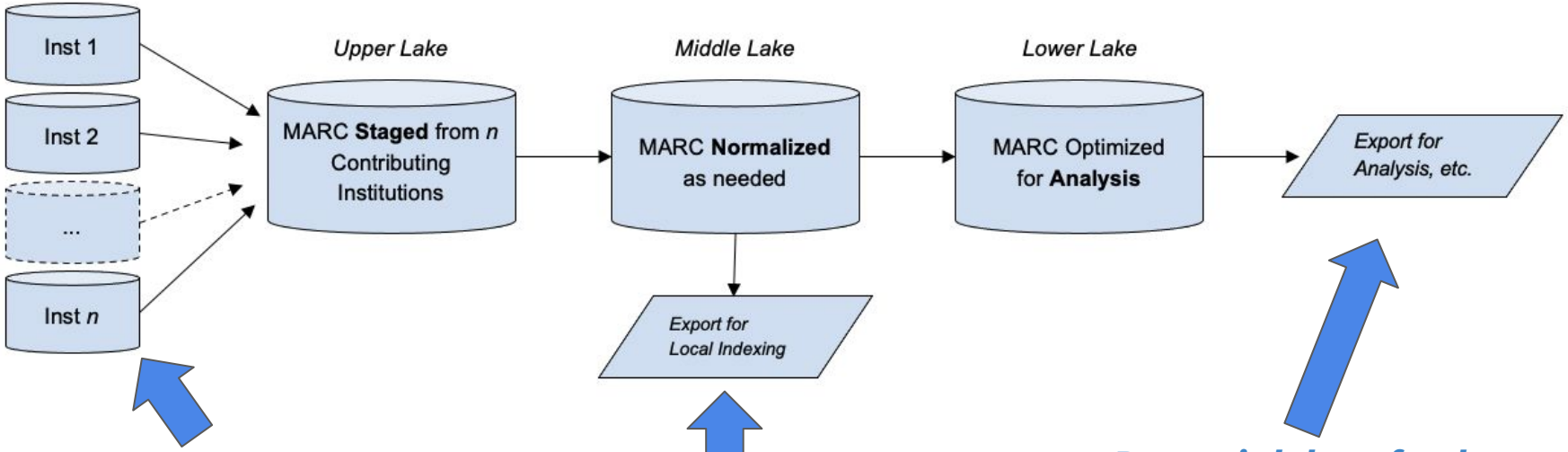
A DATA LAKE FOR IPLC

A **data lake** is a repository for structured, unstructured, and semi-structured data, allowing data to be in its rawest form without needing to be converted and analyzed first.

ONE FEED, MANY USES

Source: https://learn.g2.com/what-is-a-data-lake

ONE DATA FEED, MANY POSSIBLE USES



Single feed per participating institution

Feeds for ILL discovery

Potential data feeds for collection analysis, et al. (e.g., Gold Rush)

THREE DISTINCT CLUSTERS OF USE CASES

Resource Discovery, Access & Sharing

- Physical and digital access across IPLC

Collections Analysis & Decision Support

- View on collective holdings to inform local action

Data Innovation & Enrichment

- Data mining
- Linked data
- AI

USE CASES -- RESOURCE DISCOVERY, SHARING & ACCESS

1. BorrowDirect Discovery & Fulfillment Facilitation
2. Digital Resource Sharing for public domain, OA, repository content
3. Special Collections: IPLC-wide Virtual Reading Room
4. Serials Analysis for Copyright Status & Enhanced Access
5. Controlled Digital Lending for BorrowDirect / IPLC
6. Catalog Enrichment & Remediation
7. Catalog Matching, Deduplication, Linked Data Transformation
8. Potential ERM Analysis, Pooling

USE CASES -- COLLECTIONS ANALYSIS

1. Collections Analysis (POD feed to Gold Rush)
2. Shared Print Retention Commitment Management & Analysis
    a. Deselection, Gap filling, understand rare/unique
3. Data Mining to Support Research
    a. …autosuggest URIs for publishers in cataloging UI
    b. …art & architecture acquisitions over 20 years
4. DEI Analysis of IPLC Collections
5. IPLC Collections Intelligence:
    a. Inform Digitization, Preservation, Replace Lost Item Decisions
6. E-resource Holdings Analysis to HathiTrust, Open Library, etc.

GETTING DATA INTO POD

- pod.stanford.edu
- Bib, item and holdings data
- Upload data by
  - Dashboard
  - API
  - Remote URL
- Support for
  - Full data dump
  - Incremental changes

DATA PROFILING TOOLS

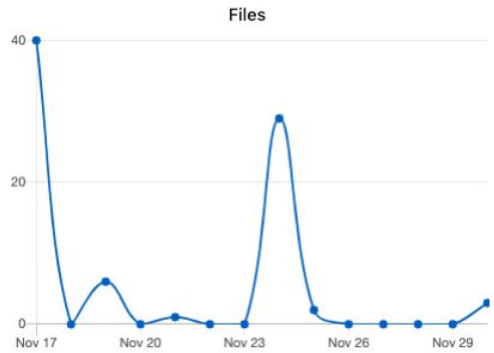
- Summary information (inclusion of 001s, multilingual data, holdings)
- Histogram of MARC field and subfield occurrence
- Listing of non-standard field usage

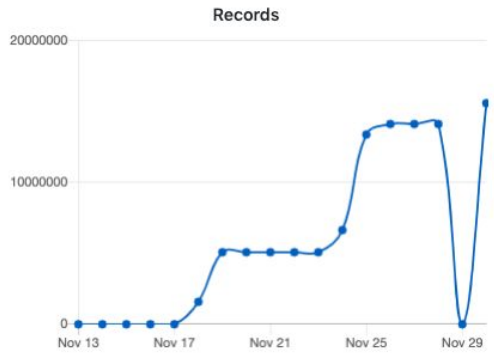
STATISTICS

Organizations

Name	Files	Size	Unique records	Total records	Last updated
Brown	40	2.06 GB	4,326,101	5,616,145	2020-11-17 16:32:27 UTC
Chicago	0	0 Bytes	0	0	
Columbia	0	0 Bytes	0	0	
Cornell	0	0 Bytes	0	0	
Dartmouth	0	0 Bytes	0	0	
Duke	0	0 Bytes	0	0	
Harvard	60	4.63 GB	0	0	2020-11-19 23:25:29 UTC
Ivy University	6	210 MB	508	551	2020-11-21 00:24:54 UTC
Johns Hopkins	0	0 Bytes	0	0	
Library of Congress	3	193 MB	750,000	750,000	2020-11-19 02:19:14 UTC
markm test	3	2.48 GB	2,257,621	6,876,489	2020-11-25 01:51:28 UTC
MIT	0	0 Bytes	0	0	
Penn	0	0 Bytes	0	0	
Princeton	0	0 Bytes	0	0	
Stanford	28	13.5 GB	8,243,438	8,243,438	2020-11-24 23:32:21 UTC
test	0	0 Bytes	0	0	
Yale	0	0 Bytes	0	0	
	140	23 GB	15,577,668	21,486,623	

Uploads

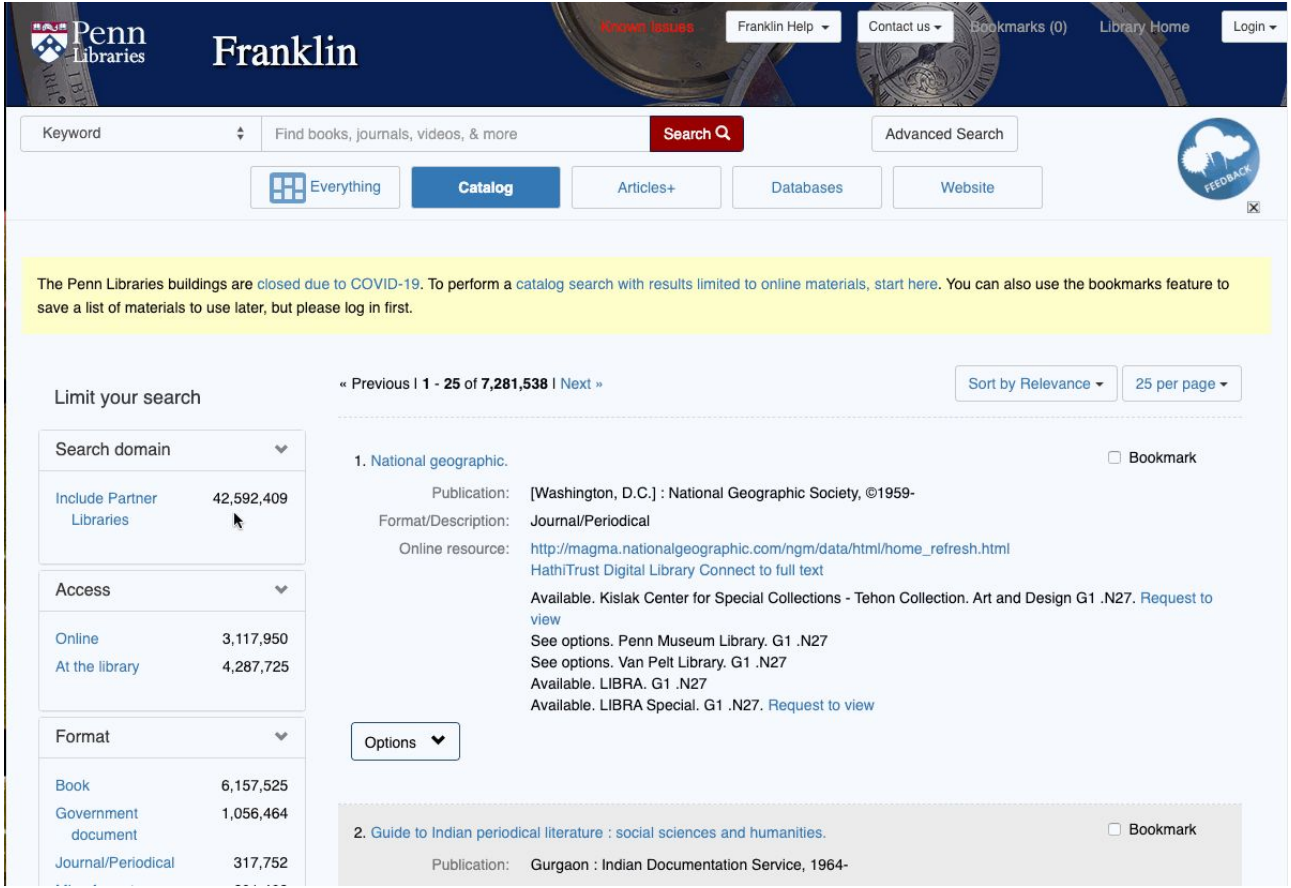




Organization	Name	Updated	File count	File size	Records	
Ivy University	2020-11-30T21:09:25Z	about 2 hours ago	28	120 KB	490	
	vernacularSearchTests.mrc	application/marc		12.4 KB	24	✅
	vernacularNonSearchTests.mrc	application/marc		6.48 KB	14	✅

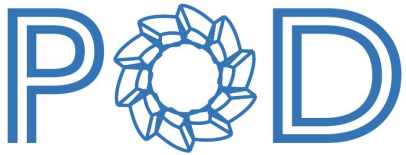
FRANKLIN DEMO

- 2020 proof of concept
- 7M Penn records
- +43M titles from POD
- Default search Penn
- Expand to POD
- Direct link to partner libraries

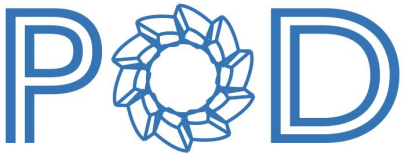


PROJECT STATUS

- [x] Broad participation across IPLC; 2+ years of continuous work
- [x] Established ongoing team from 10+ institutions and 25+ individuals
- [x] Operational data lake running since Dec 2020
- [x] Data: 60M unique records amalgamated from 13 IPLC sites
- [x] Two proof-of-concept local discovery environments operational
- [x] 2022 development workcycle planned to put POD into production
- [ ] Full population of data lake with 100M records (ETA May 2022)
- [ ] Production feeds to support ILL discovery & fulfillment (ETA June 2022)
- [ ] Extension to additional use cases (2022-23)



- pod.stanford.edu
- GitHub Repository: github.com/ivplus/aggregator
- Contact: LIBpod@o365lists.upenn.edu



Possible Discussion Questions

- How does the concept of a data lake fit with shared print (and other) needs?
- What data would be most interesting to have readily accessible?
- What tools would be most interesting to have connected to lakes?