OCLC Data Sync Reports with Python

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TCNJ THE COLLEGE OF NEW JERSEY

OCLC Data Sync Collections

- Replaces batchload services
- Part of WorldShare Collection Manager
- Allows libraries to keep holdings aligned with WorldCat
- Several options for ongoing collections
  - **Bibliographic collection**
  - Local holdings records (LHR) collection
  - Non-MARC numeric search key collection
  - Non-MARC patterned data collection
- Reclamation (one-time project)
- More information available from OCLC https://help.oclc.org/Metadata_Services/WorldShare_Collection_Manager/Choose_your_Collection_Manager_workflow/Data_sync_collections?sl=en

TCNJ Publishing Profiles (Alma)

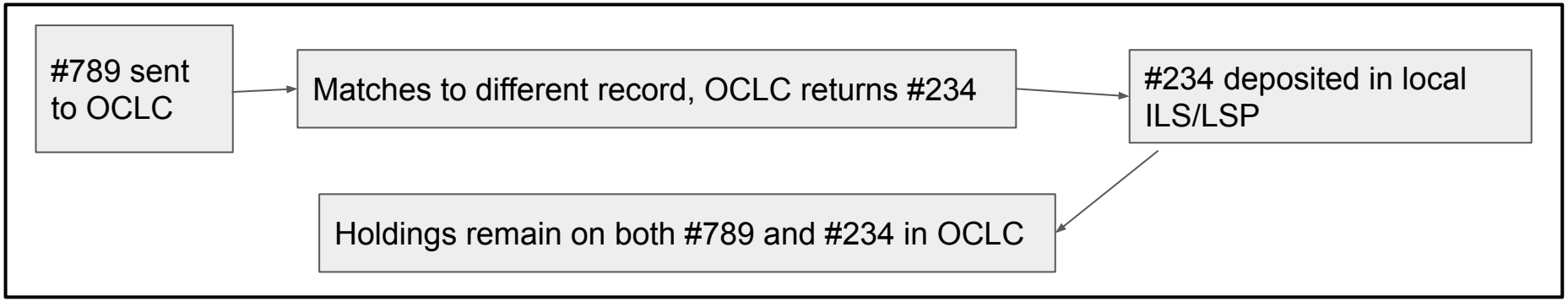
- Two publishing profiles in Alma
  - Electronic titles (all electronic institutional records with OCLC#)
  - Physical titles (all physical records set to “publish bib”)
- Files from each profile sent daily via FTP
  - Added, deleted, updated (determined by Alma logic)
- Average ≈3,000 records daily between both profiles

OCLC Datasync Settings

- Two datasync collections in OCLC, corresponding to Alma publishing profiles (physical/electronic)
- Local system number (Alma MMS ID) located in 001
- OCLC number located in 035 $a
- MARC record delivery disabled (only receive reports)
- Used number matching up until July 2020
- Currently use record matching
- Likely to resume number matching when available

OCLC Datasync Issues

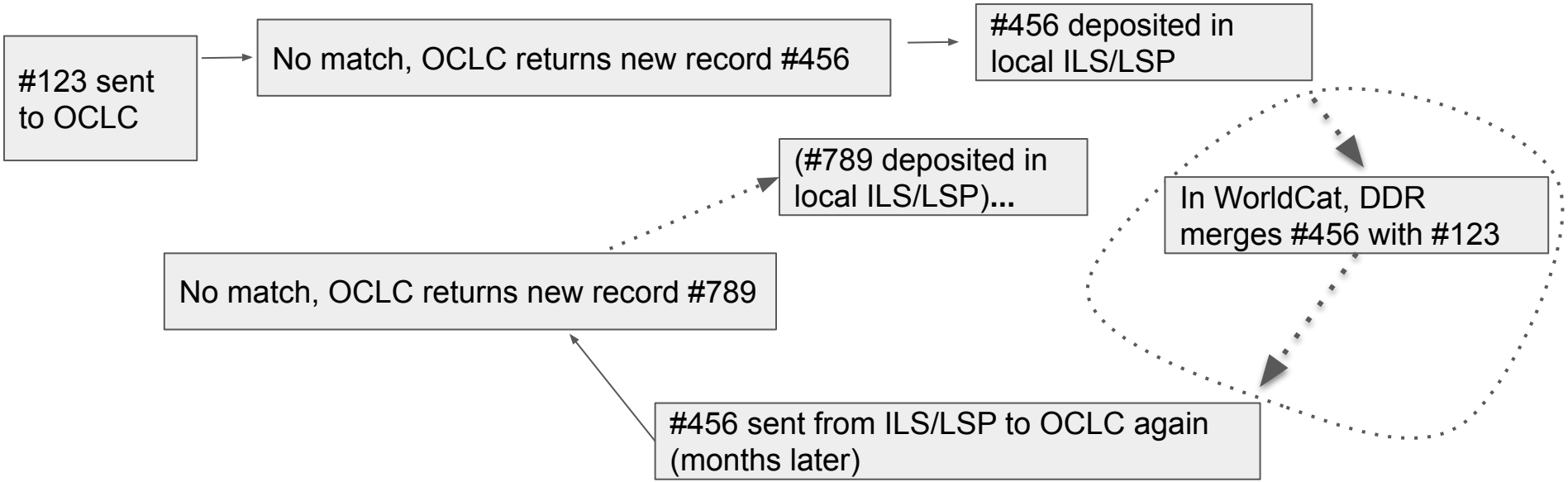
- Record matching can leave stray holdings in WorldCat



- Records constantly merging in WorldCat via DDR (Duplicate Detection Resolution) and Member Merge Project
- Lag between data sync and report processing
  - Reports contain new OCLC#s, but merges can occur after report delivery
- Duplicate records in local ILS/LSP can cause problems

OCLC Datasync Issues

- *Note: Data Sync Record Matching Algorithm different from DDR. Can result in "loop" behavior*



Reports from OCLC

- Numerous reports delivered after each sync (WorldShare>>Metadata>>My Files>>Downloads)
- Reports generated within hours of Alma publishing job
- TCNJ uses two reports
  - Bibliographic Processing Report (BibProcessingReport.txt)
  - Bibliographic Exception Report (BibExceptionReport.txt)
- Your mileage may vary
- **Use Python to enhance the Bibliographic Processing Report**
- Manually process the Bibliographic Exception Report

BibProcessingReport.txt

- Pipe delimited
  bibKey | **local system number** | **input OCLC** | **output OCLC** | bibAction
  NJT_156489|**9992589134051 91**|**1098222884**|**1098222884**|match

- Desired outcome:
  - Keep all OCLC#s up to date in Alma
    - Maintain links from WorldCat.org
    - OCLC# is match point for dozens of record sources/vendors
  - Keep holdings aligned with WorldCat

OCLC-Datasync-Postprocessing.py

- Intended for use with the Bibliographic Processing Report
- Input (from BibProcessingReport.txt)
  NJT54689 | 991146803405191 | 830722503 | 1232418344 | create
- Output (oclc_result.csv)

DATASYNC	MMSID	FILEINPUT	FILEOUTPUT	ACTION	FILEMATCH	BATCH	ORIGBATCHMATCH	NEWBATCHMATCH	HELD
NJT54689	991146803405191	830722503	1232418344	create	FALSE	1232418344	FALSE	TRUE	TRUE

OCLC-Datasync-Postprocessing.py

- Windows OS
- Libraries/modules
  - pandas, numpy, glob, path
  - bookops-worldcat developed by Tomasz Kalata (NYPL)
    https://pypi.org/project/bookops-worldcat/
    (Requires WorldCat Metadata API)
- Targets first text file in downloads folder (e.g., C:\Users\Colin\Downloads)
- Creates dataframe from text file

OCLC-Datasync-Postprocessing.py

- Dataframe
- Input (BibProcessingReport.txt)

  NJT54689 | 991146803405191 | 830722503 | 1232418344 | create

  Output (initial dataframe)

DATASYNC	**MMS ID**	**FILEINPUT**	**FILEOUTPUT**	**ACTION**
NJT54689	991146803405191	830722503	1232418344	create

- If FILEOUTPUT is null, replace with FILEINPUT
- Initial comparison (**FILEMATCH**) between FILEINPUT and FILEOUTPUT

DATASYNC	MMSID	FILEINPUT	FILEOUTPUT	ACTION	**FILEMATCH**
NJT54689	991146803405191	830722503	1232418344	create	**FALSE**

- Take all values from FILEOUTPUT and query WorldCat using WorldCat Metadata API

OCLC-Datasync-Postprocessing.py

- Use FILEOUTPUT to query WorldCat for:
  - OCLC# (currentOclcNumber)
  - Holdings status (holdingCurrentlySet)
- Append returned values to dataframe

DATASYNC	MMSID	FILEINPUT	FILEOUTPUT	ACTION	FILEMATCH	**BATCH**	**HELD**
NJT54689	991146803405191	830722503	1232418344	create	FALSE	**1232418344**	**FALSE**

- Add two comparisons: FILEINPUT==BATCH, FILEOUTPUT==BATCH

DATASYNC	MMSID	FILEINPUT	FILEOUTPUT	ACTION	FILEMATCH	BATCH	**ORIGBATCHMATCH**	**NEWBATCHMATCH**	HELD
NJT54689	99118...	830722503	1232418344	create	FALSE	1232...	**FALSE**	**TRUE**	FALSE

- Output dataframe to csv (oclc_result.csv) to downloads folder

oclc_result.csv

- Generally looking for FALSE values
- Held: If not held in OCLC (FALSE), confirm in local ILS/LSP
  - Two records with same OCLC#, one is deleted>>>unheld in WorldCat
- Comparisons: FILEMATCH, ORIGBATCHMATCH, NEWBATCHMATCH
  If FALSE, take any number of actions:
  - Examine records between Alma and WorldCat
  - Batch new OCLC#s numbers back into Alma
  - Be sure holdings are correct (holdings set on new OCLC record does not mean holdings were removed on previous OCLC record)

Questions

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