Integrating Alma and OCLC Worldshare Collection Manager for Ebook Management

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Agenda

- Background and Initial Decisions
  - When to use WCM?
  - Evaluating WCM vs. Alma community zone
  - How WCM record delivery works
- Getting set up
  - Worldshare customization and Alma Import profiles for new records
  - To delete or not to delete? Service issues, part 1
- Handling Updates
- Automating processing and assessment
  - Record quality
  - Service issues, part 2
  - Feeding Alma pre-processed records
  - Contributing to record improvement

University of Minnesota Background

- Alma early adopter (live in December 2013).
- Heavy users of OCLC's Worldcat Collection Sets service for ebook records.
- Required to migrate Collection Sets to Worldshare Collection Manager in Fall 2014.
- Limited staff time to devote to frequent, ongoing manual batch edits and imports.
- 141 Worldshare collections currently configured for MARC record delivery, used to populate 32 Alma ebook collections.

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When does it make sense to use WCM?

- No appropriate Community Zone collection available (but WCM offers).
- Full local control over bibliographic records is desired.
- Library has the resources (i.e. personnel and time) to manage coordination of WCM with Alma, and ongoing import/update processes.
- It's the only option (EBSCOhost ebooks).
- Can help to align metadata/portfolio management with licensing (when multiple CZ activations would be needed).

Worldshare Collection Manager or Alma Community Zone?

- Coverage
  - Is total KB title count accurate (compared to vendor lists)?
  - For WCM, is a Worldcat record available for every KB entry in a collection?
- Record Completeness
  - Are metadata elements that can affect discovery and identification of the resource present in most records?
- Accuracy
  - Does the record match the resource?
  - Are specific values in each record accurate?

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Collection Name	WCM	CZ
Sage Knowledge Reference 2016	28/29	26/26
ENVIROnetBASE	1068/1096	1266/1266
Gale Dictionary of Literary Biography	401/414	425/425
IEEE-Wiley Ebooks2010 & Prior	507/509	509/509
National Academies Press Monographs	6307/6317	2258/2258
Oxford Reference Premium*	321/330	366/366
Wageningen Academic ebooks 2002-2017*	266/279	333/333

Coverage

Records vs. KB entries

- Download WCM KBART file
- Filter on oclc_number

**Not always a valid cross-KB comparison. Same- or similarly-named collections may not represent the same content.*

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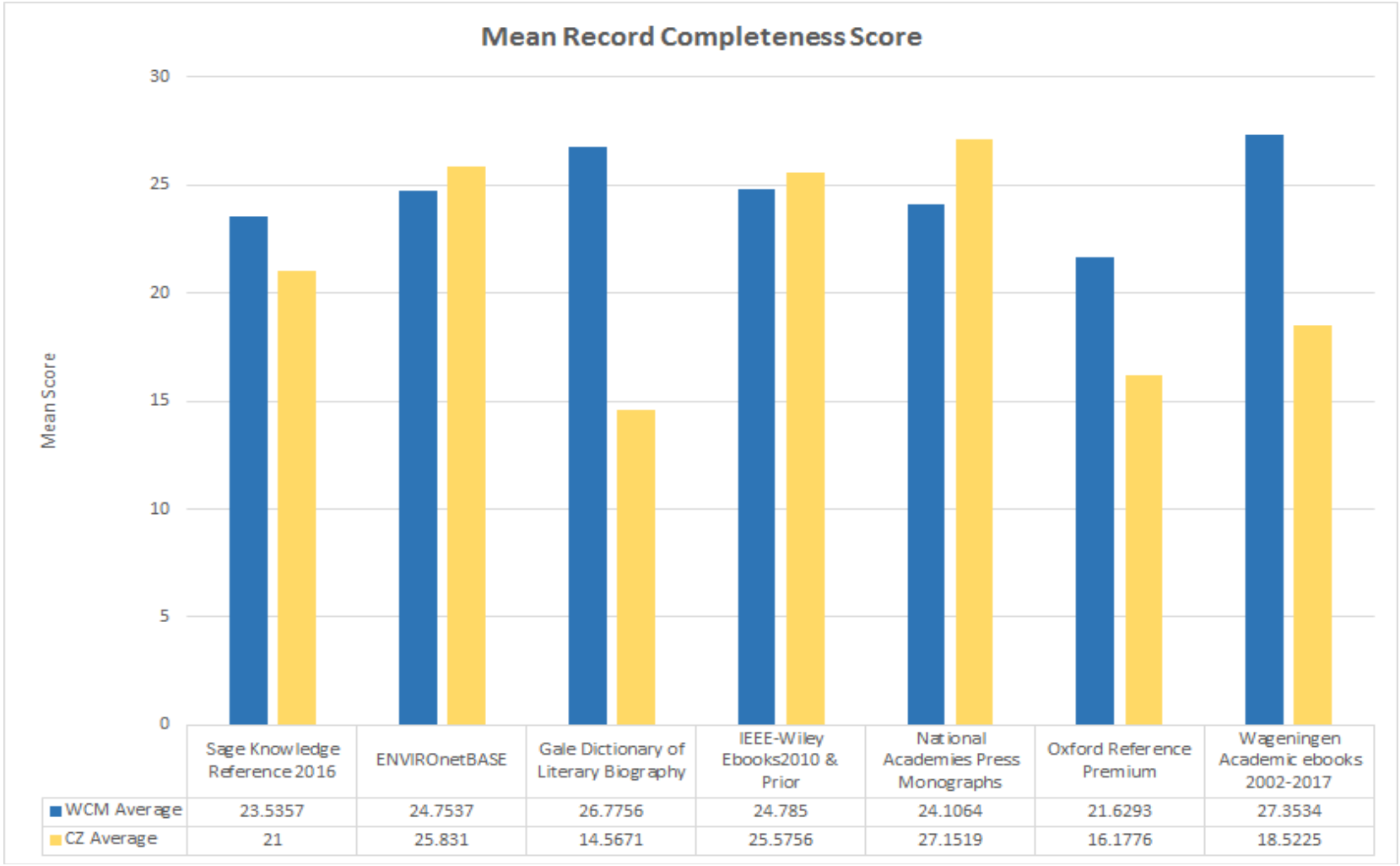
Completeness

- Past practice: impressionistic, eyes-on.
- Evolving practice: assign completeness score to every record in a file via script that counts elements affecting discovery or identification of the resource.
- Work in progress (currently a very rough measure).

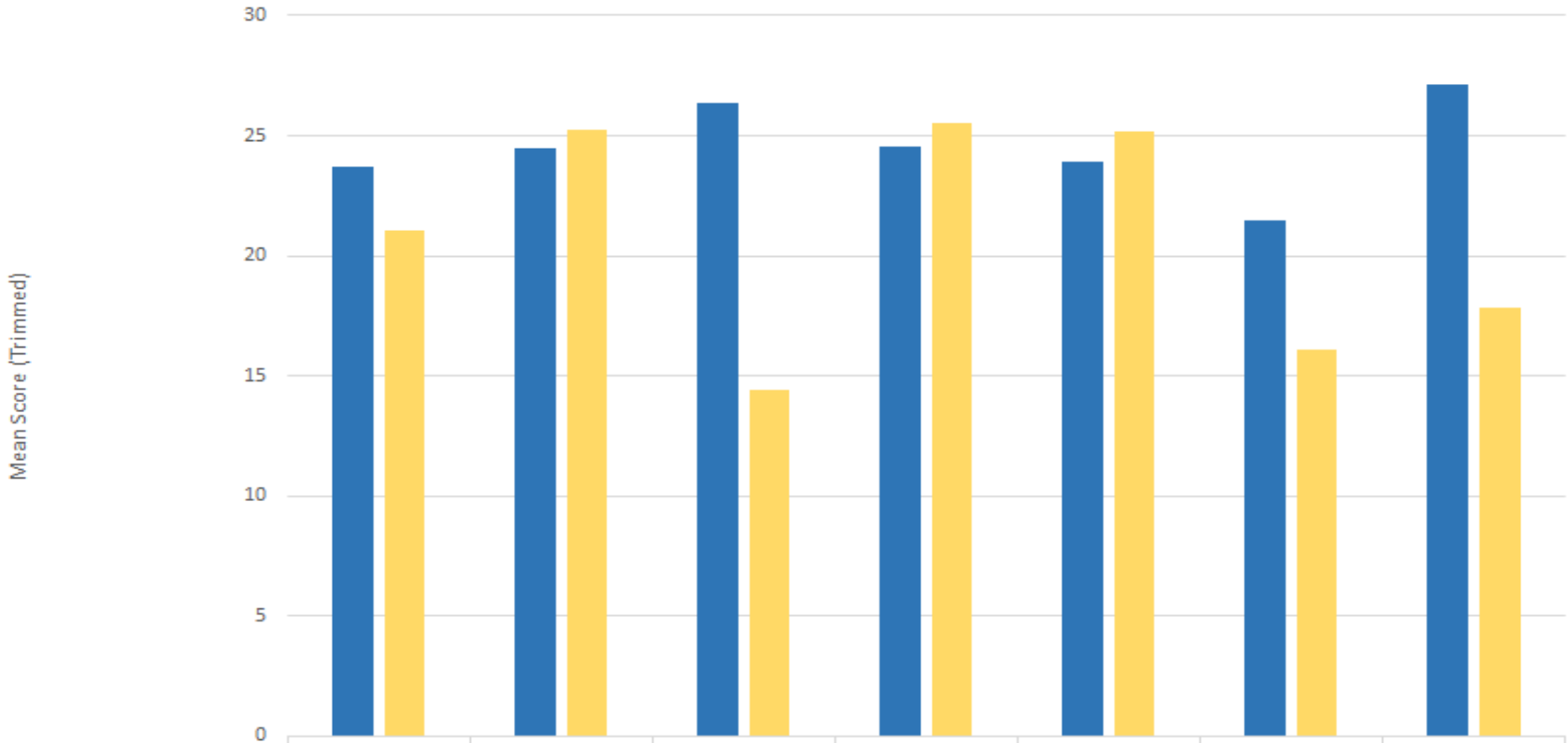
```
        try:
            date_008_int = int(date_008[0])
        except ValueError:
            date_008_int = 1111

        if date_008_int == int(date_imprint[0]):
            rec_qualities['dates_matched'] = 1
        else:
            rec_qualities['dates_matched'] = 0

        lcsh_count = 0
        lcsh_re = re.compile('^.{7}0.*$')
        for subj in subjects:
            if lcsh_re.match(str(subj)):
                lcsh_count += 1
                rec_qualities['subjects_lcsh'] = lcsh_count

        online_rsrc_re = re.compile('^.*online.resource.*$')
        for field in descr:
            subf_a_300 = field.get_subfields('a')
            if online_rsrc_re.match(str(subf_a_300)):
                rec_qualities['descr'] = 1
            else:
                rec_qualities['descr'] = 0

        cat_lang_re = re.compile('^.*eng.*$')
        for field in rec_source:
            subf_b_040 = field.get_subfields('b')
            if subf_b_040 and not cat_lang_re.match(str(subf_b_040)):
                rec_qualities['cat_lang'] = 0
            else:
                rec_qualities['cat_lang'] = 1

        rec_score = 0
        for k, v in rec_qualities.items():
            rec_score = rec_score + v
        rec_qualities['total_rec_score'] = rec_score

        record_dict[record_id] = rec_qualities

    return record_dict
```

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		isbn_count	authors	alt_titles	edition	toc	abstract	subjects	contribs	series	date_008	date_26X	dates_matched	subjects_lcsh	descr	cat_lang	total_rec_score	
2	906009220	4	1	0	0	0	1	2	1	0	1	1	1	1	1	1	15	
3	907238072	8	0	1	0	1	1	9	1	0	1	1	1	3	1	1	29	
4	908175724	4	0	1	0	1	1	4	3	0	1	1	1	2	1	1	21	
5	908514078	6	0	0	0	1	1	2	1	0	1	1	1	1	1	1	17	
6	908769188	8	0	1	0	1	1	7	2	0	1	1	1	2	1	1	27	
7	910932116	4	0	2	0	1	1	3	1	0	1	1	1	1	1	1	18	
8	911616918	6	0	1	0	1	1	7	1	0	1	1	1	1	1	1	23	
9	912323058	3	0	0	0	1	1	12	4	0	1	1	1	2	1	1	28	
10	913660907	7	0	2	0	1	1	4	1	0	1	1	1	1	1	1	22	
11	913660908	8	0	0	0	1	1	6	1	1	1	1	1	2	1	1	25	
12	913660909	6	0	1	0	0	1	5	1	0	1	1	1	1	1	1	20	
13	919002446	8	0	1	0	1	1	5	3	0	1	1	1	2	1	1	26	
14	919431798	4	0	1	0	0	1	17	1	0	1	1	1	3	1	1	32	
15	919573714	6	0	1	1	0	1	8	2	0	1	1	1	1	1	1	25	
16	919582408	8	0	0	1	1	1	6	1	0	1	1	1	2	1	1	25	
17	920521078	6	0	1	1	1	1	13	1	0	1	1	1	2	1	1	31	
18	927140606	6	0	2	0	0	1	10	2	0	1	1	1	2	1	1	28	
19	936331814	6	0	1	0	1	1	8	2	0	1	1	1	3	1	1	27	
20	936331906	6	0	0	1	0	1	6	1	0	1	1	1	2	1	1	22	
21	945736639	6	0	0	0	1	1	3	1	0	1	1	1	1	1	1	18	
22	950971839	8	0	0	0	1	1	9	1	0	1	1	1	3	1	1	28	
23	951221119	6	0	1	0	1	1	8	1	0	1	1	1	3	1	1	26	
24	951223413	7	0	0	0	0	1	10	1	0	1	1	1	4	1	1	28	
25	951226613	6	0	2	1	0	1	7	1	0	1	1	1	3	1	1	26	
26	954270412	6	0	1	0	0	1	5	2	0	1	1	1	2	1	1	22	
27	960909445	4	0	1	0	1	1	16	2	0	1	1	1	4	1	1	34	
28	965975062	2	0	0	0	0	0	0	1	0	1	1	1	0	1	1	8	
29	965982047	2	0	0	0	0	0	0	1	0	1	1	1	0	1	1	8	
30																	23.53571429	Mean
31																	23.73076923	Trimmed mean



	Sage Knowledge Reference 2016	ENVIROnetBASE	Gale Dictionary of Literary Biography	IEEE-Wiley Ebooks2010 & Prior	National Academies Press Monographs	Oxford Reference Premium	Wageningen Academic ebooks 2002-2017
WCM Average	23.5357	24.7537	26.7756	24.785	24.1064	21.6293	27.3534
CZ Average	21	25.831	14.5671	25.5756	27.1519	16.1776	18.5225

Trimmed Mean Record Completeness Scores (middle 80%)



	Sage Knowledge Reference 2016	ENVIROnetBASE	Gale Dictionary of Literary Biography	IEEE-Wiley Ebooks2010 & Prior	National Academies Press Monographs	Oxford Reference Premium	Wageningen Academic ebooks 2002-2017
WCM 80% Trimmed Mean	23.7308	24.501	26.374	24.5536	23.9523	21.4567	27.1542
CZ 80% Trimmed Mean	21.0417	25.2351	14.4308	25.5098	25.1519	16.0636	17.8704

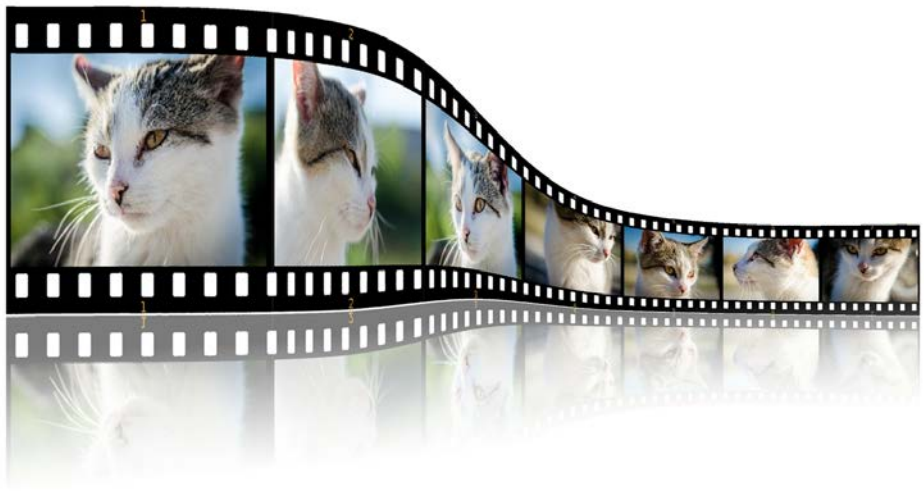
Accuracy

- Automated evaluation is hard.
- Full eyes-on evaluation is not realistic.
- Spot-checking has some value.
- Work in progress.

Disclaimer

All measures are snapshots.

Title counts, record availability, completeness, accuracy -- all are moving targets.



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Community Zone metadata enrichment

Alma April release notes:

- Community Zone bibliographic records were enriched from different providers as follows:
  - ProQuest: 1.2 million records
  - IEEE: 320 records
  - Cambridge University Press: 31250 records
  - Credo Reference: 700 records
  - Springer: 195000 records
  - Oxford University Press: 25000 records

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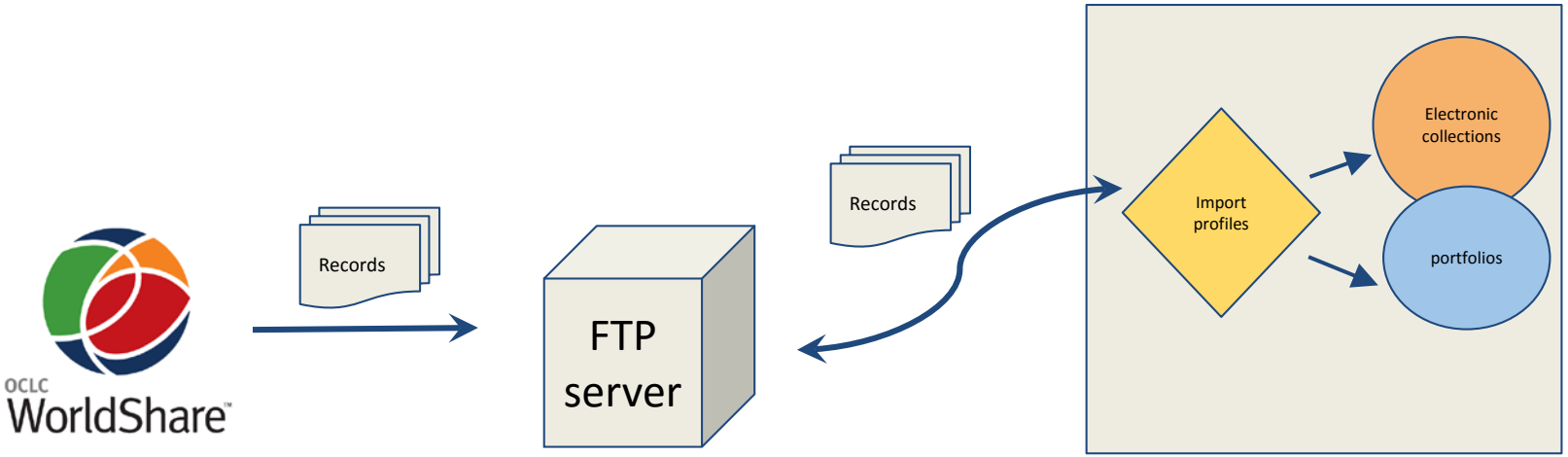
How WCM record delivery works



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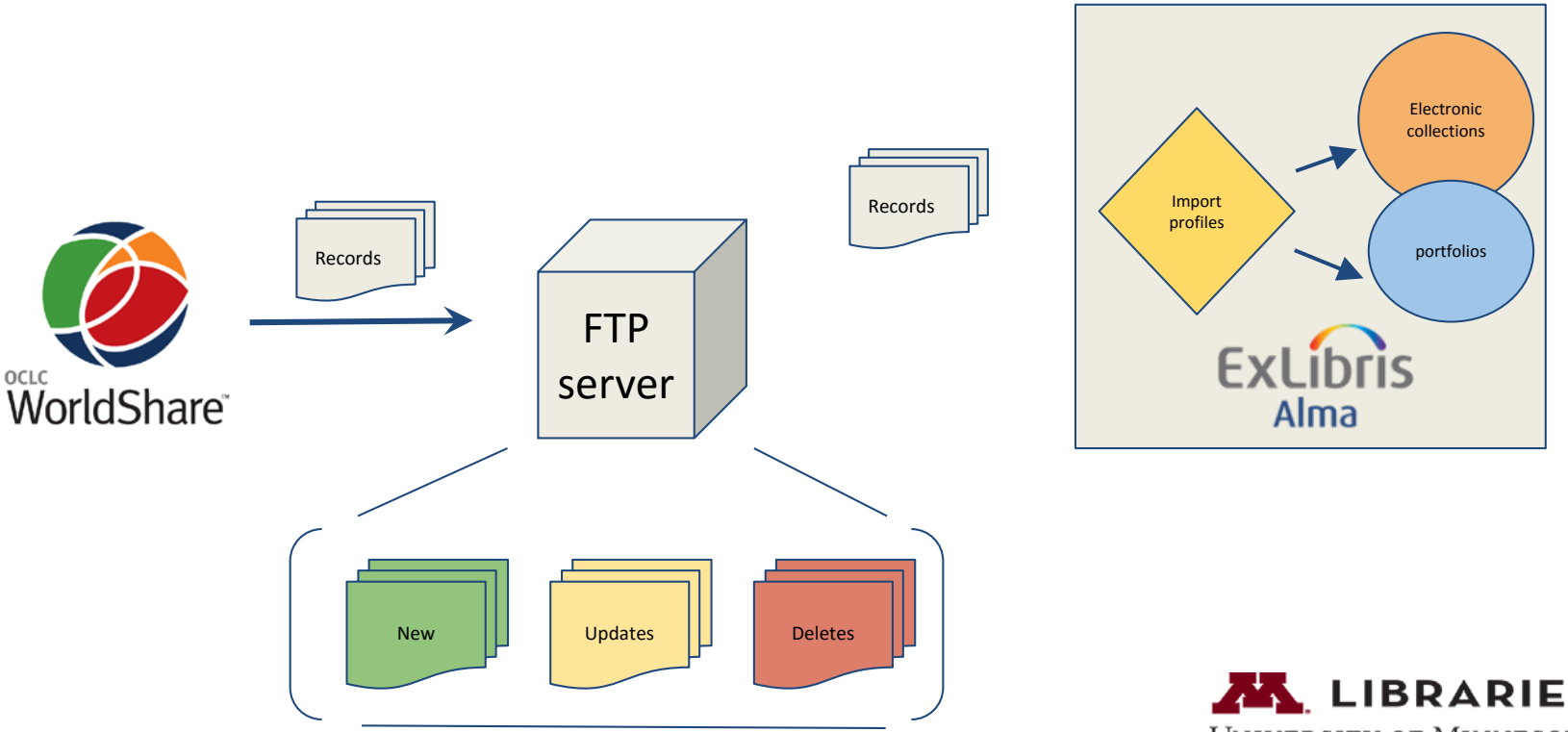
How WCM record delivery works



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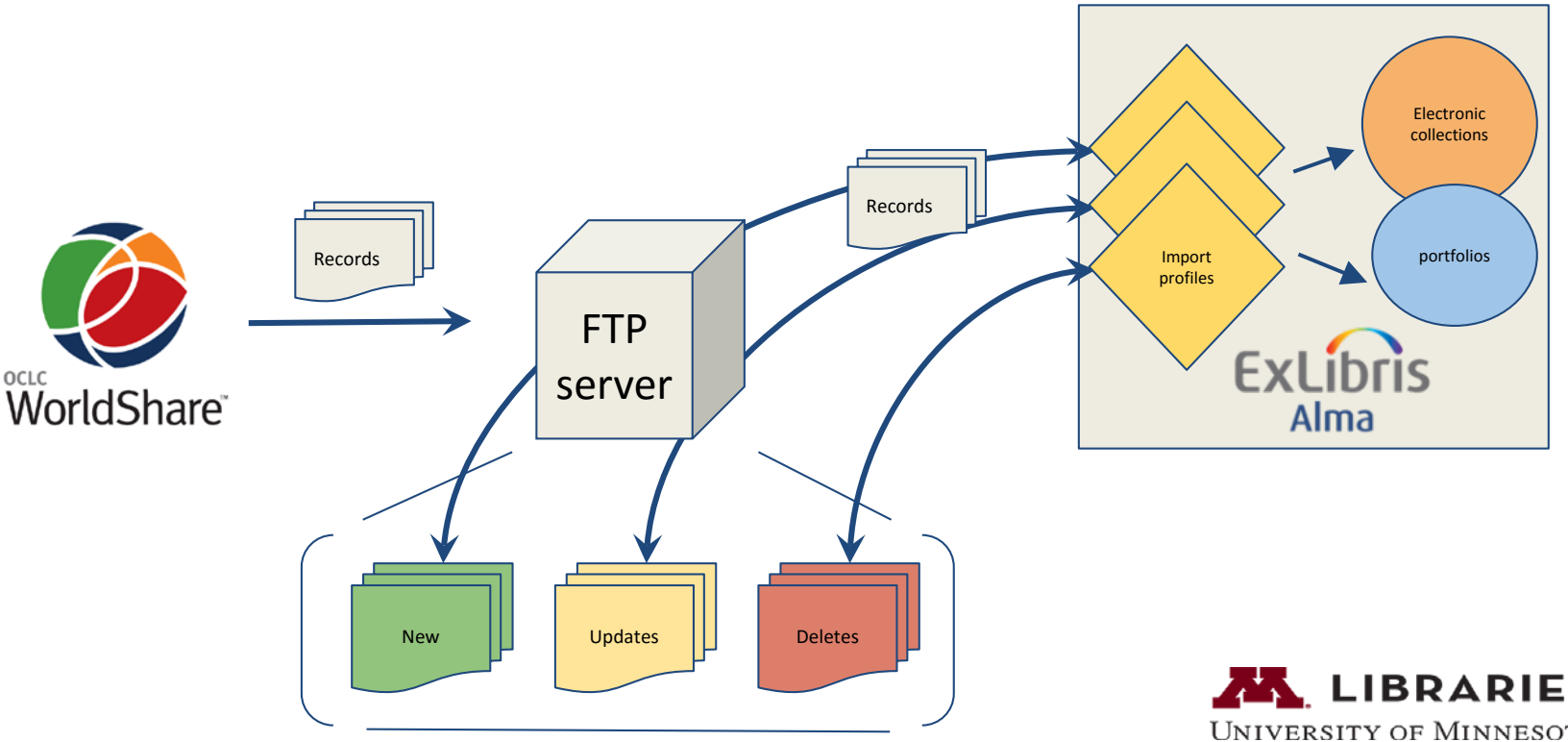
How WCM record import works in Alma



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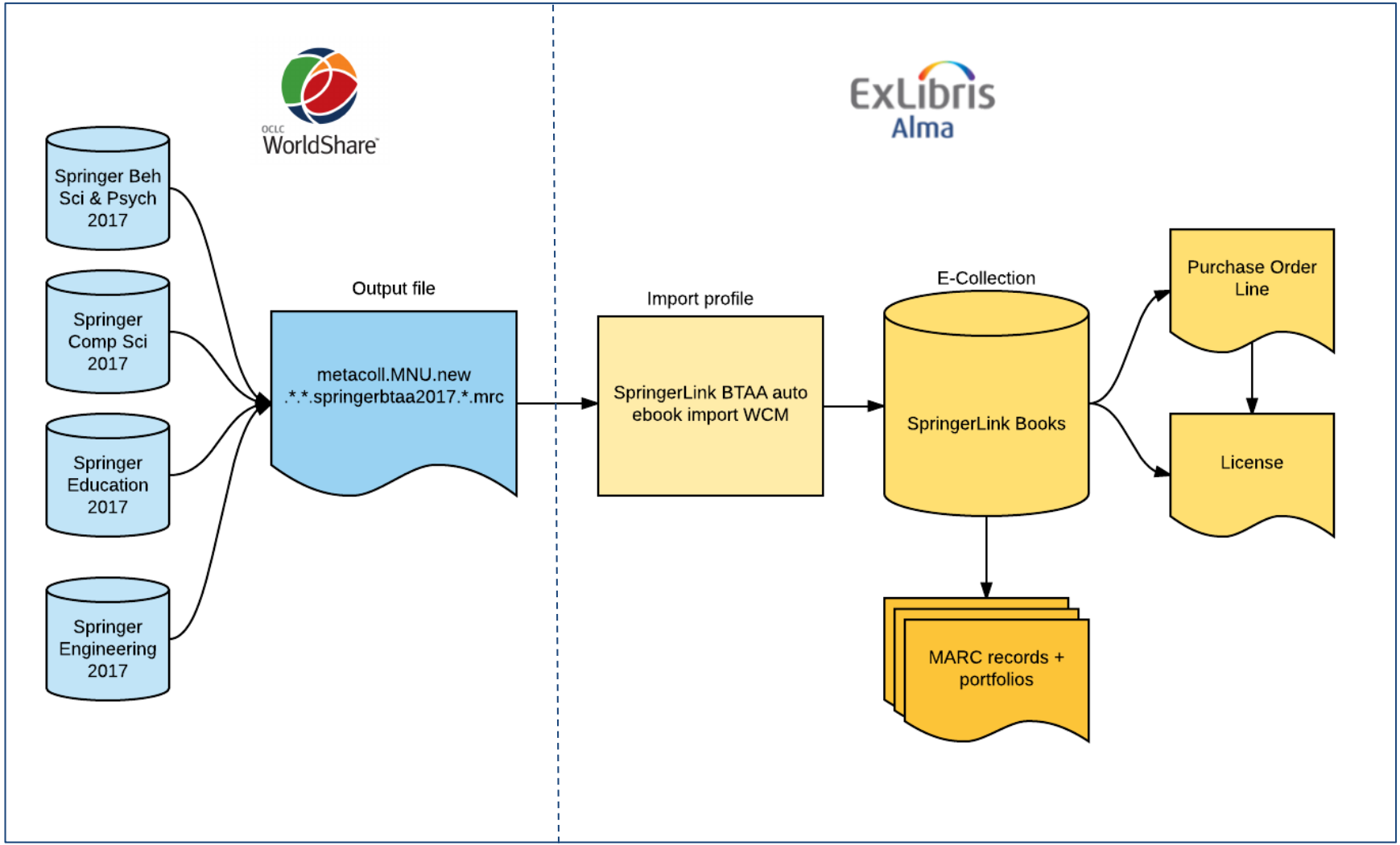

OCLC WorldShare
ExLibris Alma
Springer Beh Sci & Psych 2017
Springer Comp Sci 2017
Springer Education 2017
Springer Engineering 2017
Output file
metacoll.MNU.new .*.*.springerbtaa2017.*.mrc
Import profile
SpringerLink BTAA auto ebook import WCM
E-Collection
SpringerLink Books
Purchase Order Line
License
MARC records + portfolios

Getting set up

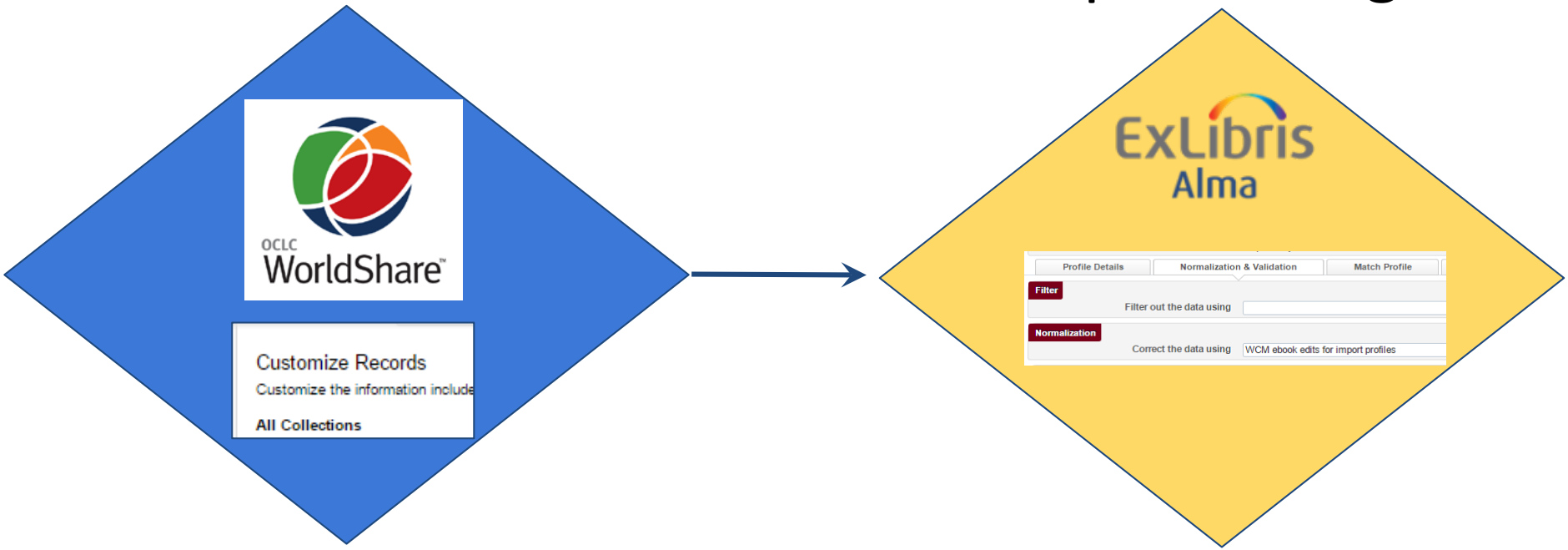
Worldshare Collection Manager:

- Customizes MARC records based on institution-wide and collection-specific settings.
- Produces files of new, updated, and deleted records on a schedule of the library's choosing.

Alma import profiles:

- Fetch files on schedule from an FTP server based on filename pattern matches.
- Customize records via normalization process.
- Apply merge rules so the appropriate fields are added or replaced upon match.
- Create and update (or delete) inventory.

WCM to Alma: New bib record processing



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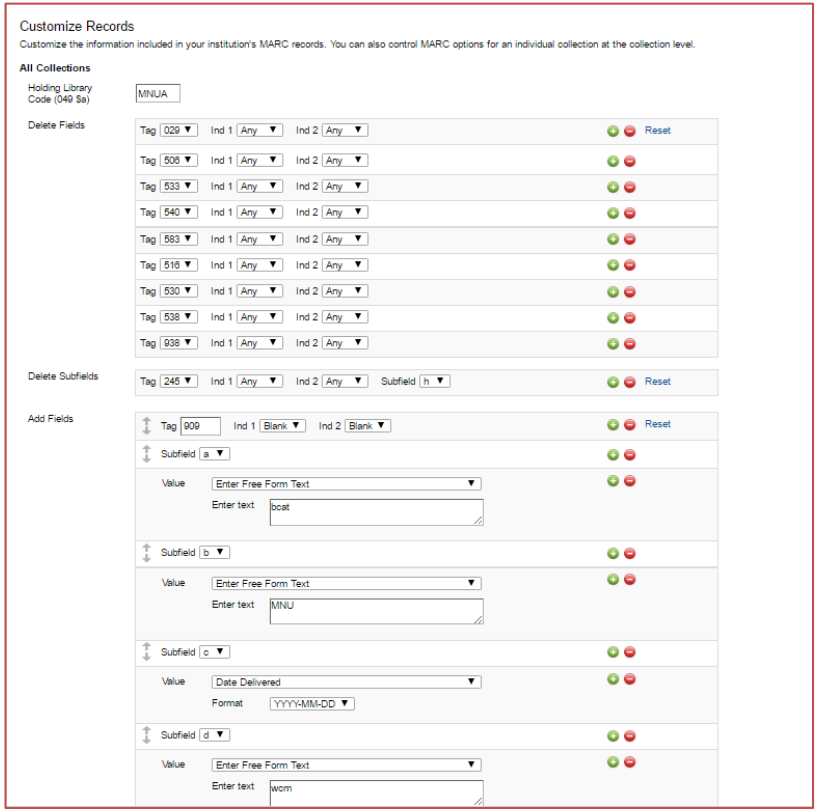
WCM MARC record customization settings



- Work in tandem with Alma import profile normalization process.
- Can do some things Alma normalization can't (e.g., dynamically generate the current date).
- Other edits better handled by Alma normalization, which offers more actions and more sophisticated conditionals.

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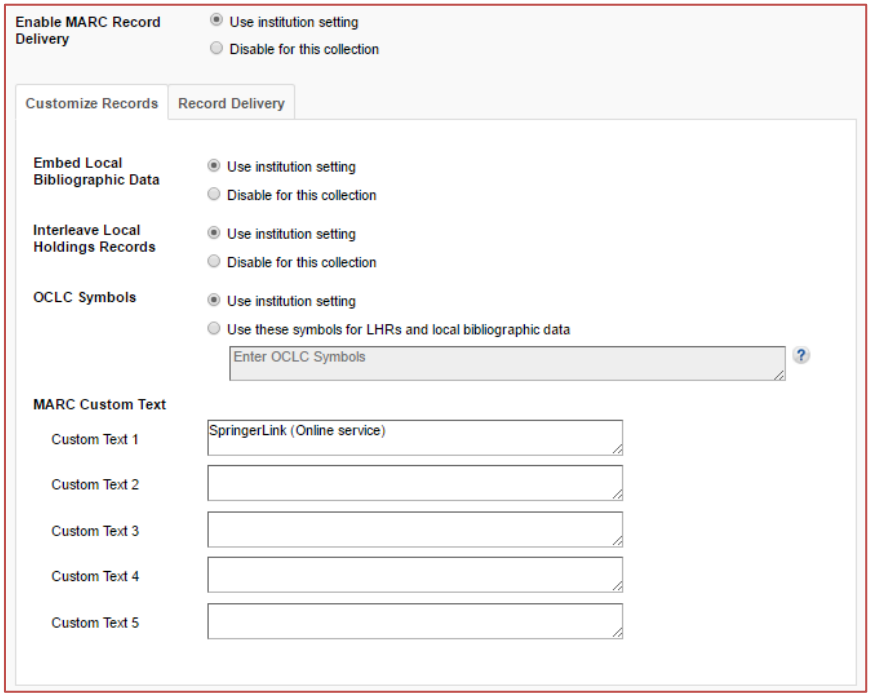
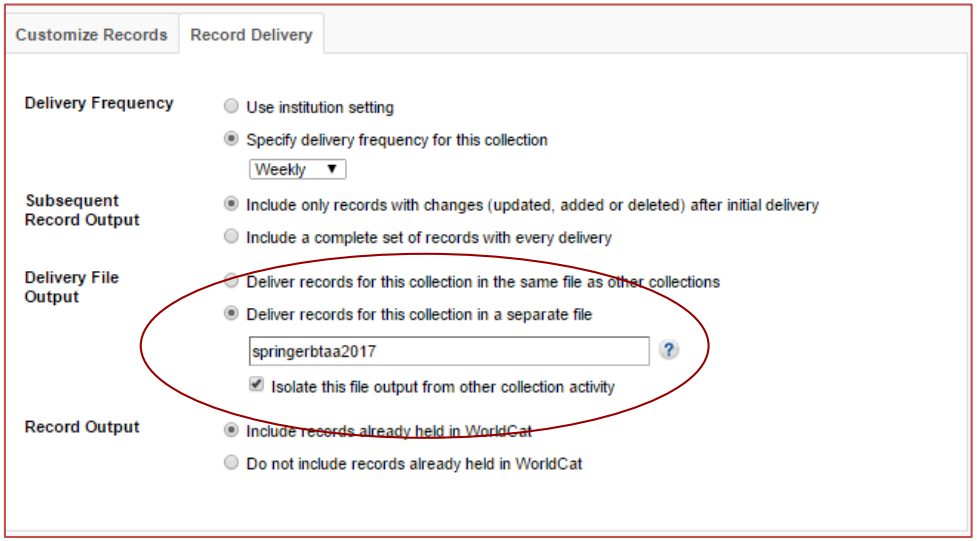
Collection-level MARC delivery configuration





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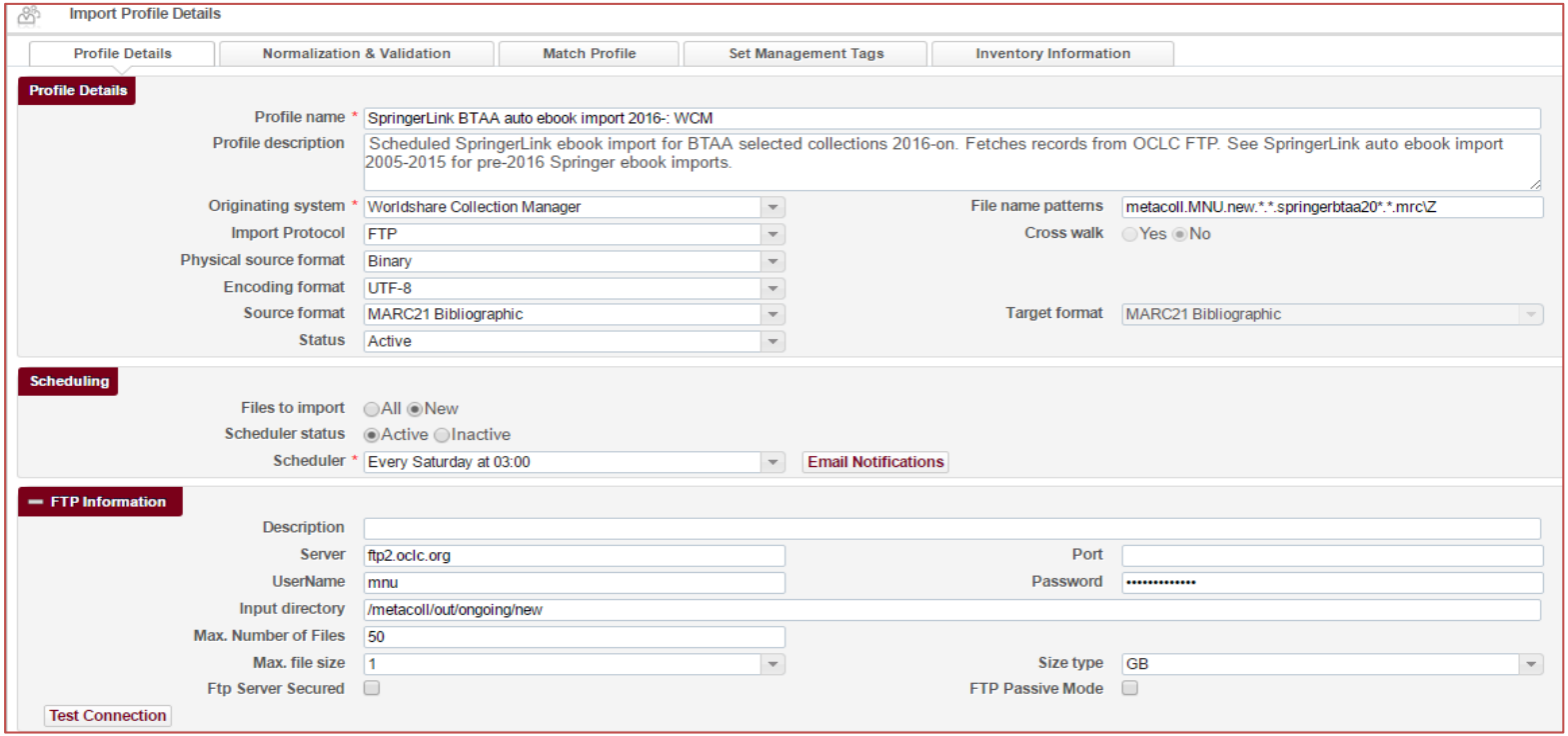
Import profiles: New records



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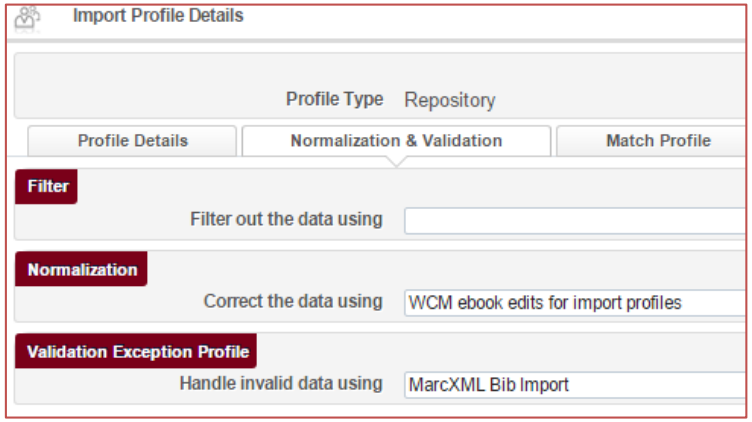
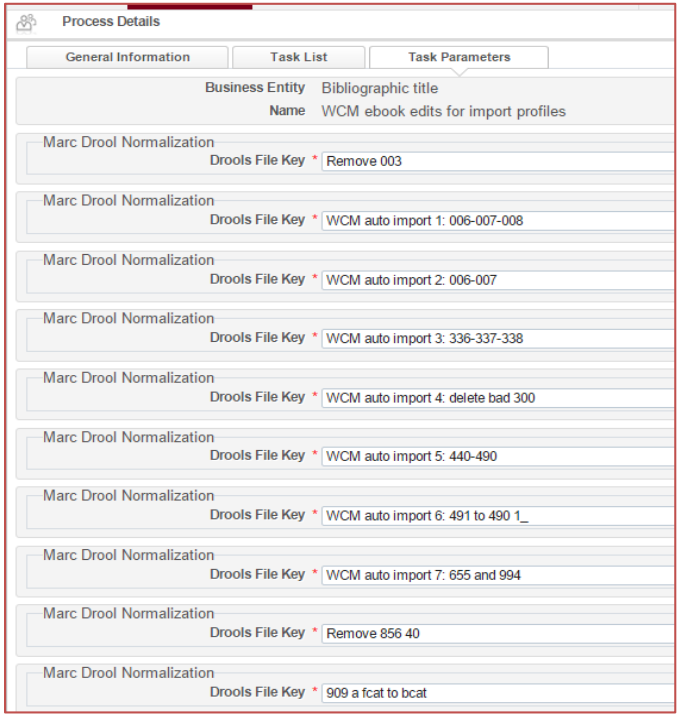
Import profiles: New records




```
rule "Ebook import merge"
#existing record is preferred record
when
merge
then
add MARC."909"
add MARC."930"
add MARC."931"
end
```



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To delete or not to delete...

- UMN decision: tread carefully with delete files, especially for collections with perpetual access.
- WCM sometimes supplies delete records for valid content, not just for content removals (e.g., if linked record in WCM has changed).
- WCM has a problematic track record with delete/replace timing (recently improved).[1]
- Frequent delete/replace actions break Primo permalinks.
- Trade-off: we miss some record updates.

...but for collections where content frequently comes and goes, delete files are **not** optional.

[1]Kristin E. Martin and Christie Thomas, "OCLC Collection Manager for Electronic Resource Record Delivery and Holdings Updates: The Chicago Experience." ALCTS CRS Committee on Holdings Information Forum, ALA Midwinter 2017.

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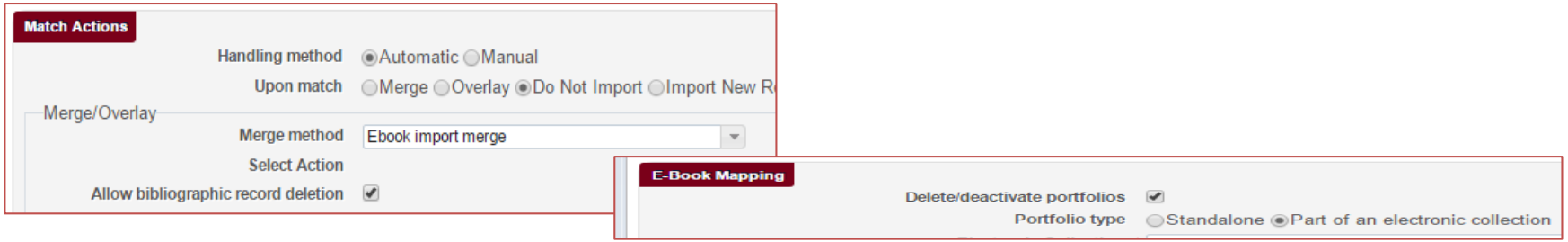
Import profiles: Delete records

- Scheduled to run less frequently than new/update profiles (generally monthly).
- FTP: finds “deletes” filenames in /deletes directory.
- Matches on OCLC ID
- If match is found and inventory exists in linked collection, deletes inventory.
- If no other inventory is linked to bib record, record is also deleted.



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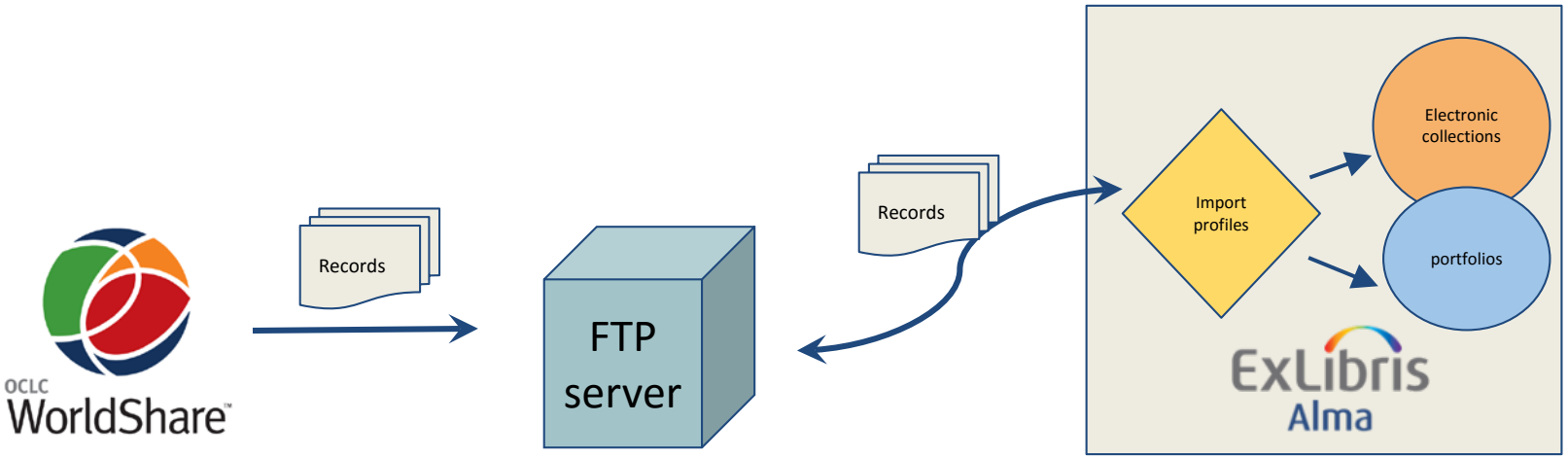
Automating record analysis



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Automating record analysis

New records

- Import, then manually clean-up
- "Provide access first, then worry about data quality"
  - Don't want to delay access because the description isn't perfect

Update records

- Filter with a script before import
  - URL changes handled manually
  - OCN changes checked manually after automatic process
  - Everything else automatically processed
- "Access exists, do no harm"
  - Can afford to wait to do analysis before updating the description

New records

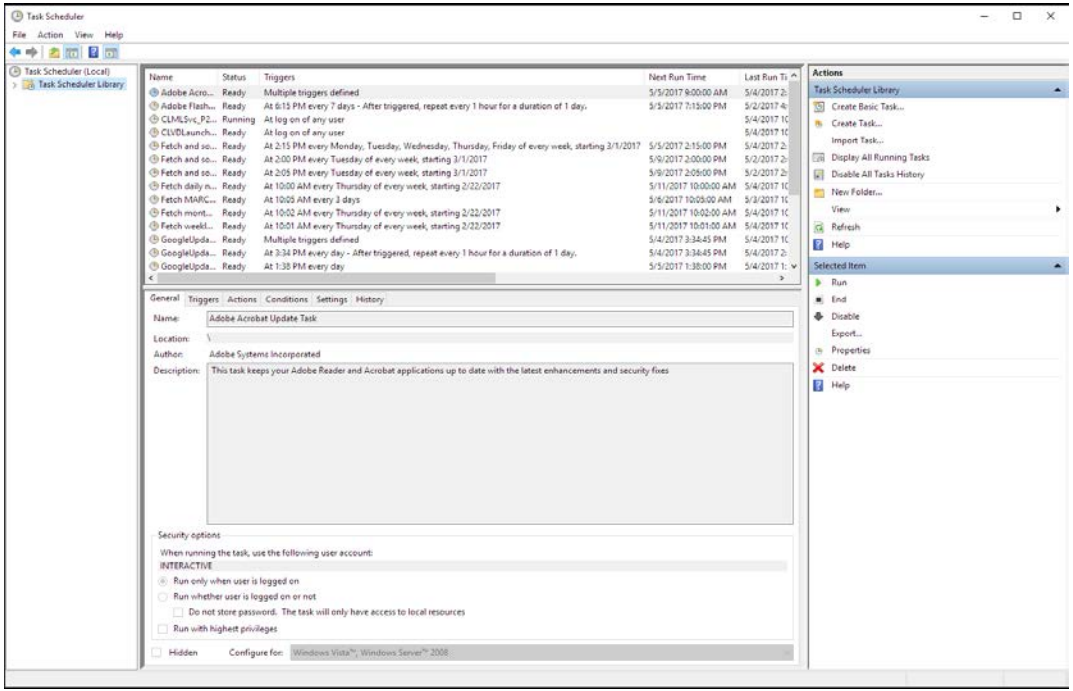
Post-ingest processing

Output: reports

Automating record analysis

- Use Windows Task Scheduler to automatically run your scripts on a daily or weekly schedule.

- The script fetches the files from the FTP server and evaluates them.



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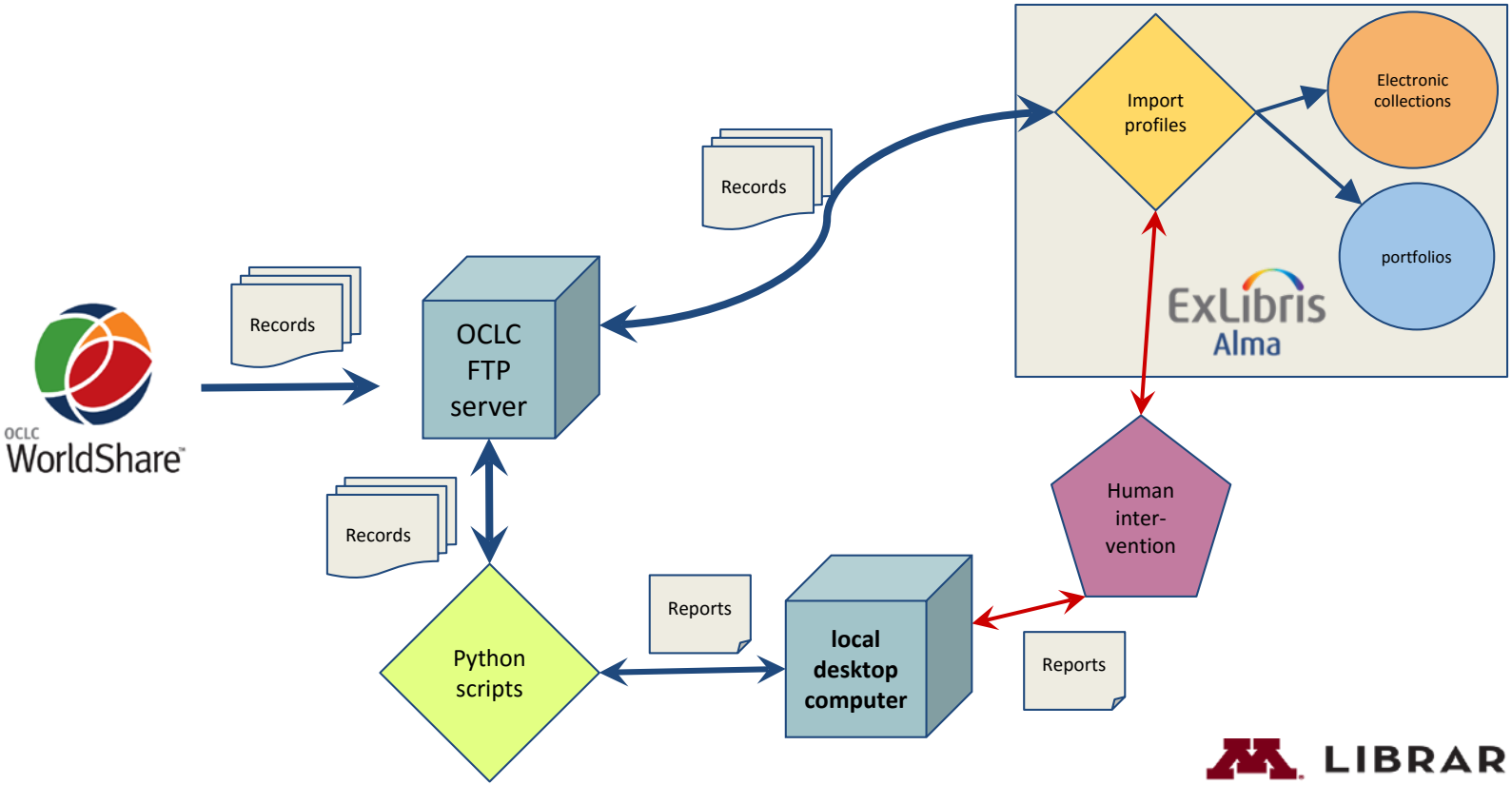
Automating new record flagging



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What are the Python scripts evaluating?

New record evaluation happens **post-ingest**.

Quality indicators:

- Potential multi-volume sets
- Language of cataloging
- Does the record describe an electronic or physical resource
- RDA
- Subject headings and call numbers

“Markers” or “flags”

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**OCN**	**ELvl**	**040b**	**006pos0**	**006pos6**	**006pos9**	**007**	**008**	**300**	**337**	**338**	**050**	**650 or MeSH**
2	ocn975046185	M	eng	m	\	d	cr	o	1 online resource	computer	online resource	050	LCSH
3	ocn976433932	I	eng	m	o	d	cr	o	1 online resource	computer	online resource	050	LCSH
4	ocn976433933	I	eng	m	o	d	cr	o	1 online resource	computer	online resource	050	LCSH
5	ocn978248508	I	eng	m	o	d	cr	o	1 online resource	computer	online resource	050	LCSH
6	ocn978248608	I	eng	m	o	d	cr	o	1 online resource	computer	online resource	050	LCSH
7	ocn978275325	I	eng	m	o	d	cr	o	1 online resource	computer	online resource	050	LCSH

Aggregate information on the markers

	A	B	C	D
1	**Number of records**	**118**		
2	Number of duplicate OCNs	0		
3	Number of unique OCNs	118		
4	Number of records with volume in description	13		
5				
6	**001 OCN**	**count**	**is duplicate**	**has volume**
7	47009084	1		
8	48139193	1		
9	52752095	1		
10	53840958	1		
11	54009499	1		
12	54009538	1		
13	56190233	1		volume
14	60014621	1		volume
15	60325512	1		volume
16	62081006	1		
17	62269072	1		
18	62893009	1		volume
19	71842473	1		
20	75189194	1		
21	75192765	1		
22	75197361	1		

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Aggregate information on the markers

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	OCN	EnLvl	cat_lang	comp_file_elec_res	online_006	document	categ_e_res_remote	online_008	item_desc	rda_media_type	rda_carrier_type	LC_call_no	LCSH or MeSH	total	percent	non-eng lang?	print record?	rda record?	has class?
2	61482004	I	1	1	1	1	1	1	0	1	1	1	1	10	90.9%				
3	70661167	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
4	82144410	4	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
5	85841308	I	1	1	1	1	1	1	0	1	1	1	1	10	90.9%				
6	ocn190760697	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
7	ocn313470822	K	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
8	ocn314115049	4	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
9	ocn642461781	M	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
10	ocn649473428	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
11	ocn681348027	K	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
12	ocn682112840	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
13	ocn701908647	K	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
14	ocn828724453	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
15	ocn833851240	M	1	1	1	1	1	1	1	1	1	0	1	10	90.9%				
16	ocn864991702	M	0	1	1	1	1	1	0	0	0	1	1	7	63.6%	non-eng lang?		rda record?	
17	ocn867781717	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
18	ocn867789579	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
19	ocn868020090	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
20	ocn868027580	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
21	ocn868155805	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
22	ocn868227607	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				
23	ocn868698338	I	1	1	1	1	1	1	1	1	1	1	1	11	100.0%				

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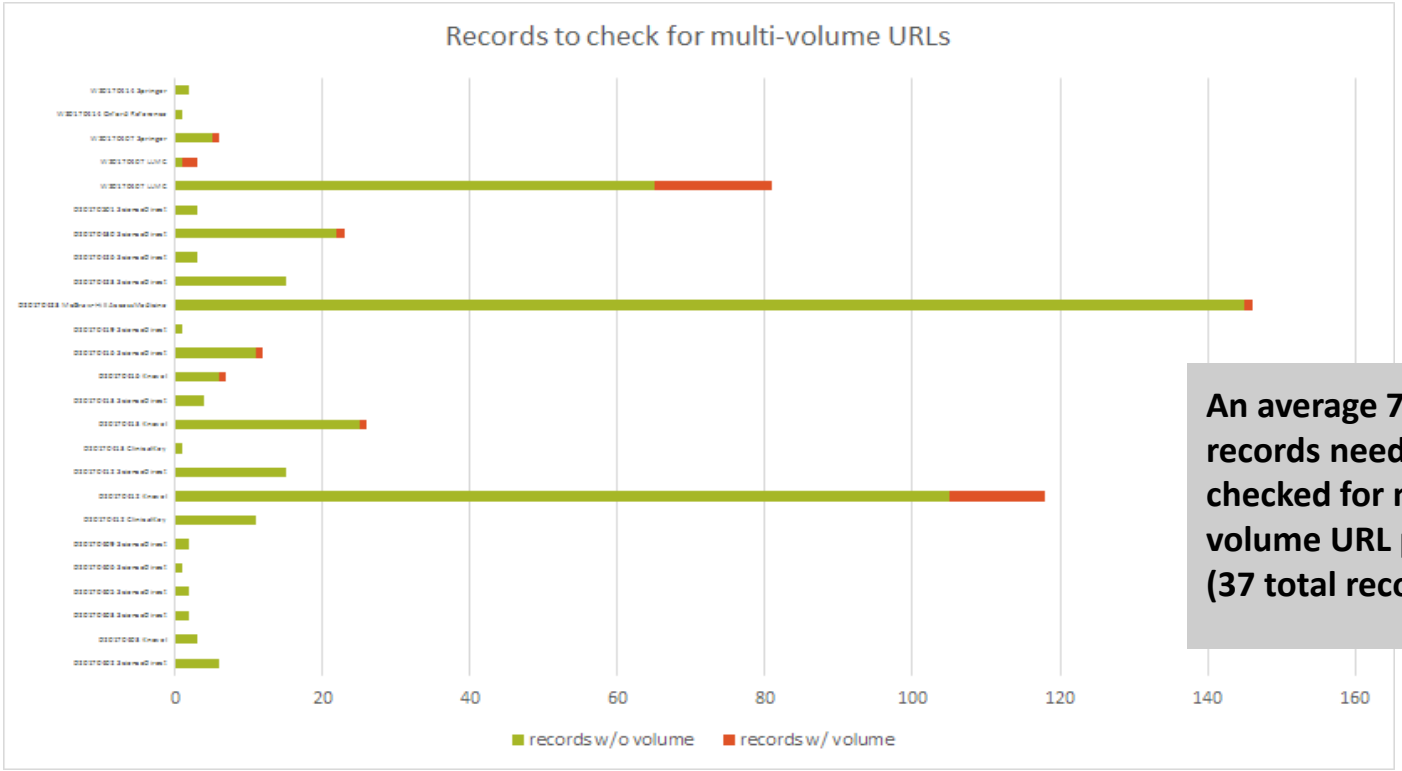
April 2017 new records



An average 7.5% of records needed to be checked for multi-volume URL problems (37 total records).

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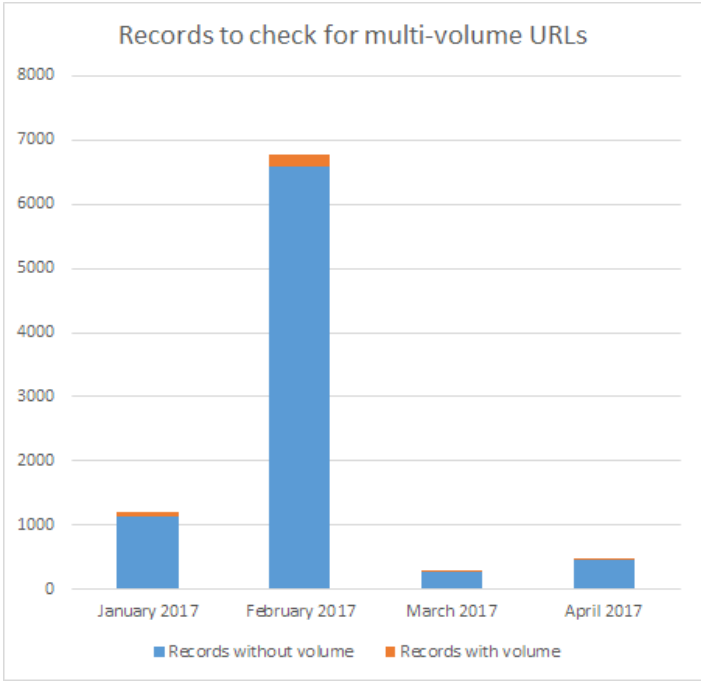
January 2017 - April 2017 new records

Month	Sum of record count	Sum of records w/o volume	Sum of records w/ volume	Sum of % to be checked for vol	Sum of non-eng language of cataloging	Sum of print record count
January 2017	1202	1142	60	5.0%	1	2
February 2017	6764	6597	167	2.5%	2	3
March 2017	289	265	24	8.3%	3	3
April 2017	491	454	37	7.5%	2	0
Grand Total	**8746**	**8458**	**288**	**3.3%**	**8**	**8**



An average 3.3% of records needed to be checked for multi-volume URLs (288 total records).

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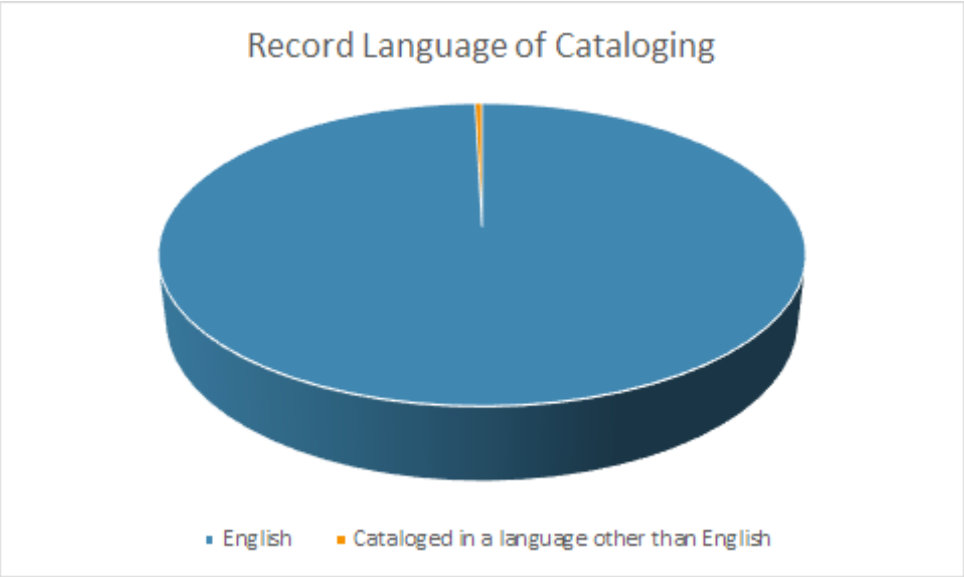
April 2017 new records



2 out of 494 records needed to be examined for language of cataloging

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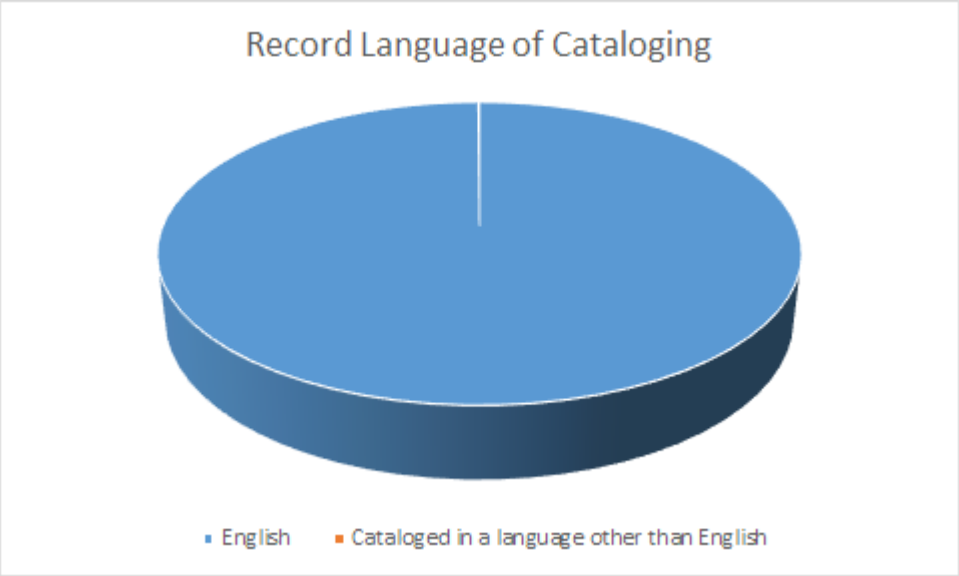
Jan-April 2017 new records



8 out of 8746 records needed to be examined for language of cataloging (~0.09%)

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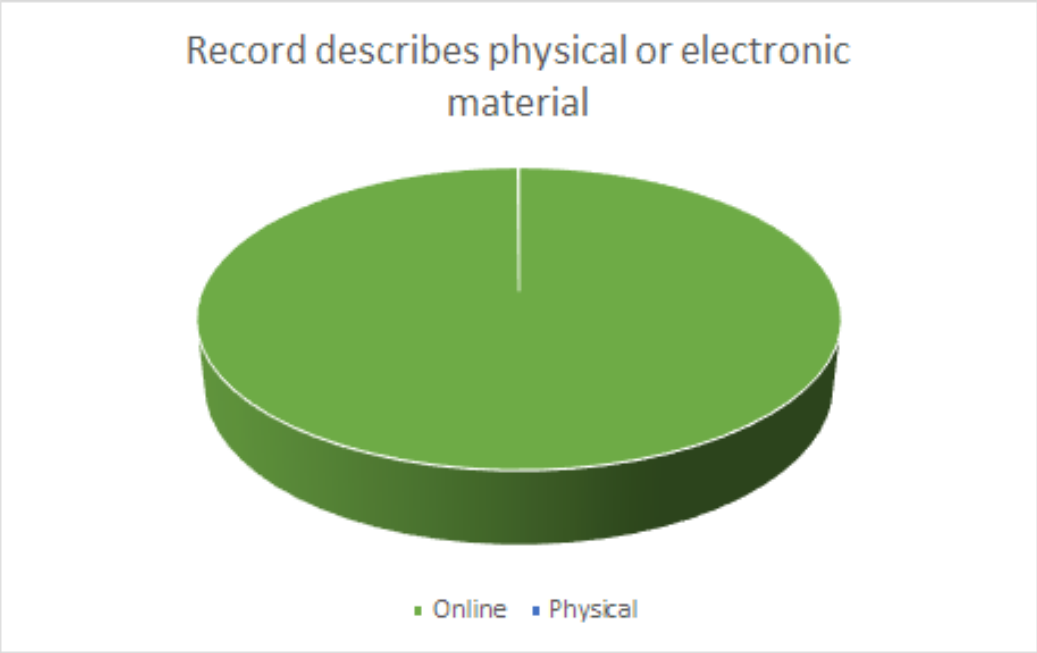
Jan-April 2017 new records



8 out of 8746 records needed to be examined to ensure they described electronic, not physical resources (~0.09%)

(There were zero records in April 2017 requiring this check.)

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Contributing to record improvement

- Records from WCM are only added to Alma if they have an OCN
- This creates gaps in coverage
- Libraries can add or replace OCNs in WCM
  - Time consuming
  - Opportunity to link to best quality record
  - Ensures that if you update a master record in OCLC, your work will be reflected in your local system

Updated records

Pre-ingest processing

Output: MARC files

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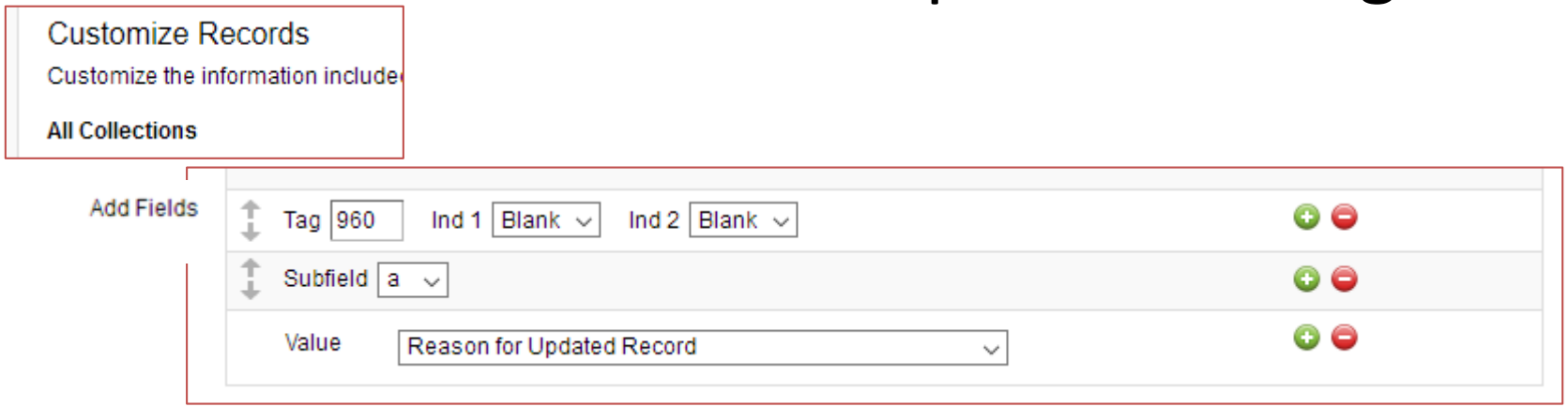
WCM MARC record updates settings



- Can configure which record changes will trigger delivery of an updated record
- Can configure output to include a field with the reason for the update (we use the **960 field)**
- Use this 960 field to sort files for processing

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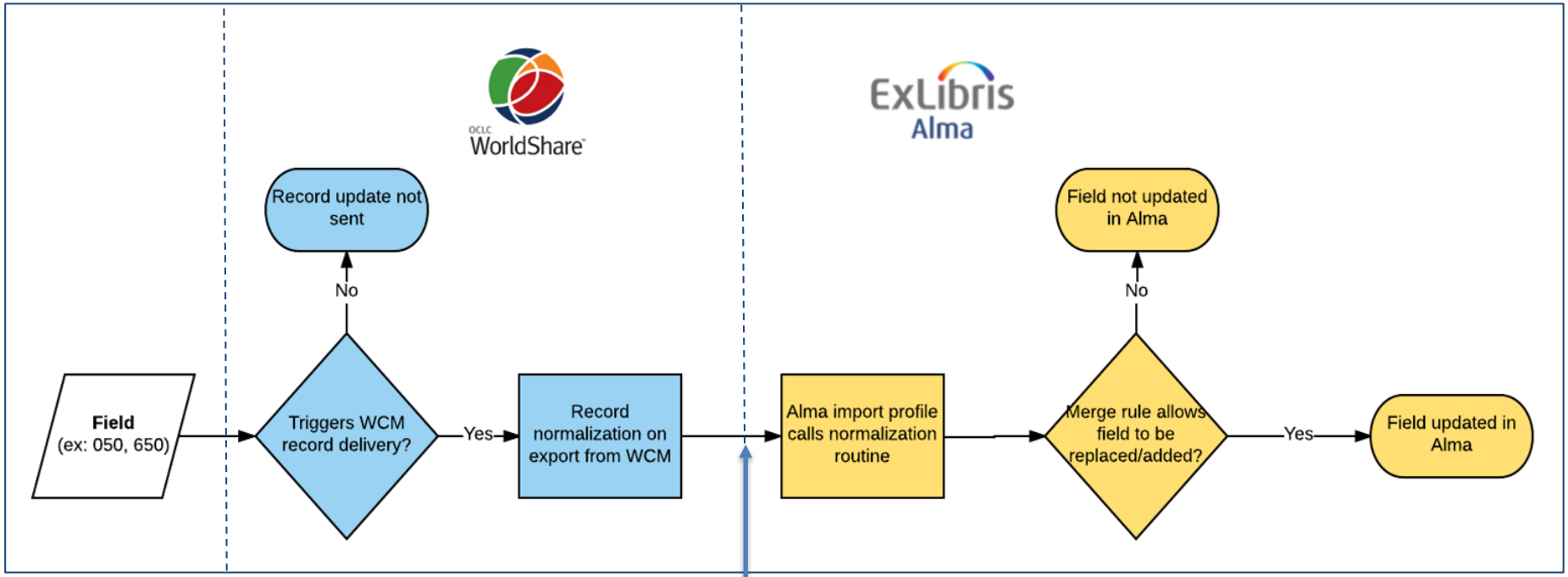
Update delivery configuration



python™

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What are the Python scripts evaluating?

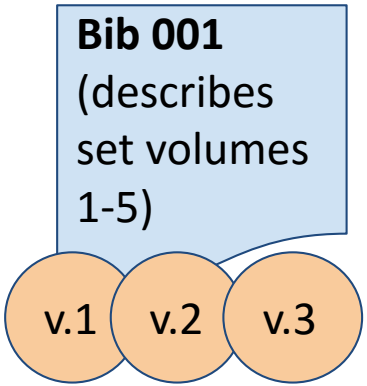
Updated record ingest filtering happens **pre-ingest**:

- Reason for update (field 960)
  - **OCLC number change**
    - Processed automatically but checked manually
    - Script output is a file of MARC records
  - **KB URL change**
    - Handled manually
    - Script output is a file of MARC records
  - **[Everything else - descriptive changes]**
    - Handled automatically
    - Script output is a file of MARC records to place on an FTP server for Alma to pickup

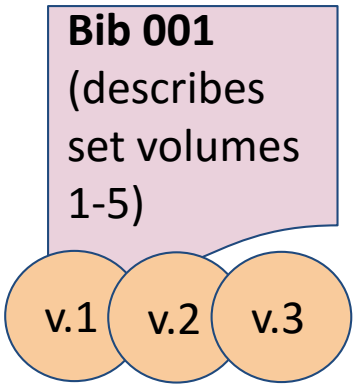
Service quality: Multi-volume records

- For multi-volume records, WCM often mis-manages these URLs.
- For example:

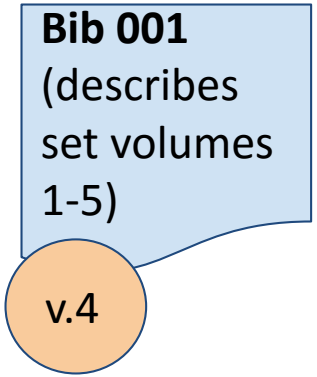
Initial record load



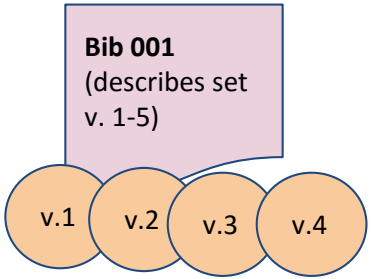
In Alma:



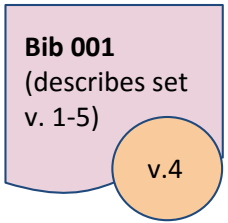
Record update (URL change)



EXPECTED



ACTUAL



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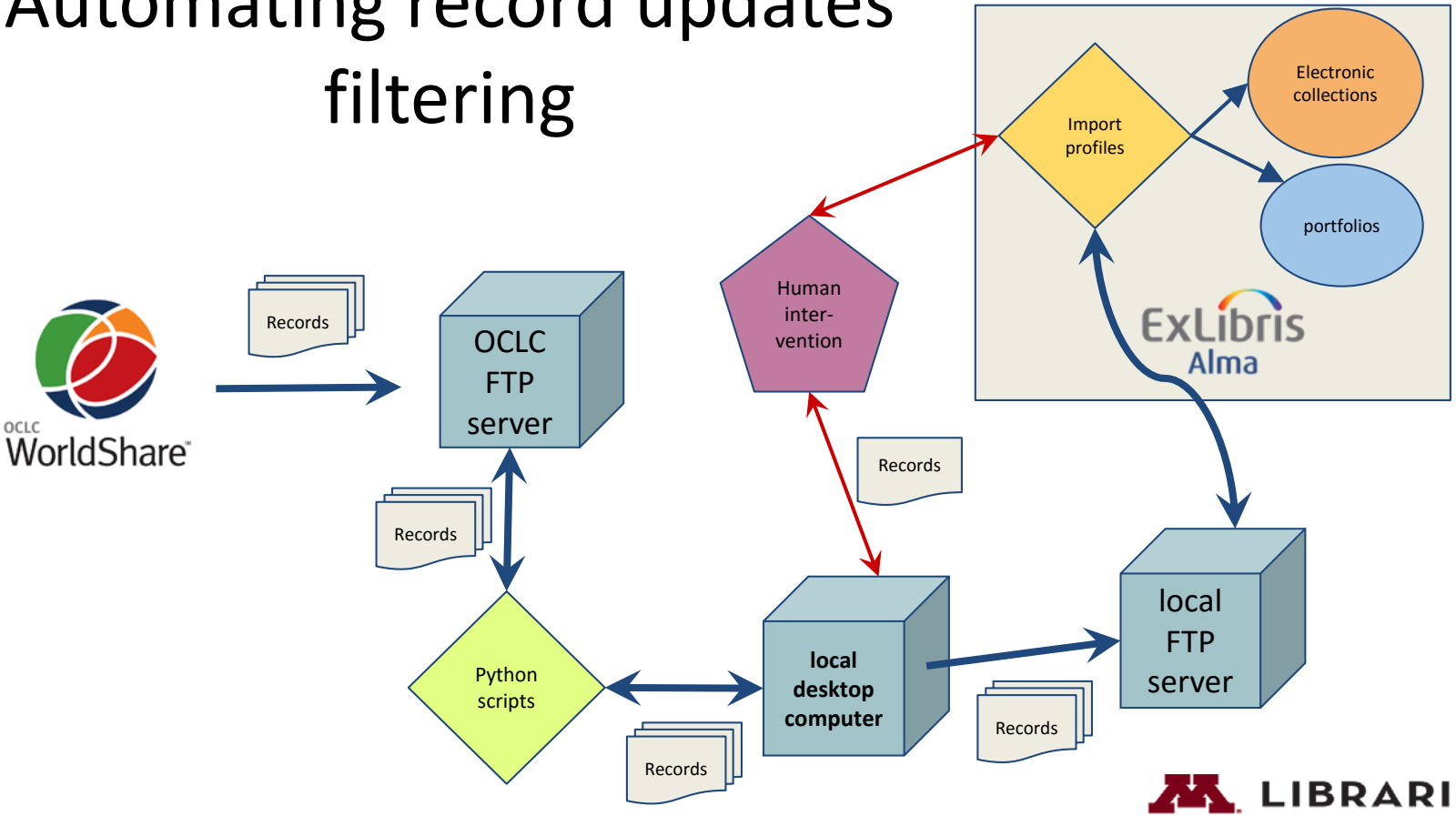
Automating record updates filtering



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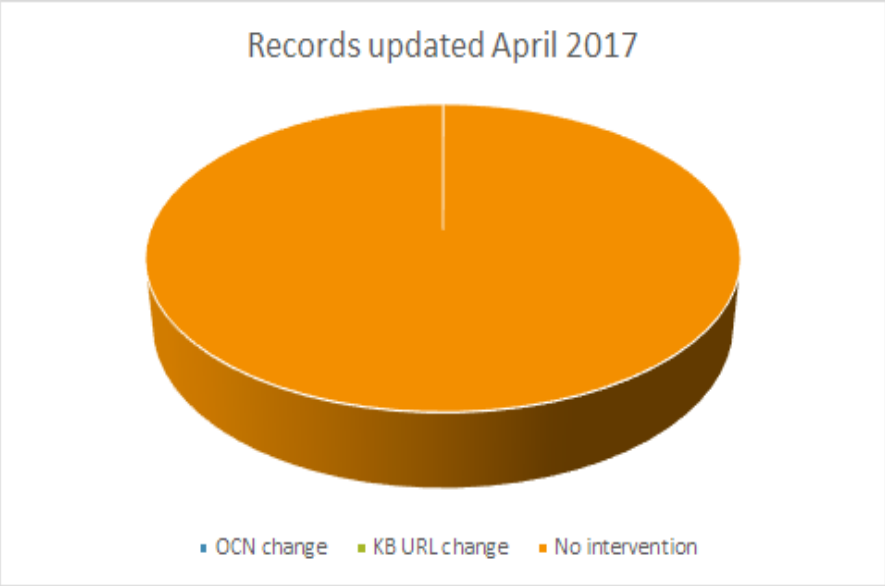
April 2017 record updates



In one month, there were only:

- 14 records with OCN changes to check (0.01%)
- 33 records with URL changes to manually handle (0.02%)
- 144914 record updates needing no intervention (99.98%)

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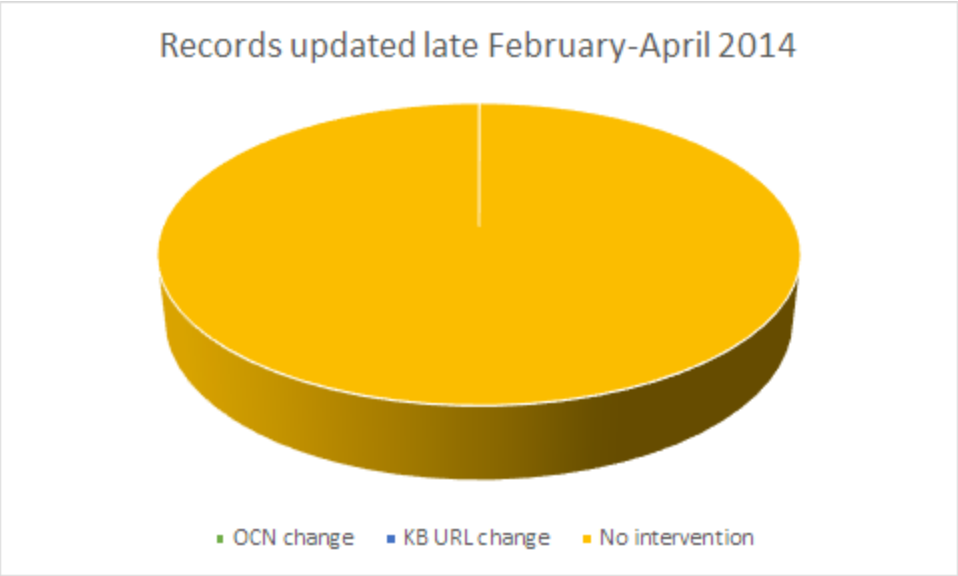
Late February-April 2017 record updates



In about two months, there were:

- 28 records with OCN changes to check (0.008%)
- 124 records with URL changes to manually handle (0.035%)
- 354435 record updates needing no intervention (99.957%)

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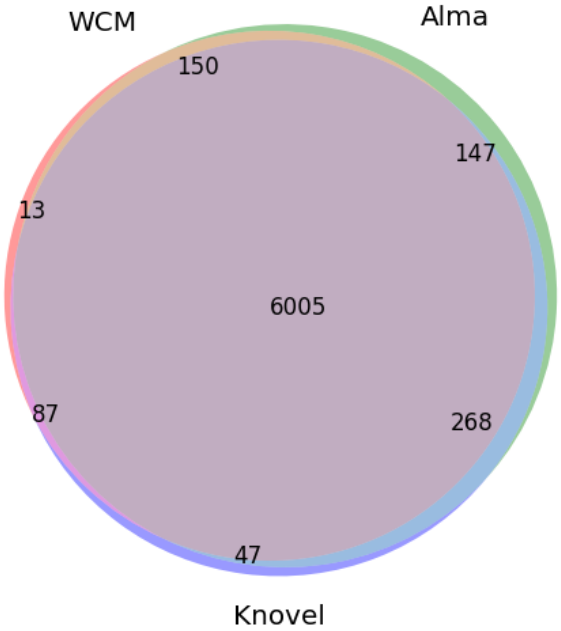
Next step: Deletes!

Downsides to not running deletes...

Things get out of sync



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Scheduling: synchronize your watches

Both WCM record delivery and Alma import profiles are **scheduled**.

You need to make sure these schedules coordinate with each other.

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Conclusion

- We don’t have all the answers.
- Journey to manageable semi-automated processes has been long (and isn’t over).
- Complexity increases as more collections are managed this way.
- Possibly less worthwhile over time as bibliographic metadata in the Community Zone improves...but we’re not there yet.

Thank You!

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