

Update Inventory records based on POL/VRN matches

 **UXPROD-3345** - Match on POL and VRN to update related Inventory records

IN REFINEMENT

Problem(s):

- Vendors often supply cataloging and shelfready information to libraries in MARC bibliographic records at point of shipment or invoicing. That data may be used to update brief Instances, Holdings, and Items created at point of order. The vendor does not have HRID or UUID information for any of the Inventory records. Without that, the best matchpoint is the FOLIO Purchase Order Line number (POL) or the Vendor Reference number (VRN).

Use Cases & Requirements:

Requirement	Status	Use cases
Allow users to update SRS MARC Bibs, instances, holdings, and items based on a POL match.	RESOLVED	<ul style="list-style-type: none">• Create an SRS MARC Bib for an instance that was previously Source = FOLIO• Modify the SRS MARC Bib for an instance that is Source = MARC• Update Instance and/or SRS MARC Bib from brief to full cataloging• Update holdings with permanent location, call number, URL (shelfready)• Update items with barcodes, permanent loan type, In process or Available status (shelfready)
Allow users to update SRS MARC Bibs, instances, holdings, and items based on a VRN match.	RESOLVED	<ul style="list-style-type: none">• Same as above, except used in cases when there is no FOLIO POL available for matching, e.g. approval plan purchases, DDA purchases

Sample MARC file with POL and VRN data

Firm order (FOLIO POL and Vendor Reference Number)

LDR 02524cam a2200493 i 4500
 001 on1141040024
 003 OCoLC
 005 20210610144226.0
 008 200206t20202020paua\\b\\s001\0leng\
 010 \\\\$a 2020001402
 040 \\\\$aPSt/DLC\$beng\$erda\$cDLC\$dYDX\$dOCLCO\$dOCLCF\$dBDX\$dPIT\$dUKMGB\$dYDX\$dUPM\$dYUS\$dFNE\$dGYG
 019 \\\\$a1229937418
 020 \\\\$a9780271086040\$q(hardcover)
 020 \\\\$a0271086041\$q(hardcover)
 024 8\\\$a**90030228025**
 035 \\\\$a(OCoLC)1141040024\$z(OCoLC)1229937418
 042 \\\\$apcc
 050 00\$aND237.J76\$bV36 2020
 082 00\$a759.13\$223
 100 1\\\$aVanDiver, Rebecca,\$d1982-\$eauthor.
 245 10\$aDesigning a new tradition :\$bLois Mailou Jones and the aesthetics of Blackness /\$cRebecca VanDiver.
 264 1\\\$aUniversity Park, Pennsylvania :\$bThe Pennsylvania State University Press,\$c[2020]
 264 4\$c©2020
 300 \\\\$axii, 241 pages :\$billustrations (chiefly color) ;\$c27 cm
 336 \\\\$atext\$btxt\$2rdacontent
 336 \\\\$astill image\$bsti\$2rdacontent
 337 \\\\$aunmediated\$bn\$2rdamedia
 338 \\\\$avolume\$bnc\$2rdacarrier
 386 \\\\$mGender group:\$ngdr\$aWomen\$2lcdgt
 386 \\\\$mNationality/regional group:\$nnat\$aAmericans\$2lcdgt
 386 \\\\$mOccupational/field of activity group:\$nocc\$aUniversity and college faculty members\$2lcdgt
 504 \\\\$aincludes bibliographical references (pages 213-223) and index.
 505 00\$tIntroduction : claiming middle ground --\$tSeeking success : school, society, and career aspirations --\$tRoutes to roots : from Black Washington to Black Paris --\$tDiasporic directions : Haiti, collage, and composite aesthetics --\$tIn and out : Africa and the academy --\$tConclusion : composite naming practices and art histories.
 520 \\\\$a"A critical analysis of the art and career of African American painter Lois Mailou Jones (1905-1998). Examines Jones's engagement with African and Afrodiasporic themes as well as the challenges she faced as a black woman artist"--\$cProvided by publisher.
 600 10\$aJones, Lois Mailou\$xCriticism and interpretation.
 600 17\$aJones, Lois Mailou.\$2fast\$(OCoLC)fst00051276
 650 10\$aAfrican diaspora in art.
 650 17\$aAfrican diaspora in art.\$2fast\$(OCoLC)fst01902318
 655 17\$aCriticism, interpretation, etc.\$2fast\$(OCoLC)fst01411635
 924 \\\\$a**90030228025**
 935 \\\\$a**12345-1**
 949 1\\\$aND237.J76\$bV36 2020\$fART\$g1\$i00053505045\$laada\$s-\$t0\$u-\$z05000
 980 \\\\$a210622\$b6613\$d000\$e5423\$f928288
 981 \\\\$bMHUMAAA\$caa

Approval Plan Automatic Purchase (Vendor Reference Number only)

Match on POLs with which statuses?	RESOLVED	<p>Per Christie, would want to be able to choose the POL status for successful matches</p> <p>Per Raegan, this is not a scenario that comes up for them</p>	<p>Open = OK to match</p> <p>Pending = DO NOT MATCH</p> <p>Closed = DO NOT MATCH (no use case identified yet)</p> <p>If multiple are matched (like the same VRN in Law and Main order, leading to the same Instance, but different holdings and items), stop if multiple matches. Or maybe use location as a submatch to get to the right holdings/item</p> <p>Christie: would be rare to want to match based on a closed PO, especially if it has cataloging implications and could result in accidental overlay of previous cataloging.</p> <p>Same for Jennifer E, Leeda, Dung-Lan</p> <p>A-M to talk with Devs on Friday - would it be more complexity to take status into account when matching? a little more, but infrastructure already there</p> <p>Maybe have 4 matching options</p> <p>POL with status = Open</p> <p>POL with status = Open or Closed</p> <p>VRN with status = Open</p> <p>VRN with status = Open or Closed</p>
What about multiple copies?	RESOLVED	<p>For now, we can only do 1 instance/holdings/item update until the multiples feature is developed</p> <div data-bbox="558 814 781 949" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p> UXPROD-2741 - Imp ort of MARC Bibs to create/update multiple holdings and items</p> <p style="text-align: center;"><input type="button" value="OPEN"/></p> </div>	<p>Right now, can only create single instance, holdings, item from an incoming MARC Bib. What happens if you're trying to updating multiple holdings or items from the same MARC Bib (if you have multiple holdings/items HRIDs) (find the feature for updating multiples from the same MARC Bib)</p> <p>Write a couple tests to see what happens when trying to update more than 1 item or holdings from the same MARC Bib</p>

Basic workflow

Matching on POL (only accounts for single Instance/Holdings/Item for now)

1. Data Import job profile:
 - a. Match POL to Instance UUID
 - i. Single match: Update Instance (and Create/Update SRS MARC Bib)
 - ii. No match or Multiple match: STOP
 - b. Match POL to Holdings UUID
 - i. Single match: Update Holdings
 - ii. No match or Multiple match: STOP
 - c. Match POL to Item UUID
 - i. Single match: Update Item
 - ii. No match or Multiple match: STOP
2. mod-inventory hits mod-orders endpoint to find a POL's related Inventory UUIDs (only for Open, or possibly Open/Closed, not Pending POLs)
3. If found, follow related Action and Field mapping profiles for SRS MARC Bib create/update and Inventory record updates
 - a. **Questions for SMEs:**
 - i. **would the workflow sometimes be finding the instance and then creating (instead of updating) the holdings and item?**
 1. Jenn C - for orders from previous system, creating items during receipt, but that's a time-bounded situation (migration)
 2. **Similar for Dung-lan**
 3. **Leeda - we need to test to see if system can create a holdings and item on the correct bib, if it doesn't find a match on POL - UUID.**
 - ii. **would the workflow sometimes be finding the instance and holdings and then creating (instead of updating) the item?**

Matching on VRN (only accounts for single Instance/Holdings/Item for now)

1. Data Import job profile:
 - a. Match VRN to Instance UUID
 - i. Single match: Update Instance (and Create/Update SRS MARC Bib)
 - ii. No match or Multiple match: STOP
 - b. Match VRN to Holdings UUID
 - i. Single match: Update Holdings
 - ii. No match or Multiple match: STOP
 - c. Match VRN to Item UUID
 - i. Single match: Update Item
 - ii. No match or Multiple match: STOP
2. mod-inventory queries mod-orders by VRN to find related POL (only for Open, not Pending or Closed POLs)
 - a. If only 1 POL, keep going
 - b. If multiple POLs, STOP
3. mod-inventory hits mod-orders endpoint to find a POL's related Inventory UUIDs

4. If found, follow related Action and Field mapping profiles for SRS MARC Bib create/update and Inventory record updates

What Backend stories are needed?

- Thunderjet:
 - Create API endpoint that would allow lookup by POL for related Instances, Holdings, Items
 - Already have a query for using VRNs to find POLs
 - No additional indexes needed, since there are already searches and indexes for POLs and VRNs, which probably will be fast enough
- Folijet:
 - Spike to review the feature and create BE stories: [MODDATAIMP-399](#)
 - Create match queries and matching logic for POLs and VRNs
 - Logic: [MODDATAIMP-574](#)
 - Will need cross-index query if POL/VRN matches need to be limited to specific statuses (e.g. Open, but not Pending or Closed)
 - Add stories for happy path and exception Karate tests
- Prokopovych:
 - No dev work required
- Other
 - Have PTF help with performance check once dev work is completed
 - Analyze MARC-MARC matching for 0xx and 9xx fields (based on the MARC query work previously done)
 - May not be needed if can use MARC-Instance matching to create/update SRS MARC Bib

What UI stories are needed?

- Folijet:
 - Update UI matching screen to include options for POL and VRNs for each Inventory record type
 - Instance: [UIDATIMP-1046](#)
 - Holdings: [UIDATIMP-1047](#)
 - Item: [UIDATIMP-1048](#)
 - Add stories for happy path and exception E-to-E tests: [UIDATIMP-1050](#)

Automated Testing Scenarios (for API Karate and UI E-to-E)

Scenario 1: Match on POL and update Instance (source = FOLIO), Holdings, Item (fill in some details about necessary profiles, and supply test data)

Scenario 2: Match on POL, but no match

Scenario 3: Match on POL, but multiple match

Scenario 4: Match on VRN, and update Instance (source = MARC), Holdings, Item

Scenario 5: Match on VRN, but no match

Scenario 6: Match on VRN, but multiple match

Developer Questions:

Question	Status	Conclusion	Comments
What changes are needed to the UI matching screen?	RESOLVED	Add POL and VRN options for each Inventory record type	
Any different considerations if the match-from and/or match-to field is repeatable?	OPEN		
Where do we pull the POL and VRN from?	RESOLVED	Pull POL or VRN from the MARC field /subfield designated in the match profile	
If we only wanted to match on POLs or VRNs for orders that are Open (and maybe Closed), but NOT Pending, would that be an issues? (we already use similar logic for EDIFACT invoice matching between Invoice line and POL/VRN)	IN PROCESS	No, not an issue, but confirm with Thunderjet exactly what story/work is needed from them	POs with Ongoing status (in receipt or payment) are included with Open Order status is at the PO level, but POL/VRN are at the POL level. May need to hit a composite endpoint to get the number and the status. Per Siarhei H, can use cross-index query to also find the status of a POL

E-to-E automated tests; how many, and happy path only, or negative too?

IN PROCESS

See draft test Jira [UIDA TIMP-1050](#)

- For the 4 happy path scenarios
- Possible negative scenarios
 - No match (instance, holdings, item)
 - Multiple matches (holdings, item; any need for instance?)