



Direct to Downsview

Utilizing Alma Analytics
to Manage Transfers to
Off-Site Storage

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Background

- University of Toronto Libraries is one of the largest academic library systems in North America
- In 2005, the University of Toronto established Downsview, an environmentally controlled high-density storage and preservation facility.
- Designed to house materials that are not in high demand but are still valuable for research and historical purposes
- Plays a crucial role in alleviating the space constraints faced by on-campus libraries, allowing them to focus on housing high-use materials and providing dynamic study environments

Direct to Downsview

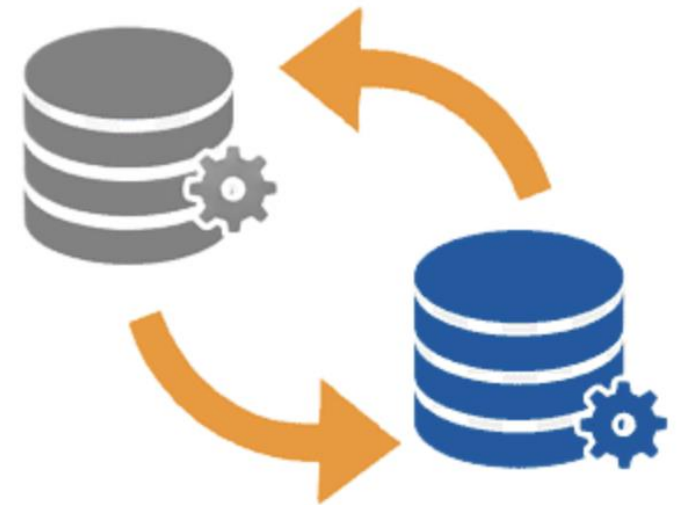
- Direct to Downsview is an automated process that transfers newly acquired items to Downsview, our remote storage facility
- Automated process routes newly acquired items with projected low use to off-site storage
- Based on criteria such as language and Library of Congress call number range
- Strategy allows Central Libraries to fulfill collection mandates, but reserves shelf space for more frequently used titles

Prior to Alma

- Previous locally hosted ILS required many workarounds to gain the needed functionality
- Many locally developed scripts created to achieve desired technical services workflows
- Direct to Downsvie script developed in C++ to enable automated transfers to Downsvie
- Program was developed specifically for our locally hosted system in which we had direct access to the ILS database

Migration to Alma

- Direct to Downsvie script developer retires – other developers not proficient with the programming language
- Program became obsolete in cloud-based environment, where all access to data is through Alma Analytics and APIs
- During transition to Alma, migration team were required to redevelop the process during transition to Alma



Finding an “Alma Way”

- Process requirements:
 - Identify newly acquired materials that fall within specific languages and LC call number ranges
 - Set items into a TRANSFER state to Downsvew facility
 - Indicate to users that materials in transit to Downsvew are not available for loan
 - Expandability to other libraries



Languages Considered in D2D Script

Afrikaans	English	Latvian	Slavic
Albanian	Estonian	Lithuanian	Slovak
Arabic	Flemish	Macedonian	Slovenian
Belarusian	French	Marathi	Spanish
Bosnian	German	Norwegian	Swedish
Bulgarian	Greek	Persian	Tamil
Catalan	Hebrew	Polish	Turkish
Croatian	Hindi	Portuguese	Ukrainian
Czech	Hungarian	Romanian	Urdu
Danish	Italian	Russian	
Dutch	Latin	Serbian	

Alma Analytics

- Natural starting point for new process to identify newly acquired items
- Original script utilizes a “reverse logic” – it indicates the language and call number ranges that STAY in Robarts Library, all materials falling outside of the specified ranges are intended to be transferred to Downsview
- To determine what items will be sent to Downsview, we must specify what the call number IS NOT within each given language

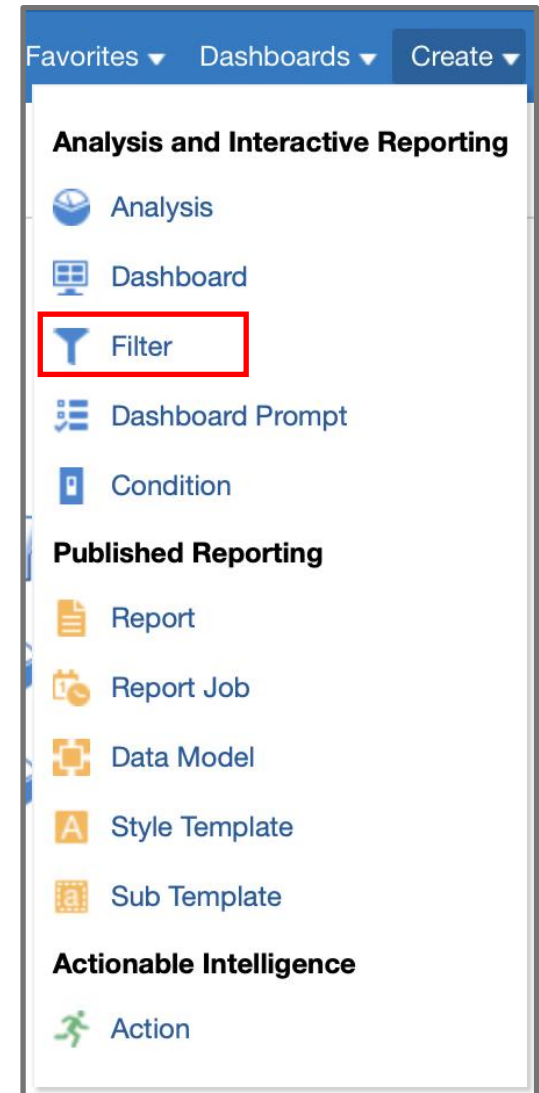
Linked Reports

- Linked reports are used to narrow the pool of candidates
- Enables the results of a report in one subject area to be the input for a report in a different subject area
- The list of barcodes created in the “Physical Items Historical Events” subject area will be input for a report in the ”Physical Items” subject area.
- This is done using filter "is based on results of another analysis".



Filters in Alma Analytics

- Analytics reports can become too unwieldy due to the number of languages required and the differing call number ranges for each language
- Solution: Filters!
- Criteria for each language can be self contained in a filter and handled as an independent unit in the main report



Direct to Downsview - Step by Step

Report 1

- Report 1 aims to capture all resources that are transiting out of the Collection Development Department on a given day.
- Based on 'Physical Items Historical Events' subject area

▲ Filters

┆ Transit From Library Code is equal to / is in COLL_DEV

OR ┆ Transit From Department is equal to / is in COLL_DEV Acquisitions Department

AND ┆ Lifecycle is equal to / is in Active

AND ┆ Item Library Code is equal to / is in ROBARTS

AND ┆ "Event Start Date"."Event Start Date" >= TIMESTAMPADD(SQL_TSI_DAY, -1, CURRENT_DATE)

AND ┆ Item Location Code is not equal to / is not in UTLD; TRANSFER; SHIPPING; BINDERY; CATALOGING; GOVPUBS; GOVSTOR; INPROCESS; MIGRATION; PETROJACYK; PRECAT; GOVREF

Report 1 Example

Title								
All_Current_COLL_DEV_Transit_Items								
Table								
Transit From Library Code	Transit From Department	Lifecycle	Process Type current	Item Library Code	Barcode	Event Start Date	Item Location Code	Event type description
	COLL_DEV Acquisitions Department	Active	Transit	ROBARTS	31761015515950	20/08/2024	STACKS	Physical Item went into transit
					31761089917017	20/08/2024	STACKS	Physical Item went into transit
					31761089917587	20/08/2024	STACKS	Physical Item went into transit
					31761111045563	20/08/2024	STACKS	Physical Item went into transit
					31761111045589	20/08/2024	STACKS	Physical Item went into transit
					31761111045605	20/08/2024	STACKS	Physical Item went into transit
					31761111045639	20/08/2024	STACKS	Physical Item went into transit

Report 2

- Report 2 is filtered by the barcodes in Report 1
- Based on 'Physical Items' subject area
- Utilizes a series of filters to capture items in particular languages and LC call number ranges

The screenshot displays a report configuration interface with two main sections: 'Selected Columns' and 'Filters'.

Selected Columns:

Bibliographic Details	Holding Details	Physical Item Details	Library Unit
MMS Id	Holding Id	Physical Item Id	Barcode
			Library Code

Filters:

- AND D2D_All_Materials_Daily_Filters_For_Transit_Items (Filter related to all items)
- OR D2D_English
- OR D2D_French
- OR D2D_German
- OR D2D_Italian
- OR D2D_Russian
- OR D2D_Serbian
- OR D2D_Slavic
- OR D2D_Slovak
- OR D2D_Spanish
- OR D2D_Swedish
- OR D2D_Ukrainian
- OR D2D_Afrikaans
- OR D2D_Catalan
- OR D2D_Croatian
- OR D2D_Czech
- OR D2D_Danish
- OR D2D_Dutch_Flemish
- OR D2D_Greek

Red arrows point from the text annotations to the corresponding filter entries in the list.

Filter for All Materials

- Some criteria are related to all resources, regardless of language
- All Materials filter links the two reports together on Barcode

Edit Filter

Column Barcode *fx*

Operator is based on results of another analysis ▼

Saved Analysis /Shared Folders/University of Tc **Browse...**

Relationship is equal to any ▼

Use values in Column Barcode ▼

Protect Filter

OK **Cancel**

Saved Filter

Create a filter for the current Subject Area. Click on a column from the Subject Area pane to add it to

- Barcode is equal to any Barcode in All_Current_COLL_DEV_Transit_Items
- AND** Material Type is equal to / is in Book
- AND** Permanent LC ClassificationTop Line is not equal to / is not in unknown; Unknown
- AND** Permanent Call Number Type is equal to / is in Library of Congress classification
- AND** Lifecycle is equal to / is in Active
- AND** Item Policy is not equal to / is not in Onsite
- AND** Library Code is equal to / is in ROBARTS
- AND** Location Code is not equal to / is not in UTLD; TRANSFER; SHIPPING; BINDERY; CATALOGING; GOVPUBS; GOVSTOR; INPROCESS; MIGRATION; PETROJACYK; PRECAT; GOVREF

Sample Criteria for Languages

- Criteria for Danish language materials

Saved Filter

Create a filter for the current Subject Area. Click on a column from the Subject Area pane to add it to this filter. Select a saved filter to apply its contents to this new filter.

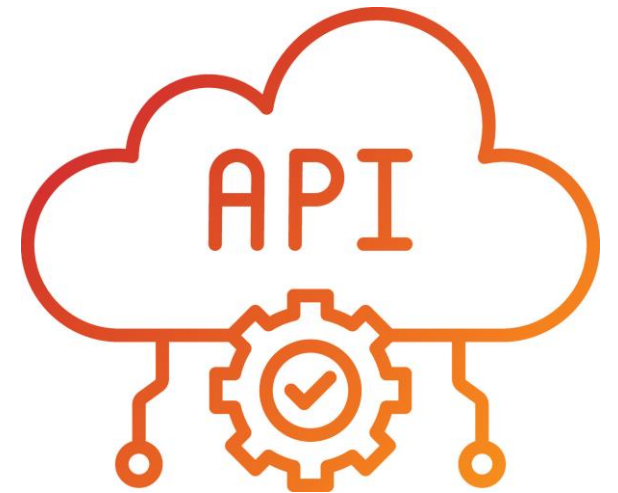
- Language Code is equal to / is in dan
- AND "Holding Details"."Normalized Call Number" NOT BETWEEN '0pt#7601' AND '0pt#8260'
- AND "Holding Details"."Normalized Call Number" NOT BETWEEN '0ph"101' AND '0ph"405'
- AND "Holding Details"."Normalized Call Number" NOT BETWEEN '0ps#9000' AND '0ps#9599'
- AND "Holding Details"."Normalized Call Number" NOT BETWEEN '0g#1000' AND '0g#3122'
- AND Classification Code (Holdings) is not equal to / is not in AN; AP; FC; Q; QA; QB; QC; QD; QE; QH; QK; QL; QM; QP; QR; R; RA; RB; RC; RD; RE; RF; RG; RJ; RK; RL; RM; RS; RT; RV; RX; RZ; S; SB; SD; SF; SH; SK
- AND LC Classification Top Line is not equal to / is not in AN; AP; FC; Q; QA; QB; QC; QD; QE; QH; QK; QL; QM; QP; QR; R; RA; RB; RC; RD; RE; RF; RG; RJ; RK; RL; RM; RS; RT; RV; RX; RZ; S; SB; SD; SF; SH; SK
- AND "Holding Details"."Permanent LC ClassificationTop Line" NOT LIKE 'AN%'
- AND "Holding Details"."Permanent LC ClassificationTop Line" NOT LIKE 'AP%'
- AND "Holding Details"."Permanent LC ClassificationTop Line" NOT LIKE 'FC%'
- AND "Holding Details"."Permanent LC ClassificationTop Line" NOT LIKE 'Q%'
- AND "Holding Details"."Permanent LC ClassificationTop Line" NOT LIKE 'R%'
- AND "Holding Details"."Permanent LC ClassificationTop Line" NOT LIKE 'S%'

Report Results

MMS Id	Holding Id	Physical Item Id	Barcode	Library Code (Active)	Location Code	Language Code	Material Type	Title
991105862170606196	22812498080006196	23812498070006196	31761111045639	ROBARTS	STACKS	rus	Book	"Pomeshchich'ia pravda " : dvorianstvo levoberezhnoï Ukrainy i krest'ianskiï vopros v kontse XVIII--pervoï polovine XIX veka /
991106180345306196	22914275710006196	23914275700006196	31761111045563	ROBARTS	STACKS	rus	Book	Gorodskiaia kommuna srednevekovogo Pskova : XIV - nachalo XVI v. /
991106180345906196	22914275890006196	23914275880006196	31761111045753	ROBARTS	STACKS	rus	Book	Pravozashchitnaia problematika v rossiïskoï zhurnalistike dinamika v sotsial'no-politicheskom kontekste /
991106180352006196	22914277900006196	23914277890006196	31761111045704	ROBARTS	STACKS	rus	Book	Tretiï front grazhdanskoï voïny v Rossii : meshochnichestvo /
991106180373606196	22914264710006196	23914264700006196	31761111045910	ROBARTS	STACKS	rus	Book	Russkiï nekropol' v Bolgarii /
991106180622206196	22914317450006196	23914317440006196	31761111045589	ROBARTS	STACKS	rus	Book	Reforma goroda Ekateriny II : po materialam gubernii tsentral'noi Rossii /
991106186552306196	22916279580006196	23916279570006196	31761111045712	ROBARTS	STACKS	rus	Book	Russkiï khleb v zhernovakh ideologii /
991106186564206196	22916263420006196	23916263410006196	31761111045746	ROBARTS	STACKS	rus	Book	ÎA! Pomniu! Chudnoe Mgnoven'e! : Vmesto memuarov /
991107200771106196	221360274990006196	231360274980006196	31761113465231	ROBARTS	STACKS	rus	Book	Slukhi, obrazy, èmotsii : massovye nastroyeniia rossiian v gody voïny i revoliutsii, 1914-1918 /
991107366912706196	221402962050006196	231402962040006196	31761115073983	ROBARTS	STACKS	pol	Book	Pokolenie (nie)obecne : uwarunkowania i procesy obywatelskiej aktywności i bierności młodych dorosłych /
991107371400306196	221403988800006196	231403988790006196	31761117195404	ROBARTS	STACKS	srp	Book	Istina o ekonomskoj podlozi hrvatskog pitanja Rudolfa Bičanića : odgovor g. dr Bičaniću /
991107371408406196	221404014290006196	231404014280006196	31761117195149	ROBARTS	STACKS	srp	Book	Kvalitet života i bezbednost žena /
991107371409006196	221404014380006196	231404014370006196	31761117194597	ROBARTS	STACKS	srp	Book	Lepo selo - vražje selo : sećanja /
991107371409406196	221404014410006196	231404014400006196	31761117185694	ROBARTS	STACKS	srp	Book	Hladno oružje srednjovekovne zbirke Narodnog muzeja Niš : katalog izložbe /
991107386812406196	221407697110006196	231407697100006196	31761118125434	ROBARTS	STACKS	pol	Book	Z Warszawy do Europy : dzieje czterech pokoleń Jastrzębowskiich /
991107387021406196	221407724960006196	231407724950006196	31761118126226	ROBARTS	STACKS	slo	Book	Bohovia starých Slovanov /
991107390945306196	221408798340006196	231408798330006196	31761117185280	ROBARTS	STACKS	tur	Book	Larende vakfiyeleri : (Karamanoğulları Beyliği dönemi) /
991107392152706196	221409659140006196	231409659120006196	31761118549203	ROBARTS	STACKS	srp	Book	Sveti Sava u kultu n predanju u severoistočnoj Bosni /
991107392945206196	221409632740006196	231409632710006196	31761114988561	ROBARTS	STACKS	per	Book	Îrân, pul-i pîrûzi-i Jang-i Jahânî-i Duvvum /
991107392947906196	221409544760006196	231409544730006196	31761117342618	ROBARTS	STACKS	ara	Book	al-Siyâsah al-Îrânîyah tujâh al-'Îrâq wa-Sûriyâ.
991107392948006196	221409544830006196	231409544810006196	31761117340240	ROBARTS	STACKS	ara	Book	Anmâṭ al-tahdîd al-Îrânî li-amn al-iqlîmî.
991107392957806196	221409550420006196	231409550400006196	31761117156513	ROBARTS	STACKS	ara	Book	Rûḥāniyat Fransîskāniyah : mawḍū'ât mukhtārah /
991107393869106196	221409533700006196	231409533690006196	31761117156539	ROBARTS	STACKS	ara	Book	al-Taḡārîr al-sirrîyah li-dawlat al-za'îm : riwāyah /
991107393869706196	221409533880006196	231409533870006196	31761117342600	ROBARTS	STACKS	ara	Book	al-Siyâq al-sardî fi al-shi'r al-'Arabî al-mu'âšîr /
991107393870006196	221409532920006196	231409532910006196	31761117340216	ROBARTS	STACKS	ara	Book	al-Şirâ' al-'Îrâqî al-Îrânî wa-ta'thîruhu 'alâ al-Kuwayt : aḥḍâth târikhiyah /

Working With Alma APIs

- Analytics results are sent to a local server to be picked up by a series python scripts used to transfer resources to Downsview
- Series of steps taken to complete the transfer
 - Cancel physical items requests
 - Item record changes
 - Change the physical location
 - Add provenance for originating library
 - Add a Permanent Move Process



Cancel Physical Item Requests

- Since items are flagged for transfer when they transiting out of the department, all items have a request type “Transit for Reshelving” on each item.
- To avoid the need for scanning, these requests must be removed from the item record.
- The script automates the cancellation of transit requests for a batch of library items.
- It reads item data from a CSV file, creates an itemized set in Alma, and submits a job to cancel the transit requests.

Item Record Changes


- Two main changes to item record: location change and addition of provenance to item record
- JSON file obtained for each item that needs to be transferred
- Item location is modified to “UTLD” - a location that indicates the item is to be transferred to Downsvieview
- Script updates the provenance information based on the item’s originating library code.
- Item JSON data is sent back to Alma to update the item record

Permanent Move Process


- The API call invokes the “Create physical item move requests” job in Alma
- The python script reads a batch file containing library items to be moved
- It categorizes the items by library/remote location and creates itemized sets in Alma for each category
- The script initiates a move job in Alma to relocate the items from their current library to the appropriate Downsvievw location

Results


- In Alma, items are in a permanent move process to Downsvievw
- In Primo, items are marked as “Not Available” and in transit to Downsvievw

1  **Russkiĭ khleb v zhernovakh ideologii / Shamil' Kuriĭ aev.** Cancel Print Slip ...


Request Type: Move permanently	Place in Queue: 0	Workflow Step: Transit Item
ID: 51474651850006196	Call Number: HC340 .F3 K86 2019	Process Status: In Process
Creator: System	Request Date: 21/08/2024	Managed By Library: Robarts Library
MMS ID: 991106186552306196	Material Type: Book	Managed By Desk: Robarts Library Circulation Desk
Pickup Location: UTL at Downsvievw		Process Date: 22/08/2024
Barcode: 31761111045712		Expiration Date: 05/09/2024


BOOK 

Русский хлеб в жерновах идеологии / Шамиль Куряев.; Russkiĭ khleb v zhernovakh ideologii
Kuriĭ aev, Shamil', author.; Куряев, Шамиль., author.
Sankt-Peterburg : Aleteĭia; Санкт-Петербург : Алетейя; 2019

 Not Available >

LOCATION ITEMS

Robarts Library
Not Available , In process for shelving at Downsvievw ; HC340 .F3 K86 2019
(1 copy, 0 available, 1 request) 

In transit	HC340 .F3 K86 2019	
Not loanable		

Key Enhancements

- Alma's advanced inventory management features allowed for several enhancements to the Direct to Downsvie process
- "Transit" status is a much better indicator for when an item should be transferred to Downsvie
- "Permanent move" process enables materials to be designated as "not in place" while they are in the process of being transferred to the facility
- Modular nature of the Analytics reports enables the Direct to Downsvie process to be easily extended to other languages and call number ranges

Challenges of the Direct to Downsview Process

- As workflows evolve, the report needs to evolve along with them
- Challenging to monitor for accuracy on an ongoing basis – flaws in logic are most often caught by support staff
- Unpredictability of the Analytics refresh time – if Analytics is slow to update, the update scripts may run before the new data is available in Analytics

Future Directions

- More comprehensive criteria based on historical usage data
 - Existing criteria provided by selectors
 - Criteria based on data from several years ago
 - Aim to use up to date usage reports to adjust criteria to current patterns of use
- Expansion to other libraries
 - Modular nature of the Analytics reports enables the Direct to Downsvievw process to be extended to other libraries across campus
 - Currently extended to Architecture Library and Law Library will be included in September. More to come...

thank
you

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And thanks to Maks Okrasa for creating the original Direct to Downsvie script, and to Dickson Law who developed the new and improved scripting for the Alma environment.