



MARC Creation & Bulk Upload in Koha

Presentation:
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Overview of the Presentation

- Introduction to MARC
- History of MARC
- Purpose of MARC 21
- Installation of MARCEdit software
- Stepwise Bulk Upload to Koha
- Step 1: Prepare the Metadata in Excel
- Step 2: Map Excel Fields to MARC Fields
- Step 3: Excel File to MARC Format
- Step 4: Bulk Upload in Koha
- Step 5: Verify Imported Records
- Benefit & Use in Library
- Conclusion
- References

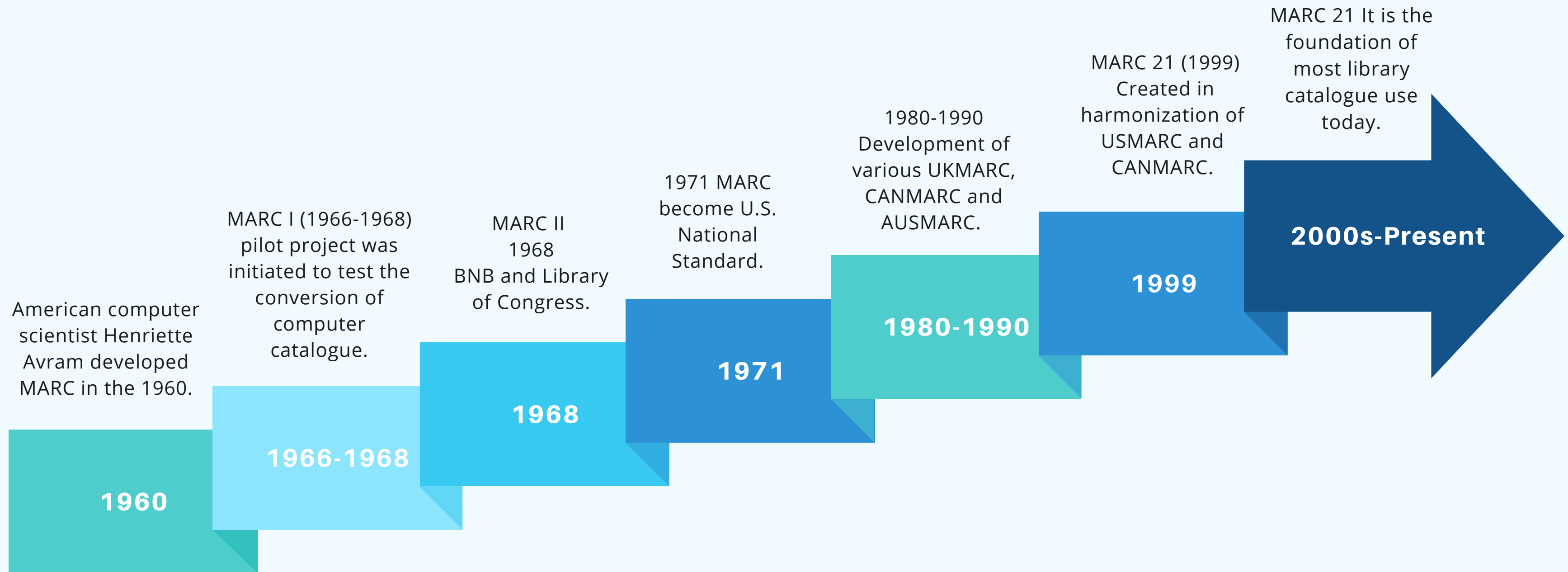


Introduction



- MARC stands for Machine-Readable Cataloguing.
- Machine readable means one particular machine or computer can read and interpret the data in the cataloguing record.
- Standardized format for organizing and exchanging bibliographic data in computer-readable form.
- It was designed so computers can store, read, and share catalog records.
- Libraries use it to describe books, journals, media, and other resources consistently.
- MARC 21 is a standard way to encode and exchange bibliographic and library record data worldwide.

History of MARC



Purpose of MARC 21



01

Standardized Format

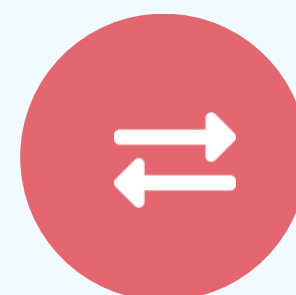
A consistent, structured bibliographic record format across libraries.



02

Efficient Data Exchange

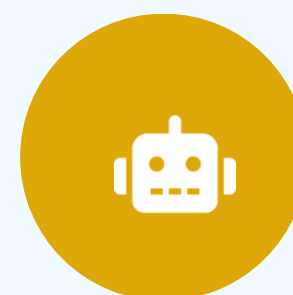
Supports seamless sharing of catalog data between institutions.



03

Automated Cataloguing

Enables automated cataloguing, indexing, and retrieval of records.



04

Facilitation of Interlibrary Loans

Makes it easier for libraries to participate in interlibrary loan programs.



05

Broad Compatibility

Works with major ILMS platforms, including Koha, for import/export.



Downloading and Installing the software



01

Step 1: Download MARCEdit

- Go to the official MARCEdit downloads page:
- Visit: <https://marcedit.reeset.net/downloads>
- Download the latest Windows installer.

02

Step 2: Install the Software

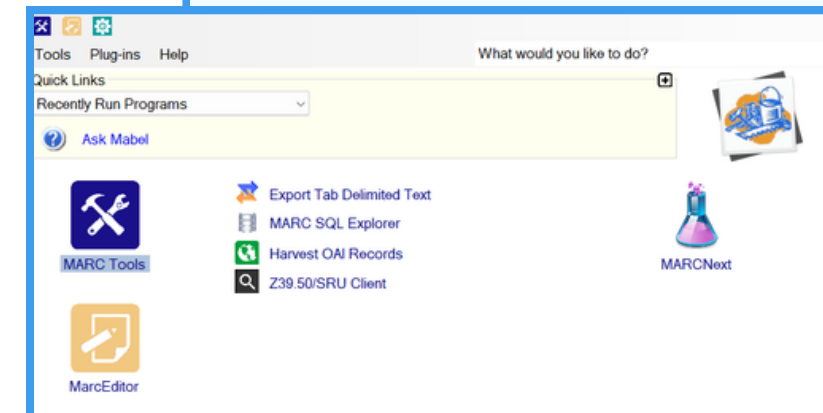
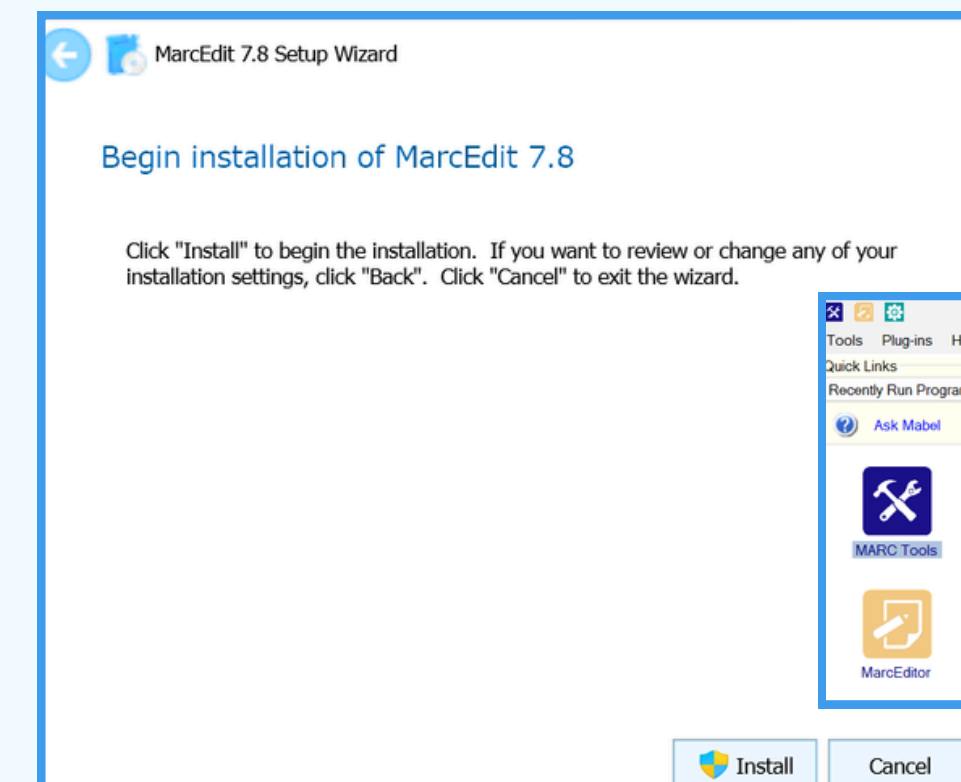
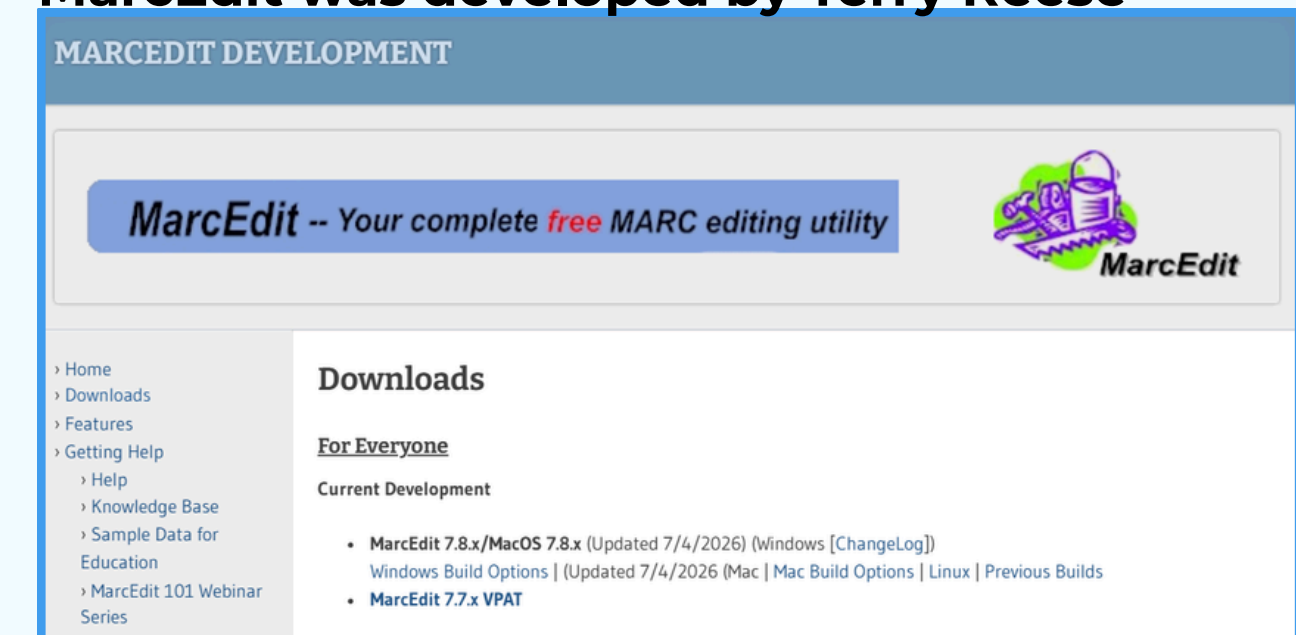
- Install the SoftwareRun the downloaded .exe file.
- Accept the License Agreement.
- Click Next → Install → Finish.

03

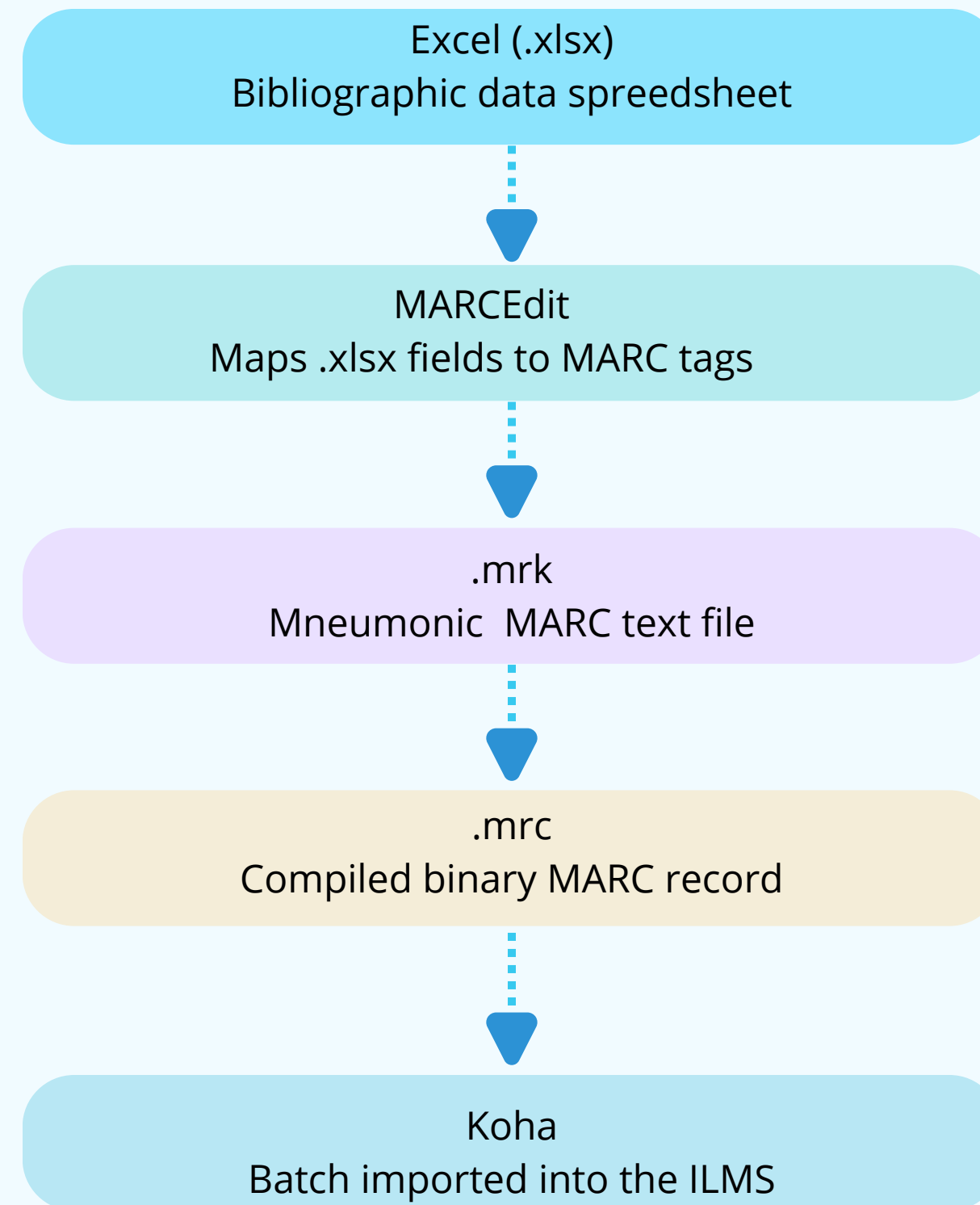
Step 3: Launch MARCEdit

- Open MARCEdit from the Start Menu.
- Complete the initial setup using Default Settings.

MarcEdit was developed by Terry Reese



Stepwise Bulk Upload to Koha



Step 1: Prepare the Metadata in Excel

1. Organize Metadata Fields:

- Ensure your Excel sheet includes columns that correspond to the MARC fields in Koha (e.g., Title, Author, ISBN, Publisher, Publication Year, etc.).

2. Clean Data:

- Remove any unnecessary spaces or invalid characters.

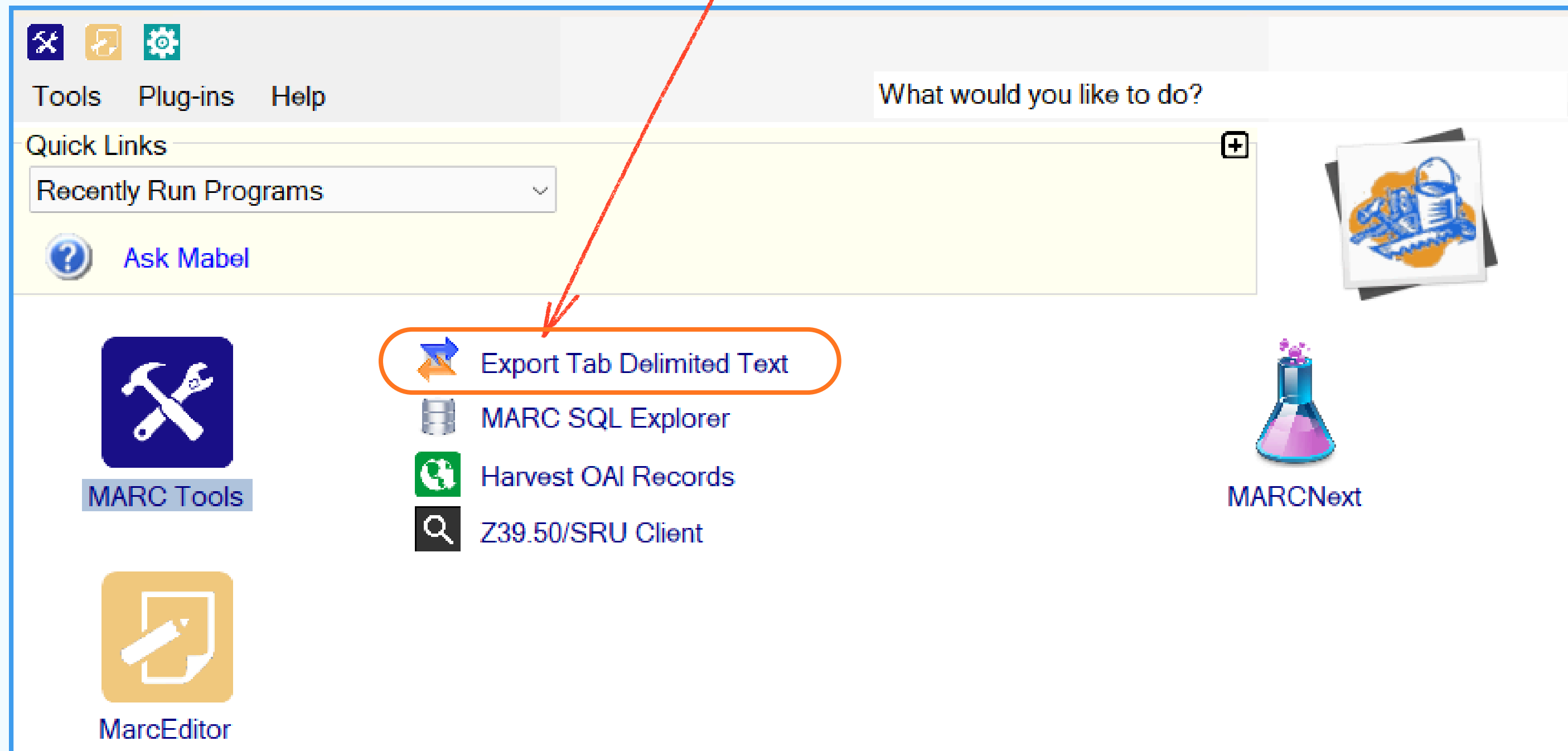
Step 2: Map Excel Fields to MARC Fields

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
1	020\$a	072\$a	082\$a	082\$b	100\$a	245\$a	245\$b	245\$c	250\$a	260\$a	260\$b	260\$c	300\$a	504\$a	520\$a	650\$a	650\$a	650\$a	650\$a	700\$a	720\$a	856\$3	856\$u	942\$c	942\$2	952\$a	952\$b	952\$c	952\$o	952\$p	952\$y
2	9789355730153	AM	537.8	MIL-C	Milton,	Classical electrodyn	by Kimball	2nd ed.	Boca Rato	CRC Press	2024	xxii, 54	Includ	The orig	Electroma	Electric Fi	Magnetic	Maxwell	Schwinger, Julia	Table of c	https://w	BK	DDC	CL	CL	GEN	537.8 MIL	180545	BK		
3	9789391566128	CHE	620.002	NEI-A	O'Neil,	Advanced Engine	by Peter	7th	Penguin R	Cengage	2012	xxi, 309 p.		This sev	Applied M	Differenti	Linear Alg	Fourier A	Prasad, P.V.	Table of c	https://e	BK	DDC	CL	CL	GEN	620.00151	180547	BK		
4	9789355732484	CHE	621.3	PRA-B	Prasad,	Basic Electrical	by R. Prasad, S. Siv	Rajkamal	Cengage	2014	xxii, 310 p.				Electronic	Electric Ci	Electrical	Network Analysis		Table of c	https://e	BK	DDC	CL	CL	GEN	621.3 PRA	180549	BK		
5	9789360539801	CHE	515	STE-C	Stewart	Calculus: Concepts	by James	4th	CRC Press	Cengage	2019	xi, 607 p.			Differenti	Integral C	Limits	Mathematical Analysis		Table of c	https://e	BK	DDC	CL	CL	GEN	515 STE-C	180551	BK		
6	9789353504786	CHE	620.106	GHO-C	Ghosh	Computational F	by Ghoshdastidar	Viva Book	Cengage	2018	xvii, 310 p.				Heat Tran	Fluid Mec	Numerica	Thermal Engineering		Table of c	https://e	BK	DDC	CL	CL	GEN	620.1064	180553	BK		
7	9789355732552	CHE	621.382	SOM-D	Soman	Digital Signal an	by K.P. Soman and	Larsen and	Cengage	2019	xxi, 309	Includes biblio			Image Pro	Computer	Signal Ana	Digital Fi	Ramanathan, R.	Table of c	https://e	BK	DDC	CL	CL	GEN	621.3822	180555	BK		
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9	978813101795	AM	621.382	AMB-D	Ambar	Digital : A Modern	by Ashok Ambard	Cambridg	Cengage	2018	xxi, 309 p.				Signals	Digital Fil	Fourier Ar	Sampling Theory		Table of c	https://ce	BK	DDC	CL	CL	GEN	621.3822	180559	BK		
0	9789355735669	AM	519.503	CAR-D	Carver,	Doing Data Anal	by H. Car	5th	Cambridg	Cengage	2025	xxi, 310	Includes biblio		Data Anal	Statistics	Statistical	Quantita	Nash, Jane Grad	Table of c	https://e	BK	DDC	CL	CL	GEN	519.50285	180561	BK		
1	9788131516836	AM	621.382	RAS-E	Rashid	Electronic Devic	by Muhammad H.	Maple Pre	Cengage	2014	xxi, 309 p.				Electronic	Semicond	Diodes	Transistors		Table of c	https://ce	BK	DDC	CL	CL	GEN	621.3815	180563	BK		
2	9788131526699	AM	620.11	RAT-E	Rath, P	Engineering Che	by Prasanta Rath	Routledge	Cengage	2016	xxi, 310	Includes biblio			Chemical	Industrial	Materials	Electrochemistry		Table of c	https://ce	BK	DDC	CL	CL	GEN	620.11 RA	180565	BK		
3	9789360530327	AM	604.2	MAD-E	Madsen	Engineering Draw	by David	6th	Cengage	Cengage	2017	xxi, 309 p.			Technical	Engineeri	CAD	Graphics	David, P.	Table of c	https://e	BK	DDC	CL	CL	GEN	604.2 MA	180567	BK		
4	9789353504809	AM	628	GOP-E	Gopina	Environmental S	by Rajesh Gopinath	Dr. Ambe	Cengage	2018	xxi, 310 p.				Environm	Pollution	Waste Ma	Sustaina	Balasubramanya	Table of c	https://e	BK	DDC	CL	CL	GEN	628 GOP-	180569	BK		
5	9789355732583	AM	363.7	DAV-E	Dave,	Environmental S	by Deeksha Dave	CRC Press	Cengage	2011	xxi, 309 p.				Ecology	Environm	Sustainab	Natural Resources		Table of c	https://ce	BK	DDC	CL	CL	GEN	363.7 DAV	180571	BK		
6	9789366609409	AM	657	RIC-F	Rich, Ja	Financial Accour	by Jay S.	5th	Viva Book	Cengage	2022	xxi, 310	Includes biblio		Accountin	Financial	Bookkeep	Business	Jones , Je Myers,	Table of c	https://e	BK	DDC	CL	CL	GEN	657 RIC-F	180573	BK		
7	9789366609584	AM	510	WAN-F	Waner,	Finite Mathemat	by Stefar	7th	Larsen and	Cengage	2018	xxi, 309 p.			Linear Pro	Probabilit	Matrices	Discrete	Costenoble, Ste	Table of c	https://ce	BK	DDC	CL	CL	GEN	510 WAN-	180575	BK		
8	9788131527955	AM	621.402	SID-H	Siddiqu	Heat and Mass T	by Altamush Siddi	Cengage	Cengage	2015	xxi, 310 p.				Mass Tran	Thermody	Thermal E	Conduction		Table of c	https://e	BK	DDC	CL	CL	GEN	621.4022	180577	BK		



Step 3: Excel File to MARC Format

- Importing Excel File to MARCEdit.
- Koha requires metadata in MARC format for bulk imports.
- Open MarcEdit and select [Export Tab Delimited Text](#).



- [Import your \(.xlsx\)](#) Excel file. (Source file on your Desktop.)
- Save the output as a [\(.mrk\)](#) (Select the folder where you want to save.)



MarcEdit Delimited Text Translator

Configure Data Define Translation

Source File:
C:\Users\lubis\OneDrive\Desktop\Books_Bulk\Books_Bulk.xlsx

Output File:
C:\Users\lubis\OneDrive\Desktop\Books_Bulk\Books_Bulk.mrk

Excel Sheet Name: Book

Delimiter Values

Delimiter:	Character:	Qualifier
Tab		

Options

[Edit LDR/008](#)

☒ UTF-8 Encoded

Import File

Cancel

- Click [import file](#) (Once you click import file it will be save to the selected folder)

- Drop down the LDR/008 and choose [Book](#).

MarcEdit Delimited Text Translator

Configure Data Define Translation

Source File:
C:\Users\lubis\OneDrive\Desktop\Books_Bulk\Books_Bulk.xlsx

Output File:
C:\Users\lubis\OneDrive\Desktop\Books_Bulk\Books_Bulk.mrk

Excel Sheet Name: Book

Delimiter Values

Delimiter:	Character:	Qualifier
Tab		

Options

☒ UTF-8 Encoded

[Edit LDR/008](#)

Edit LDR/008

LDR Book

00000nam 2200000a 4500

008 s9999|||||xx|||||||||||||N|und|

☐ UNIMARC

OK Close



- After importing the file scroll down the bottom Click [auto generate](#)

MarcEdit Delimited Text Translator

Configure Data Define Translation

Data Snapshot

Field 0	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6
020\$a	072\$a	082\$a	082\$b	100\$a	245\$a	245\$b
978935...	AM	537.8	MIL-C	Milton...	Classi...	
0700000	CHF	620.0	NFI-A	O'Ne	Adva	hv I

Finish Cancel

Settings

Select: Map To: Indicators: Term. Punctuation:

☐ Constant Data
☐ Repeatable Subfield

Add Argument

Arguments

☐ Save Template

[Auto Generate](#)

- Join the item together which fall under the same Group all subfields of the same MARC tag should join together eg. [082\\$a](#) and [082\\$b](#).

97893 537.8 537.8 537.8 537.8 537.8 537.8

Cancel

Settings

Select: Map To: Indicators: Term. Punctuation:

☐ Constant Data
☐ Repeatable Subfield

Add Argument

Arguments

0 020\$a 0
1 072\$a 0
2 082\$a 0
3 082\$b 0
4 100\$a 0

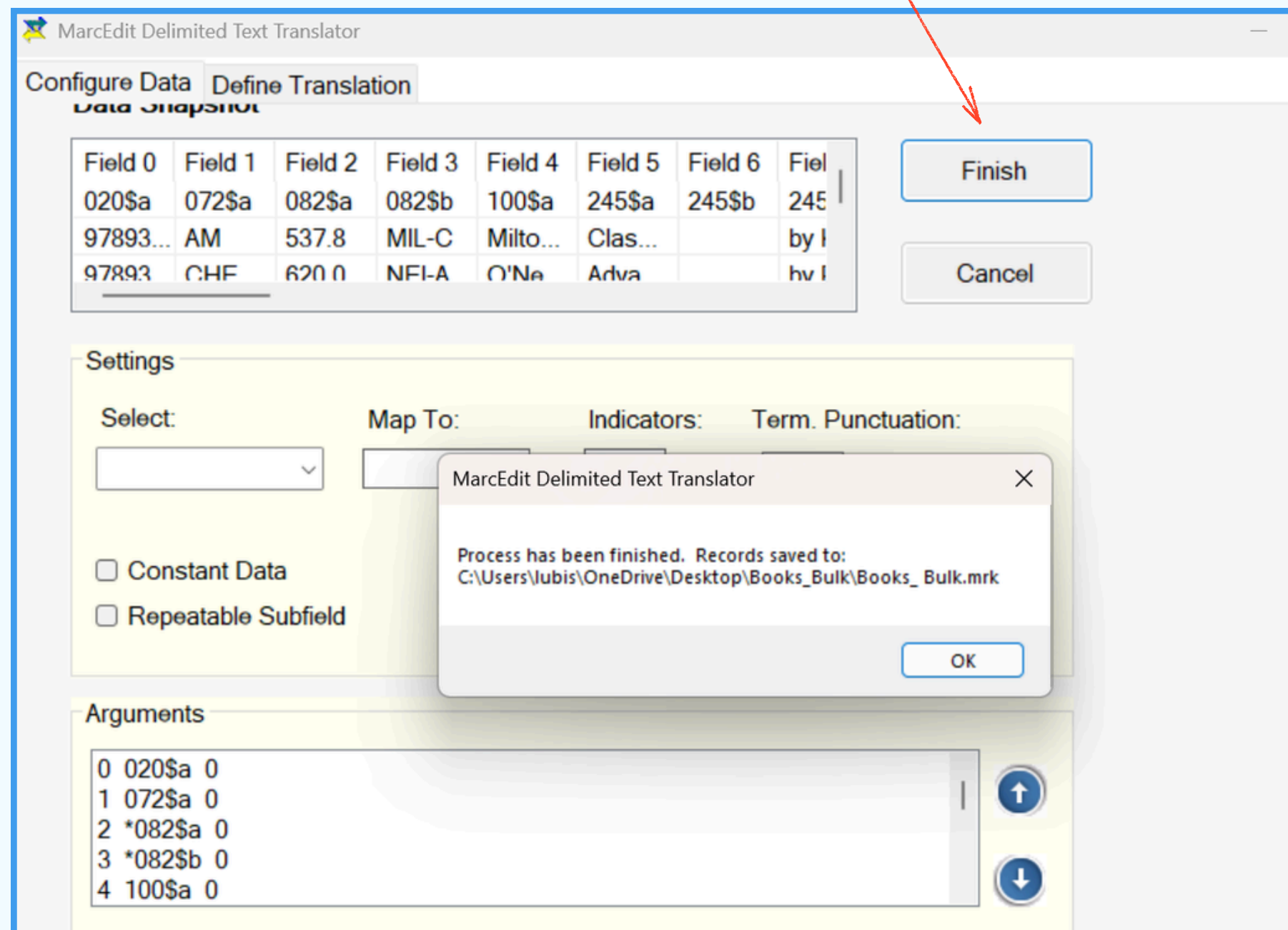
↑
↓

☐ Save Template
☒ Sort Fields

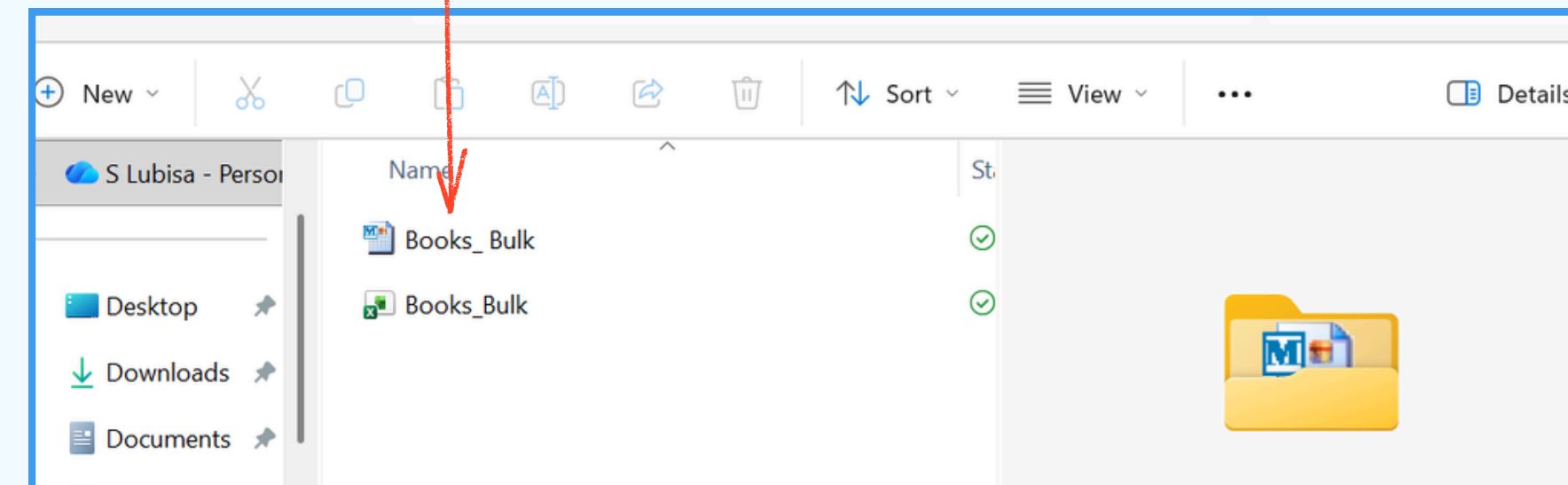
[Auto Generate](#)
Load Template



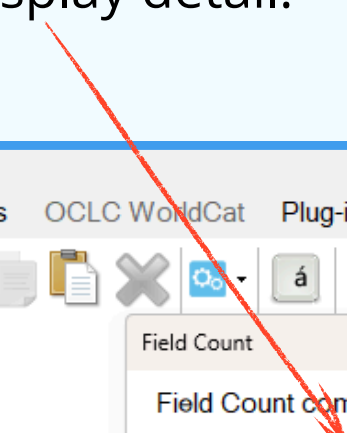
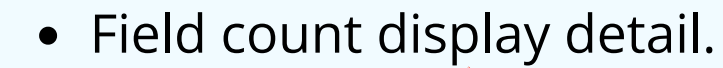
- After joining all the field together [click Finish](#)



- The file has been successfully saved in the folder.
- Below is the [.mrk](#) file that has successfully saved.



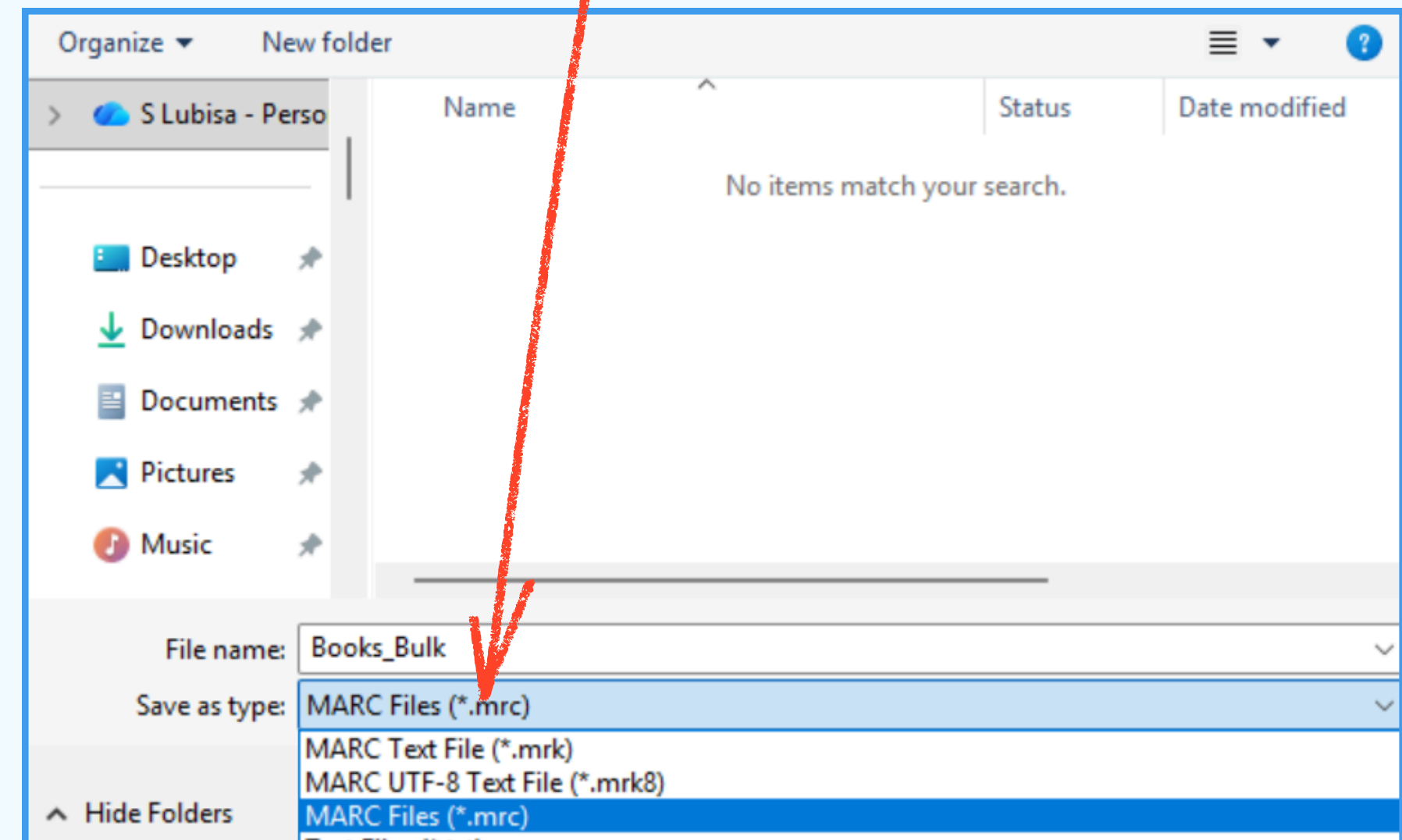
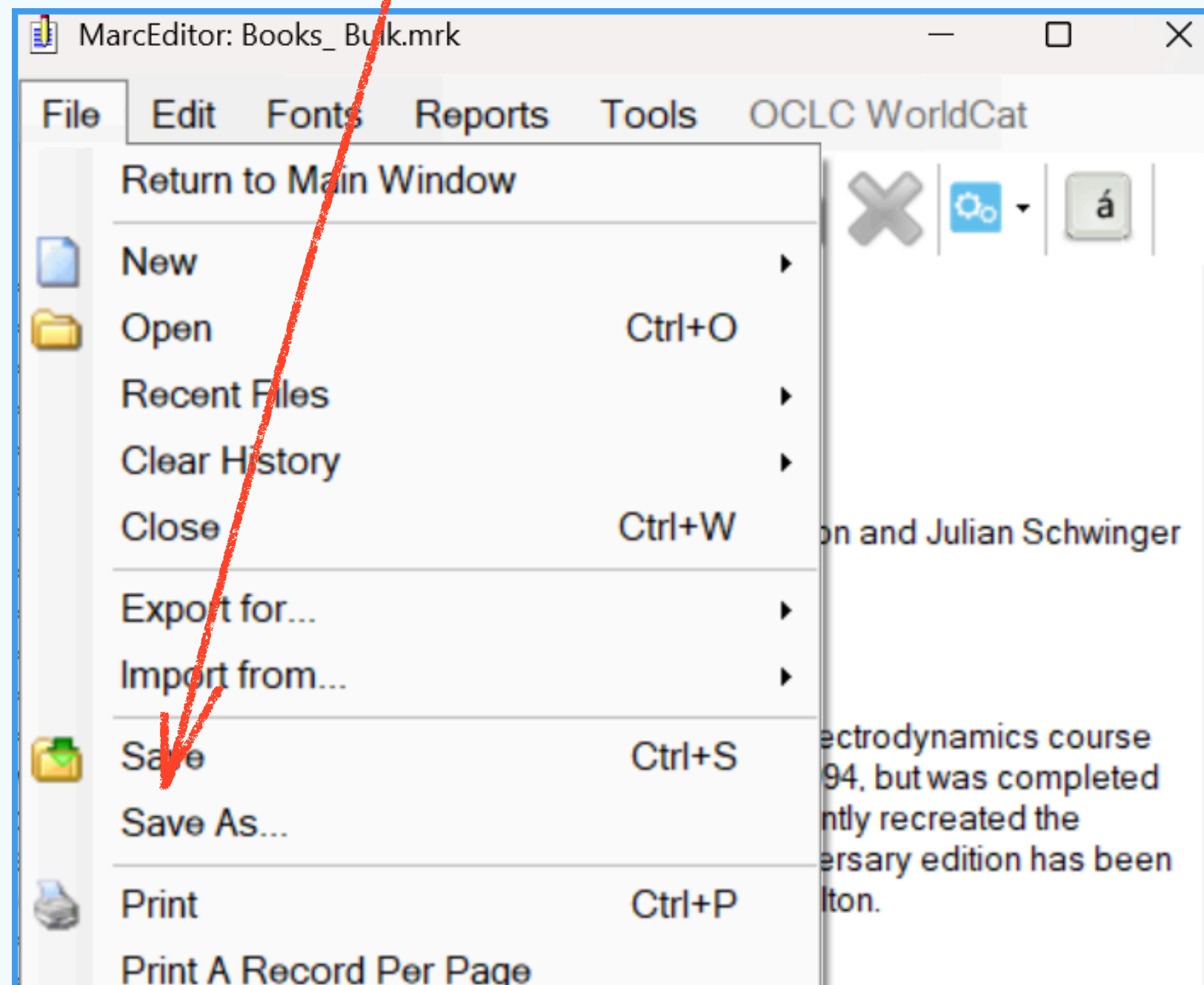
-



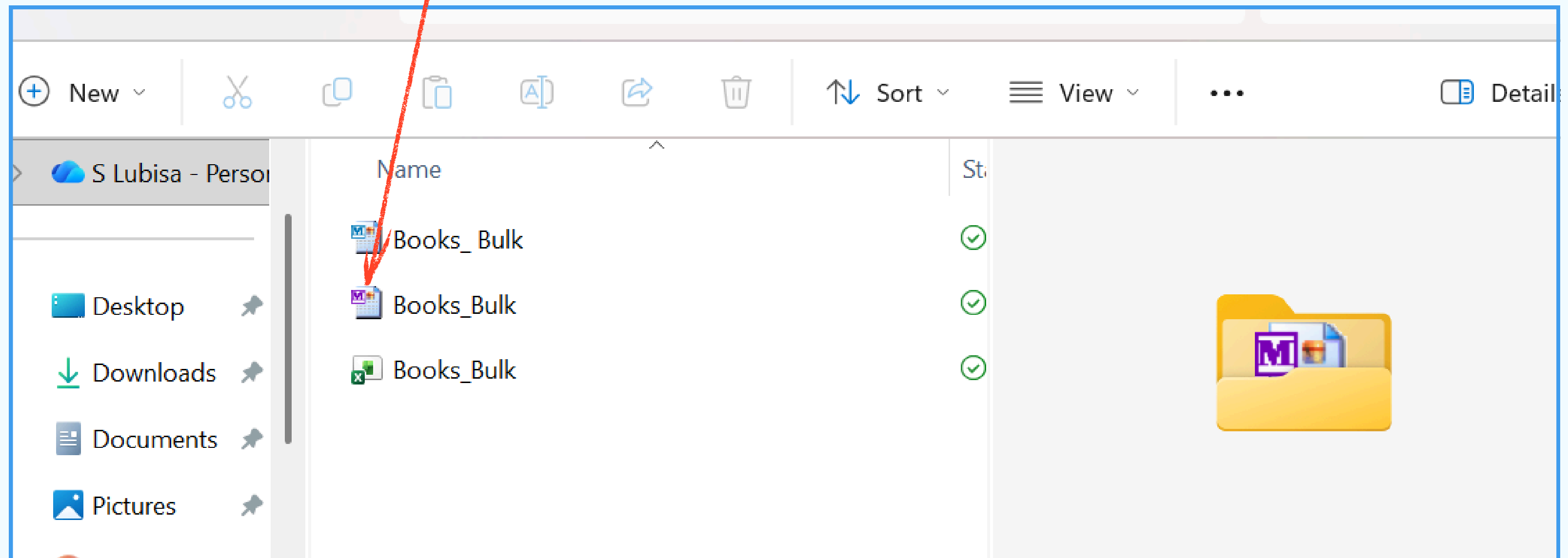


- Once everything is 100% correct.
- Click on [Save As](#)

- Select file save as [.mrc](#) as the file format and click Save As.



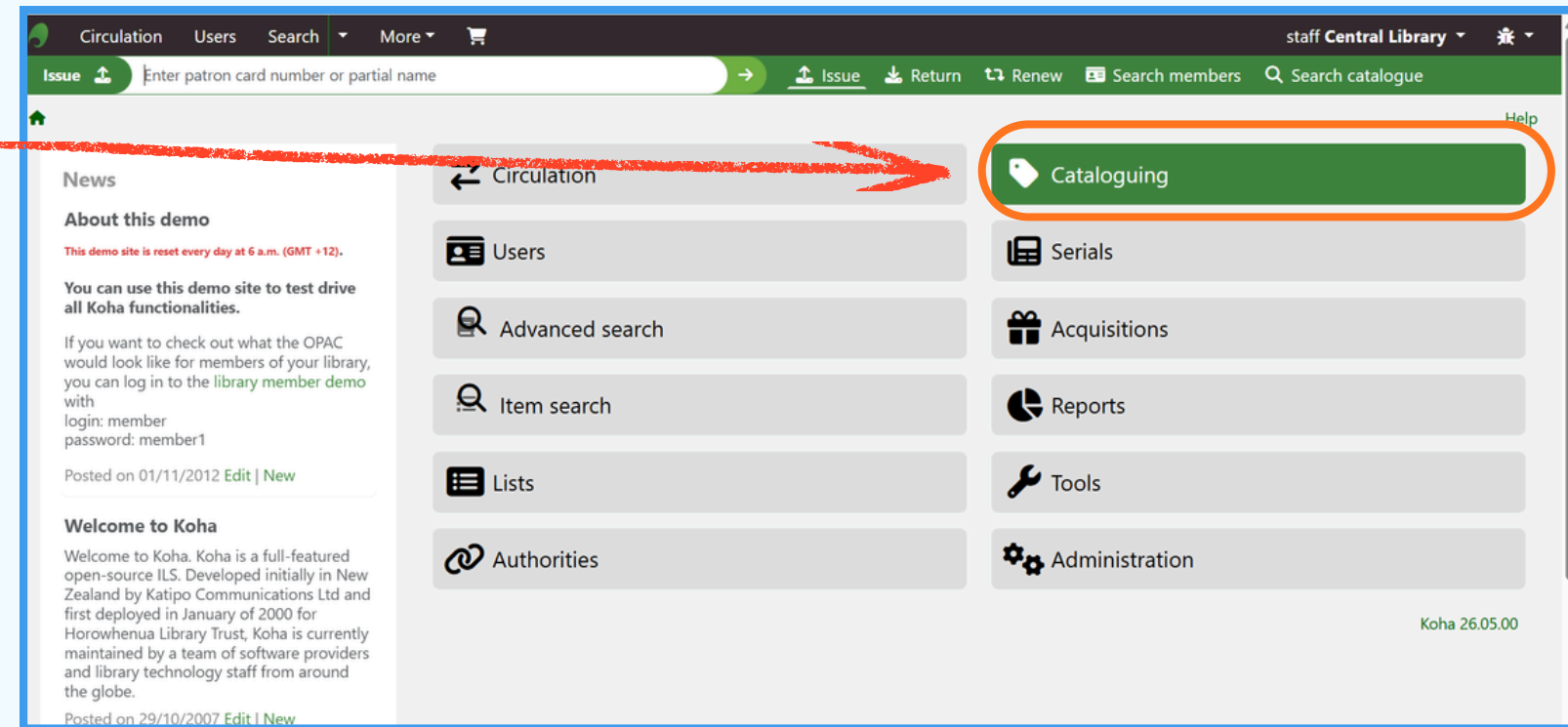
- The below is the final [.mrc](#) file
- It is ready to upload in koha



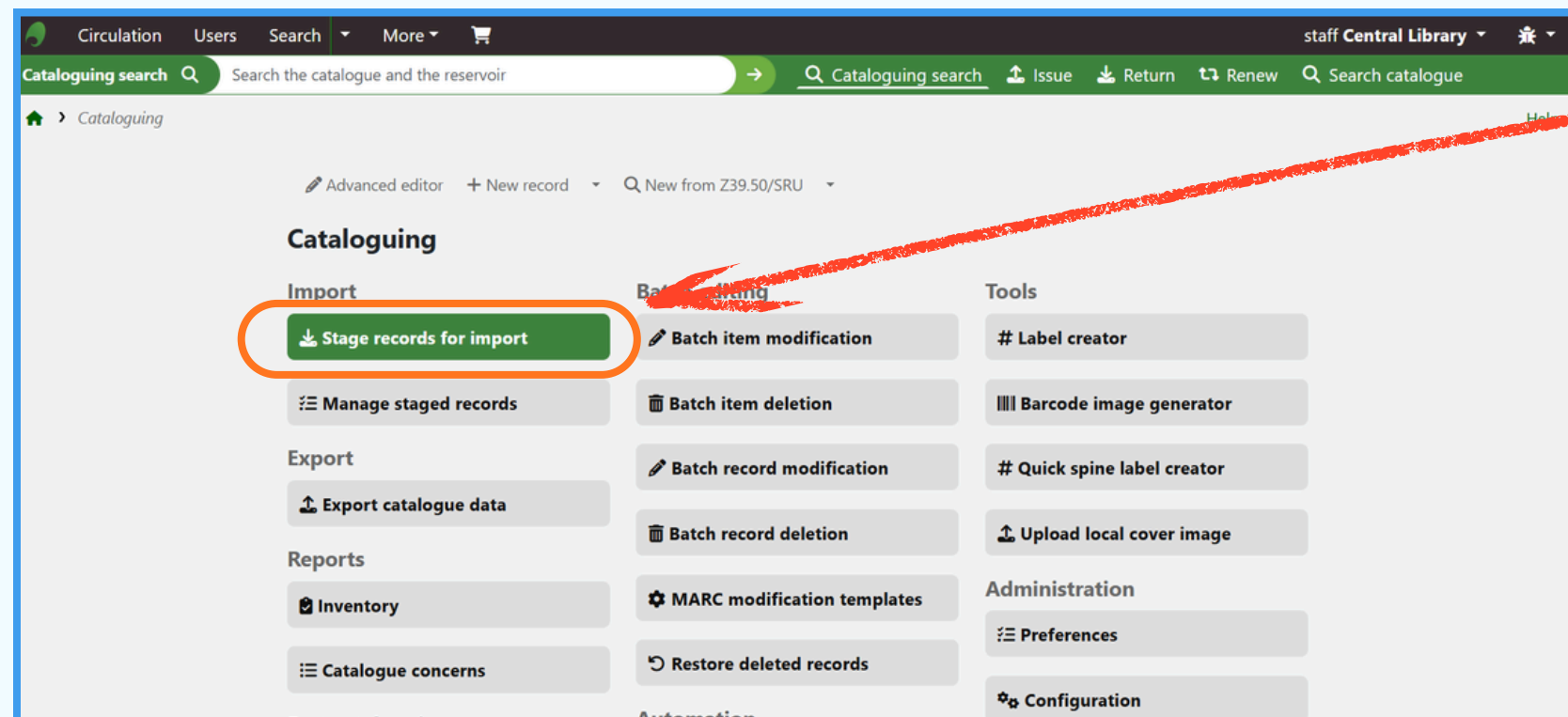
Step 4: Bulk Upload in Koha

1. Log in to koha

- Navigate to [Cataloguing Module](#)



- Click on [Stage records for Import](#).



Step 4: Bulk Upload in Koha

2. Upload the file

- Click on Choose File and select [.mrc](#) MARC file.
- Click on [Upload File](#)

The screenshot displays the Koha interface for staging MARC records. The top navigation bar includes links for Circulation, Users, Search, and More. The main content area is titled 'Stage MARC records for import' and contains instructions on how to stage a MARC file. The 'Upload a file to stage' section features a 'File:' label, a 'Choose File' button, and the filename 'Books_Bulk.mrc'. A yellow 'Upload file' button is positioned below the filename. Red arrows indicate the steps: clicking 'Choose File' to select the .mrc file and then clicking 'Upload file' to upload it.



Step 4: Bulk Upload in Koha

3. Set the Rule

- Koha will ask to handle books that are already in your system

MARC modification templates

Restore deleted records

Automation

Item modifications by age

Tools

Label creator

Barcode image generator

Quick spine label creator

Upload local cover image

Administration

Preferences

Configuration

Settings

Comments about this file: Books_Bulk_2026

Record type: Bibliographic

Character encoding: UTF-8 (Default)

Format: MARC

Modify records using a MARC modification template?

Template: Do not use template

Look for existing records in catalogue?

Record matching rule: ISBN (020\$a)

Action if matching record found: Ignore incoming record (its items may still be processed)

Action if no match is found: Add incoming record

Check for embedded item record data?

☒ Yes

☐ No (If you do not check for items while staging you may not change this option later)

How to process items: Always add items

Save profile

Profile name: Save profile Remove profile

Stage for import

- Click on [stage for import](#)



Step 4: Bulk Upload in Koha



- The MARC records have been successfully uploaded.
- **The job has been enqueued!** indicates that the system has accepted the uploaded file.

A screenshot of the Koha staff interface. The top navigation bar includes links for Circulation, Users, Search, More, and a shopping cart icon. The user is logged in as 'staff Central Library'. Below the navigation bar is a search bar and buttons for 'Issue', 'Return', 'Renew', and 'Search catalogue'. The breadcrumb trail shows: Home > Cataloguing > Stage MARC records for import > Job enqueued. The left sidebar has sections for 'Import' (with 'Stage records for import' and 'Manage staged records'), 'Export' (with 'Export catalogue data'), and 'Reports' (with 'Inventory' and 'Catalogue concerns'). The main content area is titled 'MARC staging' and contains a blue box with the message 'The job has been enqueued!' and 'It will be processed as soon as possible.' Below this is a green progress bar labeled '100% Finished'. A red arrow points from the text 'The job has been enqueued!' in the list above to the message box in the screenshot. Links for 'View detail of the enqueued job' and 'View batch' are also present.

Step 4: Bulk Upload in Koha

- MARC Record Import Completed Successfully. All **274** bibliographic records were staged without any MARC errors, indicating a successful import process.
- **Job Status:** The import job finished successfully with 100% progress (274/274 records) and no duplicate matching was performed during staging.



Circulation

Users

Search

More

Search system preferences

Administration > Jobs > Details of job #13

System preferences

Basic parameters

Libraries

Library groups

Item types

Authorized values

Patrons and circulation

Patron categories

Circulation and fine rules

Patron attribute types

Library transfer limits

Transport cost matrix

Library float limits

Self-service circulation (SIP2)

Item circulation alerts

Cities and towns

Curbside pickup

Patron restriction types

Details of job #13

Job ID: 13

Status: Finished

Progress: 274 / 274

Type: Staged MARC records for import

Queued: 16/07/2026 17:08

Started: 16/07/2026 17:08

Ended: 16/07/2026 17:08

Report

Completed staging records

MARC staging results

Processing bibliographic records

274 records in file

0 records not staged because of MARC error

274 records staged

274 records with at least one match in catalogue per matching rule "ISBN"

View batch

Detailed messages

Return to the job list

4. Import to the Database

- **Manage Staged MARC Records**
- The imported batch is staged and ready for review.

Circulation

Users

Search

More

Search catalogue

Cataloguing > Manage staged MARC records

Import

Stage records for import

Manage staged records

Export

Export catalogue data

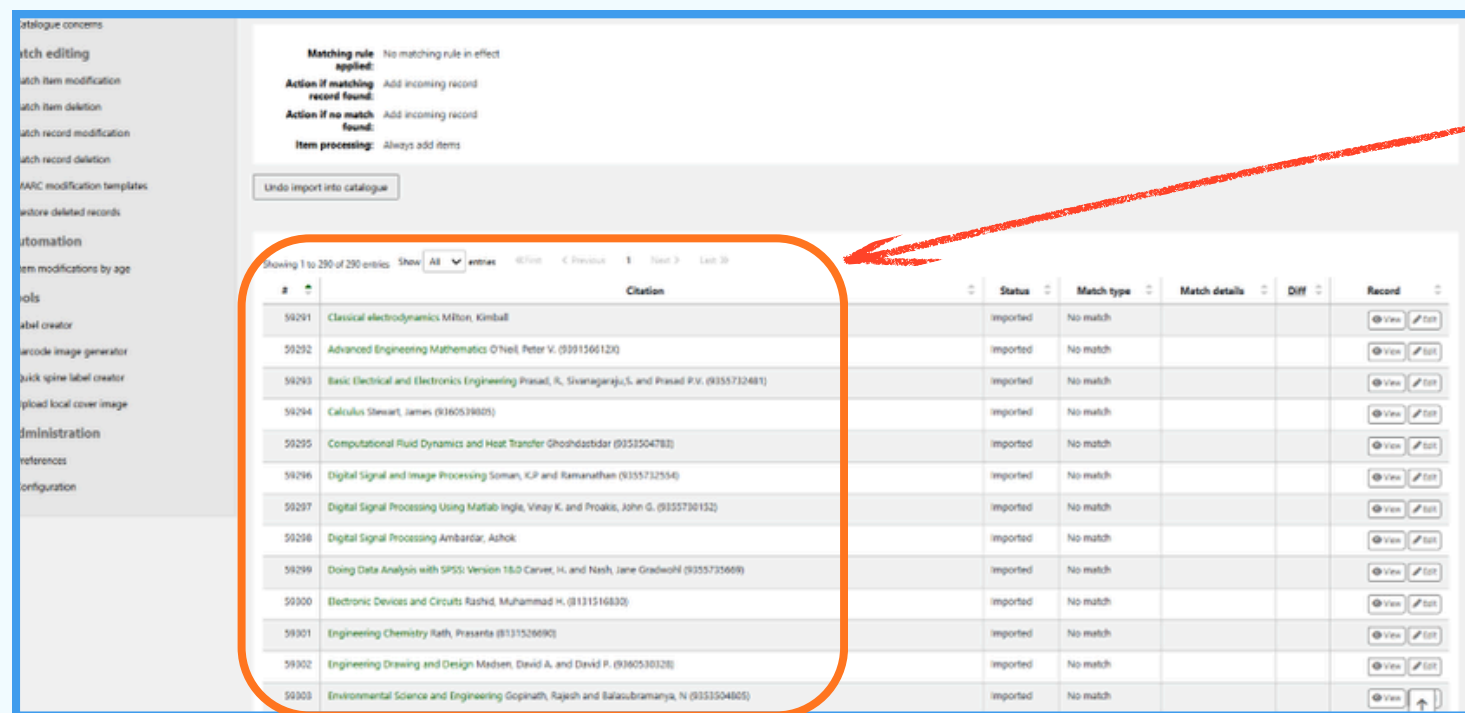
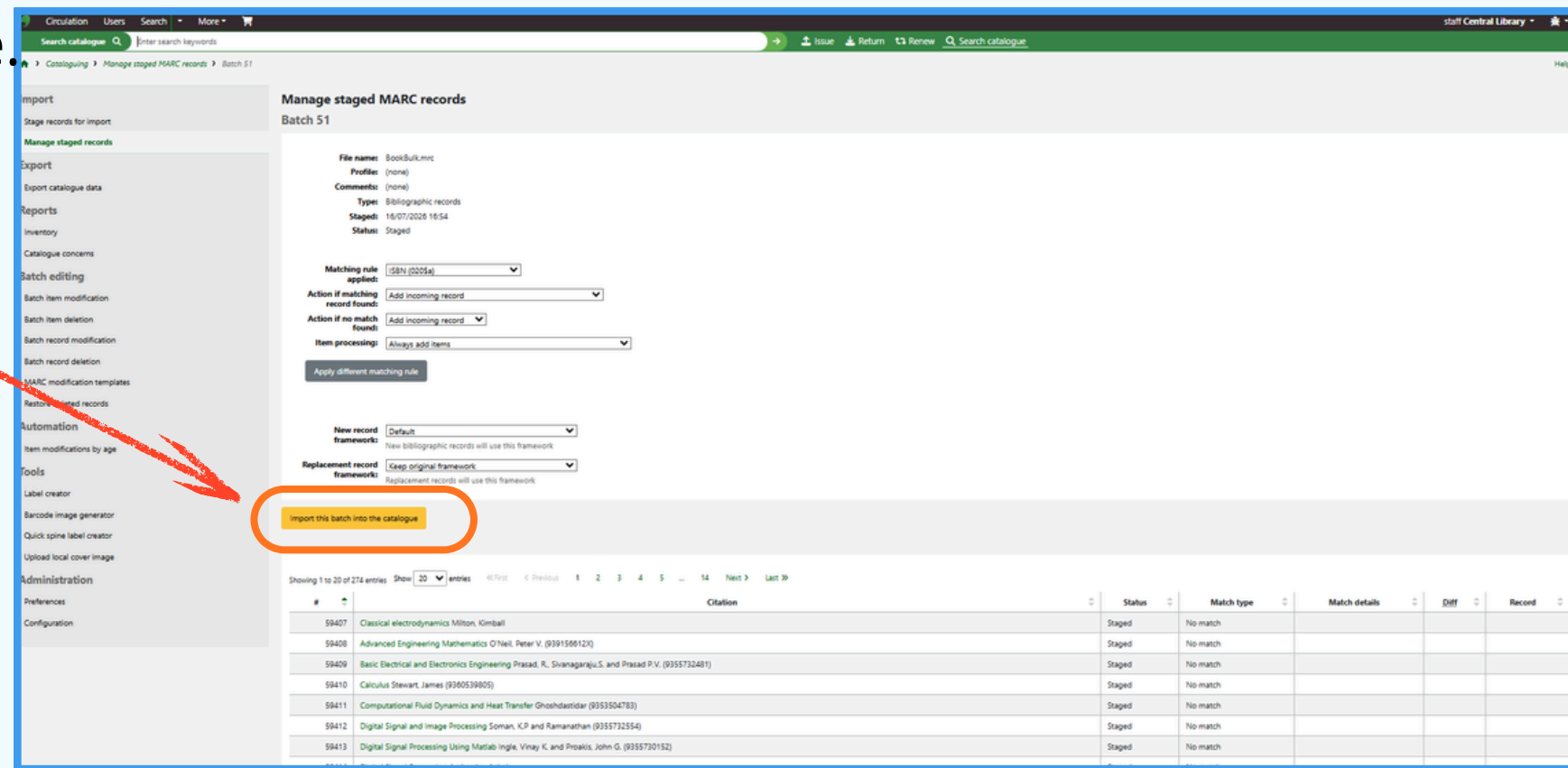
Reports

Manage staged MARC records

#	File name	Profile	Comments	Type	Status	Staged	# Records	# Items	Action
53	BookBulk.mrc		Book_Bulk_2026	Bibliographic	Imported	16/07/2026 17:08	274	274 (Create label batch)	Clean

Step 4: Bulk Upload in Koha

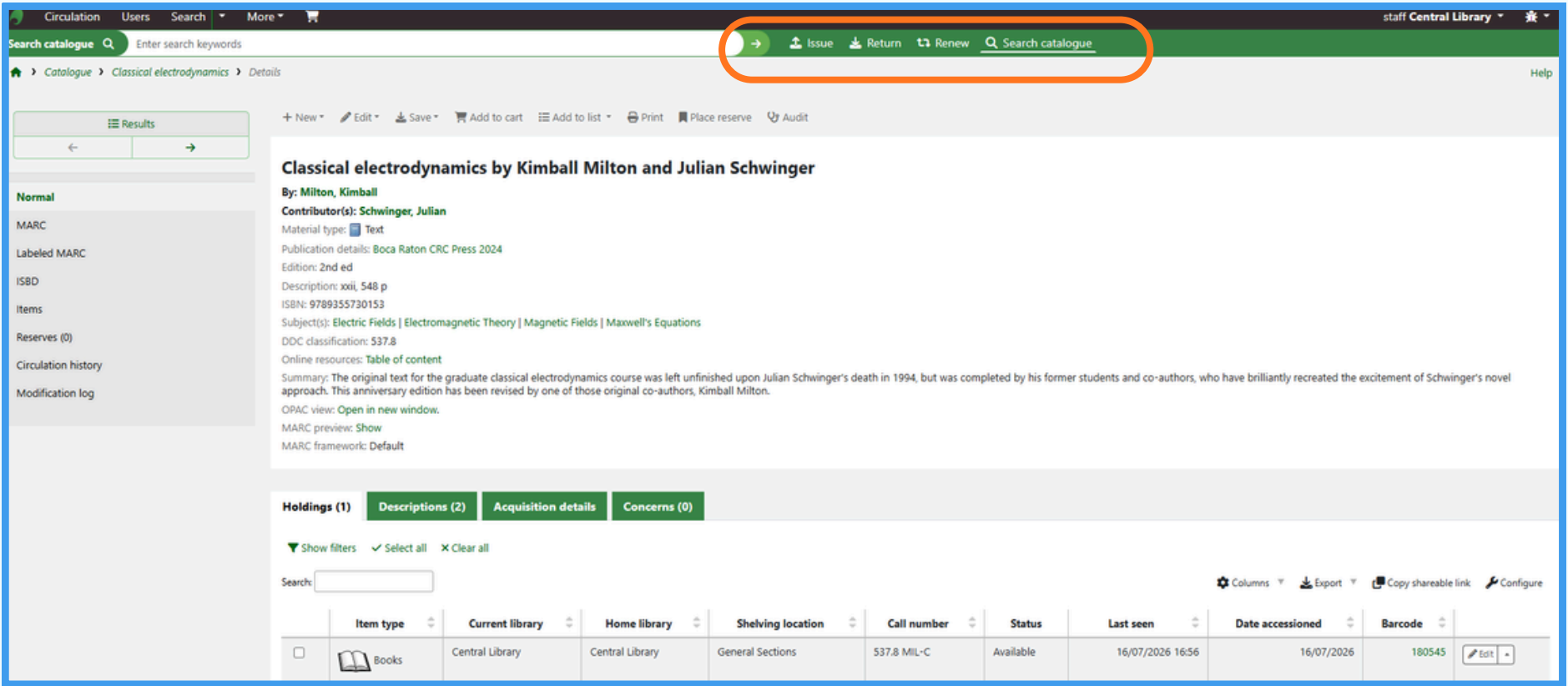
- Ready to Importbulk into the catalogue.
- Click on Import the **Batch into the catalogue.**
- List of book that has been staged



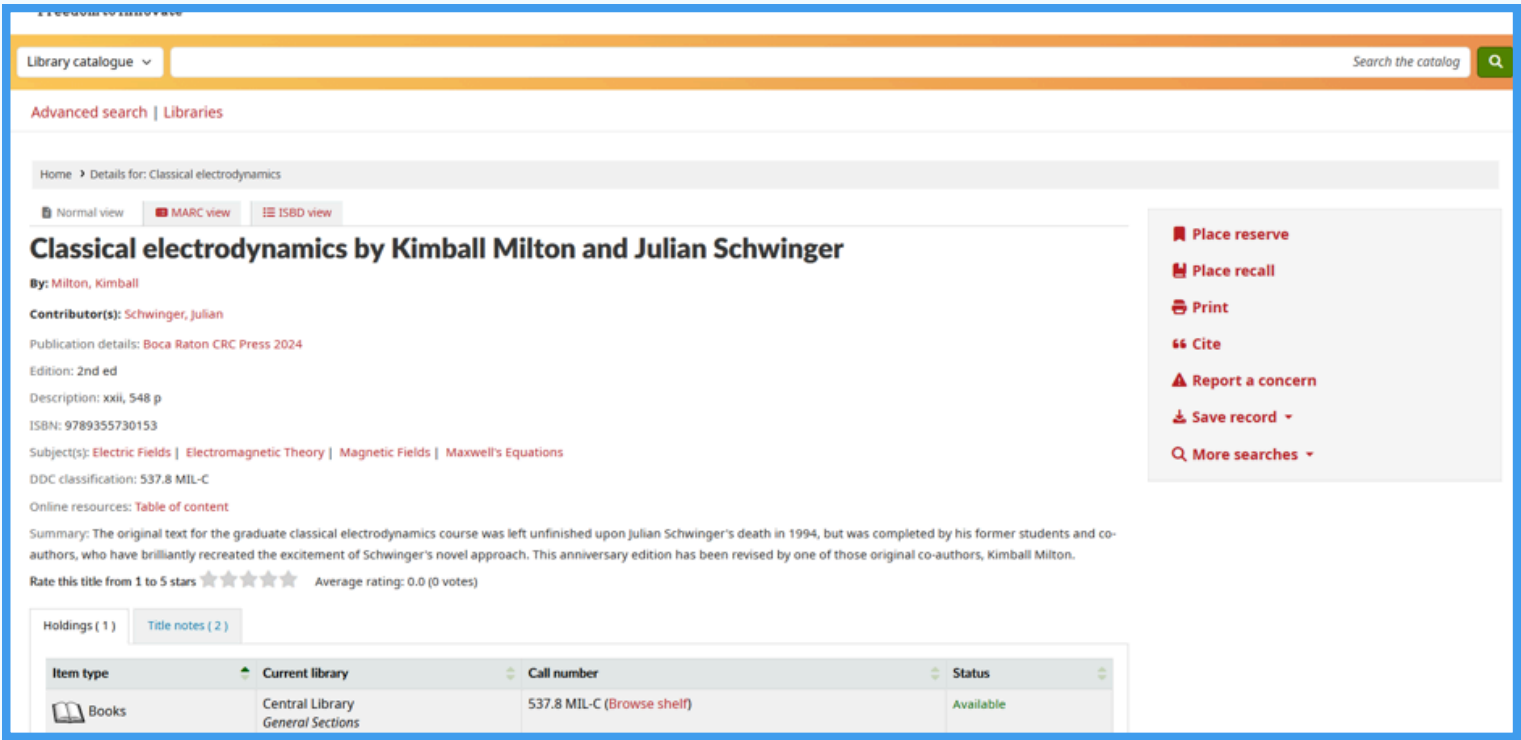
- Imported Bibliographic Records Overview.
- Indicating they were added as new records rather than matched with existing catalog entries.
- The interface allows librarians to review imported records, check matching details, compare differences, and use View or Edit options to verify and update records.

Step 5: Verify Imported Records

- Staff interface Catalogue search



- Opac Interface



Benefits of Bulk Upload in Koha



Time-saving

Upload thousands of records at once.

01



Easy migration

Simplifies moving records between library systems.

05



Duplicate Detection

helping to prevent duplicate bibliographic entries.

02



Resource Sharing

Exchange bibliographic records between libraries, networks, and consortia.

03



Cataloguing Standardization

Standardized MARC records across the catalog.

04



Better discoverability

Resources appear in the OPAC more quickly.

06



Cost-effective

Saves staff time and operational costs.

07



Supports Digitization

Useful for Digitization Projects and Retrospective Conversion

08

Benefits

Conclusion



An Efficient, Reliable Way to Build & Manage Your Catalog

Converting bibliographic data into MARC and importing it in bulk lets libraries save time, cut manual effort, and keep cataloging consistent and accurate.



Saves Time

Bulk import replaces manual entry, speeding up cataloging work.



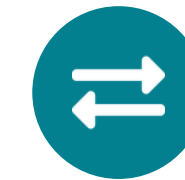
OPAC discoverability

Automated conversion minimizes manual mistakes in records.



Consistent Standards

Keeps bibliographic records uniform and high quality.



Eases Migration

Ideal for digitization projects and moving between systems.



Overall, MARC conversion and bulk upload strengthen library operations, supporting a modern, efficient, user-friendly system with faster, more accurate access for users.



References



- Ashikuzzaman, M. (2024, June 27). Article. Library & Information Science Education Network. <https://www.lisedunetwork.com/what-is-marc21-understanding-the-essential-cataloguing-standard/>
- Downloads. (2026, July 5). MarcEdit Development. <https://marcedit.reeset.net/downloads>
- Library of Congress Network Development and MARC Standards Office. (n.d.). *MARC 21 LITE Bibliographic Format: Table of Contents (Network Development and MARC Standards Office, Library of Congress)*. <https://www.loc.gov/marc/bibliographic/lite/>
- Reese, T., & Robertson, W. (2018). A Beginners Guide to MarcEdit and Beyond the Editor: Advanced Tools and Techniques for Working with Metadata. *The Serials Librarian*, 74(1–4), 3–8. <https://doi.org/10.1080/0361526x.2018.1439247>
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- The MARC 21 Formats: Background and principles. (n.d.). <https://www.loc.gov/marc/96principi.html>
- Understanding MARC records in koha Library systems. (2023, February 14). KohaSupport. <https://kohasupport.com/knowledge-base/what-is-marc-record/>

A 3D paper speech bubble is centered on a solid blue background. The bubble is light beige with a subtle texture and a soft shadow cast to its left. The text 'THANK YOU!' is printed in a bold, blue, sans-serif font across the middle of the bubble. The bubble has a rectangular body and a pointed tail pointing towards the bottom right.

THANK YOU!