



Beyond MarcEditor: Intermediate and Advanced Tools for Your Metadata Automation

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Agenda

- ❖ Update on MARCEdit
- ❖ Intermediate tools
 - ❖ Delimited Text Translator
 - ❖ Export as Tab Delimited
 - ❖ MARCCompare
 - ❖ MARCJoin, MARCSplit
 - ❖ Merge Record Data
 - ❖ RDA Helper
 - ❖ Task Management
- ❖ Advanced tools
 - ❖ Regular expressions
 - ❖ MARC to other metadata formats
 - ❖ Bibframe testbed
 - ❖ Link identifiers
 - ❖ SPARQL
 - ❖ MySQL

The Software

- ❖ Developed by Terry Reese in 1999
 - ❖ MARC to plain text translation utility
 - ❖ Complete free MARC editing tool
 - ❖ 192 unique countries & 18,000 active users



Windows/Linux vs. MacOS

- ❖ Windows/Linux

- ❖ Since 1999
- ❖ Version 6.2.6233
- ❖ More enhancements

- ❖ MacOS

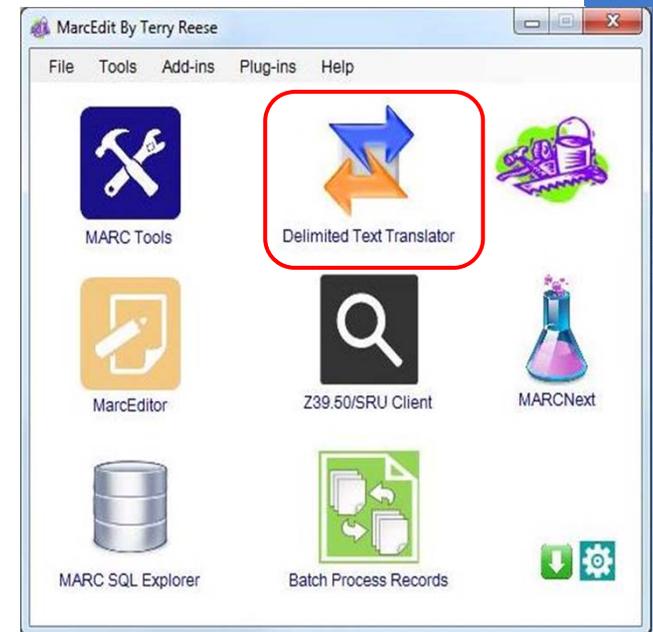
- ❖ Since June 2015
- ❖ Version 1.9.20
- ❖ Sporadic support



Intermediate Tools

Delimited Text Translator

- ❖ A tool that allows users to translate delimited text data such as Excel files into MARCEdit's mnemonic file.
 - ❖ map delimited field to MARC field and subfields
 - ❖ identify multiple fields and subfield definitions



Delimited Text Translator

1. Select source file
2. Choose output file
3. Add Excel sheet name
4. Choose delimiter

MarcEdit Delimited Text Translator

Source File: C:\Users\mmorgan\OLA-2017\Files\OLA Files\DTT.xlsx 1

Output File: C:\Users\mmorgan\OLA-2017\Files\DTT.mrk 2

Excel Sheet Name: Sheet1 3

Delimiter Values

Delimiter: Tab 4 Character: Qualifier

Options

Edit LDR/008

UTF-8 Encoded

Next

Cancel

	A	B	C	D	E	F	G	H	I	J	K
1	Author	Title	Place of P	Publisher	Year of Pu	Abstract	Identifier	Subject1	Subject2	Subject3	Subject4
2	Jameson, E	Environm	Burlington	Elsevier A	2016	Nematod	http://ez	Rhabditid	Lungworm	Anura	Ecology
3	Danilov, D	Encyclope	London	Rowman &	2015	Fully illus	http://ez	Flute players			
4	Duncan, S	The Middl	Raleigh, N	Farland &	2010	"A fresh tl	http://ez	Middle Ages in	motion pictures		
5	Davidson, M	Music and	Raleigh, N	Farland &	2011	"Investiga	http://ez	School me	Counseling in higher education		

Each Excel column corresponds to a field.

1. Select each field and map to MARC fields, subfields & indicators
2. Add arguments

MarcEdit Delimited Text Translator

Data Snapshot

Field 0	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7
Author	Title	Place ...	Publis...	Year of...	Abstract	Identifier	Su
James...	Enviro...	Burling...	Elsevi...	2016	Nemat...	http://e...	Rh

Settings

Select: **1** Field 0 Map To: 100\$a Indicators: 1\ Term. Punctuation:

Constant Data Repeatable Subfield Add Argument **2**

Arguments

Save Template Auto Generate Sort Fields Load Template Calculate common nonfiling data Ignore Header Row

Delimited Text Translator

1. Select columns and map to MARC fields and indicators
2. Add arguments
3. Save template
4. Ignore header row

The screenshot shows the 'Delimited Text Translator' interface. It is divided into two main sections: 'Settings' and 'Arguments'.

Settings Section:

- Select:** A dropdown menu with a red '1' next to it.
- Map To:** A text input field.
- Indicators:** A text input field containing the characters '\\|'.
- Term. Punctuation:** A text input field.
- Constant Data
- Repeatable Subfield
- Add Argument:** A button with a red '2' next to it.

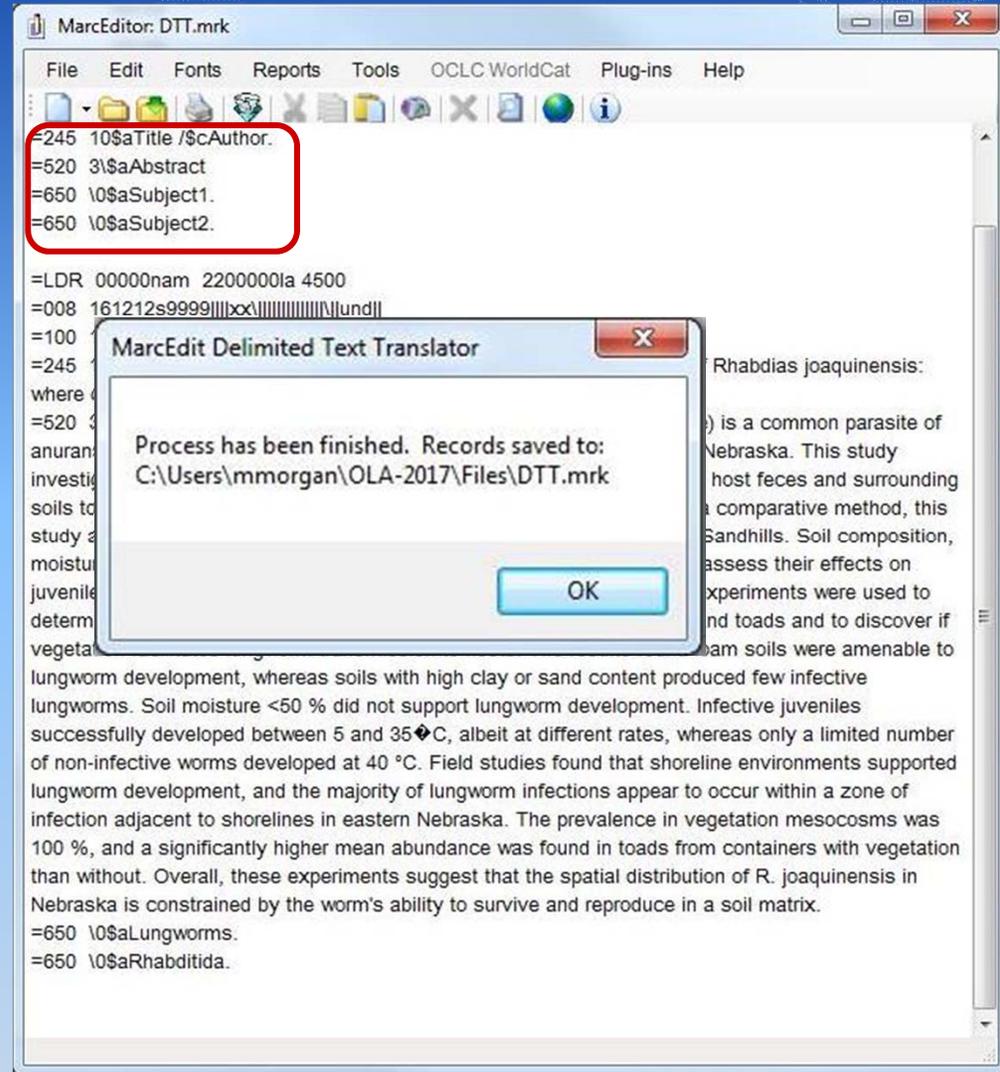
Arguments Section:

- A list box containing the following arguments:

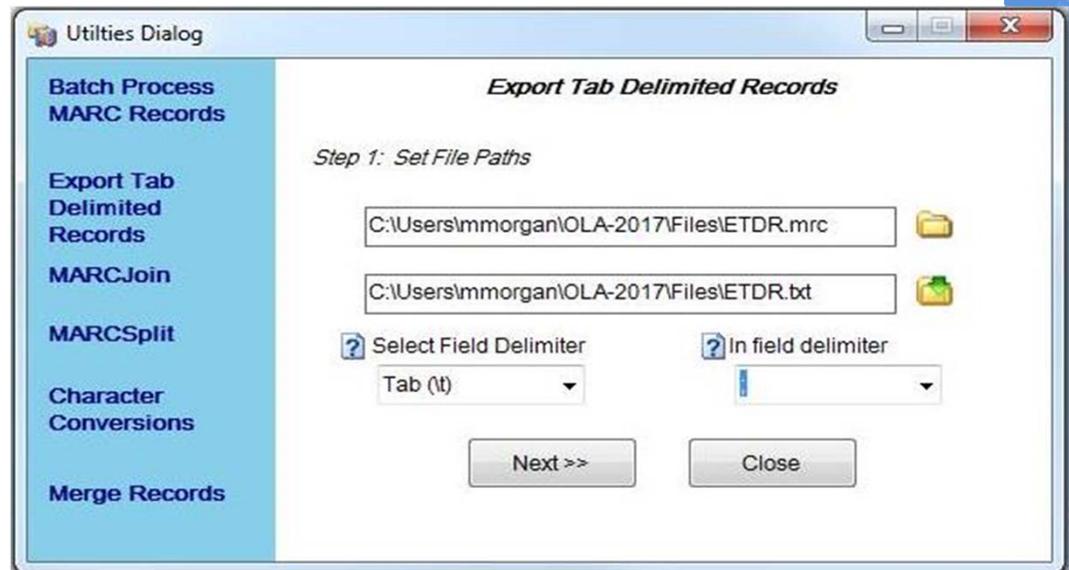
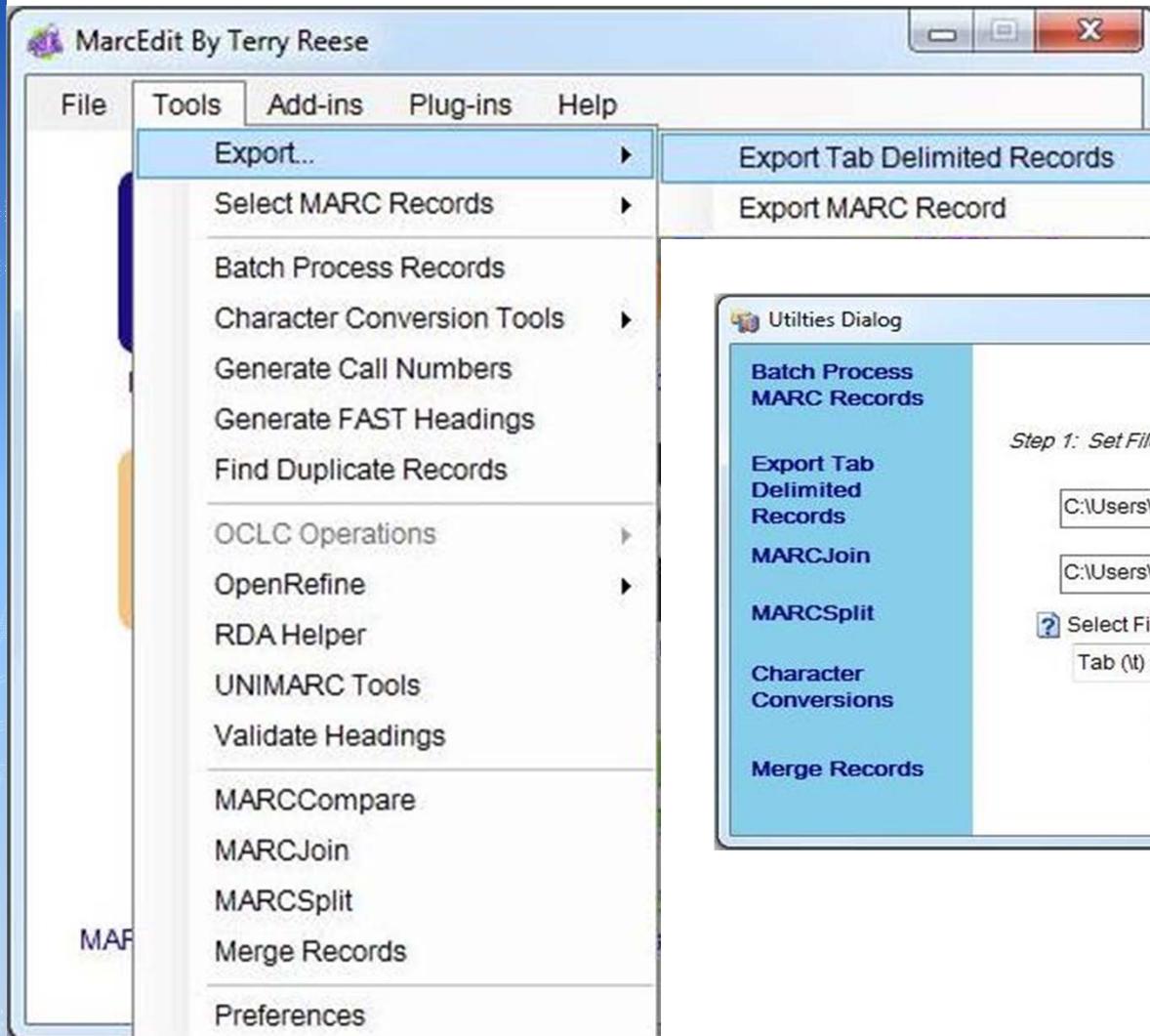
```
0 100$a 0
1 **245$a 0
0 **245$c 0
2 *264$a 0
4 *264$b 0
3 *264$c 0
```
- Up and down arrow buttons on the right side of the list box.
- Save Template (with a red '3' next to it)
- Sort Fields
- Calculate common nonfiling data
- Ignore Header Row (with a red '4' next to it)
- [Auto Generate](#) (a blue link)
- Load Template:** A button.

Delimited Text Translator

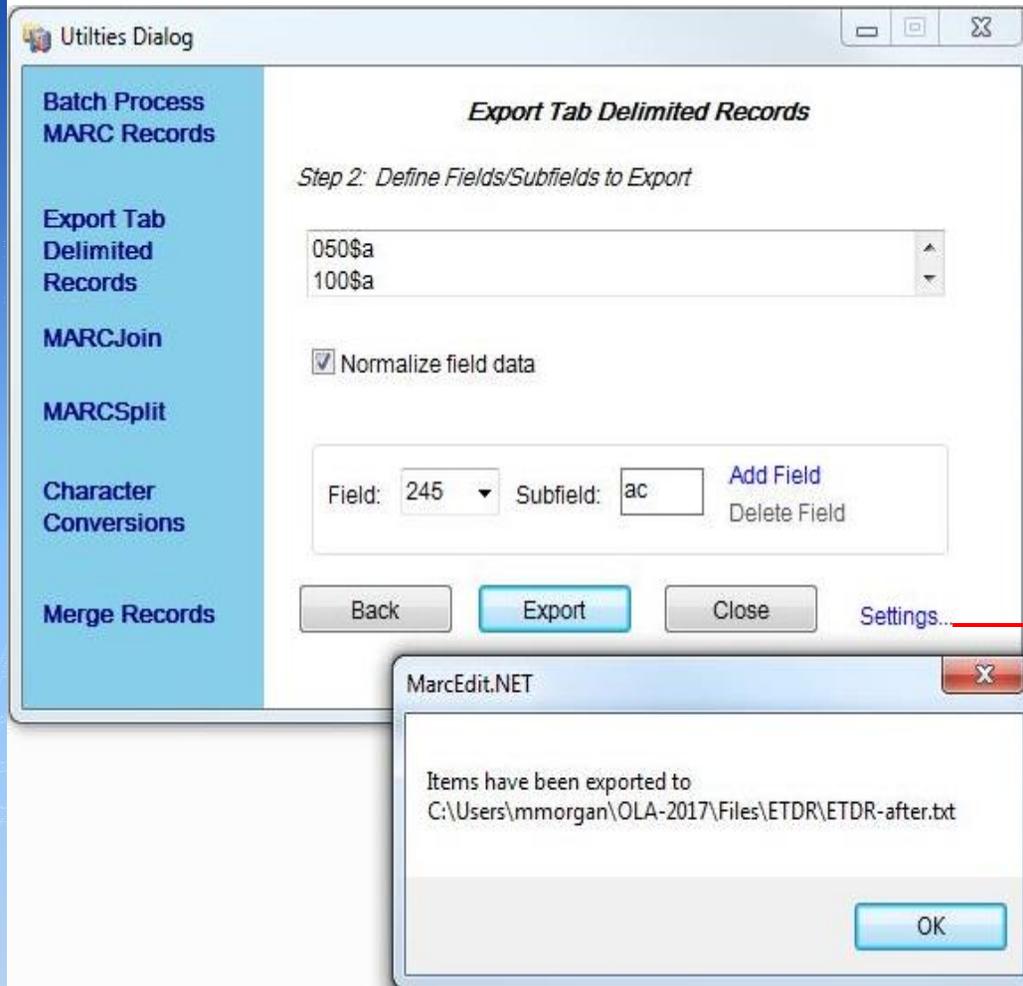
As of Dec. 21 2016 update, there is an option to ignore the headings.



Export Tab Delimited Records



Export Tab Delimited Records



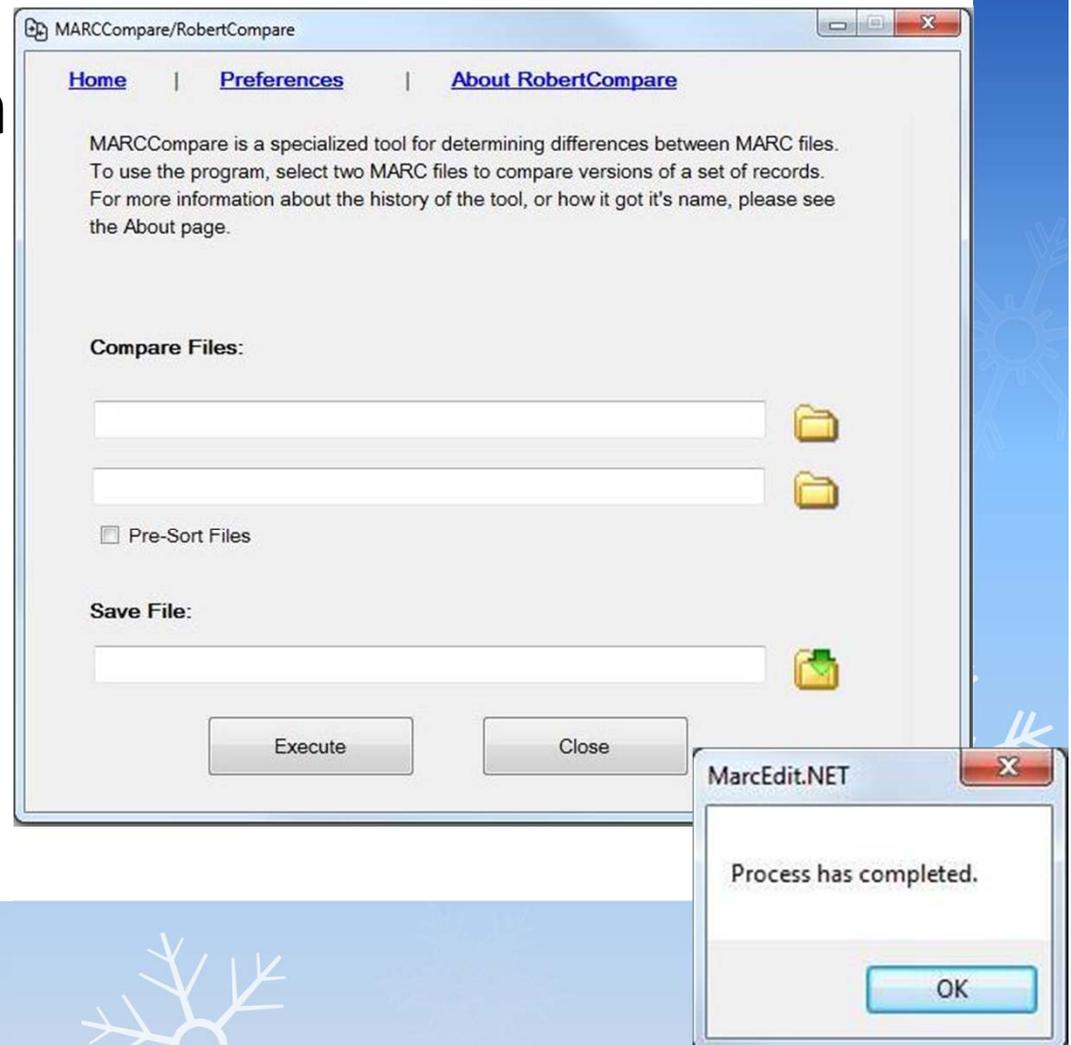
❖ Define fields and subfields

❖ Normalize field data

❖ Save settings for future exports

MARCCompare

- ❖ Determines the differences between MARC files.
- ❖ Records in files need to be in the same order.
- ❖ The output of the file is in HTML.



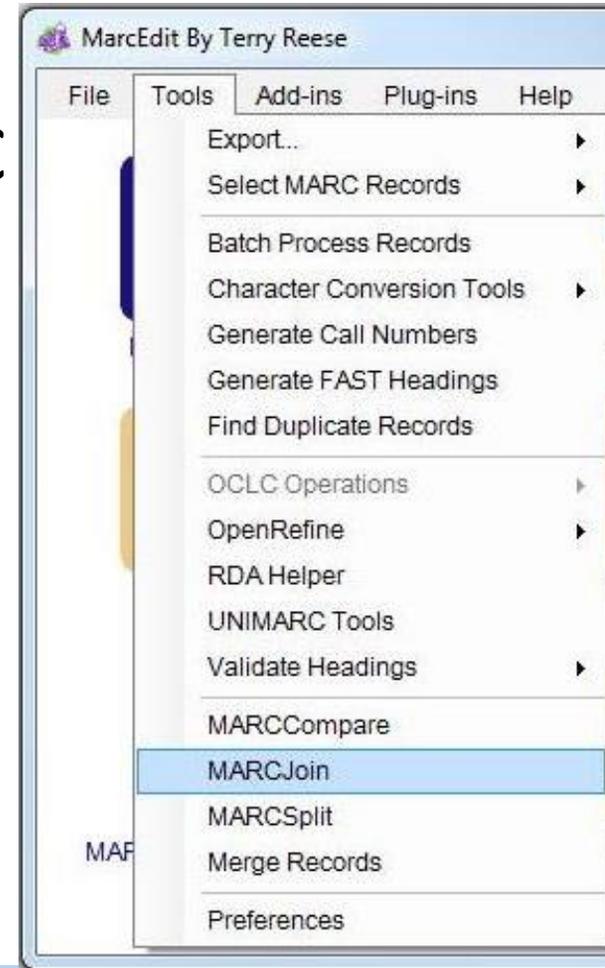
Record #: 1

MARCCompare

=LDR 01370552nam 220034734a 4500 ;
=001 ebr10051233 ;
=003 CaPaEBR ;
=006 m////////u//////// ;
=007 cr\cn//////// ;
=008 000724s2000\\nyua\\sb\\001\0\eng\\ ;
=010 \\\$z 00060188 ;
=020 \\\$z0824704258 (alk. paper) ;
=040 \\\$aCaPaEBR\$cCaPaEBR ;
=050 14\$aRS189\$b.W57 2000eb ;
=082 04\$a615/.19/06855221 ;
=090 \\\$aOnline :
=100 1\ \$aWillig, Sidney H..\$d1919- ;
=245 10\$aGood manufacturing practices for pharmaceuticals\$~~h[electronic resource]~~ :\$ba plan for total quality control from manufacturer to consumer /\$cSidney H. Willig. ;
=250 \\\$a5th ed., rev. and expanded. ;
=2604 \\1\$aNew York :\$bM. Dekker,\$c2000. ;
=300 \\\$axii. 732 p.\$ages :\$billustrations. ;
=336 \\\$atext\$btxt\$2rdacontent :
=337 \\\$acomputer\$bc\$2rdamedia :
=338 \\\$aonline resource\$bcr\$2rdacarrier :
=490 1\ \$aDrugs and the pharmaceutical sciences ;\$vv. 109 ;
=504 \\\$aIncludes bibliographical references and index. ;
=533 \\\$aElectronic reproduction.\$bPalo Alto, Calif. :\$cebrary,\$d2013.\$nAvailable via World Wide Web.\$nAccess may be limited to ebrary affiliated libraries. ;
=650 \0\$aPharmaceutical industry\$xQuality control. ;
=650 \0\$aDrugs\$xStandards\$zUnited States. ;
=655 \7\$aElectronic books.\$2local ;
=710 2\ \$aebrary, Inc. ;
=830 \0\$aDrugs and the pharmaceutical sciences ;\$vv. 109. ;
=856 40\$uhttp://ezproxy.fl.southern.edu:2048/login?url=http://site.ebrary.com/lib/fl.southern/Doc?id=10051233\$zAn-elView tronhies bE-Book ;
=949 \\\$aee*recssi=b;bn=w;b2=z;le through the World Wide Wc=web; eliek /ty=29/co-viewp=1 ;

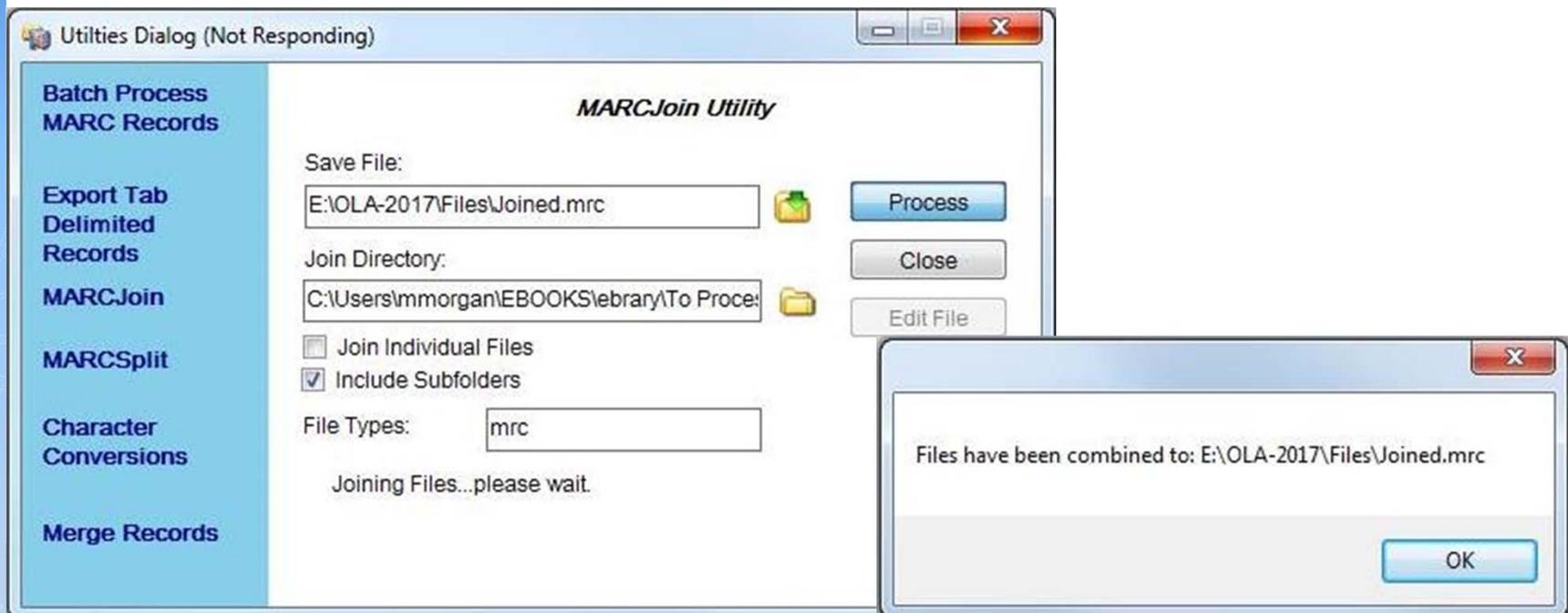
MARCJoin

- ❖ Utility to join separate MARC record files into one file for easier handling.
- ❖ Select MarcJoin from the Tools menu in the MarcTools window.



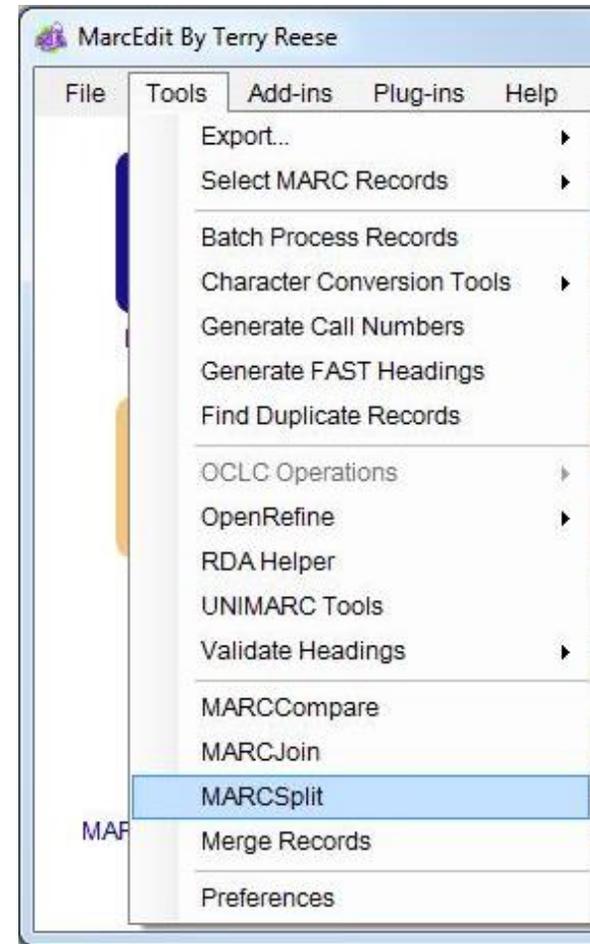
MARCJoin

- ❖ Pick a place to save the joined MARC files.
- ❖ Select all the files to join into one.
- ❖ Click Open, then Process.



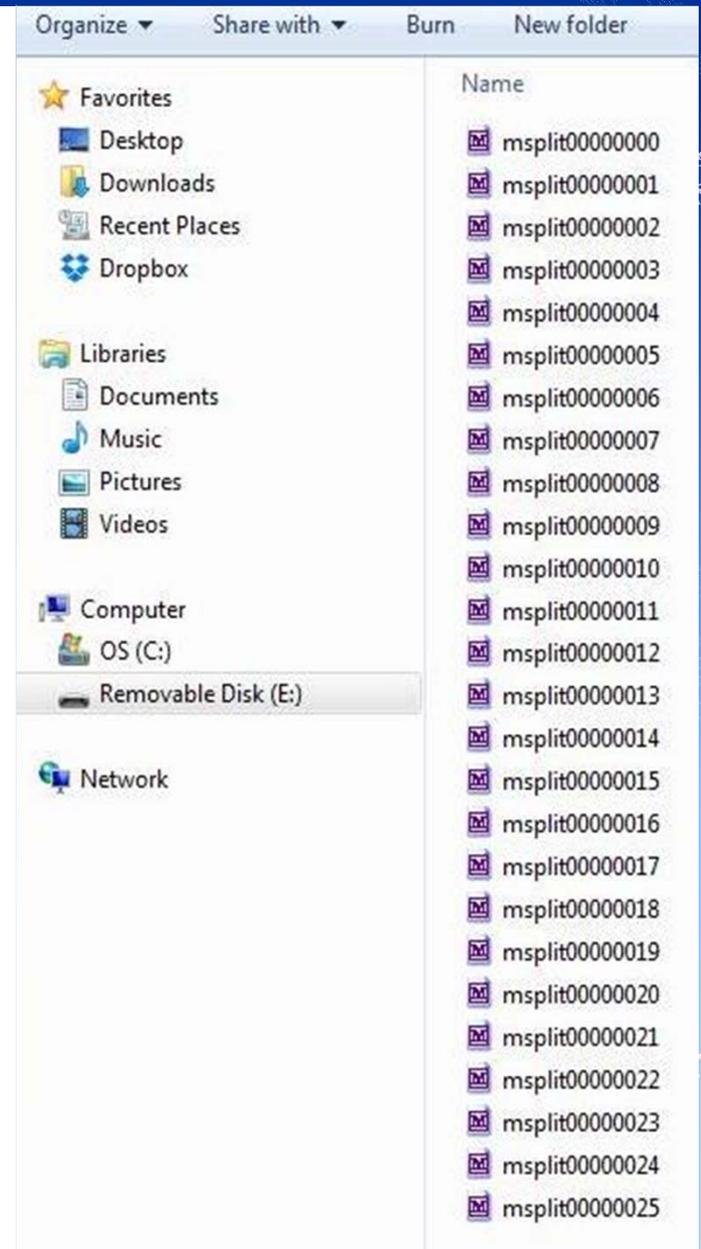
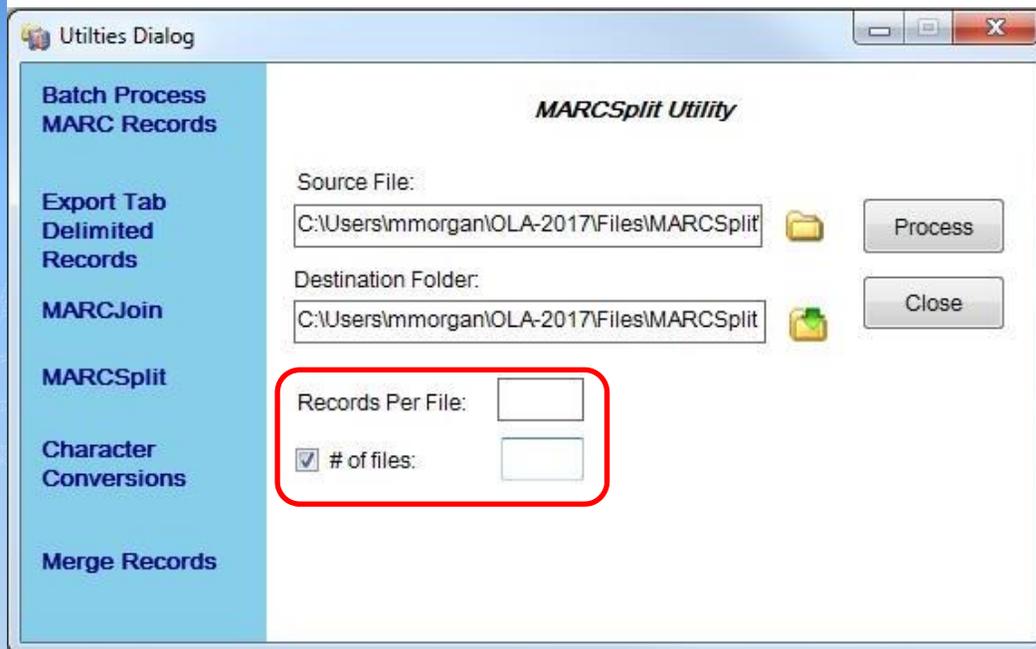
MARCSplit

- ❖ Utility to split a large MARC record file into smaller files for easier handling.
- ❖ Select MarcSplit from the Tools menu in the MarcTools window.



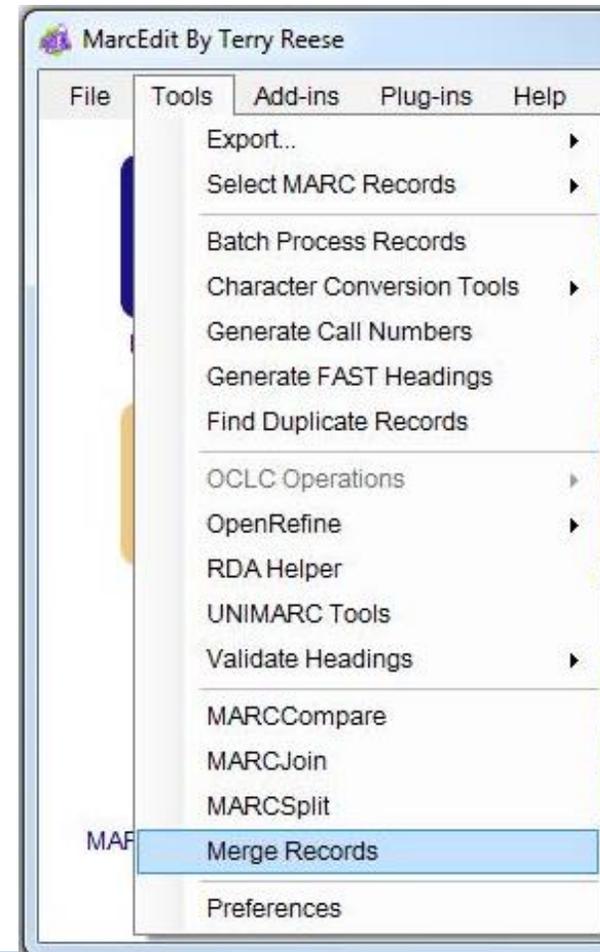
MARCSplit

Decide if you want to split the file according to desired records per file or # of files



Merge MARC Records

- ❖ Tool allowing users to take two different MARC records sets and merge the contents of one to another.
- ❖ Select Merge Records from the Tools menu in the MarcTools window.



Merge MARC Records

Utilities Dialog

Batch Process MARC Records

Export Tab Delimited Records

MARCJoin

MARCSplit

Character Conversions

Merge Records

Merge Record Data

Source File: C:\Users\mmorgan\OLA-2017\Files\MAR\

Merge File: C:\Users\mmorgan\OLA-2017\Files\MAR\

Save File: C:\Users\mmorgan\OLA-2017\Files\MAR\

Record Identifier: ARC21 Customize Fields

Unicode Encoded

Next => Cancel

the main file without the desired data but with fields we want to keep

the file with extra data

the merged file (master file)

Merge MARC Records

Utilities Dialog

Batch Process MARC Records

Export Tab Delimited Records

MARCJoin

MARCSplit

Character Conversions

Merge Records

Merge Record Data: Select Fields

Select Field:

Merge Fields: 020

LDR 001 002 003 004 005

Merge Unique Items

Confidence Value:

<=< Back

Next =>

Cancel

Utilities Dialog

Batch Process MARC Records

Export Tab Delimited Records

MARCJoin

MARCSplit

Character Conversions

Merge Records

Merge Completed

Files have been merged. Results located in C:\Users\lmmorgan\OLA-2017\Files\MARCMerge\Saved File.mrk.

Close

Merge MARC Records

The image displays three screenshots of the MarcEditor software interface, illustrating the process of merging MARC records. Each window shows a list of MARC records with various fields and values. Red boxes highlight specific records in each window.

Source File.mrk: Shows a list of MARC records. The record with key 020 and value \\\$a1860646425 is highlighted with a red box.

Merge File.mrk: Shows the same list of MARC records. The record with key 020 and value \\\$a1860646425 is highlighted with a red box, indicating it is the record being merged.

Saved File.mrk: Shows the final merged MARC records. The record with key 020 and value \\\$a1860646425 is highlighted with a red box, showing it has been successfully merged into the source file.

Find Duplicate Records

Tools

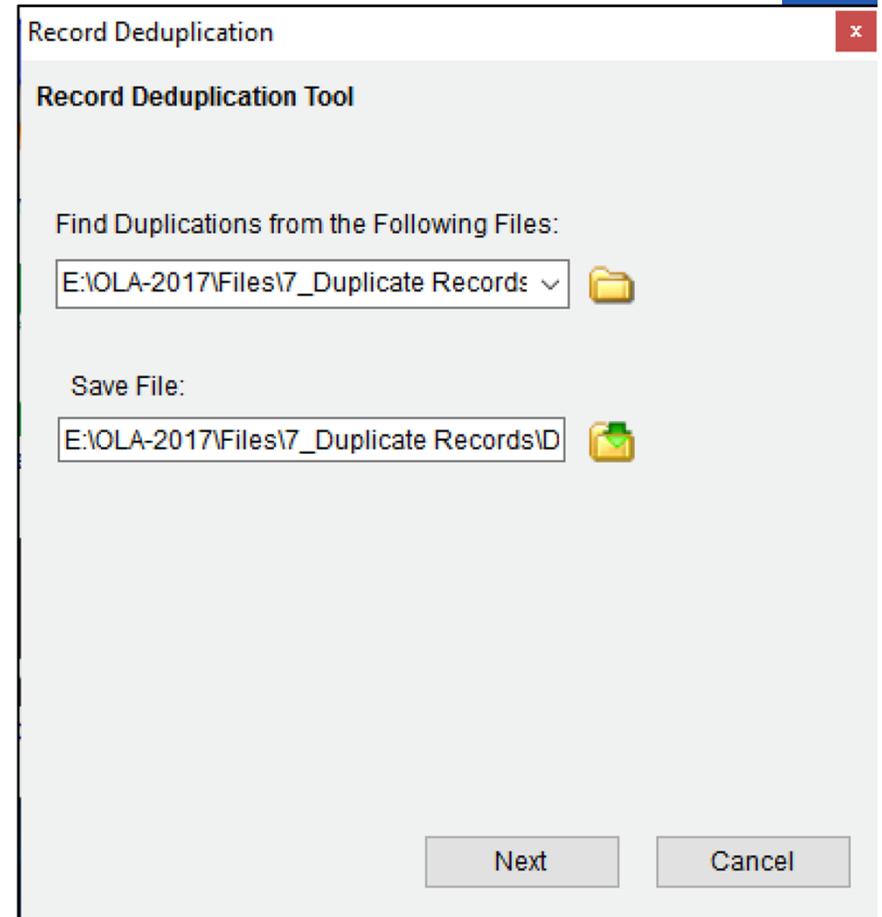
> Find Duplicate Records

or

In MARCEditor

>Tools

> Record Deduplication



Find Duplicate Records

- ❖ Control field
 - ❖ OCLC #
 - ❖ ISBN
 - ❖ Main Title
 - ❖ Field/Subfield
- ❖ Use fuzzy matching
 - ❖ Confidence
- ❖ Dedup keeping
 - ❖ First / Last record

Record Deduplication

Control Field:
Main Title 245
Field/Subfield

Dedup Keeping:
First Record first

Record 5688 is being processed.

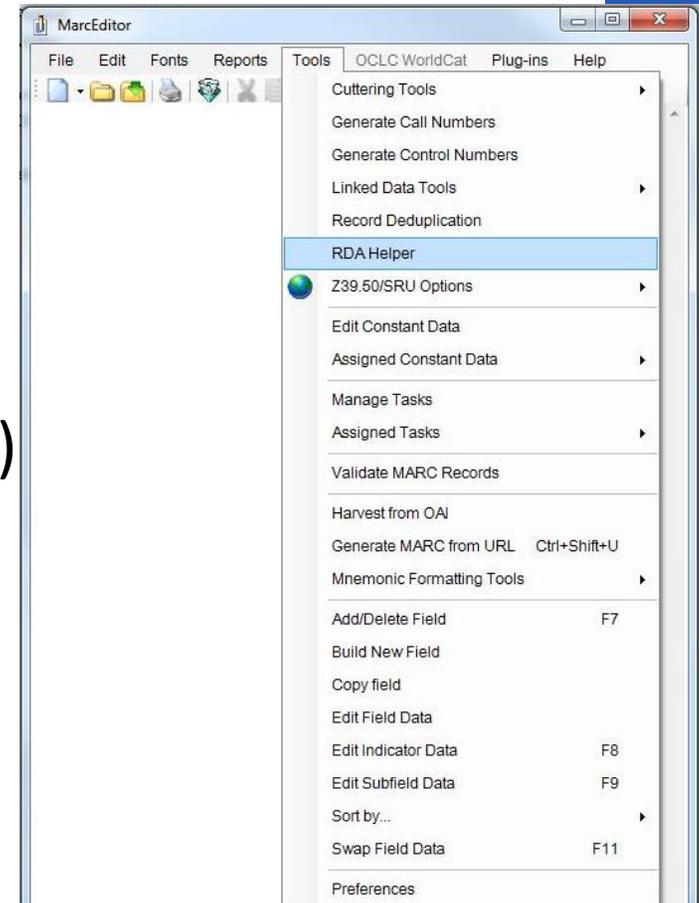
Options:
 Remove Duplicate Items
 Output Unique Items
 Save Dedup Items to:
[Empty text box]

Process

Duplication File Processing X
Files have been processed.
OK

RDA Helper

- ❖ RDA specific data automatically generated
- ❖ Based on the coded data and analysis of fields or subfields
 - 336 (LDR, 007, 008, 245\$h, 516, 530)
 - 337 (007, 008, 245, 300, 516, 856)
 - 338 (007, 008, 245, 300, 516, 856)
 - 264 (260)
 - 040\$e (300, 5XX)



RDA Helper

- ❖ Select the RDA fields to be added to records
- ❖ Options for expanding abbreviations
- ❖ Edit list or fields



MarcEditor: Mixed file.mrk

File Edit Fonts Reports Tools OCLC WorldCat Plug-ins Help

=LDR 03860cam a22003254a 4500
=001 3957491
=005 20121221093348.0
=007 ta
=008 080924s2008\\mdua\\b\\001\\0\\eng\\
=010 \\\$a 2007036045
=020 \\\$a9780801888182 (hardcover : alk. paper)
=020 \\\$a0801888182 (hardcover : alk. paper)
=035 \\\$a(OCOLC)ocn173182396
=035 \\\$a(OCOLC)173182396
=040 \\\$aDLC\$cDLC\$dBTCTA\$dBAKER\$dYDXCP\$dOCLCG\$dC#P\$dIXA\$dCDX
\$dYAM\$dDLC\$dOrLoB-B
=050 00\$aHV4747\$b.E43 2008
=082 00\$a179/.3\$222
=090 \\\$aHV4747\$b.E43 2008\$5CaOGU
=245 00\$aElephants and ethics :\$btoward a morality of coexistence /\$cedited by
Christen Wemmer and Catherine A. Christen ; foreword by John Seidensticker.
=260 \\\$aBaltimore, Md. :\$bJohns Hopkins University Press,\$c2008.
=300 \\\$axvii, 483 p. :\$bill. ;\$c26 cm.
=504 \\\$alIncludes bibliographical references and index.
=505 0\\\$aForeword / John Seidensticker -- 1. Introduction Never Forgetting the
Importance of Ethical Treatment of Elephants / Christen Wemmer and Catherine A.
Christen -- Pt. I. Overview of Elephant Philosophy and Science -- 2. Elephants in Time
and Space: Evolution and Ecology / Raman Sukumar -- 3. Personhood, Memory, and
Elephant Management / Gary Varner -- 4. Elephant Sociality and Complexity: The
Scientific Evidence / Joyce H. Poole and Cynthia J. Moss -- 5. Elephants, Ethics, and
History / Nigel Rothfels -- 6. Pain, Stress, and Suffering in Elephants: What Is the
Evidence and How Can We Measure It? / Janine L. Brown, Nadja Wielebnowski and
Jacob V. Cheeran -- Pt. II. Elephants in the Service of People: Cultural Differences and
Ethical Relativity -- 7. Elephants and People in India: Historical Patterns of Capture and
Management / Dhriti K. Lahiri Choudhury -- 8. Carrots and Sticks, People and
Elephants: Rank, Domination, and Training / John Lehnhardt and Marie Galloway -- 9.
Canvas to Concrete: Elephants and the Circus-Zoo Relationship / Michael D. Kreger --
10. Why Circuses Are Unsuitable to Elephants / Lori Alward -- 11. View from the Big Top:
Why Elephants Belong in North American Circuses / Dennis Schmitt -- 12. Challenges
of Meeting the Needs of Captive Elephants / Jane Garrison -- 13. Most Zoos Do Not
Deserve Elephants / David Hancocks -- 14. Zoos as Responsible Stewards of
Elephants / Michael Hutchins, Brandie Smith and Mike Keele -- 15. Can We Assess

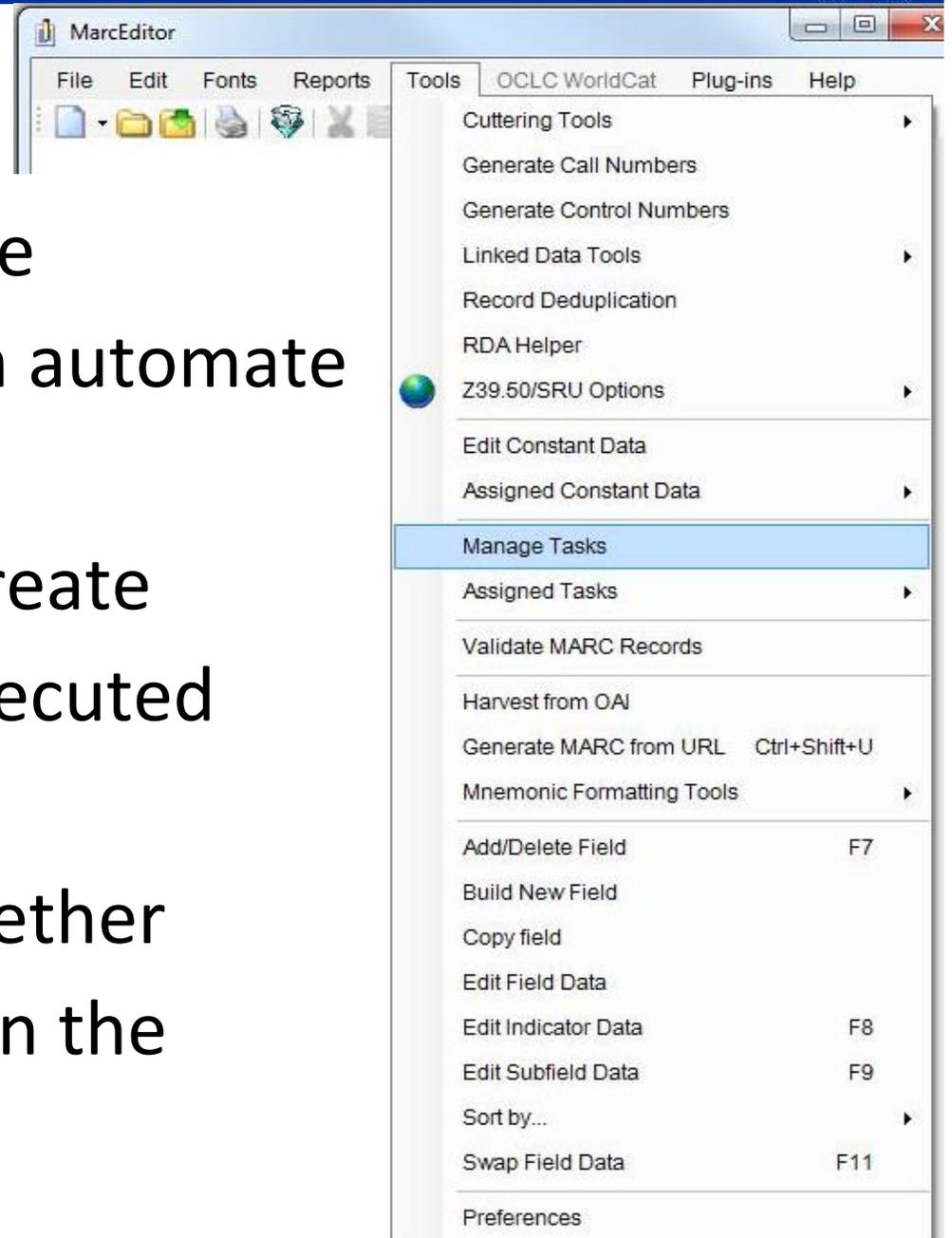
MarcEditor: Mixed file-RDA Helper.mrk

File Edit Fonts Reports Tools OCLC WorldCat Plug-ins Help

=LDR 03860cam a22003254i 4500
=001 3957491
=005 20121221093348.0
=007 ta
=008 080924s2008\\mdua\\b\\001\\0\\eng\\
=010 \\\$a 2007036045
=020 \\\$a9780801888182\$qhardcover : alk. paper
=020 \\\$a0801888182\$qhardcover : alk. paper
=035 \\\$a(OCOLC)ocn173182396
=035 \\\$a(OCOLC)173182396
=040 \\\$aDLC\$serda\$cDLC\$dBTCTA\$dBAKER\$dYDXCP\$dOCLCG\$dC#P\$dIXA
\$dCDX\$dYAM\$dDLC\$dOrLoB-B\$eng
=050 00\$aHV4747\$b.E43 2008
=082 00\$a179/.3\$222
=090 \\\$aHV4747\$b.E43 2008\$5CaOGU
=245 00\$aElephants and ethics :\$btoward a morality of coexistence /\$cedited by
Christen Wemmer and Catherine A. Christen ; foreword by John Seidensticker.
=264 1\\\$aBaltimore, Md. :\$bJohns Hopkins University Press,\$c2008.
=300 \\\$axvii, 483 pages :\$billustrations ;\$c26 cm.
=336 \\\$atext\$btxt\$2rdacontent
=337 \\\$aunmediated\$bn\$2rdamedia
=338 \\\$avolume\$bn\$2rdacarrier
=504 \\\$alIncludes bibliographical references and index.
=505 0\\\$aForeword / John Seidensticker -- 1. Introduction Never Forgetting the
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10. Why Circuses Are Unsuitable to Elephants / Lori Alward -- 11. View from the Big Top:
Why Elephants Belong in North American Circuses / Dennis Schmitt -- 12. Challenges

Task Manager

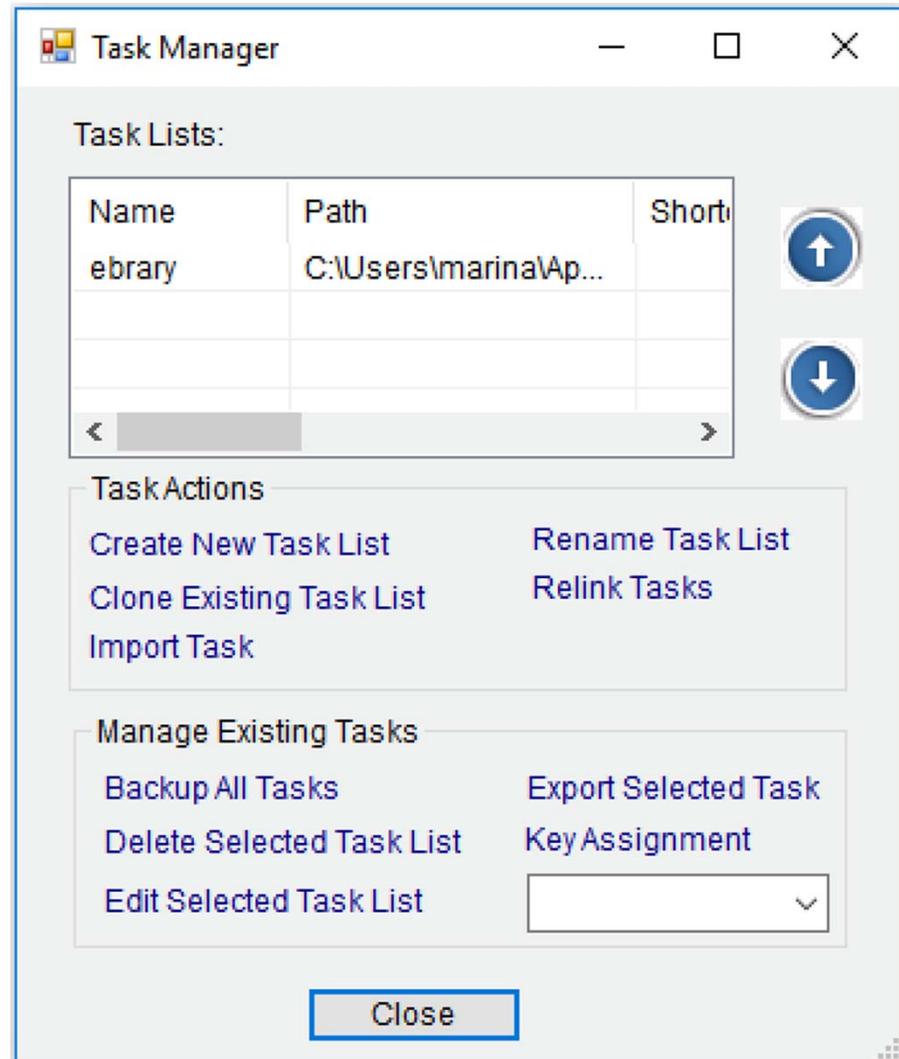
- ❖ Anything done in the MarcEditor, you can automate as a task
- ❖ Provides a way to create defined task lists executed automatically
- ❖ Chains task lists together
- ❖ Performs the tasks in the added order



Task Manager

You can:

- ❖ Create new tasks
- ❖ Clone tasks
- ❖ Rename tasks
- ❖ Delete tasks
- ❖ Edit tasks
- ❖ Share tasks
 - ❖ import
 - ❖ export
- ❖ Key assignment



Task Manager

Task Actions

- Create New Task List
- Clone Existing Task List
- Import Task
- Rename Task List
- Relink Tasks

Manage Existing Tasks

- Backup All Tasks
- Delete Selected Task List
- Edit Selected Task List
- Export Selected Task List
- Key Assignment

Close

Edit Task List

Task List Name: OLASC_2017

Description:

Tasks:

Actions: + [document icon] X [green checkmark icon]

Save Close

Actions: + [document icon] X [green checkmark icon]

Add Copy Delete Edit

Task Management

Task List Name: OLASC_2017

Description:

Tasks:

Actions: + [document] X [checkmark]

Save Close

-
- Add Replace All Task
 - Add New Field Task
 - Add Delete Field Task
 - Add Field Edit Task
 - Add Edit Subfield Task
 - Add Edit Indicator Task
 - Add Swap Field Task
 - Add Copy Field Task
 - Add Task List
 - Add RDA Helper
 - Add Linked Data Task
 - Add Build New Field Task
 - Edit ShortCuts

Task Manager

Add a new task

Actions:    

- Add Replace All Task
- Add New Field Task
- Add Delete Field Task
- Add Field Edit Task
- Add Edit Subfield Task
- Add Edit Indicator Task
- Add Swap Field Task
- Add Copy Field Task
- Add Task List
- Add RDA Helper
- Add Linked Data Task
- Add Build New Field Task

Edit Task List

Task List Name:

Description:

Tasks:

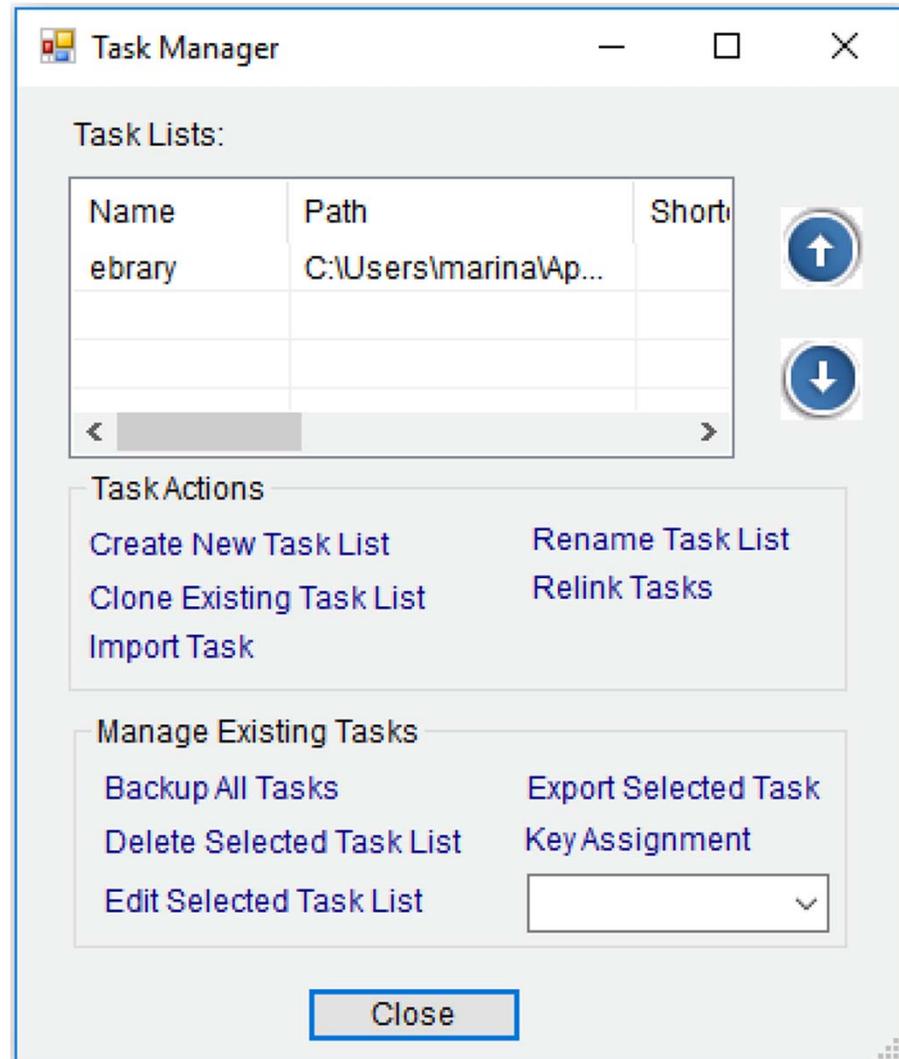
RDHELPER	1 1 1 1 1 1 1 1 1 1 0 1 1 1				
DELETE 029		0	False	False	False
DELETE 049		0	False	False	False
DELETE 060		0	False	False	False
DELETE 082		0	False	False	False
DELETE 084		0	False	False	False
DELETE 506		0	False	False	False
ADD 506	\\\$aAccess restricted to Ryerson students, faculty and staff.\$5CaOTR				
REPLACE\$nAvailable via World Wide Web.		0			1
SUBFIELD_EDIT 856	3			View this ebook	0 0
DELETE 994		0	False	False	False
DELETE 981		0	False	False	False
DELETE 910		0	False	False	False
REPLACE(=245.{4})(\\$.a.)([A-Z .]*)			\$1\$2lcase(\$3)	2	1

Actions:    

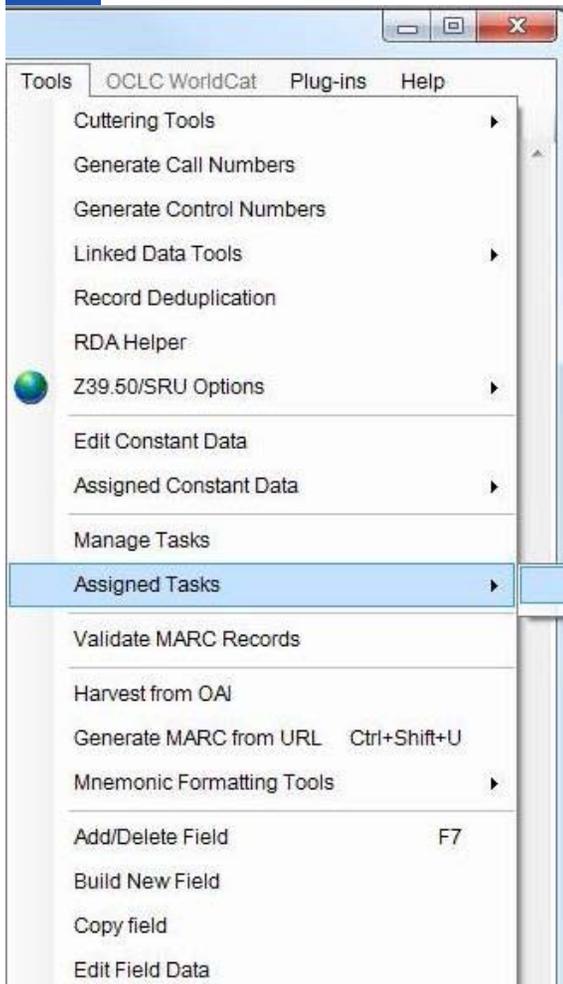
Save Close

Task Manager

- ❖ Clone tasks
 - ❖ Select existing task
 - ❖ Clone it
 - ❖ Edit it
- ❖ Share tasks
 - ❖ import
 - ❖ export
- ❖ Key assignment



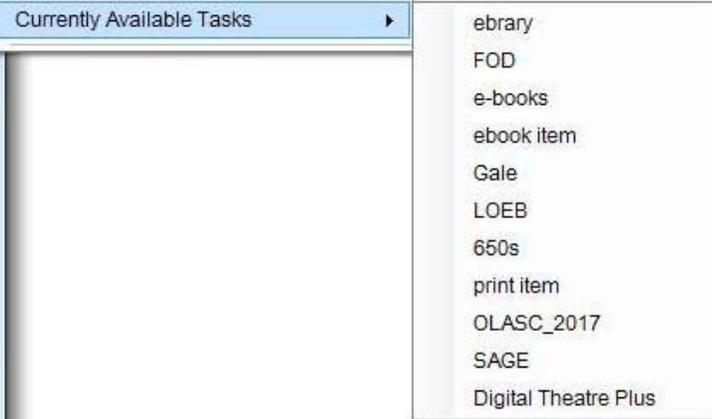
Task Management



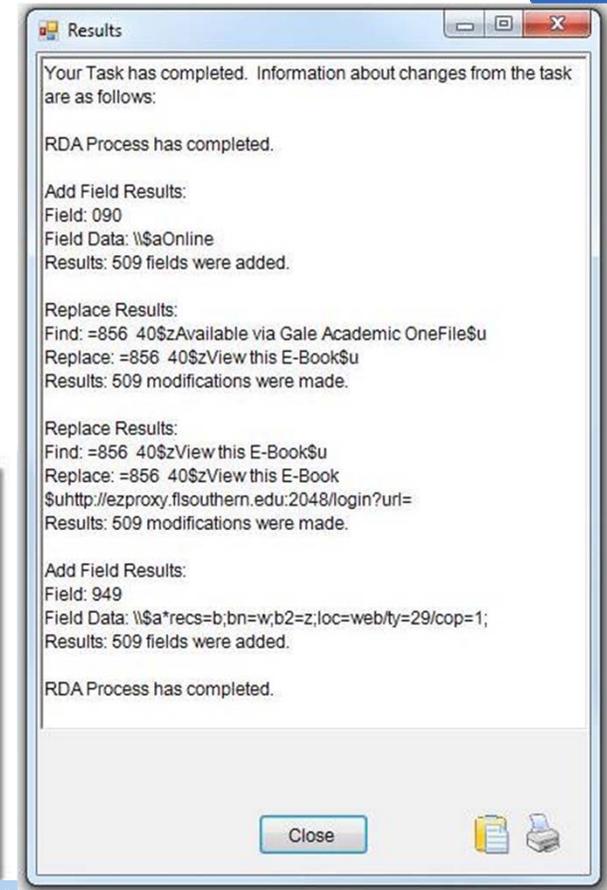
The screenshot shows the 'Tools' menu in OCLC WorldCat. The menu items are: Cuttering Tools, Generate Call Numbers, Generate Control Numbers, Linked Data Tools, Record Deduplication, RDA Helper, Z39.50/SRU Options, Edit Constant Data, Assigned Constant Data, Manage Tasks, Assigned Tasks (highlighted), Validate MARC Records, Harvest from OAI, Generate MARC from URL (Ctrl+Shift+U), Mnemonic Formatting Tools, Add/Delete Field (F7), Build New Field, Copy field, and Edit Field Data.

Summary of results

Execute task



The screenshot shows the 'Currently Available Tasks' list, which includes: ebrary, FOD, e-books, ebook item, Gale, LOEB, 650s, print item, OLASC_2017, SAGE, and Digital Theatre Plus.



The screenshot shows the 'Results' dialog box with the following text:

Your Task has completed. Information about changes from the task are as follows:

RDA Process has completed.

Add Field Results:
Field: 090
Field Data: \\\$aOnline
Results: 509 fields were added.

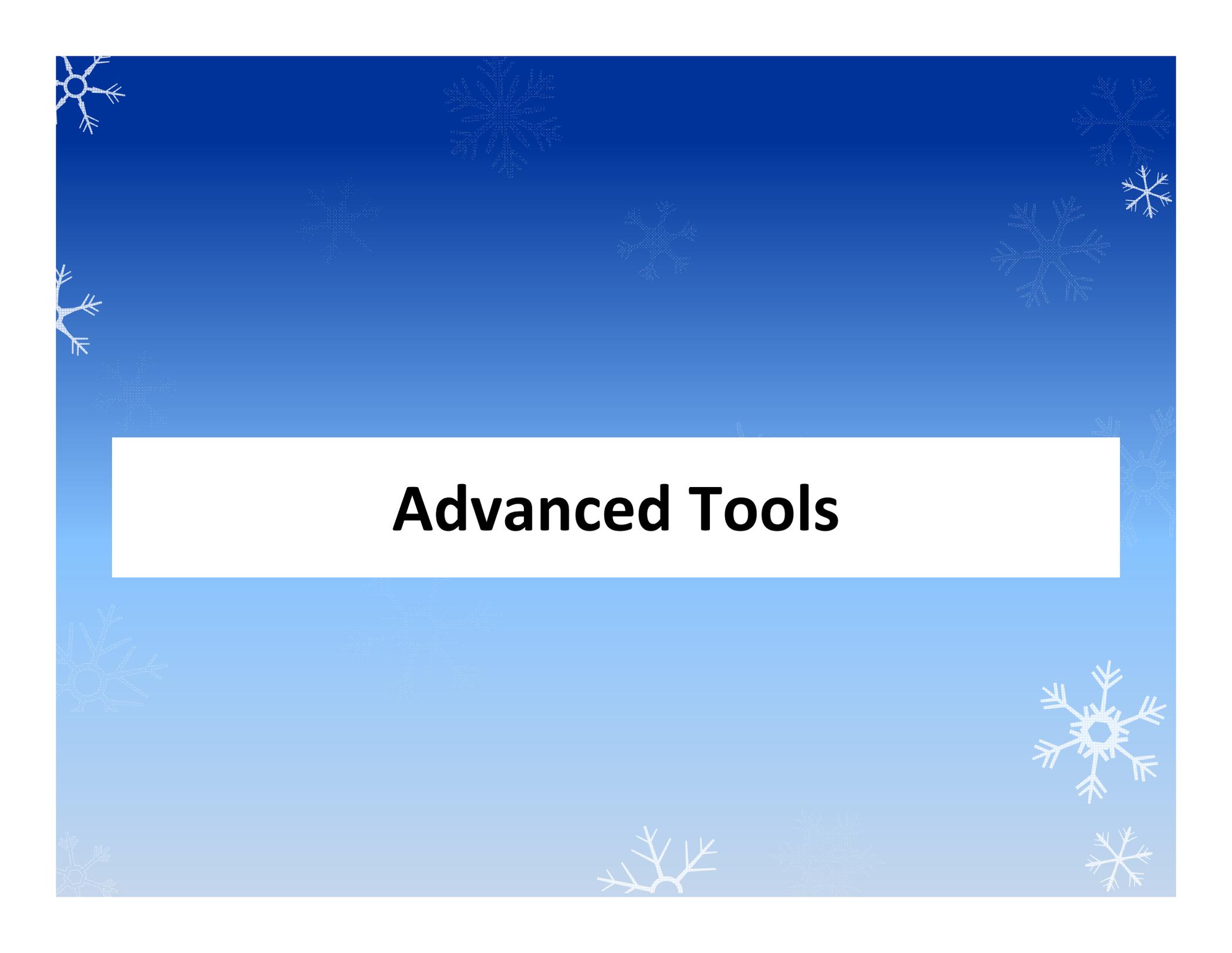
Replace Results:
Find: =856 40\$zAvailable via Gale Academic OneFile\$u
Replace: =856 40\$zView this E-Book\$u
Results: 509 modifications were made.

Replace Results:
Find: =856 40\$zView this E-Book\$u
Replace: =856 40\$zView this E-Book
\$uhttp://ezproxy.flisouthern.edu:2048/login?url=
Results: 509 modifications were made.

Add Field Results:
Field: 949
Field Data: \\\$a*recs=b;bn=w;b2=z;loc=web/ty=29/cop=1;
Results: 509 fields were added.

RDA Process has completed.

Buttons: Close, Print, Copy



Advanced Tools

Regular Expressions

- ❖ What is a “regular expression”?
- ❖ Functions that support regular expressions
- ❖ Major components of the language
- ❖ Getting regular expressions help
- ❖ Express yourself with regex

What is a “regular expression”?

“A regular expression is a special text string for describing a search pattern.

You can think of regular expressions as wildcards on steroids”.

```
(cry|give up|(°o°))\.
```

Functions that support regex

- ❖ Edit fields and subfields
- ❖ Copy / swap fields
- ❖ Extract / Delete records
- ❖ Delete and build new fields
- ❖ MarcEdit remembers the last 10 replacements
- ❖ MarcEdit has a Special Undo function that will undo your last global update

Major Components

- Character escapes
- Anchors
- Qualifiers
- Groupings
- Substitutions

Character Classes

[] only one character

w[ai]l

Matches wall will but does not match wail way

[^] any character **except**

d[^ea]n

Matches don, dun, dunes but does not match den, dean

one character in the range

[0-9]

Matches any number from 0 to 9

one character in the range

[A-Z]

Matches any character from A to Z

any one letter **not in the range**

[^a-z]

alef0.com

Character Classes

(.) Any character **=245(.*)**

Matches =245 10 or =245 14

\w Any word **=245(.*)(\w)**

Matches =245 10\$aEncyclopedia of heart diseases

is short for **[A-Za-z]**

\d Any digit

is short for **[0-9]**

\D Any non-digit

is short for **[^0-9]**

\s Any whitespace character

\S Any non-whitespace character

| This or that

(a|b)

Quantifiers

? Zero or one time

Mar(ch)? 15(th)?

Matches **March 15th, March 15, Mar 15th** or **Mar 15**.

* Zero or more times

(=245.*)

Matches any character zero or more times (space space and 2 indic.)

+ One or more times

([0-9]+)

Matches one character in the range one or more times

{ } Exactly 4 times

(=245.{4})

Matches any character exactly 4 times

Anchors

^Start of a string

^=245

Matches **=245** 10\$aLorem ipsum dolor sit amet

\$End of a string

[^\W]\$

Matches all data in the line and evaluates if the final character not a word

Regex Examples

245 10 \$aA life to remember
245 10 \$aAn incredible story
245 10 \$aThe magic kingdom

Find

(=245 .)0(\\$aA)

(=245 .)0(\\$aAn)

(=245 .)0(\\$aThe)

Replace with

#{1}2\$2

#{1}3\$2

#{1}4\$2

Regex Examples

=245 10\$aENCYCLOPEDIA OF THE HISTORY
OF PSYCHOLOGICAL THEORIES

Find `(=245.{4})(\$.)([A-Z\s]+)`

Replace With `$1$2lcase($3)`

Regex Example

Find all subject headings with 2nd indicator other than 0 or 2

=650...[^02]

Find all subject headings with 1st indicator other than \ and 2nd indicator other than 0 or 2

=650..[\$\][^02]

My data

=245 10 Environmental factors in the geographic distribution of lungworms / Jameson, Leon.

My desired data

=245 10 Environmental factors in the geographic distribution of lungworms / Leon Jameson.

Find

(=245.*)(\a.*)(\c)([A-Za-z]+), ([A-Za-z]+)

=245 10\$aEnvironmental factors in the
geographic distribution of lungworms
/cJameson, Leon.

Replace with

\$1\$2\$3\$5 \$4

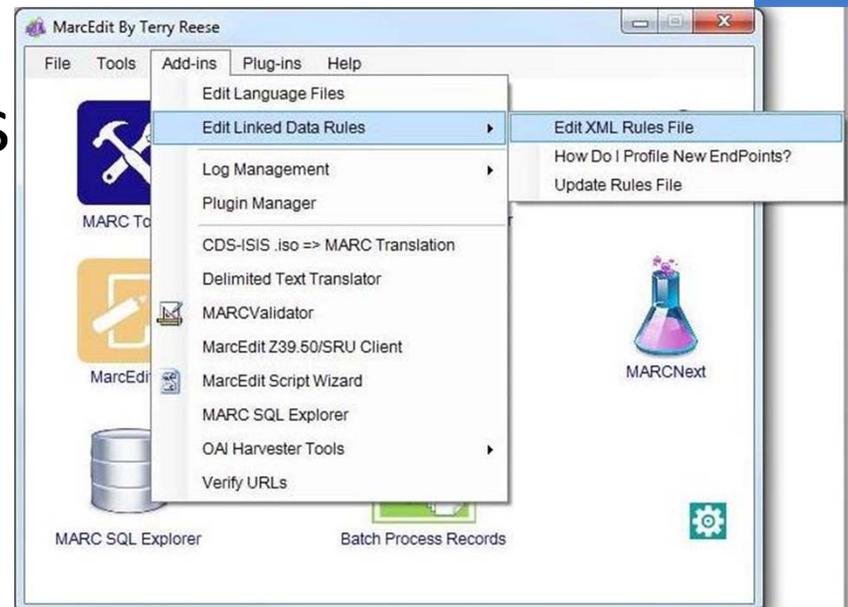
Regex Useful Resources

- ❖ <https://regex101.com/>
- ❖ <https://www.cheatography.com/davechild/cheat-sheets/regular-expressions/>
- ❖ [https://msdn.microsoft.com/en-us/library/az24scfc\(v=vs.110\).aspx](https://msdn.microsoft.com/en-us/library/az24scfc(v=vs.110).aspx)
- ❖ <http://regexr.com/>

Link Data Rules File

MarcEdit

- Add-ins
 - Edit Linked Data Rules
 - Edit XML Rules File
 - Linked data profile values & URIs



Rules File

supported index Supported Vocabularies: Value: lcshac Description: LC Childrens Subjects Value: lcdgt Description: LC Demographic Terms Value: lcsh Description: LC Subjects Value: ictmg Description: TGM Value: aat Description: Getty Arts and Architecture Thesaurus Value: ulan Description: Getty ULAN Value: lcgft Description: LC Genre Forms Value: lcmtpt Description: LC Medium Performance Thesaurus Value: naf Description: LC NACO Terms Value: naf_lcsh Description: lcsh/naf combined indexes. Value: mesh Description: MESH indexes -->

```
- <rules>
- <field type="bibliographic">
  <tag>100</tag>
  <subfields>abcdqnt</subfields>
  <uri>0</uri>
  <special_instructions>name</special_instructions>
  <vocab>naf</vocab>
</field>
- <field type="bibliographic">
  <tag>110</tag>
  <subfields>abcdqnt</subfields>
  <uri>0</uri>
  <special_instructions>name</special_instructions>
  <vocab>naf</vocab>
</field>
- <field type="bibliographic">
  <tag>111</tag>
  <subfields>acdefqnt</subfields>
  <uri>0</uri>
  <special_instructions>name</special_instructions>
  <vocab>naf</vocab>
</field>
- <field type="bibliographic">
  <tag>130</tag>
  <subfields>adfkqnt</subfields>
  <uri>0</uri>
  <special_instructions>name</special_instructions>
  <vocab>naf</vocab>
```

```
- <collection>
  <name>US Library of Congress NACO Service</name>
  <label>naf</label>
  <uri>http://id.loc.gov/authorities/names/label/{search_terms}</uri>
</collection>
- <collection>
  <name>US Library of Congress Subject Heading</name>
  <label>lcsh</label>
  <uri>http://id.loc.gov/authorities/subjects/label/{search_terms}</uri>
</collection>
- <collection>
  <name>US Library of Congress Names and Subjects</name>
  <label>naf_lcsh</label>
  <uri>http://id.loc.gov/authorities/label/{search_terms}</uri>
</collection>
- <collection>
  <name>US Library of Congress Children's Subject Headings</name>
  <label>lcshac</label>
  <uri>http://id.loc.gov/authorities/childrensSubjects/label/{search_terms}</uri>
</collection>
- <collection>
  <name>US Library of Congress Demographic Group Terms</name>
  <label>lcdgt</label>
  <uri>http://id.loc.gov/authorities/demographicTerms/label/{search_terms}</uri>
</collection>
- <collection>
  <name>Thesaurus for Graphic Materials</name>
  <label>tgm</label>
  <label>ictgm</label>
  <uri>http://id.loc.gov/authorities/graphicMaterials/label/{search_terms}</uri>
</collection>
```

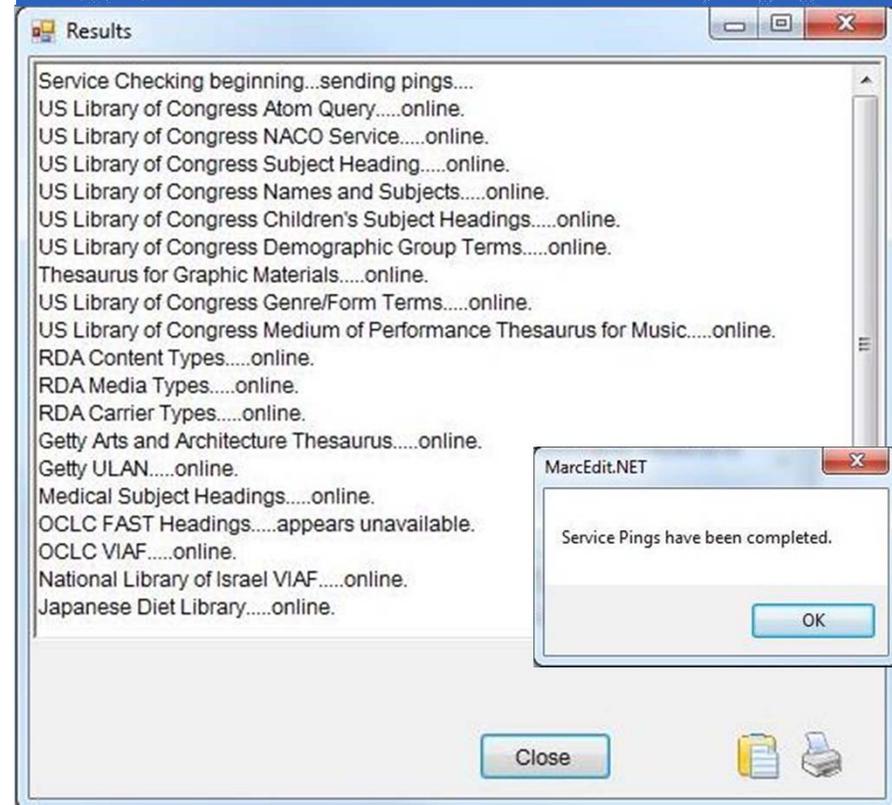
Link Data Tools Service Status

Check Linked data
service status

- Tools
- Validate headings
- Service status

or

- Link identifiers
(Marc Next)
- Service status



Build Linked Records

Build Linked Records



The Linked Data Tool has been designed to loop through a set of MARC records and resolve access points in the 1xx, 6xx, and 7xx

Source File: E:\OLA-2017\Terry\DCMI-2016\Data File\sample

Save File: E:\OLA-2017\Terry\DCMI-2016\Data File\sample

Rules File: C:\Users\marina\AppData\Local\Microsoft\Windows\apps\credittcc

AutoDetected Data
LC/NACO
GND
ULAN

AutoDetected Data

AAT
AGROVOC
GND
LC/NACO
LCSH
LCSH Children
LCGFT
LCMPT
LCDGT
MESH
TGM

Record 20...Please Wait.

ID Services

- AutoDetect Main/Added Entry
- AutoDetect Subject ID
- Process 3xx Fields
- Limit Resolution to:

- OCLC VIAF
- Embed OCLC Work ID
- OCLC Number:

Process

Service Status

Close

- France (BnF)
- France (Sudoc)
- Germany
- Getty (ULAN)
- Hispánica
- Hungary
- ISNI
- Japan (NDL)
- Israel
- Italy
- Latvia
- Lebanon
- LC (NACO)
- Netherlands
- Norway
- Perseus
- Poland (Nationa)
- Poland (NUKAT)
- Portugal
- Singapore
- Spain
- Sweden
- Swiss (Nationa)
- Syriac
- Swiss (RERO)
- Russia
- Vatican
- Wikipedia
- xA
- xR
- LC (NACO)

008 131025s2014\\mauab\\b\\000\1\eng\\
010 \\\$a 2013038020
020 \\\$a9780674725676 (alk. paper)
020 \\\$a0674725670 (alk. paper)
035 \\\$a(OCOLC)861674304
040 \\\$aDLC\$erda\$beng\$cDLC\$dYDX\$dBTCTA\$dBDX\$dYDXCP\$dWNE\$dOCLCO\$dYBM
042 \\\$apcc
043 \\\$ae-uk-en
049 \\\$aYBMM
050 00\$aPR4034\$b.N7 2014
100 1\\\$aAusten, Jane,\$d1775-1817,\$eauthor.\$0<http://id.loc.gov/authorities/names/n79032879>
245 10\$aNORTHANGER ABBEY :\$ban annotated edition /\$cJane Austen ; edited by Susan J. Wolfson.
264 1\\\$aCambridge, Massachusetts :\$bThe Belknap Press of Harvard University Press,\$c2014.
300 \\\$a362 pages :\$billustrations (some color), maps ;\$c25 cm.
336 \\\$atext\$2rdacontent
337 \\\$aunmediated\$2rdamedia
338 \\\$avolume\$2rdacarrier
504 \\\$aincludes bibliographical references.
520 \\\$aWhile enjoying a six weeks' stay in fashionable Bath, the young and callow Catherine Morland is introduced to the delights of high society. Thanks to a new literary diet of the sensational and the macabre, Catherine travels to Northanger Abbey fully expecting to become embroiled in a Gothic adventure of intrigue and suspense and, once there, soon begins to form the most gruesome and improbable theories about the exploits of its occupants. This edition includes pictures and an extensive section about the author's life and works.
650 10\$aYoung women\$zEngland\$vFiction.\$0<http://id.loc.gov/authorities/subjects/sh2008124372>
650 10\$aHorror tales\$xAppreciation\$vFiction.\$0<http://id.loc.gov/authorities/subjects/sh2008121861>
650 10\$aBooks and reading\$vFiction.\$0<http://id.loc.gov/authorities/subjects/sh2007102090>
650 10\$aGentry\$zEngland\$vFiction.
650 10\$aMarriage\$xEconomic aspects\$vFiction.
600 10\$aAusten, Jane,\$d1775-1817.\$iNorthanger Abbey.\$0<http://id.loc.gov/authorities/names/no00002948>
655 10\$aSatire.\$0<http://id.loc.gov/authorities/subjects/sh85117645>
700 1\\\$aWolfson, Susan J.,\$d1948-\$eeditor.\$0<http://id.loc.gov/authorities/names/n85374795>
856 41\$u<http://marcedit.reset.net/software/updates.txt>

Marc Tools

The screenshot displays the MarcEdit software interface. The main window, titled "MarcEdit By Terry Reese", has a menu bar with "File", "Tools", "Add-ins", "Plug-ins", and "Help". The "Tools" menu is open, showing several icons: "MARC Tools" (circled in red), "Delimited Text Translator", "MARC SQL Explorer", "MarcEditor", "RDA Helper", "Batch Process Records", and "MARCNext".

The "Tools" dialog box is open on the right side of the screen. It features a "Tools" header with a wrench icon and an information icon. The dialog includes the following fields and controls:

- Input File:** A text field containing "C:\\" and a folder selection icon.
- Output File:** A text field containing "C:\\" and a folder selection icon.
- Functions:** A list box containing the following items:
 - MarcBreaker (highlighted)
 - MarcMaker
 - MARC21=>MARC21XML
 - MARC21XML=>MARC21
 - Dublin Core => MARC
 - EAD=>HTML
 - EAD=>MARC
 - FGDC=>MARC
 - MARC=>Dublin Core
 - MARC=>FGDC
 - MARC=>MODS
 - MODS=>MARC
 - MODS=>MARCXML
 - OAIDC=>MARCXML
 - OAIMARC21=>MARC21
- Default Character Encoding:** A dropdown menu set to "MARC8" and two checkboxes: "Translate to MARC-8" (unchecked) and "Translate to UTF8" (unchecked).
- Results:** An empty text field.
- Buttons:** "Execute", "Edit Records", and "Close".

Marc Tools

Input File:
C:\

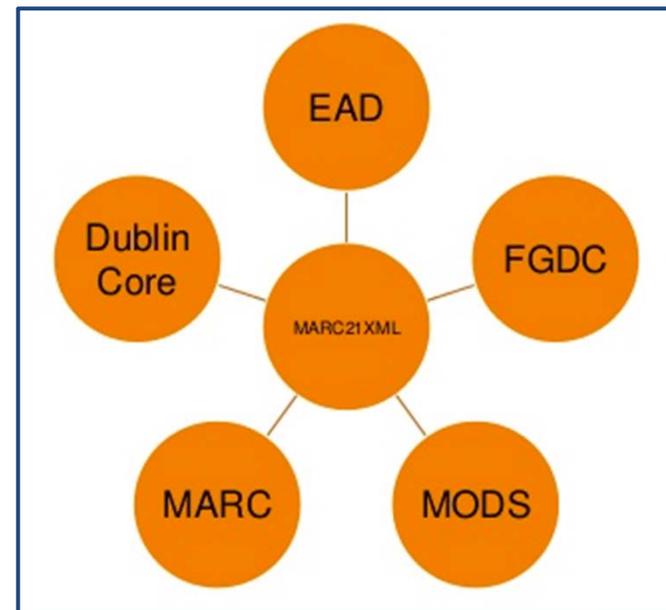
Output File:
C:\

Functions

- MarcBreaker
- MarcMaker
- MARC21=>MARC21XML
- MARC21XML=>MARC21
- Dublin Core => MARC
- EAD=>HTML
- EAD=>MARC
- FGDC=>MARC
- MARC=>Dublin Core
- MARC=>FGDC
- MARC=>MODS
- MODS=>MARC
- MODS=>MARCXML

Translate to MARC-8
 Translate to UTF8

Results:



MARC to Dublin Core

```
<?xml version="1.0" encoding="UTF-8"?>
<rdf:RDF xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
- <rdf:Description>
  <dc:title>Elephants and ethics : toward a morality of coexistence /</dc:title>
  <dc:creator>Wemmer, Christen M.</dc:creator>
  <dc:creator>Christen, Catherine A.(Catherine Ann)</dc:creator>
  <dc:type>text</dc:type>
  <dc:publisher>Baltimore, Md. : Johns Hopkins University Press,</dc:publisher>
  <dc:date>2008.</dc:date>
  <dc:language>eng</dc:language>
  <dc:description>Includes bibliographical references and index.</dc:description>
  <dc:description>Foreword / John Seidensticker -- 1. Introduction Never Forgetting the Importance of
  Ethical Treatment of Elephants / Christen Wemmer and Catherine A. Christen -- Pt. I. Overview of
  Elephant Philosophy and Science -- 2. Elephants in Time and Space: Evolution and Ecology / Raman
  Sukumar -- 3. Personhood, Memory, and Elephant Management / Gary Varner -- 4. Elephant
  Sociality and Complexity: The Scientific Evidence / Joyce H. Poole and Cynthia J. Moss -- 5.
  Elephants, Ethics, and History / Nigel Rothfels -- 6. Pain, Stress, and Suffering in Elephants: What
  Is the Evidence and How Can We Measure It? / Janine L. Brown, Nadja Wielebnowski and Jacob V.
  Cheeran -- Pt. II. Elephants in the Service of People: Cultural Differences and Ethical Relativity -- 7.
  Elephants and People in India: Historical Patterns of Capture and Management / Dhriti K. Lahiri
  Choudhury -- 8. Carrots and Sticks, People and Elephants: Rank, Domination, and Training / John
  Lehnhardt and Marie Galloway -- 9. Canvas to Concrete: Elephants and the Circus-Zoo
  Relationship / Michael D. Kreger -- 10. Why Circuses Are Unsuitable for Elephants / Lori Alward -- 11.
  View from the Big Top: Why Elephants Belong in North American Circuses / Dennis Schmitt -- 12.
  Challenges of Meeting the Needs of Captive Elephants / Jane Garrison -- 13. Most Zoos Do Not
  Deserve Elephants / David Hancocks -- 14. Zoos as Responsible Stewards of Elephants / Michael
  Hutchins, Brandie Smith and Mike Keele -- 15. Can We Assess the Needs of Elephants in Zoos? Can
  We Meet the Needs of Elephants in Zoos? / Jill D. Mellen, Joseph C. E. Barber and Gary W. Miller --
  16. Giants in Chains: History, Biology, and Preservation of Asian Elephants in Captivity / Fred Kurt,
  Khyne U. Mar and Marion E. Garal -- Pt. III. Elephants and People in Nature: The Ethics of Conflicts
  and Accommodations -- 17. Restoring Interdependence Between People and Elephants: A Sri
  Lankan Case Study / Lalith Seneviratne and Greg D. Rossel -- 18. Sumatran Elephants in Crisis:
  Time for Change / Susan K. Mikota, Hank Hammatt and Yudha Fahrimal -- 19. Human-Elephant
  Conflicts in Africa: Who Has the Right of Way? / Winnie Kiiru -- 20. Playing Elephant God: Ethics of
  Managing Wild African Elephant Populations / Ian Whyte and Richard Fayer-Hosken -- 21. Toward
  an Ethic of Intimacy: Touring and Trophy Hunting for Elephants in Africa / Rebecca Hardin -- 22.
  Ethics of Global Enforcement: Zimbabwe and the Politics of the Ivory Trade / Rosaleen
  Duffy.</dc:description>
  <dc:subject>Elephants</dc:subject>
  <dc:subject>Animal welfare</dc:subject>
  <dc:identifier>http://www.loc.gov/catdir/enhancements/fy0805/2007036045-b.html</dc:identifier>
  <dc:identifier>http://www.loc.gov/catdir/enhancements/fy0805/2007036045-d.html</dc:identifier>
</rdf:Description>
</rdf:RDF>
```

MODS to MARCXML

MARC Tools

Tools

Input File:
E:\OLA-2017\Files\10_MODS-IMODS.xml

Output File:
E:\OLA-2017\Files\10_MODS-IMODS-MARCXML.xml

Execute

Edit Records

Close

Functions:

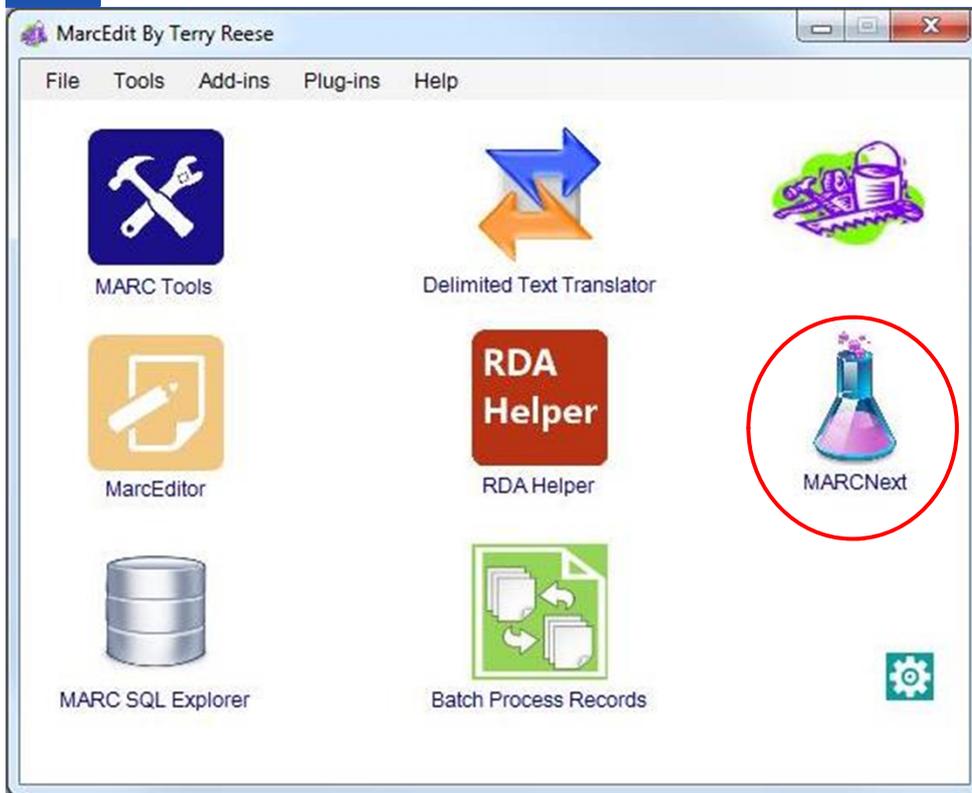
- MARC=>MODS
- MARC21=>EAD
- MODS=>MARC
- MODS=>MARCXML**
- OAIDC=>MARCXML
- OAIMARC21=>MARC21

Default Character Encoding: Translate to MARC-8
MARC8 Translate to UTF8

Results:
Records have been transformed in 3.604360 seconds.

```
<?xml version="1.0" encoding="UTF-8"?>
- <marc:collection xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:marc="http://www.loc.gov/MARC21/slim"
  xsi:schemaLocation="http://www.loc.gov/MARC21/slim
  http://www.loc.gov/standards/marcxml/schema/MARC21slim.xsd">
- <marc:record>
  <marc:leader> nam 22 uu 4500</marc:leader>
  <marc:controlfield tag="001">ASPS00000109/cwld</marc:controlfield>
  <marc:controlfield tag="003">VaAIASP</marc:controlfield>
  <marc:controlfield tag="005">20071218103052.0</marc:controlfield>
  <marc:controlfield tag="008">720405s
    mau|||||s||||||||deng||</marc:controlfield>
- <marc:datafield tag="040" ind2=" " ind1=" ">
  <marc:subfield code="a">DLC</marc:subfield>
</marc:datafield>
- <marc:datafield tag="245" ind2="0" ind1="1">
  <marc:subfield code="a">Letters of Lydia Maria Child</marc:subfield>
  <marc:subfield code="c">with a biographical introduction by John G.
    Whittier and an appendix by Wendell Phillips.</marc:subfield>
  <marc:subfield code="h">electronic resource</marc:subfield>
</marc:datafield>
- <marc:datafield tag="100" ind2=" " ind1="1">
  <marc:subfield code="a">Child, Lydia Maria Francis</marc:subfield>
  <marc:subfield code="d">1802-1880</marc:subfield>
  <marc:subfield code="e">creator</marc:subfield>
</marc:datafield>
- <marc:datafield tag="700" ind2=" " ind1="1">
  <marc:subfield code="a">Phillips, Wendell</marc:subfield>
  <marc:subfield code="d">1811-1884</marc:subfield>
</marc:datafield>
- <marc:datafield tag="700" ind2=" " ind1="1">
  <marc:subfield code="a">Sewall, Harriet Winslow</marc:subfield>
  <marc:subfield code="d">1819-1889</marc:subfield>
</marc:datafield>
- <marc:datafield tag="700" ind2=" " ind1="1">
  <marc:subfield code="a">Whittier, John Greenleaf</marc:subfield>
  <marc:subfield code="d">1807-1892</marc:subfield>
</marc:datafield>
- <marc:datafield tag="260" ind2=" " ind1=" ">
  <marc:subfield code="a">Boston</marc:subfield>
```

MARCNext



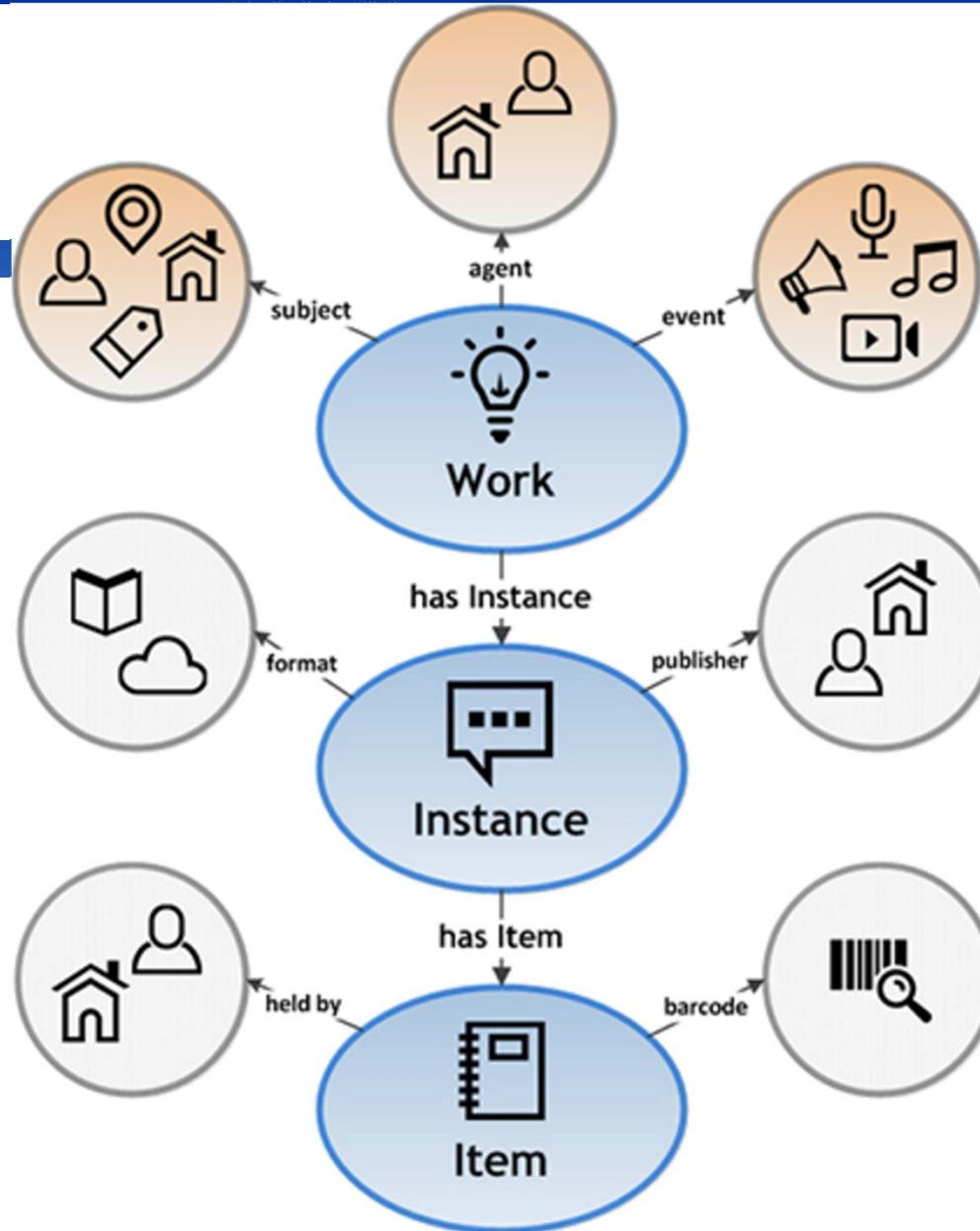
- ❖ BibFrame Testbed
- ❖ Link Identifiers
- ❖ SPARQL



BIBFRAME

- ❖ BIBFRAME (Bibliographic Framework) is a data model that provides a foundation for the future of bibliographic description.
- ❖ BIBFRAME serves as a general model for expressing and connecting bibliographic data.
- ❖ BIBFRAME uses linked data principles

bf:



Source: <https://www.loc.gov/bibframe/docs/bibframe2-model.html>

BibFrame

bf: BibFrame TestBed



The BibFrame Testbed is a simple to use utility designed to allow metadata specialists the ability to model their data using BibFrame Concepts.

Process

Source File:

E:\OLA-2017\Files_Bibframe\Bibframe.mrc



Save File:

E:\OLA-2017\Files_Bibframe\Bibframe.xml



File Type:

MARC

BaseURI:

http://example.com/

XQuery URI:

http://marcedit.reeset.net/software/xquery/modl

[Edit](#)

Data Serialization:

RDFXML

Close

```
<?xml version="1.0" encoding="UTF-8"?>
<rdf:RDF xmlns:relators="http://id.loc.gov/vocabulary/relators/"
  xmlns:madsrdf="http://www.loc.gov/mads/rdf/v1#"
  xmlns:bf2="http://bibframe.org/vocab2/"
  xmlns:bf="http://bibframe.org/vocab/"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-
ns#">
  <bf:Work rdf:about="http://example.com/ocm48253236 ">
    <rdf:type rdf:resource="http://bibframe.org/vocab/Text"/>
    <bf:authorizedAccessPoint>National Cooperative Highway
Research Program. Recommended use of reclaimed asphalt pavement
in the superpave mix design method [electronic resource] /
prepared for National Cooperative Highway Research Program,
Transportation Research Board, National Research Council ;
submitted by Rebecca S. McDaniel [and] Hamid Soleymani, North
Central Superpave Center, Purdue University, West Lafayette,
Indiana [and] R. Michael Anderson, Pamela Turner, [and] Robert
Peterson, Asphalt Institute, Lexington, Kentucky.Recommended use
of reclaimed asphalt pavement in the superpave mix design
method</bf:authorizedAccessPoint>
    <bf:workTitle rdf:resource="http://example.com/ocm48253236
title25"/>
    <bf:contributor
rdf:resource="http://example.com/ocm48253236 organization26"/>
    <bf:contributor
rdf:resource="http://example.com/ocm48253236 organization27"/>
    <bf:contributor
rdf:resource="http://example.com/ocm48253236 organization28"/>
    <bf:language
rdf:resource="http://id.loc.gov/vocabulary/languages/eng"/>
    <bf:subject rdf:resource="http://example.com/ocm48253236
topic30"/>
```

SPARQL Browser

- ❖ Like the tables of a relational database are queried using SQL, the triples of RDF data are queried using SPARQL
- ❖ Query any SPARQL endpoint and retrieve data
- ❖ Results are formatted internally into a Graph

SPARQL Browser

SPARQL Browser

SPARQL Endpoint:

SPARQL Query:

Output: XML

Results:

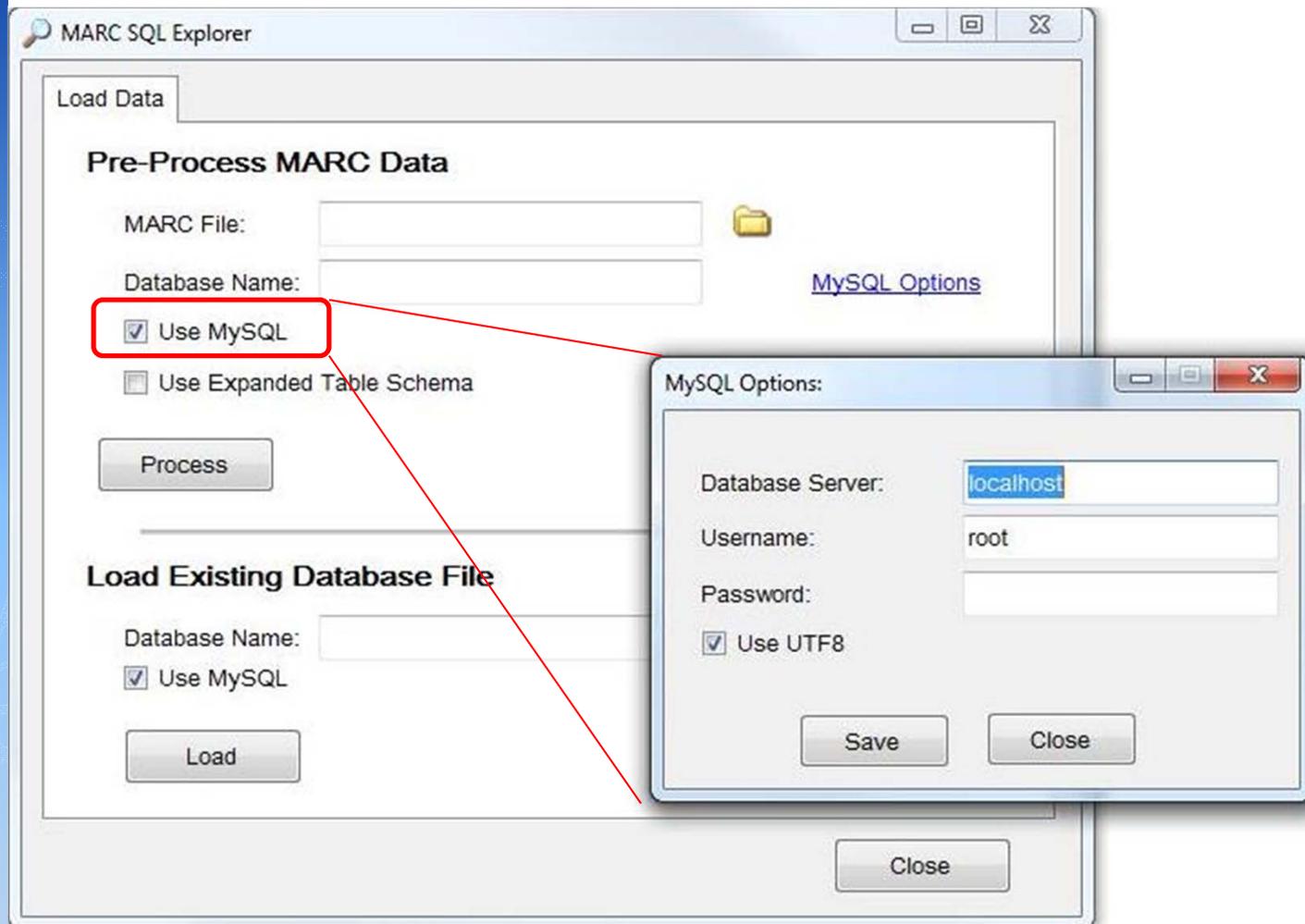
Query

Close

the Browser takes a URL to the SPARQL Endpoint

Supports XML, RDFXML, HTML, CSV, Turtle, NTriple, and JSON as output formats

MARC SQL Explorer – Load

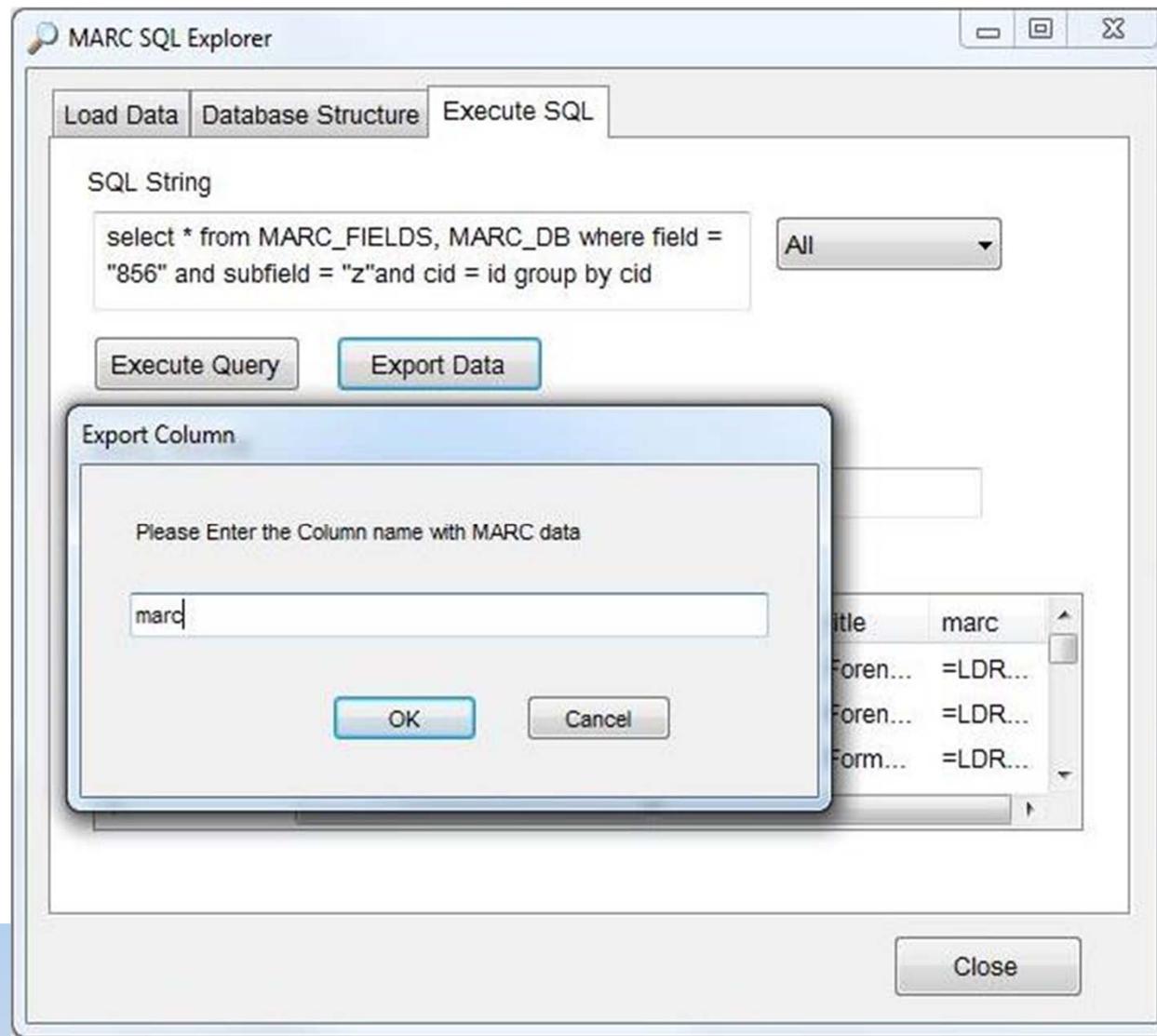


MARC SQL Explorer – Queries

The screenshot shows the MARC SQL Explorer application window. The 'Execute SQL' tab is active. The SQL String field contains the query: `select * from MARC_FIELDS, MARC_DB where field = "856" and subfield = "z"and cid = id group by cid`. Below the query are 'Execute Query' and 'Export Data' buttons. The 'Query Results' section shows '22 record found. Execute time: 0.0470047 seconds.' The 'Data Returned' section displays a table with 8 columns: field, ind1, ind2, subfield, field_..., id, title, and marc. The table contains three rows of data.

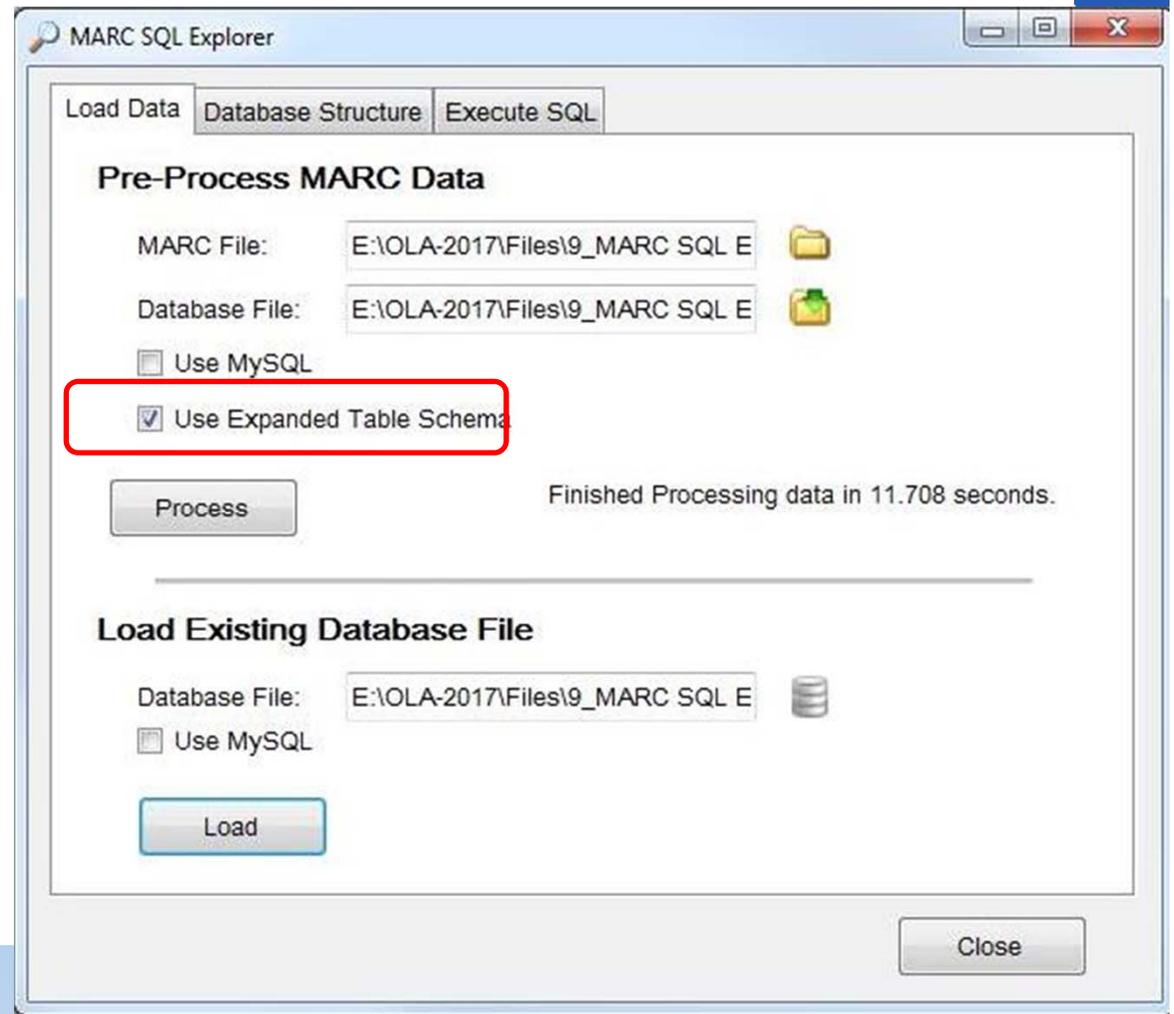
field	ind1	ind2	subfield	field_...	id	title	marc
856	4	0	z	View t...	1	Foren...	=LDR...
856	4	0	z	View t...	2	Foren...	=LDR...
856	4	0	z	View t...	3	Form...	=LDR...

MARC SQL Explorer – Export



MARC SQL Explorer – Expanded

Use Expanded
Table Schema for
more granularity



MARC SQL Explorer

Load Data Database Structure Execute SQL

Name	Object	Schema
MARC_DB	table	CREATE TABLE MARC_DB (id INTEGER PRIMARY KEY, title TEXT, marc TEX
T0xx	table	CREATE TABLE T0xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T1xx	table	CREATE TABLE T1xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T2xx	table	CREATE TABLE T2xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T3xx	table	CREATE TABLE T3xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T4xx	table	CREATE TABLE T4xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T5xx	table	CREATE TABLE T5xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T6xx	table	CREATE TABLE T6xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T7xx	table	CREATE TABLE T7xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T8xx	table	CREATE TABLE T8xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind
T9xx	table	CREATE TABLE T9xx (cid INTEGER, fid INTEGER, field TEXT, ind1 TEXT, ind

MARC SQL Explorer

Load Data Database Structure Execute SQL

SQL String

T0xx.field_data = "rda" and T3xx.cid = T0xx.cid and
MARC_DB.id = T3xx.cid group by MARC_DB.id

All

Execute Query Export Data

Query Results

Records have been exported.

Data Returned

id	marc
13	=LDR...
39	=LDR...
41	=LDR...
56	=LDR...

Close

MarcEdit Support

MarcEdit website

<http://marcedit.reeset.net/>

MarcEdit Listserv

<http://listserv.gmu.edu/cgi-bin/wa?A0=marcedit-l>

MarcEdit 101 Webinar

<http://marcedit.reeset.net/marcedit-101-workshop>

Youtube MarcEdit chanel

<https://www.youtube.com/user/tpreese/videos>

A photograph of a sunset at a university campus. The sky is filled with soft, colorful clouds in shades of orange, pink, and blue. The sun is low on the horizon, casting a warm glow. In the foreground, a large, rectangular pool of water reflects the sky and the building in the background. The building is a large, multi-story structure with a central tower. To the left, the fronds of a palm tree are visible. The overall mood is peaceful and serene.

**Thank you.
Questions?**

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