Migrating XML resources into ArchivesSpace

ArchivesSpace Member Forum 2018
Celia Caust-Ellenbogen
Friends Historical Library of Swarthmore College ccauste1@swarthmore.edu

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Ministry and Counsel State of the Meeting

Faith and Practice

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Haverford College Quaker Collection

Friends Historical Library of Swarthmore College

Back to List of Meetings

Go to New York Yearly Meeting website



OF THE REL

RECORDS OF NEW YO

A Finding Aid for its Recor

SUMMARY

Meeting Name: New York Yearl Records of Min Title

1672-Dates:

Ouantity: ca.46 linear ft. Repository: Friends Historic

Swarthmore Co Location: For current info

online catalog:

SHORT HISTORY OF MEETING

New York Yearly Meeting was first helconsisting essentially of the Flushing C Meeting, Meeting for Sufferings was e business of the Yearly Meeting while it

Return to the Table of Contents

An Inventory of the Allen Family Papers, 1700-1954

(4 boxes; 2 linear ft.)

RG 5/001

© Friends Historical Library of Swarthmore College. Swarthmore, Pennsylvania 19081-1399 U.S.A.

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 - · Preferred citation
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- - Ser. 1. Biographical and Genealogical Material, 1839-1935
 - o Ser. 2. Correspondence, 1789-1954 o Ser. 3. Journals and Diaries, 1831-1893
 - o Ser. 4. Financial Papers, 1813-1851
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 - o Ser. 6. Miscellaneous Papers, 1823-1924, n.d.
- · Return to Friends Historical Library
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Background note:

The Allen family traces its ancestry to one of William Penn's commissioners. Nathaniel Allen, who landed at Chester Creek in 1681. The collection's main focus is on the 5th and 6th generations: Charles Allen (1776-1843) and his son George B. Allen (1804-1869).

Charles Allen, a druggist, first married Sarah Breidenhart (1778-1807) and later married Rebecca Jackson (1781-1860), a teacher. Their home was on Pine Street in Philadelphia, and Charles and Rebecca were overseers and elders of Philadelphia Monthly Meeting, Southern District, Charles frequently accompanied ministers on their visits to other meetings. Rebecca served on the committee in charge of Westtown Boarding School

Contains the papers of the Allen Family, a Quaker family of Philadelphia and

related Breidenhart, Casdorp, Gibbons, Hubley, Jacobs, Matlack, and Samuel

source material on Quaker family life in the 19th century in the Philadelphia

area. Of particular interest are letters from Charles and Rebecca Allen to their

families. The Allen family papers contain extensive genealogical material,

family correspondence, journals and memorials which provide excellent

children, several of whom were educated at Westtown School.

Delaware County, Pennsylvania, which traced its ancestry back to one of

William Penn's commissioners. Includes papers relating to the Allen and

TIMORE MONTHLY MEETING FOR THE **EASTERN DISTRICT**

ecords Deposited in Friends Historical Library of **Swarthmore College**

Monthly Meeting for the Eastern District (Society of Friends: 1807-1819 re, Md.)

English

istorical Library of Swarthmore College

EETING

became the City of Baltimore in 1781 after moving from Patapsco, and in ig was formed. The meeting grew quickly, and in 1805 a second meeting eet. In 1807, the large number of Friends in Baltimore led to the creation of more Monthly Meeting changed its name to the Baltimore Monthly and the new meeting at Lombard Street became the Baltimore Monthly Tensions over the Aisquith St. gravevard arose, and resulted in the laving eting for the Eastern District by the Yearly Meeting: it became a more Monthly Meeting for the Western District

ORDS

Meeting of Friends for the Eastern District, and its predecessor Baltimore

BRIEF DESCRIPTION OF THE RECORDS

Records of the Meeting of Ministry and Counsel and its Orthodox and Hicksite predecessors, the Meetings of Ministers and Elders of New York Yearly Meeting.

Records

Includes minutes, reports, and other papers of the Arrangements and Hospitality Committee, 1964-86. Also included are records of the Meal Committee, 1962-86, and the Philadelphia... Full description

Corporate Author: Other Authors:

Committee.

Yearly Meeting of the Religious Society of Friends. Meal Committee.

Language: English

Subjects: Philadelphia Yearly Meeting of the Religious Society of Friends > Archives.

Society of Friends > Pennsylvania > Philadelphia.

Society of Friends > Pennsylvania.

Holdings Description

LEADER 02505npdaa2200397la 4500

005 19970314102439.0

001 36551507

008 970314i19621986pau eng d

040

043 la n-us-pa

049

090 |a RG2/Phy/346

> 090 8 |b RG2/Phy/346

099

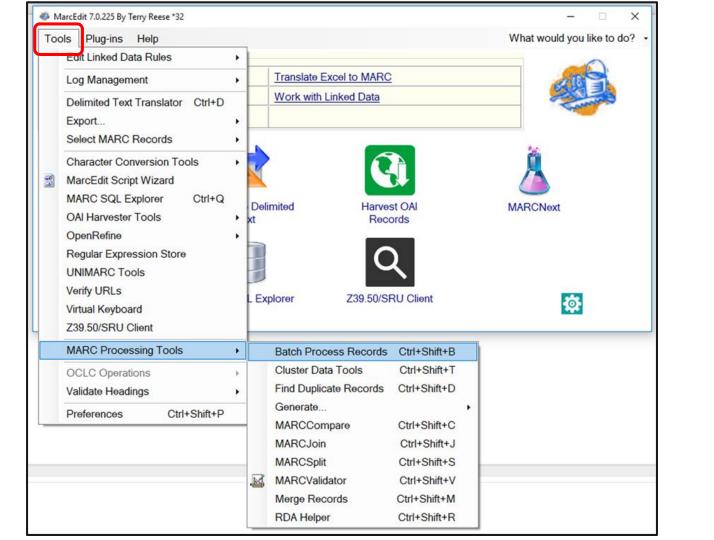
110 2 |a Philadelphia Yearly Meeting of the Religious Society of Friends. |b Arrangements and Hospitality Committee.

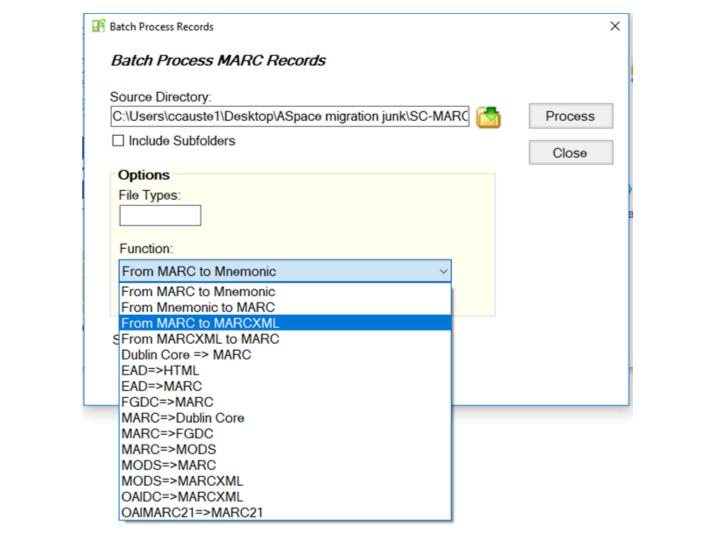
|a Records, |f 1962-1986.



Free! https://marcedit.reeset.net/









Туре	Cost per new license (renewals are cheaper)		
Academic	\$99		
Business	\$688		
Individual	\$198		
30-day trial	FREE		

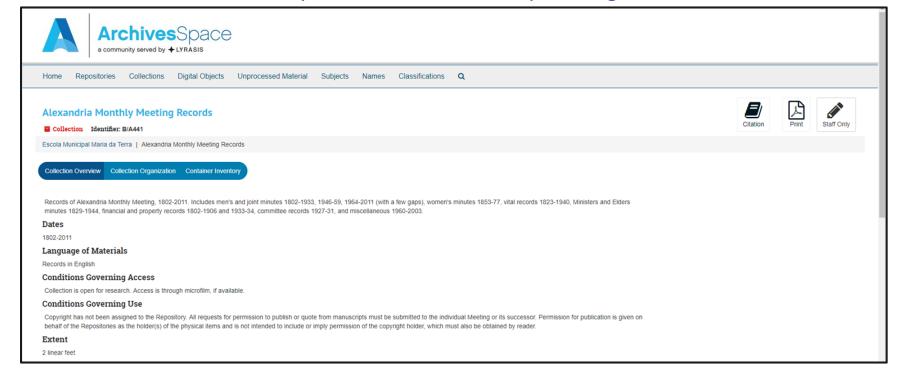
Blogs

- ArchivesSpace @ Yale
 http://campuspress.yale.edu/yalearchivesspace/, especially
 http://campuspress.yale.edu/yalearchivesspace/2015/07/22/validation-scenarios/
- Bentley
 <u>http://archival-integration.blogspot.com/</u>, especially <u>http://archival-integration.blogspot.com/</u>2015/05/legacy-ead-clean-up-getting-started.html
- Chaos → Order
 https://icantiemyownshoes.wordpress.com/, especially
 https://icantiemyownshoes.wordpress.com/category/eads-in-aggregate/
- Way More at Awesome ArchivesSpace!
 https://github.com/archivesspace/awesome-archivesspace#migrations

Getting started

Test imports in the Sandbox (or your dev server)

http://sandbox.archivesspace.org/



Test imports in the Sandbox (or your dev server)

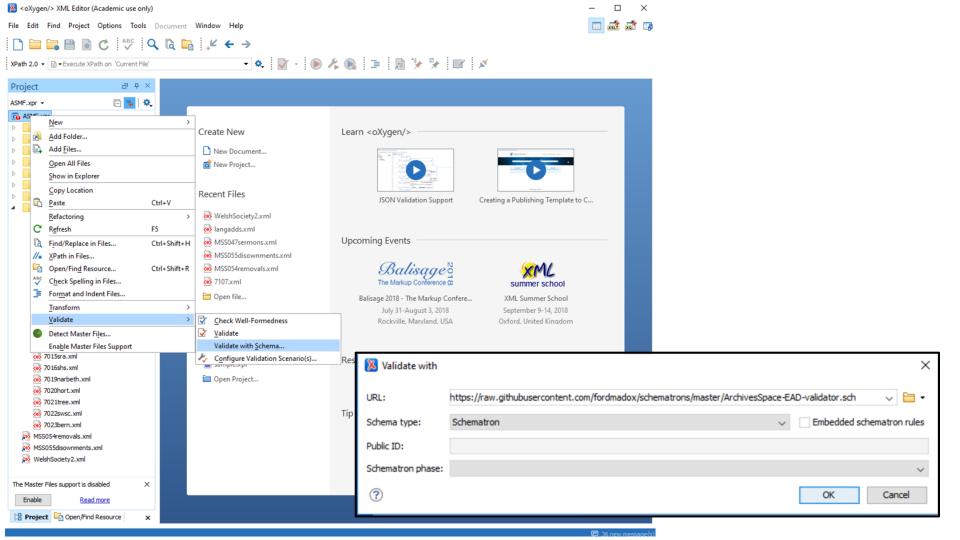
http://sandbox.archivesspace.org/

```
Log
 IMPORT ERROR
 The following errors were found:
         dates/0/end : must not be before begin
  For JSONModel(:archival object):
  #<JSONModel(:archival object) {"jsonmodel type"=>"archival object", "external ids"=>[], "subjects"=>[], "linked events"=>[], "extents"
 In:
  <c02 class=&quot;cdata&quot; level=&quot;file&quot;&gt; ... &lt;/c02&gt;
```

Mark Custer's EAD-validation schematron

https://raw.githubusercontent.com/fordmadox/schematrons/ master/ArchivesSpace-EAD-validator.sch

```
<?xml version="1.0" encoding="UTF-8"?>
<schema xmlns="http://purl.oclc.org/dsdl/schematron"</pre>
    xmlns:sqf="http://www.schematron-quickfix.com/validator/process"
    queryBinding="xslt2">
    <ns uri="http://www.w3.org/1999/xlink" prefix="xlink"/>
    <ns uri="urn:isbn:1-931666-22-9" prefix="ead"/>
    <!-- eventually, this file should test for all of the ASpace "EAD" requirements prior to import
        (still need to figure what all of those are, including all undocumented data model constraints. etc.)
for the time being, i removed namespace checks so that the same rules will work for DTD and/or schema-associated files.
        still to add:
            dao stuff (must have title and href attributes?)
           something about field lengths (also need to test for length of title / unit ids, etc.)... if something is too long for the database, etc., like the 65k character limit :(
           what else???
        still to do:
           re-write the error messages!
          make sure that the error messages include everything needed
          pray that i can use xpath 2.0, as i've done here
           group and arrange this file like a semi-decent schematron file should actually be structured (and learn how to do that!)
    -->
        <rule context="*:archdesc">
            <assert test="@level">You must supply a level attribute at the resource level</assert>
        <rule context="*:archdesc/*:did">
            <assert test="*:unittitle[normalize-space()]">You must supply a
                title at the resource level</assert>
            <assert test="descendant::*:unitdate[normalize-space()] or descendant::*:unitdate[@normal]"</pre>
                >You must supply a date at the resource level (including as child of unittitle)</assert>
```



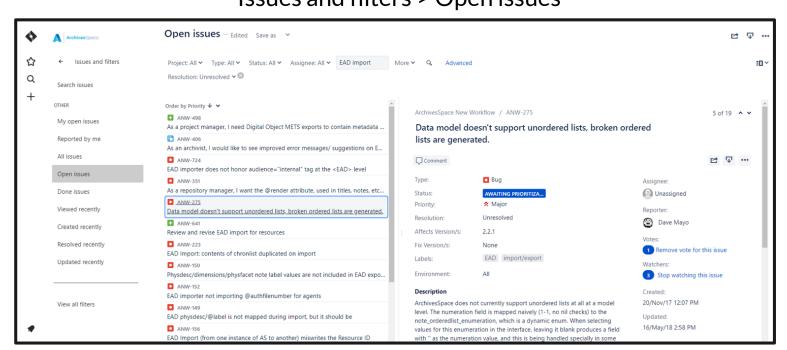
ArchivesSpace MARCXML Import / Export Map

http://archivesspace.org/wp-content/uploads/ 2016/08/MARCXML-Import-Export-Mapping-20130715.xlsx

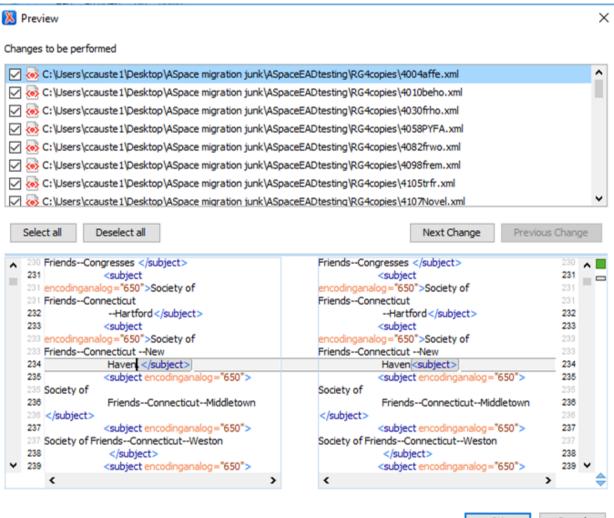
4	Α	В	С	D	E	F	G				
	Import Ma	anning f	or Bes	ources from	MARCYMI to ArchivesSpace						
	Import Mapping for Resources from MARCXML to ArchivesSpace										
	Last Updated: 7/15/2013										
3											
•	MARC Datafield	4 -			December / Fermenthine Discretions	Aughines Conses Donnes anti-					
	IVIARC Datafield	MARC Datafields			Processing / Formatting Directions	ArchivesSpace Properties					
5	_			- 16 11 1							
\rightarrow	Tag	ind1	ind2	Subfield code		Object	Property				
_	100 600 700										
19					IF field = 600	agent	role = 'subject'				
0.					IF field = 100 700	agent	role = 'source'				
					AND either \$e relator term OR \$4 relator code = Auctioneer (auc) Bookseller						
					(bsl) Collector (col) Depositor (dpt) Donor (dnr) Former owner (fmo)						
21					Funder (fnd) Owner (own)						
22					ELSE	agent	role = 'creator'				
23											
24											
25			o l		IF indicator 1 = 0	agent	agent_type = 'agent_person'				
6						name_person	name_order = 'direct'				
7			1		IF indicator 1 = 1	agent	agent_type = 'agent_person'				
8						name_person	name_order = 'direct'				
29			3		IF indicator 1 = 3	agent	agent_type = 'agent_family'				
0											
1											
2					IF field = 100 700	name_family OR name_person	source = ingest				
3					ELSE	name_family OR name_person	source = ingest				
4			0 - Library	of Congress Subject H	e IF indicator 2 = 0	name_family OR name_person	source = lcsh				
5			1 - LC subje	ect headings for child	F indicator 2 = 1	name_family OR name_person	source = Icshac				

Known issues/bugs in JIRA

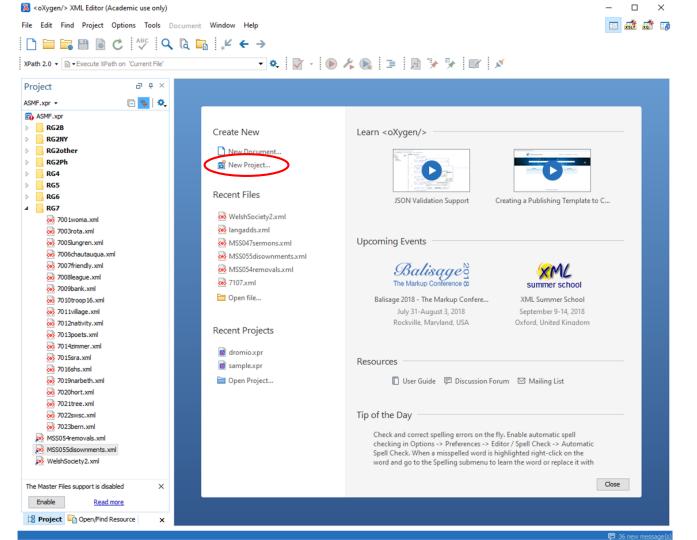
https://archivesspace.atlassian.net Issues and filters > Open issues



Using Oxygen



OK Cancel



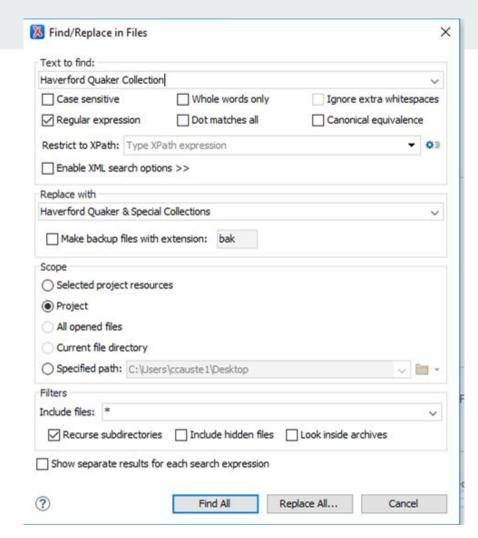
Problem

I need to find/replace text in a bunch of files.

Example: change
"Haverford Quaker
Collection" to
"Haverford Quaker &
Special Collections"

Easy find/replace

- Extra periods at end of subject
- - instead of -- in subjects
- <langusage>English</langusage> instead of
 - <langusage>ENG</langusage>
- Empty tags



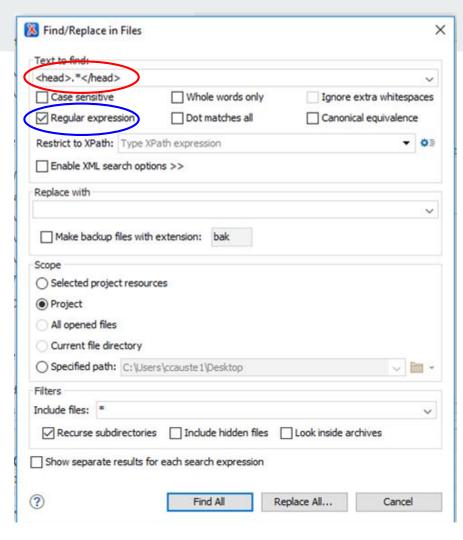
Problem

I need to delete a tag and anything it contains across all my files.

Example: delete all the note head labels

Do a lot more with a tiny bit of RegEx...

.* - anything



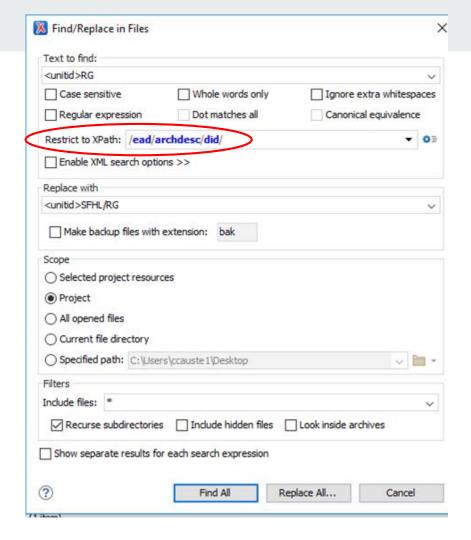
Problem

I need to make a change, but only in a certain field

Example: add a prefix to identifier at collection-level only

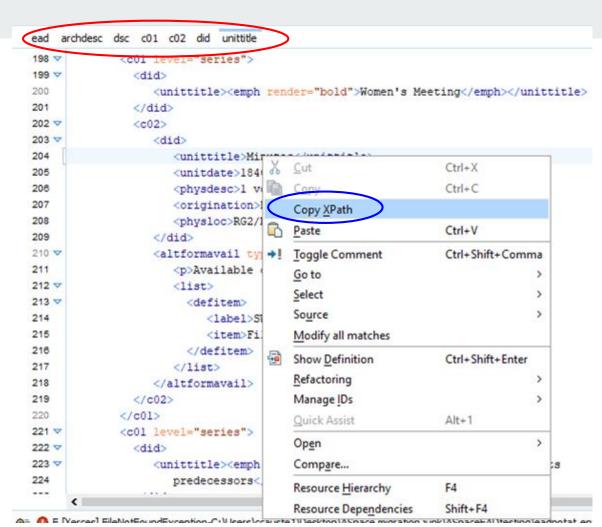
Do a lot more with a tiny bit of XPath...

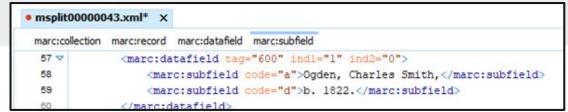
/node/node/...etc



How to find the XPath

```
/ead
/archdesc[1]
/dsc[1]
/c01[3]
/c02[1]
/did[1]
/unittitle[1]
```



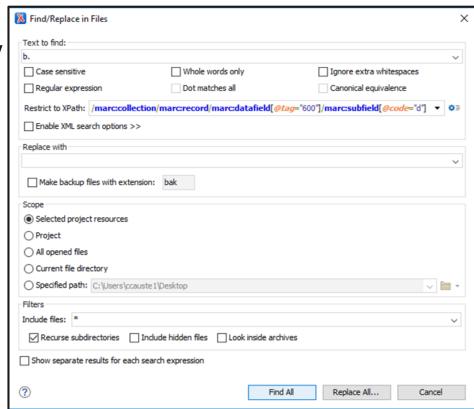


Do a lot more with a tiny bit of XPath...

select attributes with

[@tag="XXX"]

or ignore with [not(@tag="XXX")]



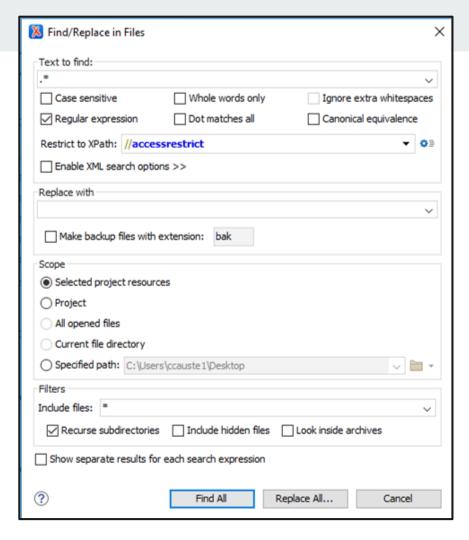
Problem

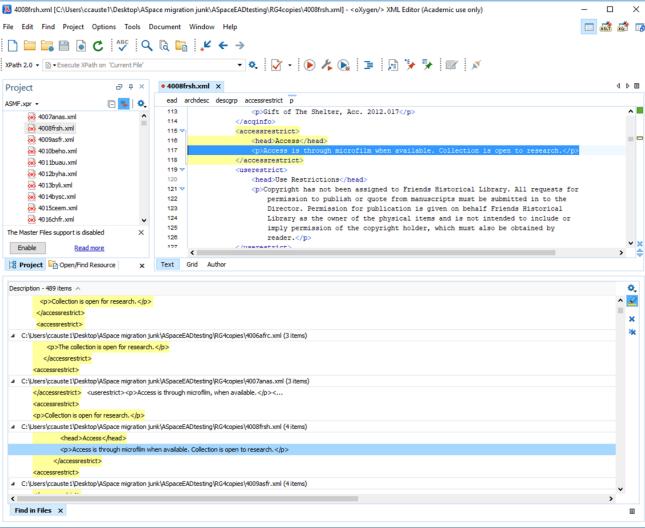
I want to review the contents of a tag in all my files

Example: verify access restrictions are consistent

Do a lot more with a tiny bit of XPath...

//tag find tag wherever it is





Extra Credit Problem

I need a list of all the tags I'm using

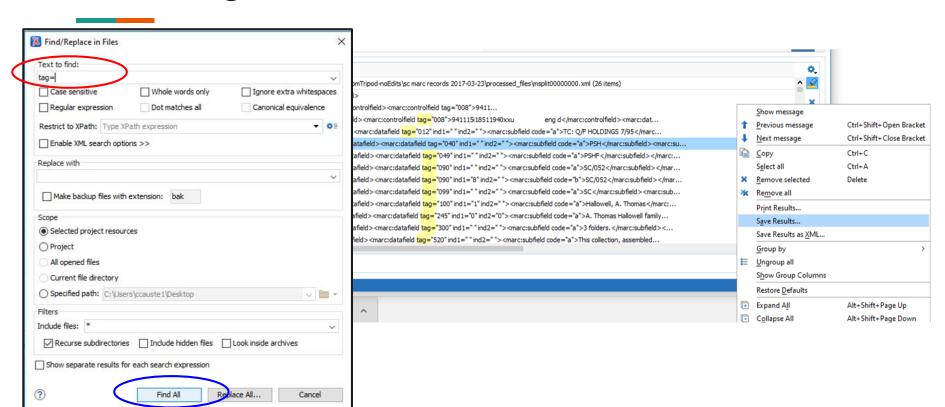
Beware: some MARC fields are silently dropped from import

ArchivesSpace MARCXML Import / Export Map

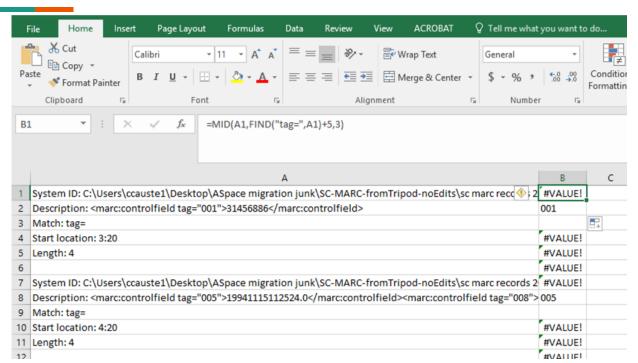
http://archivesspace.org/wp-content/uploads/ 2016/08/MARCXML-Import-Export-Mapping-20130715.xlsx

4	Α	В	С	D	E	F	G				
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19					IF field = 600	agent	role = 'subject'				
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					AND either \$e relator term OR \$4 relator code = Auctioneer (auc) Bookseller						
					(bsl) Collector (col) Depositor (dpt) Donor (dnr) Former owner (fmo)						
21					Funder (fnd) Owner (own)						
22					ELSE	agent	role = 'creator'				
23											
24											
25			o l		IF indicator 1 = 0	agent	agent_type = 'agent_person'				
6						name_person	name_order = 'direct'				
7			1		IF indicator 1 = 1	agent	agent_type = 'agent_person'				
8						name_person	name_order = 'direct'				
29			3		IF indicator 1 = 3	agent	agent_type = 'agent_family'				
0											
1											
2					IF field = 100 700	name_family OR name_person	source = ingest				
3					ELSE	name_family OR name_person	source = ingest				
4			0 - Library	of Congress Subject H	e IF indicator 2 = 0	name_family OR name_person	source = lcsh				
5			1 - LC subje	ect headings for child	F indicator 2 = 1	name_family OR name_person	source = Icshac				

Get all tags

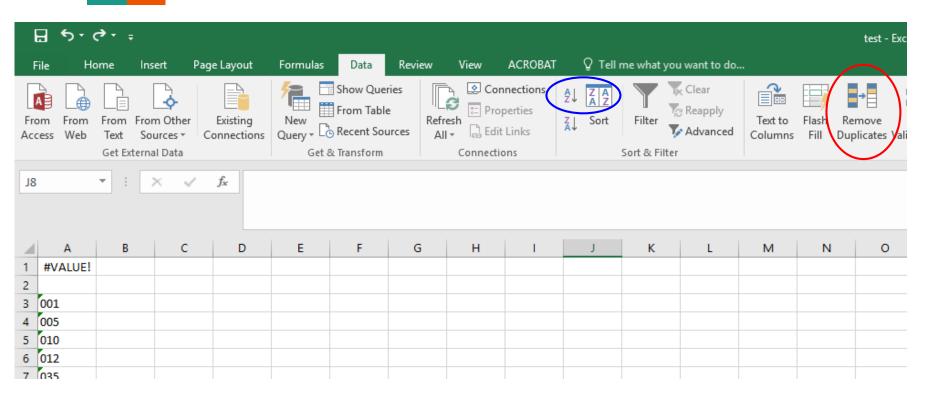


Clean in Excel



Formula = MID(A1,FIND("tag=",A1)+3,LEN(A1))

Clean in Excel



Thank you! ccauste1@swarthmore.edu

ArchivesSpace and CSV metadata

Bria Parker

Head, Discovery and Metadata Services

University of Maryland Libraries

Where we were...



Accessions

OpenRefine

- Normalize date formats (yyyy-mm-dd, etc.)
- Normalize extents (lin ft → linear_feet)
- Apply controlled vocabularies
- Make other metadata consistent (e.g. contacts)

OpenRefine is...

A free tool for cleaning your data.

This includes:

- normalization
- parsing/splitting
- batch transformation
- reconciliation
- data fetching

(Formerly known as Google Refine)

OpenRefine...

- Get started by going to http://openrefine.org/
- Tutorials:
 - https://blogs.library.duke.edu/bitstreams/2015/05/01/metadataadventures/
 - http://thomaspadilla.org/dataprep/
 - http://journal.code4lib.org/articles/11179
 - http://archival-integration.blogspot.com/2015/06/normalizingdates-with-openrefine.html

Extent normalization

lin feet
lin foot
lin ft
linear ft
lin. feet
linear feet
linear foot
lin. ft.

type	extent_1_type	-	extent_1_contail 💌 extent_1_n	umbe	extent_1_dimens	•	
	Facet	٠	Text facet	3		silve	
	Text filter		Numeric facet			citat	
	Edit cells	•	Timeline facet				
	Edit column	•	Scatterplot facet				
	Transpose	٠	Custom text facet	118		CDs	
	Sort		Custom numeric facet	110		350	
	View	•	Customized facets	0.1			
	Reconcile	•		0.2			
linear feet				9			
	linear feet			22.5			
	linear feet			4.5			

× extent_1_type	change
33 choices Sort by: name count	Cluster
file 10	
film reels 16	
floppy disks 1	
folders 78	
item [composed of two parts] 1	
items 1813	
items 2	edit include
items approximately 1	
leaves 2	
linear feet 1060	
linear feet 1	
linear feet; oversized items 1	
linear inch 2	
negatives (photographic) 8	
photographic prints 202	
poster 4	

Cluster & Edit column "Column 6"

This feature helps you find groups of different cell values that might be alternative representations of the same thing. For exa york" are very likely to refer to the same concept and just have capitalization differences, and "Gödel" and "Godel" probably r

Method key collisi	on 🗘	Keying Function	○	
Cluster Size	Row Count	Values in Cluster	Merge?	New Cell Value
5	197	 b&w (178 rows) b&w. (12 rows) b&w. (5 rows) b&w: (1 rows) b&w, (1 rows) 		b&w
5	1667	 16 mm. (1509 rows) 16 mm. + (148 rows) 16 mm + (8 rows) 16 mm. (1 rows) ;16 mm. (1 rows) 		16 mm.
4	201	 col. (196 rows) col. (2 rows) col., (2 rows) col (1 rows) Browse this cluster	er	col.
3	38	16mm. (31 rows)16mm + (4 rows)16mm. + (3 rows)		16mm.
2	6	color. (5 rows)color, (1 rows)		color.

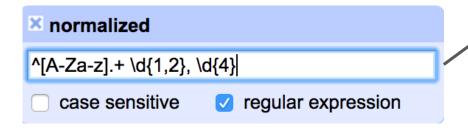
Date normalization

Borrowed and adapted scripts and process from University of Michigan Bentley Library (https://github.com/bentley-historical-library)

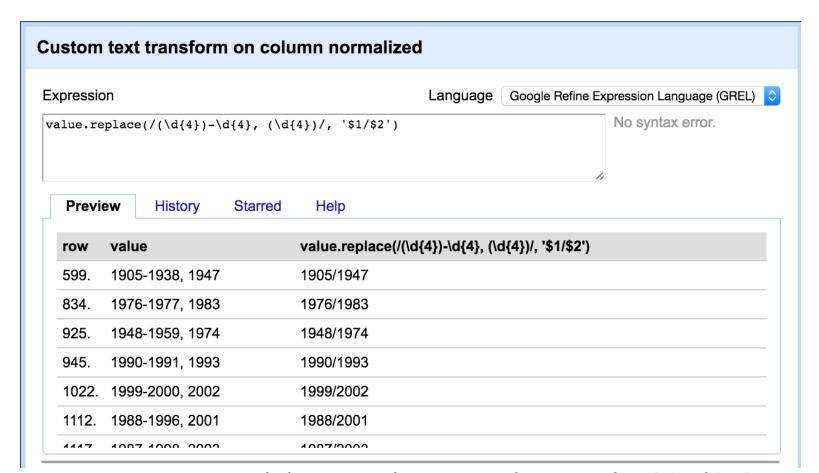
- Programmatically identify common date formats and insert the normal attribute in the correct date format in the EAD (for XML)
- Also provided guidance for extracting dates from EAD in .csv format and working with them in OpenRefine
- The same tools worked for more than EAD XML (hint: csv!)

Regular Expressions

- Very powerful tool for dealing with dates, or any alphanumeric data that needs to be structured
- Way of representing alpha-numeric patterns.







value.replace($/(\d{4})-\d{4}$, $(\d{4})/$, '\$1/\$2')

More regular expressions

[A-Za-z] - any letter, upper or lower case

 $[A-Za-z]{6}$ - six letters

[A-Za-z]+ - any number of letters in a row

\d - any date

 $\d{4} - 4$ -digit date

[A-Za-z]+ \d{1,2}, \d{4} - date format like July 17, 1979

^\d{4} - begins with a 4-digit date

More regular expressions

 see regexr.com for more examples, and you can even test out expressions in their interface.



Woman at International Ladies Garment Workers Union march - http://hdl.handle.net/1903.1/32553

Challenges

- Spreadsheets not in the same format as those from The Beast
 - (plus, we had a converter we could use to get from The Beast to EAD)
- No .csv import of finding aid data function native in ArchivesSpace
 - Plugins available, but that required developer time that was not available

Steady converts CSV into EAD XML

Upload

You can try it out with a sample CSV file.

Choose a CSV file to upload. The file must have headers which conform to the stead schema. If you have your container list data in Excel, you will need to export it as CSV before uploading it.

Name* Email* Organization CSV* Choose File No file chosen To import into ArchivesSpace and have instances created properly, you may need to make some other changes to the EAD. You can select and fill out the following options to try to do that for you. This is currently an experimental feature. Add identifiers to containers for parent/child relationships? archdesc/did/unitid

About

Use Cases

In most cases tools like ArchivesSpace are preferred because they centralize and normalize the creation of archival description and arrangement. We have two main use cases for maintaining container lists in spreadsheets instead of working directly in ArchivesSpace.

- 1. Sometimes donors provide container lists for their collections as a spreadsheet. In other cases hired appraisers will provide detailed spreadsheets which could also be used as container lists. We want to be able to edit those as little as possible to allow them to form the basis of a preliminary inventory. In this way in MPLP-style we can make the collection accessible as quickly as possible.
- 2. NCSU Libraries stores some of its architectural collections like drawings in off-site storage. With poor wireless coverage in some areas it is more convenient to enter container information in a spreadsheet off-line. Also this allows several people to be working on a single collection resource at one time. The spreadsheets can then be merged, exported to CSV, and transformed to EAD XML.

Code

Steady is a Ruby on Rails application and is available as open source software. See the full source code.

Contact

This little utility was developed by Jason Ronallo as part of his work at NCSU Libraries.

Email: jronallo@gmail.com

http://steady2.herokuapp.com/

Stead schema

These are the allowable values for the CSV header row. All values apply at the container level except the values that apply to the series or subseries level.

series title series number series dates subseries number subseries title subseries dates file id file title file dates extent physdesc internal only restrictions conditions governing access scopecontent note1 note2

instance type container 1 type container 1 number container 2 type container 2 number container 3 type container 3 number geogname geogname_source corpname corpname source famname famname source name name source persname persname_source subject subject_source



by owlpacino (<u>CC-BY-ND 2.0</u>) https://flic.kr/p/6vwycW



Additional arguments

- Collection level
 - Resource id
 - Extent
 - Scope
 - Normalized dates

```
#!/usr/bin/env rubv
$LOAD_PATH.unshift File.join(File.dirname(__FILE__), '..', 'lib')
require 'pp'
require 'stead'
require 'trollop'
opts = Trollop::options do
  banner <<-EOS
This script takes a csv file with a name in the format <eadid> container list.csv
and creates a stub EAD XML document.
Usage:
  csv2ead --csv /path/to/<eadid>_container_list.csv [options]
where options are:
E0S
  opt :csv, "A CSV file", :required => true, :type => String
  opt :baseurl, 'Base URL for adding on the eadid', :type => String
  opt :url, 'Full URL for this collection quide', :type => String
  opt :template, 'Specify using a different EAD XML template', :type => String
  opt :ncsu, 'Use NCSU specific template'
  opt :extra, 'Full path to a Stead::Extra file to add in other data', :type => String
  opt :output, 'Save the file by specifying the filename', :type => String
  opt :pretty, 'If --output is specified this will pretty indent the container list.'
  opt :stdout, 'Output full EAD to terminal'
  opt :idcontainers, 'Add id attributes to containers to show parent child relationships among containers in same com
  opt :unittitle, 'Add a unittitle to ead/eadheader/archdesc/did/unittitle', :type => String
  opt :unitid, 'Add a unitid to ead/eadheader/archdesc/did/unitid', :type => String
  opt :extent, 'Add an extent to ead/eadheader/archdesc/did/physdesc/extent', :type => String
  opt :unitdate, 'Add a unitdate to ead/eadheader/archdesc/did/unitdate', :type => String
  opt :begindate, 'Add a start date to ead/eadheader/archdesc/did/unitdate/@normal', :type => String
  opt :enddate, 'Add an end date to ead/eadheader/archdesc/did/unitdate/@normal', :type => String
  opt :scope, 'Add a scopecontent note to ead/archdesc/scopecontent/p', :type => String
```

```
def collectiondate_node
 @ead.xpath('//xmlns:archdesc/xmlns:did/xmlns:unitdate').first
end
def add normal date
 if @begindate
   collectiondate_node['normal'] = @begindate + "/" + @enddate
 end
end
def scope_node
 @ead.xpath('//xmlns:archdesc/xmlns:scopecontent/xmlns:p').first
end
def add_scope
 if @scope
   scope_node.content = @scope
 end
end
def to ead
 @ead = template.dup
 add_eadid
  add eadid url
  add_archdesc_unittitle
  add title proper
  add_archdesc_unitid
  add eadid
  add_archdesc_extent
  add_normal_date
  add_archdesc_unitdate
  add_scope
  @dsc = @ead.xpath('//xmlns:archdesc/xmlns:dsc')[0]
 if series?
   add_series
   add subseries if subseries?
  end
   @component_parts.each do |cp|
   c = node(file_component_part_name(cp))
   c['level'] = 'file'
```

```
def add series
  add_arrangement
  series = @component parts.map do |cp|
    [cp['series number'], cp['series title'], cp['series dates']]
  end.uniq
  series.each do |ser|
    add_arrangement_item(ser)
    # create series node and add to dsc
    series_node = node('c01')
    @dsc.add_child(series_node)
    series_node['level'] = 'series'
    # create series did and add to series node
    series_did = node('did')
    series_node.add_child(series_did)
    unitid = node('unitid')
    unitid.content = ser[0]
    unittitle = node('unittitle')
    unittitle.content = ser[1]
    unitdate = node('unitdate')
    unitdate.content = ser[2]
    series did.add child(unitid)
    series_did.add_child(unittitle)
    series did.add child(unitdate)
  end
end
```

```
def add_series
  add_arrangement
  series = @component_parts.map do |cp|
    [cp['series number'], cp['series title'], cp['series start'], cp['series end'],
     cp['extent'], cp['scopecontent'], cp['persname'], cp['corpname'], cp['subject']]
  end.unia
  series.each do |ser|
    add_arrangement_item(ser)
    # create series node and add to dsc
    series node = node('c01')
    @dsc.add child(series node)
    series_node['level'] = 'series'
    series node['id'] = 'series' + ser[0]
    # create series did and add to series node
    series_did = node('did')
    series node.add child(series did)
    unitid = node('unitid')
    unitid.content = ser[0]
    unittitle = node('unittitle')
    unittitle.content = ser[1]
    series_did.add_child(unitid)
    series_did.add_child(unittitle)
    unitdate= node('unitdate')
    if ser[2]
      unitdate.content = ser[2] +'-'+ser[3]
      unitdate['normal'] = ser[2] + '/' +ser[3]
      series_did.add_child(unitdate).attr('normal')
      end
```

```
physdesc = node('physdesc')
extent= node('extent')
if ser[4]
    extent.content = ser[4]
    series_did.add_child(physdesc)
    physdesc.add_child(extent)
    end
scopecontent = node('scopecontent')
series node.add child(scopecontent)
if ser[5]
   serieshead = node('head')
   scopecontent.add_child(serieshead)
   serieshead.content= 'Scope and Contents'
   p = node('p')
   scopecontent.add_child(p)
   p.content = ser[5]
   end
controlaccess = node('controlaccess')
series_node.add_child(controlaccess)
if ser[6]
    ser[6].split(';').each do [c]
    persname = node('persname')
    controlaccess.add_child(persname)
    persname << c
    end
end
if ser[7]
    ser[7].split(';').each do |c|
    corpname = node('corpname')
    controlaccess.add_child(corpname)
    corpname << c
    end
end
if ser[8]
    ser[8].split(';').each do [c]
    subject = node('subject')
    controlaccess.add_child(subject)
    subject << c
    end
```

Lessons Learned

- Steady/Stead fits wide range of skill
- Reuse, reuse, reuse

Wrap-up

- OpenRefine
 - Date normalization!
 - Extent normalization!
 - Controlled vocabs!
 - Regular Expressions!
- Steady/Stead
 - template for converting .csv to EAD XML!

Questions?

Thanks!

blparker@umd.edu