# Using Open Source Tools to Improve Access to Oral History Collections

# Becky Yoose, Bibliographic Systems Librarian and Jody Perkins, Metadata Librarian Miami University Libraries, Miami University, Oxford, OH



# Miami Stories C History Project **Miami Stories Oral**

- Begin in 2005, coordinated by University Archives, CONTENTdm collection maintained by Digital Initiatives
- Current and former students, faculty, and staff, as well as friends of the University share recollections of their Miami years
- 100 videotaped interviews
  - → Average length of interview: 2 hours → Half have been fully transcribed



# **OpenCalais**

- Released in 2008, used by various companies, news agencies, and publishers
- Uses natural language processing and machine learning to extract categorized metadata (in RDF format) from full text documents
- API, modules, applications available for different platforms



- Popular Open Source content management system (CMS) built with PHP
- Used widely for web sites and blogs
- Flexible and customizable, over 8,000 modules

### Miami Stories OpenCalais Pilot

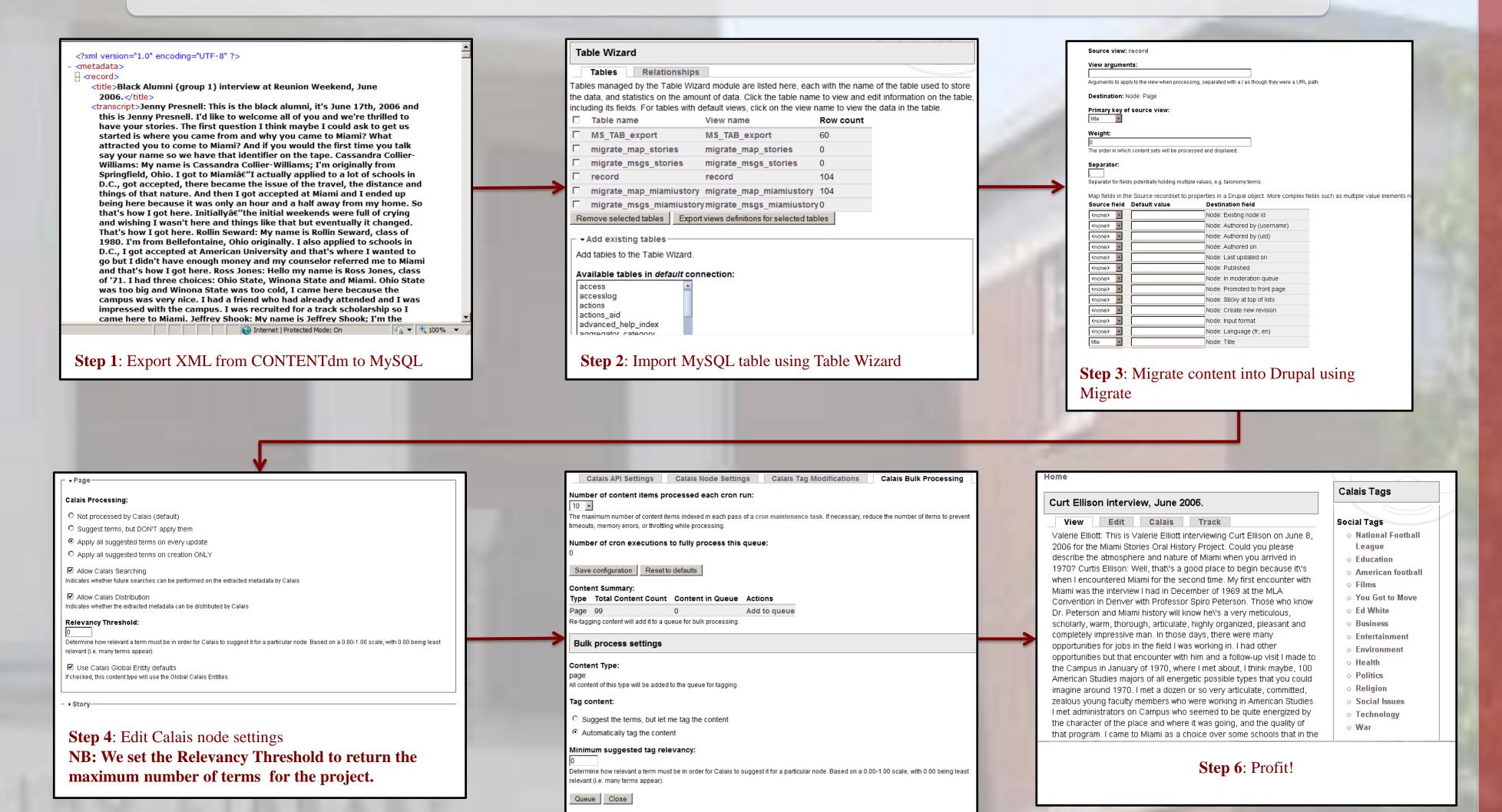
Human metadata creation workflow: Each interviewer had a cover sheet to list key terms and topics relevant to the interview. These terms were entered as keywords into item records and supplemented with FAST (Faceted Application of Subject Terminology) headings - a controlled vocabulary based on Library of Congress Subject Headings and related LC Authority files.

Human metadata creation issues: Data collected on cover sheets varied with the amount of time and number of staff available for a given interview – the sheets varied from having no data to over 50 topics for a single interview. Name entries even for interviewees were inconsistent. The Libraries did not have the staff to manually go through 60+ interview transcripts to manually extract metadata.

Pilot project goal: Experiment with applications that automatically generated index terms from full text as more efficient way to provide access points for this collection at the item level.

The OpenCalais API offered a number of advantages that made it ideal for this purpose. The faceting framework it employs makes use of categories that are essential to these kinds of historical collections – names, places and locations in particular.

# Migrating transcripts into Drupal & batch processing using the Calais Drupal module in six [oversimplified] easy steps!



### **Observations**

**Step 5**: Batch process transcripts using Calais

- > OC generates a much larger number of access points, but OC results also included a larger number of false hits/inaccuracies
- > OC categories provide a less granular browsing structure
- > Terms representing contextual and relational information are lacking in OC results
- > Certain aspects of the OC schema don't suit the content (many irrelevant categories) and there are numerous gaps when compared to the cataloger created metadata
- > Meaning of many OC categories is ambiguous making index terms difficult to interpret
- > Preservation and genre metadata not captured (since OC only processes text)
- > Subject indexing seems to be a weakness of OC it only generated a few very broad terms, though it did so with a great deal of accuracy
- Name indexing (people, organizations, facilities and locations) seems to be a real strength of OC

#### Sample of name entries issues

OpenCalais Name Entries	CONTENTdm Name Entries	OpenCalais Data Quality Issues	
Charles Wilson	Wilson, Charles		Even though the following table shows some of the name entries issues from OC, it should be noted that OC on average created more name entries than catalogers.
Curtis Ellison	Ellison, Curtis [interviewer]	unqualified	
Ed Branch	Branch, Edgar Marquess, 1913-	OC indexed other form	
Etheridge	Etheridge, Robert	OC missed first name	
Hitler's "Mein Kampf"	N/A	OC false hit	
Roland Delattre	Delattre, Roland		
Roland DeLattro	N/A	OC indexed spelling error	

Sample of assigned subjects

Education

Politics

Religion

• Jim Zwerg (mis-

categorized)

Technology (false hit)

- **CONTENT**dm topics
- Anti-Vietnam War protests The Organ (false hit) Black Student Action Music
- Committee
- Butler Co. Sheriff
- Faculty leaving the
- University
- Faculty Senate • Gentle Revolution
- Long hair and beards on
- Rowan Hall occupation
- Voices of Reason

#### **OpenCalais tags**

### **Outcome**

OC can provide substantial efficiencies when working with large volumes of full text especially for collections where terms representing people, organizations, facilities and locations that are deemed critical access points.

# Possible Next Steps:

Data quality study: Measure data quality using established criteria for:

- Aboutness / substantive coverage
- Accuracy
- Completeness
- Context
- Consistency Interoperability
- Usability

**Integration, display, and sharing:** Currently the Oral History Project is hosted on CONTENTdm; however, the Libraries are in the process of migrating several collections to DSpace. In light of this move, the metadata generated from this project, along with the videos, transcripts, and descriptive metadata, might be calling one of the following platforms "home" in the near future:

- Drupal
- Omeka
- http://omeka.org/
- OpenWMS http://rucore.libraries.rutgers.edu/open/projects/open

Want to learn more about the technical details of this project? Scan the QR code or visit http://bit.ly/hYlEHD for more information!



## For further information

Miami Stories Oral History Project http://doyle.lib.muohio.edu/cdm4/mustories/

OpenCalais

http://www.opencalais.com/

Drupal

http://drupal.org/

Becky Yoose, Bibliographic Systems Librarian yoosebj@muohio.edu

Jody Perkins, Metadata Librarian perkintj@muohio.edu