Theses Harvesting at Library and Archives Canada

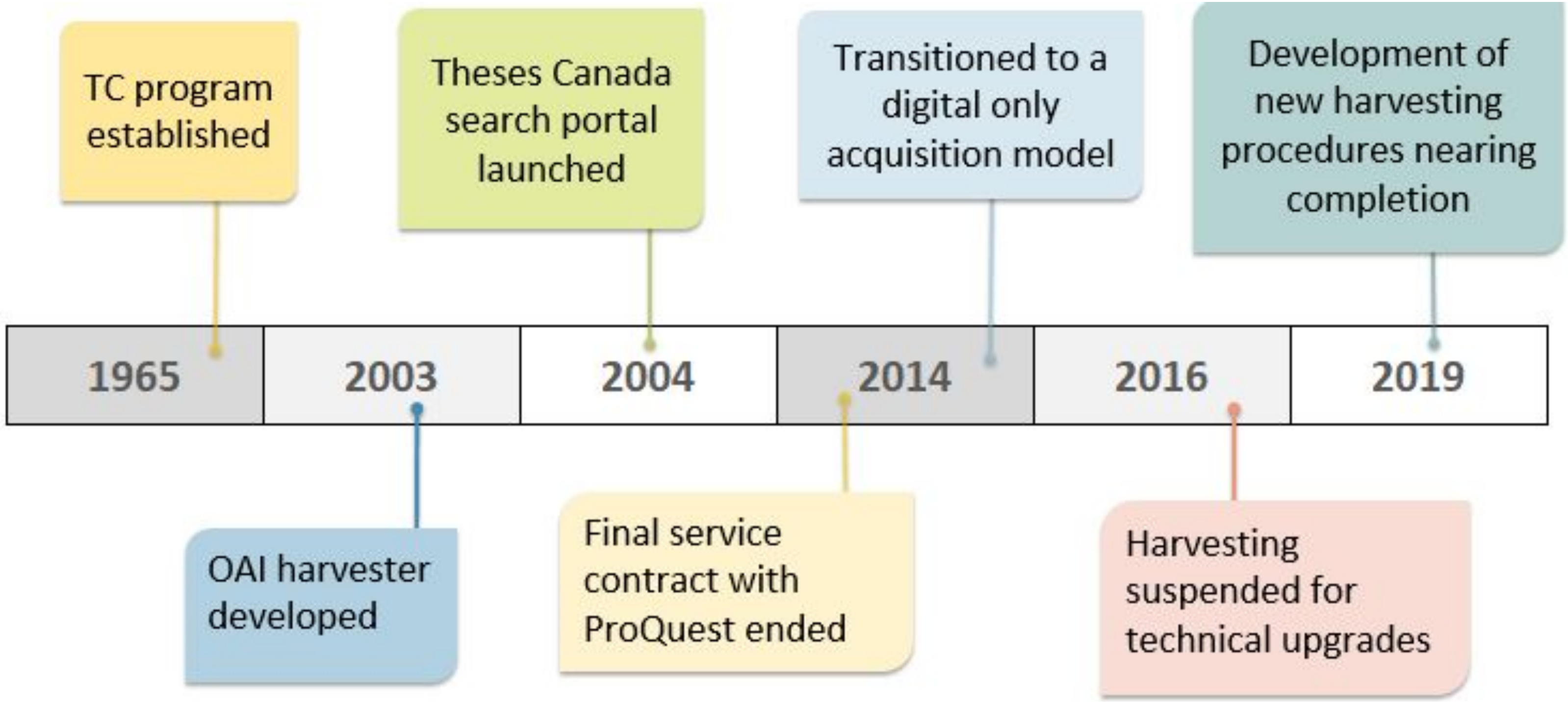
Access Conference 2019

Edmonton, Alberta

September 30, 2019

Theses Canada (TC) program

Cooperative program between Library and Archives Canada (LAC) and over 50 Canadian universities



1965 – TC program established

2003 – OAI harvester developed

2004 – Theses Canada search portal launched

2014 – Transitioned to a digital only acquisition model

2014 – Final service contract with ProQuest ended

2016 – Harvesting suspended for technical upgrades

2019 – Development of new harvesting procedures nearing completion

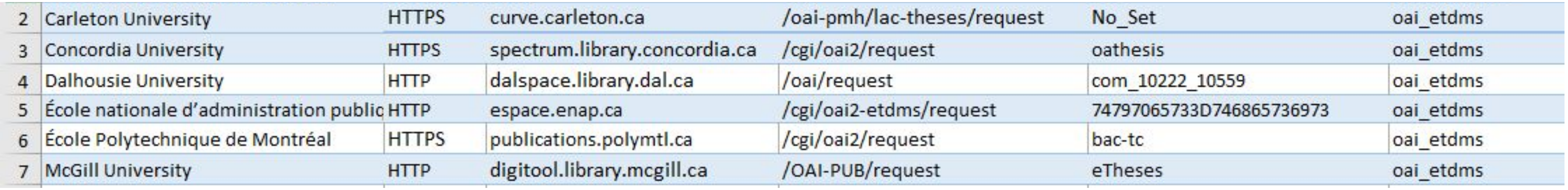
New systems

LAC has moved away from custom built systems and acquired:

- GoAnywhere Managed File Transfer:
  - harvester and workflow automation
- Preservica: active digital preservation
  - multiple copies, multiple locations
- OCLC WorldShare Management Services
  - shared library services platform

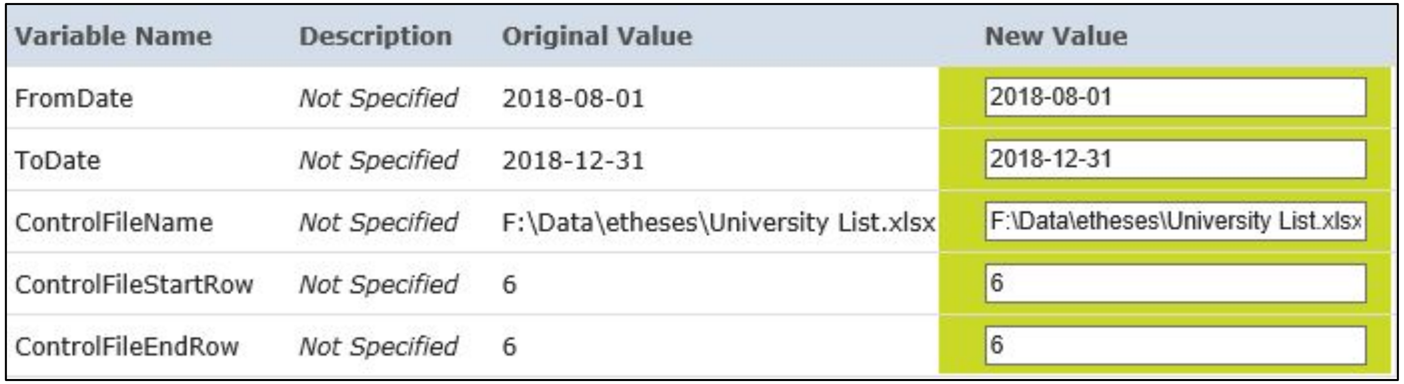
Harvesting from institutional repositories

It all starts with an Excel sheet:



2	Carleton University	HTTPS	curve.carleton.ca	/oai-pmh/lac-theses/request	No_Set	oai_etdms
3	Concordia University	HTTPS	spectrum.library.concordia.ca	/cgi/oai2/request	oathesis	oai_etdms
4	Dalhousie University	HTTP	dalspace.library.dal.ca	/oai/request	com_10222_10559	oai_etdms
5	École nationale d’administration public	HTTP	espace.enap.ca	/cgi/oai2-etdms/request	74797065733D746865736973	oai_etdms
6	École Polytechnique de Montréal	HTTPS	publications.polymtl.ca	/cgi/oai2/request	bac-tc	oai_etdms
7	McGill University	HTTP	digitool.library.mcgill.ca	/OAI-PUB/request	eTheses	oai_etdms

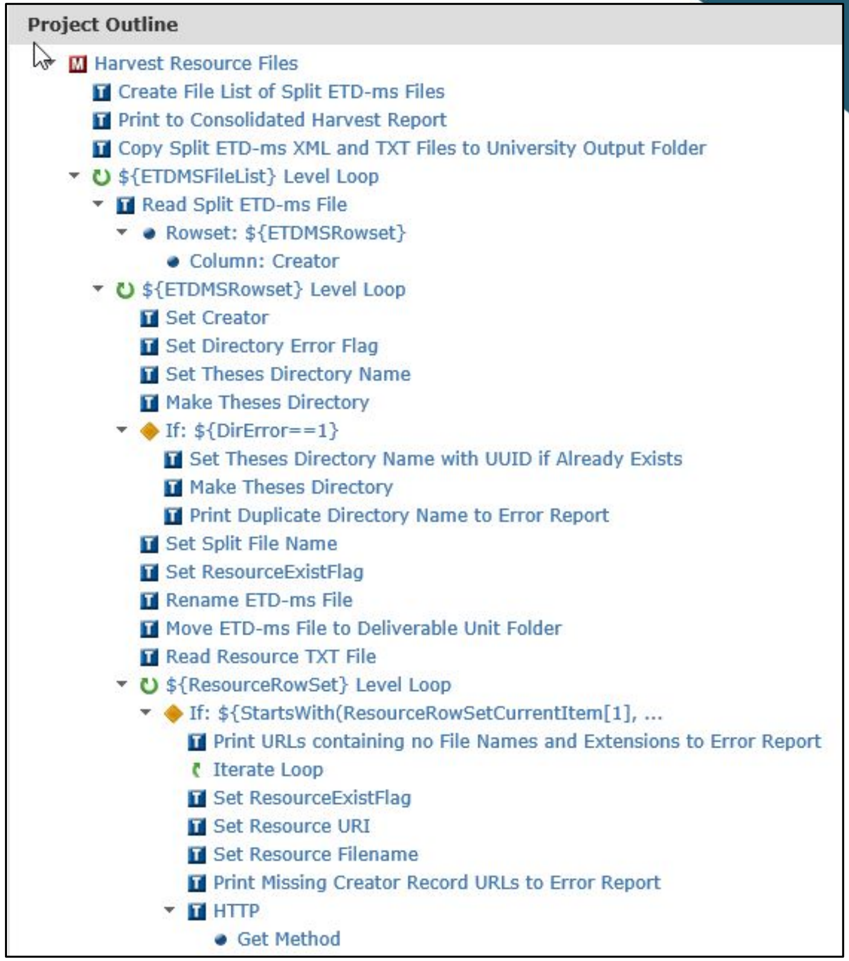
We use the harvester in GoAnywhere:



Variable Name	Description	Original Value	New Value
FromDate	*Not Specified*	2018-08-01	2018-08-01
ToDate	*Not Specified*	2018-12-31	2018-12-31
ControlFileName	*Not Specified*	F:\Data\etheses\University List.xlsx	F:\Data\etheses\University List.xlsx
ControlFileStartRow	*Not Specified*	6	6
ControlFileEndRow	*Not Specified*	6	6

GoAnywhere workflow

- 14 modules to perform tasks including:
  - Harvest and split ETD-MS metadata
  - Download resource files (PDFs and other)
  - Transform ETD-MS into MODS
  - Arrange metadata and files into folders by author name
  - Identify errors and create reports (for each university plus a consolidated report)
  - produce a SIP (submission information package) for export to Preservica

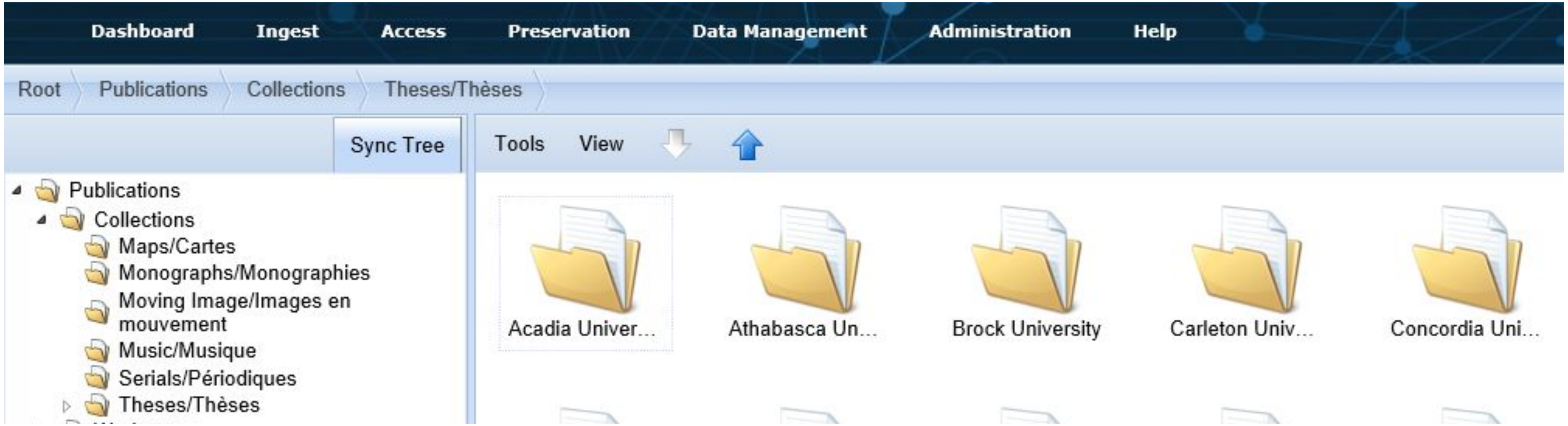


Project Outline

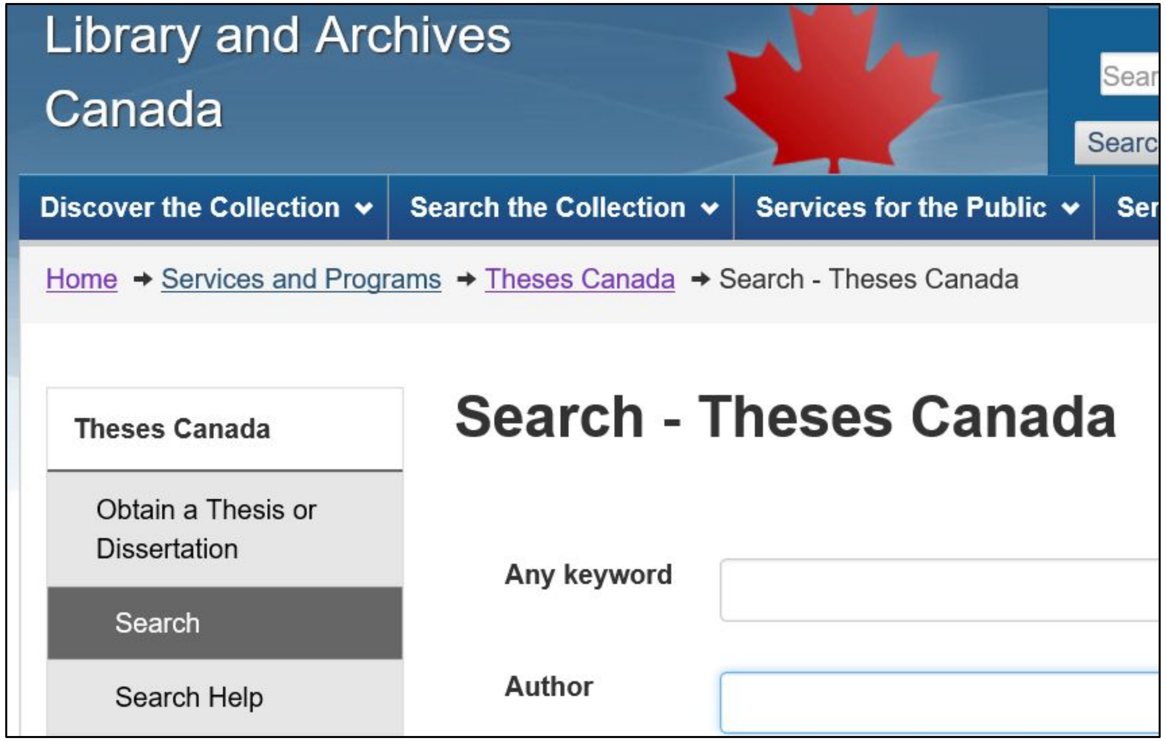
```
Harvest Resource Files
  Create File List of Split ETD-ms Files
  Print to Consolidated Harvest Report
  Copy Split ETD-ms XML and TXT Files to University Output Folder
  ${ETDMSFileList} Level Loop
    Read Split ETD-ms File
      Rowset: ${ETDMSRowset}
        Column: Creator
    ${ETDMSRowset} Level Loop
      Set Creator
      Set Directory Error Flag
      Set Theses Directory Name
      Make Theses Directory
      If: ${DirError==1}
        Set Theses Directory Name with UUID if Already Exists
        Make Theses Directory
        Print Duplicate Directory Name to Error Report
      Set Split File Name
      Set ResourceExistFlag
      Rename ETD-ms File
      Move ETD-ms File to Deliverable Unit Folder
      Read Resource TXT File
      ${ResourceRowSet} Level Loop
        If: ${StartsWith(ResourceRowSetCurrentItem[1], ...
          Print URLs containing no File Names and Extensions to Error Report
          Iterate Loop
        Set ResourceExistFlag
        Set Resource URI
        Set Resource Filename
        Print Missing Creator Record URLs to Error Report
        HTTP
          Get Method
```

Preservica

- GoAnywhere automatically triggers the Preservica ingest workflow and the folders are transferred to a review area
- Staff perform quality checks for each university then move the folders to a permanent collection area



Public access



Library and Archives Canada

Home → Services and Programs → Theses Canada → Search - Theses Canada

Search - Theses Canada

Any keyword

Author

- MODS to MARC workflow to transform and send metadata to the LAC library catalogue, Aurora, is under development
- The metadata will include a link to the files in Preservica
- A separate theses search portal is updated nightly with data from the library catalogue
- Theses are also available in Aurora and in the union catalogue, Voila

Challenges

- Learning-by-doing as we tested and developed the workflow
- Dealing with variety of repositories and metadata, each with a different issue such as missing fields, no URL to the file, quirks in formatting the date parameters, expired security certificates, etc.
- What can universities fix, what can we fix? Trying to gauge when we should modify our workflow and when we should ask the universities to change something
- Creating quality MARC records from the MODS / ETD-MS metadata with no human intervention

Looking forward

- LAC remains strongly committed to the program
- Harvesting will begin soon with more universities than before
- We plan to harvest (or reharvest) the entire theses repository of each university (with approval) into Preservica
  - This way we can acquire supplementary files for older theses
- Improved preservation and long-term access ensured
- Flexible systems that we can efficiently modify and develop
- Integrated with LAC’s main digital acquisitions stream

Thank you!

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