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Pipe Dreams: Harvesting Local Collections into Primo Using OAI-PMH

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Pipe Dreams

HARVESTING LOCAL COLLECTIONS INTO PRIMO USING OAI-PMH
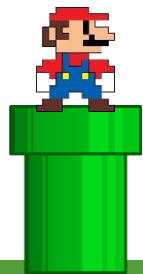
Characters

Geri Rinna	Marianne Swierenga	Emily Gross
Electronic Resources Librarian	Cataloging and Metadata Librarian	ILS Specialist

Why Harvest?

From disparate systems
- ◦ subject and course guides, local digital collections, scholarly repository, archival finding aids, and the catalog

To integrated discovery
- ◦ Unified platform for access and discovery for an improved user experience

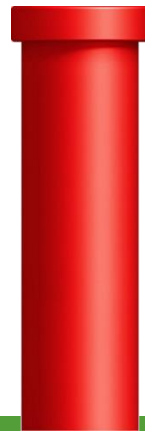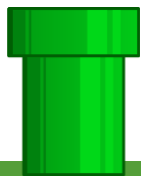# Pipes @ WMU

CONTENTdm, May 2015

LUNA Insight, March 2016

ScholarWorks (bepress Digital Commons), August 2017

Springshare LibGuides, December 2017

ArchivesSpace, In Progress

Archive-It, Future Project?

Workflow

- Selection
- Configuring External Systems
- Configuring Primo
- Testing
- Documentation

Workflow: Selection

- Identify

- Feasibility Study

- Testing

- Request

- Approval

Workflow: Configuring External Systems

- Enable OAI-PMH
  - Example: https://oai.datacite.org/oai
  - Test URL
- Setting permissions
- Mapping metadata

Workflow: Configuring External Systems

Mapping the metadata in OCLC's CONTENTdm:

Configure the field properties

Edit field, select DC mapping

Index the collection after changes

Workflow: Configuring External Systems

Mapping the metadata:

Expressed as XML;
oai_dc schema

Use the OAI validator to view the XML and troubleshoot metadata before harvest

OAI PMH validator

```xml
<metadata>
<oai_dc:dc xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/" xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:xsi
    <dc:title>Liturgy O.C.S.O., 1976, vol. 10, no. 3 (October)</dc:title>
    <dc:contributor>Waddell, Chrysogonus, 1930-2008</dc:contributor>
    <dc:publisher>Cistercians of the Strict Observance, Abbey of Our Lady of Gethsemani (Trappist, Ky.)</dc:publisher>
    <dc:date>1976</dc:date>
    <dc:description>Liturgy O.C.S.O. was published by Gethsemani Abbey, Trappist, KY and edited by Father Chrysogonus Waddell
    <dc:description>Editor&#x27;s page / Fr. Chrysogonus Waddell -- The internal unity of the Eucharist prayer / Bede Stockill
    <dc:contributor>Stockill, Bede, Dom</dc:contributor>
    <dc:contributor>Rondeau, Marie-Nivard, Fr.</dc:contributor>
    <dc:contributor>Crevant-Humières, Anne-Louise de, 1658-1710</dc:contributor>
    <dc:contributor>Waddell, Chrysogonus, 1930-2008</dc:contributor>
    <dc:contributor>Marlingeas, Bernard</dc:contributor>
    <dc:subject>Lord&#x27;s Supper--Meditations</dc:subject>
    <dc:subject>God (Christianity)--Name</dc:subject>
    <dc:subject>Catholic Church--Liturgy--Texts</dc:subject>
    <dc:subject>Bible. O.T. Psalms--Prayers and devotions</dc:subject>
    <dc:subject>Forgiveness--Religious aspects--Catholic Church</dc:subject>
    <dc:subject>Reconciliation--Religious aspects--Catholic Church</dc:subject>
    <dc:rights>Digital version of Liturgy, courtesy of Gethsemani Abbey, Trappist, Kentucky, copyright 2010 Western Michigan U
    <dc:language>eng</dc:language>
    <dc:relation>Liturgy O.C.S.O. Journal of Gethsemani Abbey</dc:relation>
    <dc:type>text</dc:type>
    <dc:format>application/pdf</dc:format>
    <dc:format>4,047,056 bytes</dc:format>
    <dc:identifier>exws_LitVol10_No3</dc:identifier>
    <dc:identifier>http://cdm16259.contentdm.oclc.org/cdm/ref/collection/p15032coll3/id/21</dc:identifier>
</oai_dc:dc>
</metadata>
```

Workflow: Configuring External Systems

Library Sear

TOP

SEND TO

ONLINE

DETAILS

LINKS

TAGS

Refine my r

Expand bey

Sort by   Rele

Show Only

Peer-reviewed
Journals

Full Text Onlin

Details

Title	Liturgy O.C.S.O., 1976, vol. 10, no. 3 (October)
Author	Waddell, Chrysogonus, 1930-2008 >
	Stockill, Bede, Dom >
	Rondeau, Marie-Nivard, Fr. >
	Crevant-Humières, Anne-Louise de, 1658-1710 >
	Waddell, Chrysogonus, 1930-2008 >
	Marlingeas, Bernard >
Subjects	Lord's Supper--Meditations >
	God (Christianity)--Name >
	Catholic Church--Liturgy--Texts >
	Bible. O.T. Psalms--Prayers and devotions >
	Forgiveness--Religious aspects--Catholic Church >
	Reconciliation--Religious aspects--Catholic Church >
Description	Liturgy O.C.S.O. was published by Gethsemani Abbey, Trappist, KY and edited by Father Chrysogonus Waddell from 1966-1999. The journal (at that time a newsletter) began after September 1965 meeting of the Liturgy Commission of the Order of Cistercians of the Strict Observance to report progress in liturgical renewal after Vatican II. The audience and contributors later included secular scholars of the Cistercian liturgy.
	Editor's page / Fr. Chrysogonus Waddell -- The internal unity of the Eucharist prayer / Bede Stockill -- The name 'Y H W H' and its usage in the Liturgy / Fr. Nivard Rondeau -- Eucharistic meditations on the Psalms by the Lady Abbess of Monchy, Madame Anne-Louise de Crevant-D'Humieres 1658-1710 -- Introduction and presentation / Chrysogonus Waddell -- Text of the Meditation -- The process of Reconciliation / Bernard Marlingeas

Workflow: Configuring Primo

Data Source

Scope Value

Normalization Rules

Code Tables

Mapping Tables

Views

Data Source

Why do you need to configure a Data Source?

The Data Source tells Primo some basic information about the data!

Scope Value

What does a Scope Value do?

Defines a set of records

Normalization Rule Set

The set of rules that will apply to the set of records defined by your Scope Value, that came from your Data Source.

Mapping Table

Maps the terms used in original data to terms used in Primo.

Set names in source -> Set names in Primo

Example: "acad_leadership" maps to "Academic Leadership Academy"

Deploy

Don't forget to deploy your:

◦ Data Source

◦ Scope Values

◦ Normalization Rules

◦ Code Tables & Mapping Tables

...*before* moving on to the next steps!

Creating the Pipes

You must create three pipes:

- Import Pipe
- Delete Pipe
- Renorm Pipe

Congratulations!

You've created your pipes!

Workflow: Testing

Where's my stuff?

◦ Harvesting and re-indexing may take a long time

◦ Make sure the pipe actually harvested something

◦ Check your search scope settings

Harvesting more/less than you expected?

◦ Check your export settings at the data source

◦ Check your mapping table in Primo

Facets not showing?

◦ Check the normalization rules and code tables

Workflow: Documentation

Bus theory: If you get run over by a bus tomorrow, who will pick up the work?

◦ Begin your documenting as you work in the Sandbox

◦ Take notes as you go along; record the how and why

◦ Note any information gleaned from tickets with Ex Libris
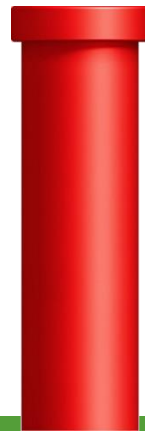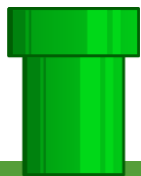
◦ Step-by-step instructions

Pipes @ WMU

CONTENTdm

LUNA Insight

ScholarWorks (bepress Digital Commons)

Springshare LibGuides

ArchivesSpace

Pipe: CONTENTdm

Unique issues:

OAI already set up for WorldCat and Summon harvests

Already mapped to Dublin Core

All collections were open and accessible

Pipe: LUNA

Unique issues:

Complex metadata need to be mapped to simple Dublin Core

Not all collections are open with some requiring configurations to block harvesting

Thumbnail link creating two different records in Primo

Pipe: ScholarWorks

Unique issues:

ScholarWorks Librarian needed to curate items and collections

Not a scheduled harvest since ingestion of new materials is sporadic

Primo Back Office is case sensitive:
◦ 01WMU_SCHOLARWORKS_Set_Names
◦ 01WMU_Scholarworks_Set_Names

Pipe: LibGuides

Unique issues:

First time we needed to create new resource type

Pipe: ArchivesSpace

Unique issues:

Needed IT assistance to set up the OAI

Finding aids are multi-part and hierarchical, requiring determination of what level a resource should be harvested

Links were not directing user to the resource

Finding Aids in Primo

Chapeau de paille   ✕ / Everything ▼ 🔍   ADVA

PAGE 1   *738 Results*   ⬤ **Personalize**

Refine my results

☐ Expand beyond my library

Sort by Relevance ▼

Show Only ⌃

Peer-reviewed
Journals   *(239)*

Full Text Online   *(715)*

Available in the
Library   *(4)*

Resource Type ⌃

Articles   *(545)*

~~Audio Visual~~   *(3)*

1   ARTICLE
CHAPEAU DE PAILLE.
The Atlantic Souvenir; A Christmas and New Year's Offering (1826-1832), 1829, p.158
🔗 Online >

2   DIGITAL OBJECT
Chapeau de paille de riz. Robe de reps indien.
Western Michigan University 1828
Le Conseiller des Graces. [Paris: Chez Marcilly],
🔗 Online ☑ >

3   DIGITAL OBJECT
Chapeau de paille de riz. Redingote en Organdi.
Western Michigan University 1832?
Le Conseiller des Graces. [Paris: Chez Marcilly],
🔗 Online ☑ >

CHAPEAU DE PAILLE.

The Atlantic Souvenir; A Christmas and New Year's Offering (1826-1832); Philadelphia   (1829): 158.

Browse this issue

Full text - PDF | Page view - PDF | Details

1 of 5 — + Automatic Zoom

CHAPEAU DE PAILLE.
The Atlantic Souvenir; A Christmas and New Year's Offering (1826-1832); 1829; Ame...
pg. 158

CHAPEAU DE PAILLE,

This picture, a chef d'œuvre of Rubens, is now at Windsor

ALL loved who saw her for her noble mien,
Not for the splendour of her rich attire;
'Twas not those robes that might become a qu
But her sweet looks that kindled soft desire.
Her sparkling eyes, and cheeks with roses spr
These could the hearts of fond adorers draw,
Not the bright gems that streaming radiance s
Nor the gay flaunting of THE HAT OF STRAW.

Costume History Collection

COLLECTIONS   EXPLORE   CREATE   SHARE   EMBED   PRINT   HELP

MEDIA INFORMATION ✕

Chapeau de paille de riz. Robe de reps indien.

COLLECTION NAME:
Costume History
Record ▼
Work Record ID:
14118
Work Type:
prints (visual works)
Title:
Chapeau de paille de riz. Robe de reps indien.
Title Alternative:
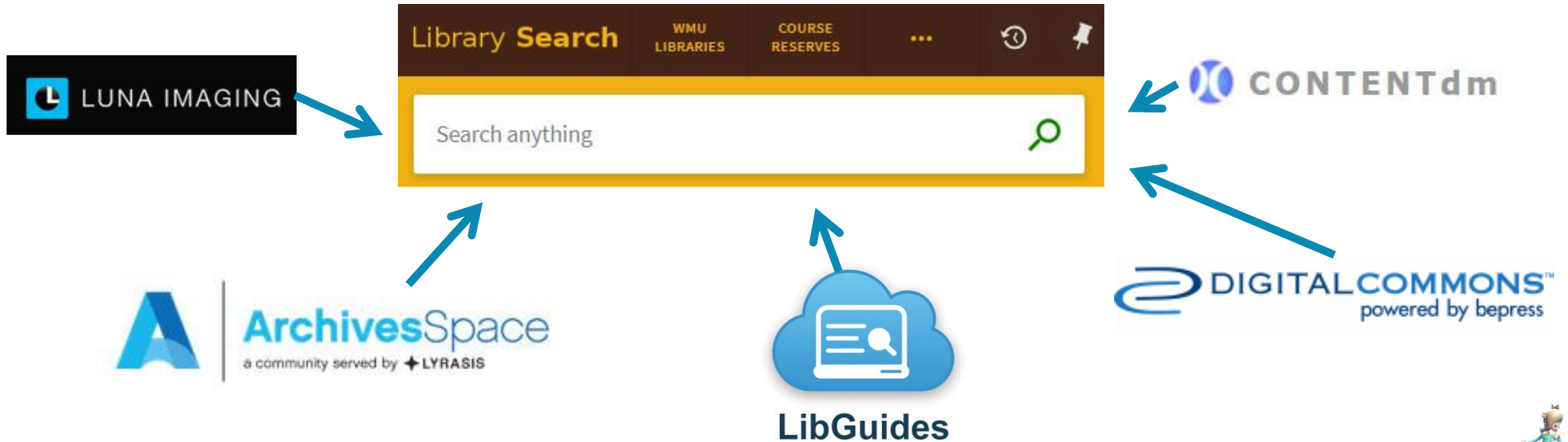Rice-straw hat. Rep weave dress.
Measurements:
23.2 14.5 cm
Material:

Conclusion

Have we achieved the vision of a unified platform of access and discovery?

Yes!

Useful Links

Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH): https://www.openarchives.org/pmh/

OAI Repository Explorer: http://re.cs.uct.ac.za/

OAI Validator: http://validator.oaipmh.com/

CONTENTdm OAI support: https://www.oclc.org/support/services/contentdm/help/server-admin-help/oai-support.en.html

Import Records into Primo from OAI Repositories: https://www.orbiscascade.org/blog/9/?bid=153

Configuring OAI-PMH in ArchivesSpace: https://github.com/archivesspace/archivesspace#configuring-oai-pmh

Ingesting LibGuides into Primo: http://documents.el-una.org/1513/

Contact Us!

Questions? Comments?

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WESTERN MICHIGAN UNIVERSITY

University Libraries

wmich.edu/library

Pipes, Step-by-Step

HOW TO SET UP YOUR VERY OWN PIPE

Definitions

Pipes : set of steps that the source information goes through before being turned into the PNX record

Search Scope : defines a group of records that can be searched together

Normalization Rules : takes the data and maps them to the PNX

PNX : Primo Normalized XML

Data Source : source of records

Digital Assets Management System : software supporting collections

OAI-PMH : Open Archives Initiative Protocol for Metadata Harvesting is the mechanism supporting the data interchange

Workflow: Data Source Configuration

Why do you need to configure a Data Source? The Data Source tells Primo some basic information about the data you will bring in via the pipes!

Two ways to get there:

Primo Home > Ongoing Configuration Wizards > Pipe Configuration Wizard > **Data Sources Configuration**
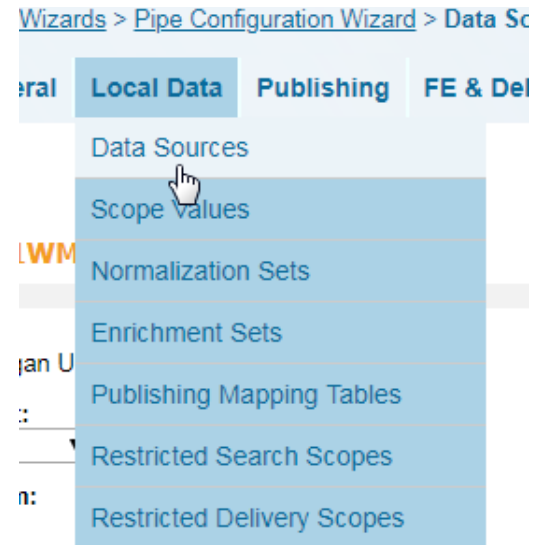
Local Data > **Data Sources**

Workflow: Data Source Configuration

You will need the following information, usually configured like this:

Owner: [**Your Institution**]

Source format: [**Format of your data**]

Source system: **Other**

File Splitter: **OAI splitter**

Source name: [**Name your source**]

Description: [**Source name**] **data source**

Character Set: [usually **UTF-8**]

Transformation file name: <blank>

Source code: [**Same as source name**]

Original Source Code: <blank>

Version: <blank>

Input Record Path: [**oai_dc:dc, record, or knowledge_unit**]

Add a New Data Source

Owner:	Western Michigan Univer ▾	Source name:		Source code:	
Source system:	Select a Source System ▾	Source format:	Select a Source Format ▾	Version	
☐ File needs transformation		Transformation file name	▾	Original Source Code	
XREF keys	LCCN OCLC ISSN ISBN				
File Splitter:	Select a File Splitter ▾	Character Set:	UTF-8 ▾	Input Record Path	record
Description:					Add

https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/060Back_Office_Guide/050Pipe_Configuration_Wizard/040Configuring_Data_Sources

Workflow: Data Source Configuration

Example

Workflow: Scope Value Configuration

Two ways to get there:

Primo Home > Ongoing Configuration Wizards > Pipe Configuration Wizard >
Scope Values Configuration

Local Data > **Scope Values**

Workflow: Scope Value Configuration

You will need the following information, usually configured like this:

Owner: [**Your institution**]

Scope Value Name: [**Same name as your Data Source**]

Scope Value Code: [**Same name as your Scope Value Name**]

Description: [**Scope Value Name**] **Scope**

Scope Type: **Collection**

Use Scope for: **Search**

Workflow: Scope Value Configuration

Example

General Attributes for Scope 01WMU_SCHOLARWORKS

Owner:	Western Michigan University (Alma)
Scope Value Name:	01WMU_SCHOLARWORKS
Scope Value Code:	01WMU_SCHOLARW
	☐ **Manually defined Search Scope**
	scope:(01WMU_SCHOLARWORKS)
Description:	01WMU Scholarworks Scope
Scope Type:	Collection ▾
Use Scope for:	☑ **Search** ☐ **Restricted Search** ☐ **Restricted Delivery**

Workflow: Normalization Rule Set Configuration

Primo Home > Advanced Configuration > **Full Normalization Rule Configuration**

Workflow: Normalization Rule Set Configuration

You will need to fill in the following information:

Owner: [**Your institution**]

Duplicate from existing Normalization Rules Set: [**Whichever Metadata format you need**]

Name: [**Use the same name as your Data Source**]

Workflow: Mapping Table

General > **Mapping Tables**

…then select SubSystem: **Normalization**

Workflow: Mapping Table

Add the following information:

Table Name: [**Same name as your Data Source**]**_Set_Names**

Description: [**Same name as your Table Name**]

Create a New Code Table

| Table Name: | | Sub System: NORMALIZATION | Description: | | Create |

Workflow: Mapping Table

Take the OAI URL for scholarworks and enter it into the OAI validator:

http://validator.oaipmh.com/

Click "List Sets" and view the XML tab. The names and codes listed will be what you enter into the target code and source code of the mapping table.

Workflow: Mapping Table

Alternatively, you can load an excel (must be .xls NOT the newer versions of excel) file with headers:

Enabled

sourceCode1

targetCode

Description

InstallationCode

InstitutionCode

	A	B	C	D	E	F
1	Enabled	sourceCode1	targetCode	Descriptio	InstallationCode	InstitutionCode
2	true	acad_leadership	Academic Leadership Academy		CUSTOMER	01WMU
3	true	accessus	Accessus		CUSTOMER	01WMU
4	true	accessus_gallery	Accessus Gallery		CUSTOMER	01WMU
5	true	accountancy	Accountancy		CUSTOMER	01WMU
6	true	accountancy_honors	Accountancy Honors Theses		CUSTOMER	01WMU
7	true	accreditation	Institutional accreditation		CUSTOMER	01WMU
8	true	ace_intl_lab	American Council on Education Internationalization Laboratory		CUSTOMER	01WMU
9	true	africancenter	Center for African Development Policy Research		CUSTOMER	01WMU
10	true	africancenter_icad	International Conference on African Development		CUSTOMER	01WMU

Enabled column must say "true" all the way down. Installation code must be "Customer" all the way down. Institution code must be "[**Your institution code**]" all the way down

DEPLOY

Don't forget to deploy your:

Data Source

Scope Values

Normalization Rules

Code Tables & Mapping Tables

...before moving on to the next steps!

Workflow: Creating the Pipes

Primo Home > Monitor Primo Status > **Pipe Monitoring**

...or go to Publishing > **Create New Pipe**

You will create three pipes:

Import Pipe

Delete Pipe

Renorm Pipe

Workflow: Creating the Pipes

IMPORT ("REGULAR") PIPE

Pipe Name: [**Use the same name as your Data Source**]

Pipe Description: [**Pipe Name**]

Pipe Type: **Regular**

Data Source: [**Choose the Data Source you created**]

Normalization Mapping Set: [**Choose the Mapping Set you created**]

Harvesting method: **OAI**

Server: [**Server URL**]

Enrichment set: **No Enrichments – Template**

Metadata format: **oai_dc** [if Dublin Core]

Harvested file format: ***.tar.gz**

System Last Stage: **Persistence**

Start Harvesting records from: [**Earliest date you can pick**]

ISSUES

Sometimes your Normalization Mapping Set won't appear in the list of options. Redeploy Normalization Rules and Code Tables & Mapping Tables and give it some time. Try again later.

Pick the earliest date possible for "Start Harvesting records from". Because this is the first 'major' load, and later loads are incremental, you want to make sure you capture all the relevant data.

Workflow: Creating the Pipes

ALWAYS "Test Connection"!

Workflow: Creating the Pipes

DELETE PIPE

Pipe Name: [**Same name as the Data Source**]_**DELETE**

Pipe Description: [**Same name as Pipe Name**]

Pipe Type: **Delete Data Source**

Data Source: [**Select the Data Source you created earlier**]

Workflow: Creating the Pipes

RENORM PIPE

What is a Renorm pipe? Instead of harvesting or deleting data, the Renorm pipe applies changes in the Normalization rules to existing data already harvested.

Pipe Name: [**Same name as Data Source**]_**RENORM**

Pipe Description: [**Same as Pipe Name**]

Pipe Type: **No harvesting - Update Data Source**

Data Source: [**Select the Data Source you created earlier**]

Normalization Mapping Set: [**Select the Mapping Set created earlier**]

Enrichment set: **No Enrichments – Template**

System Last Stage: **Persistence**

> **Define Pipe**

| Owner: Western Michigan University (Alma) | Pipe Name: 01WMU_SCHOLARWORKS_RENORM | Pipe Type: No harvesting - Update Data Source |

Pipe Description: 01WMU_SCHOLARWORKS_RENORM - apply normalization rules to existing ScholarWorks data in Primo

| **Source** | **Normalization and Enrichment** | | **Errors** |

Data Source: *
01WMU_SCHOLARWORKS ▼

Normalization Mapping Set: *
01WMU_SCHOLARWORKS ▼

Priority: *
Medium ▼

Maximum error threshold:
5 % (1-100)

Enrichment Set: *
No Enrichments - Template ▼

System Last Stage: *
PERSISTENCE ▼

☐ Force DEDUP ⓘ
☐ Force FRBR ⓘ

Congratulations!

You've created your pipes!

Sorry, you're not done...


```
THANK YOU MARIO!

BUT OUR PRINCESS IS IN
ANOTHER CASTLE!
```

Workflow: Code Tables

Adjust Code tables at the institutional level:

Primo Home > Advanced Configuration > **All Code Tables**

…or go to General > **Code Tables**

***For all code tables: if a line already exists in Primo, you just need to click "Customize" so that you can edit it, otherwise it is 'grayed out'. If no code line exists, you may need to add it!**

Workflow: Code Tables

Check Code table "**FrontEnd Display Fields**" to select the next available local display field (**lds##**) not yet in use and customize it.

Name it whatever you would like things in this collection to display. For example, we have used:

"ScholarWorks at WMU"

"ArchivesSpace"

"LUNA Insight Collection"

…etc.

Code Table Rows

Enabled	Field Code ▲▼	Field Name ▲▼	Language ▲
			en_US ▼
☑	lds18	ScholarWorks at WMU	en_US
☑	lds04	LUNA Insight Collection	en_US

Don't forget which lds## field you've chosen and make sure it's enabled!

Workflow: Code Tables

In both Code tables "**Advanced Index Fields**" and "**Basic Index Fields**," select the next available local search field (**lsr##**) not yet in use and customize it.

Make sure you use the same lsr## for both.

We usually choose to name these the same as the Display Code (previous slide).

Workflow: Code Tables

In Code table "**Advanced Media Type**" add an enabled line with:

Code: **default.search-advanced.mediaType.[resource type]**

Description: [**Resource type**]

Language: en_US

Code Table Rows

Enabled	Code ▲▼	Description ▲▼	Language ▲
			en_US ▼
☑	default.search-simple.mediaType.option.libguides	Research Guides	en_US

In Code table "**Basic Media Type**," add an enabled line with:

Code: **default.search-simple.mediaType.option.[resource type]**

Description: [**Resource type**]

Language: en_US

Workflow: Code Tables

In Code table "**Facets Code Fields**" select the next available local facet field (**facet_local##**) not yet in use and customize.

We usually choose to name these the same as the Display Code and Index Fields (previous two slides).

Code Table Rows

Enabled	Field Names ▲▼	Field Codes ▲▼	Language ▲▼
▼			en_US ▼
☑	facet_local18	ScholarWorks at WMU	en_US
☑	facet_local3	Course Instructors	en_US

Workflow: Code Tables

In Code table "**Facet Labels**" create two new code table lines.

Add or customize lines with the following codes:

default.facets.facet.facet_local[**same number as previous slide**]

default.facets.search-box.facet_local[**same number as above**]

Description: We usually choose to name these the same as the Display Code, Index Fields, and Local Facet Field (previous three slides).

Language: **en_US**

Code Table Rows

Enabled	Code ▲▼	Description ▲▼	Language ▲
			en_US ▼
☑	default.facets.facet.facet_local18	ScholarWorks at WMU	en_US
☑	default.facets.search-box.facet_local18	ScholarWorks at WMU	en_US

Workflow: Code Tables

In Code table "**Facet Resource Type**"

Add an enabled line with:

Code: **default.facets.facet.facet_rtype.**[resource type]

Description: [**resource type**]

Language: **en_US**

Code Table Rows

Enabled	Code ▲▼	Description ▲▼	Language ▲▼
▼			en_US ▼
☑	default.facets.facet.facet_rtype.libguides	LibGuides	en_US
☑	default.facets.facet.facet_rtype.Audio Visual	audio_video	en_US

Workflow: Normalization Rules

Normalization Rules are easily one of the most daunting and frustrating steps of the process! Take your time.

Tips:

If you get really turned around in the Primo Back Office, log out completely and log back in.

If you've done all the previous steps, take a break and come back to this part another day.

Workflow: Normalization Rules

Primo Home > Advanced Configuration > **Full Normalization Rule Configuration**

…or go to Local Data > **Normalization Sets**

Workflow: Normalization Rules

Edit the Normalization Set you created in an earlier step

Owner	Normalization Rules Set Name	Version	Description	Normalization Rules Format	
Western Michigan University (Alma)	01WMU_LUNA	8		dublin_core	Edit
Western Michigan University (Alma)	01WMU_ALMA	21		marc	Edit
Western Michigan University (Alma)	01WMU_CONTENTDM	7		dublin_core	Edit
Western Michigan University (Alma)	WMU_LibGuides	9		dublin_core	Edit
Western Michigan University (Alma)	01WMU_SCHOLARWORKS	9		dublin_core	Edit

Workflow: Normalization Rules

Check the box to show empty PNX fields!

Remember the lds##, lsr##, and facet_local## you used earlier? You will need to know them now!

Display > **lds##**

Description: [**Data source name**] set name

Action: **ADD**

Comments: **Display** [**Data Source name**] **set name: Build custom display field as** "[**Data source name**]"

Click Create to create a new rule

Type: **PNX**

XPath: **control/sourcerecordid**

Transformations:

"**Take until first occurrence**" ; Parameter: **-**

"**Use mapping table**" ; Parameter: [**Mapping table name**] (ex.: 01WMU_Scholarworks_Set_Names)

Workflow: Normalization Rules

Search > **lsr##**

Description: [**Data Source name**]

Comments: **Searchable collection flag**

Action: **ADD**

Click Create to create a new rule

Type: **Constant**

Value: [**Data Source name**]

Transformation:

"**Copy As Is**" ; Parameter: **<blank>**

Workflow: Normalization Rules

Facet > **lfc##**

Description: ScholarWorks set name

Comments: ScholarWorks set name: Build custom facet field

Action: **ADD**

Type: **PNX**

XPath: **control/sourcerecordid**

Transformations:

"**Take until first occurrence**" ; Parameter: **/**

"**Use mapping table**" ; Parameter: [**Mapping table name**]

Workflow: Normalization Rules

Facet > **Topic**

Action: **ADD**

Source: **XML dc:subject**

Transformation:

"**Split Field**" ; Parameter: **;** (semi-colon)

Workflow: Normalization Rules

Search > **Searchscope**

Verify a rule is present, which uses PNX control/sourceid (you might not need to add anything!)

Action: **ADD**

Transformations:

"**Copy As Is**"

Workflow: Normalization Rules

Delivery and Scoping > **Institution**

Verify a rule is present, which says:

Action: **ADD**

Type: **Constant**

Value: [**Your Institution code**]

Transformations:

"**Copy As Is**"

This rule should allow "Browse > Institution" rules to pick up PNX delivery/institution to populate correctly.

Workflow: Normalization Rules

Display > **Type**

Action: **ADD**

Source: **Constant** ; Value: [**whatever resource type you have**] (example: digital_object)

Transformation:

"**Copy As Is**"

FYI Make sure that there is only ONE type. Disable or remove other rules.

Workflow: Normalization Rules

Links > **Link to Resource**

   Source: **XML**

   Path: **dc:url**

   Conditions: **True**

Condition 1 – Logic: **True**

   Condition 1 – Source: **XML**

      Path: **dc:url**

      Success if: **match current**

      Routine: **starts with string**

      Parameter: **http://**

   Transformations

      Copy as is

      Add to beginning of string: **$$U**

      Add to end of string: **$$Elinktorsrc**

   Actions: **ADD**

Workflow: Normalization Rules

Links > **Link to Resource**

   Source: **XML**

   Path: **dc:identifier**

   Conditions: **True**

Condition 1 – Logic: **True**

Condition 1 – Source: **XML**

   Path: **dc:identifier**

   Success if: **match current**

   Routine: **starts with string**

   Parameter: **https://**

Condition 2 – Logic: **True**

Condition 2 – Source: **XML**

   Path: **dc:identifier**

   Success if: **match current**

   Routine: **starts with string**

   Parameter: **http://**

Transformations

   Copy as is

   Add to beginning of string: $$U

   Add to end of string: $$Elinktorsrc

Actions: **ADD**

DEPLOY

Don't forget to deploy your:

Normalization Rules

Code Tables & Mapping Tables

…before moving on to the next steps!

Workflow: Views

Primo Home > Ongoing Configuration Wizards > Views Wizard > [**Primo Institution Code**]

In the view "**Search Scope List**" for *all relevant search scopes*, check or select search scope value "[**Data Source name**]"

In "Full Display > **Full Results**" - Add field name of your lds## to the Detail display

      Add lds## field.

Remember this?

DEPLOY

Don't forget to deploy your:

Views

Workflow: Run the Pipe

RUN YOUR HARVEST PIPE!

Give Primo time to finish harvesting and re-indexing. It may take a day or even a couple days for your resources to appear!

Workflow: Moving to Production

Recreate all your steps in Production

Tread carefully; sometimes it seems like you've done everything exactly the same as the Sandbox and it still doesn't work

Don't feel guilty about walking away and coming back later to try again

Don't be afraid to ask for help; pipes are notoriously difficult!

Workflow: Production Testing

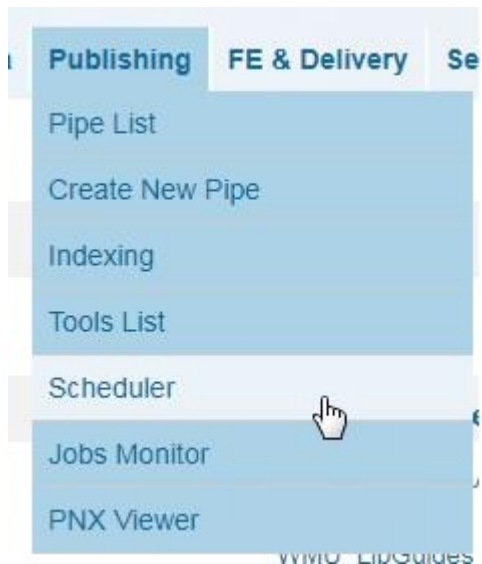Everything you tested in Sandbox should be tested in Production!

Sometimes other Sandbox settings are different from Production (when was the last time you had a refresh?) that can interfere!

Workflow: Harvesting Schedule

Publishing > Scheduler

Schedule your harvest pipe to run as desired

Workflow: Harvesting Schedule

Things to consider when deciding your harvest schedule:

Frequency with which the resources are updated

Resource is harvested into other platforms requiring different configurations

Days/times would best suit harvest

Congratulations!

You've really done it!