

Digital Preservation Tools, Practices, and Policies in Islandora

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Outline

- Tools
- Interest Group
- Use cases

Fixity and File Format Identification

- Islandora Checksum
 - Enables checksum generation on datastreams
 - Retrospective checksum generation

- Islandora FITS
 - Applied to canonical archival file (OBJ)
 - File Format Identification
 - Alternate Checksum Generation
 - Extraction of Technical Metadata stored in a separate datastream.

Data Integrity

- [Islandora Checksum Checker](#)
 - cron or user configured checksum verification
 - verification is recorded as a PREMIS-compatible event
 - alerts automatically set when mismatch discovered.

Preservation File Formats / Normalization

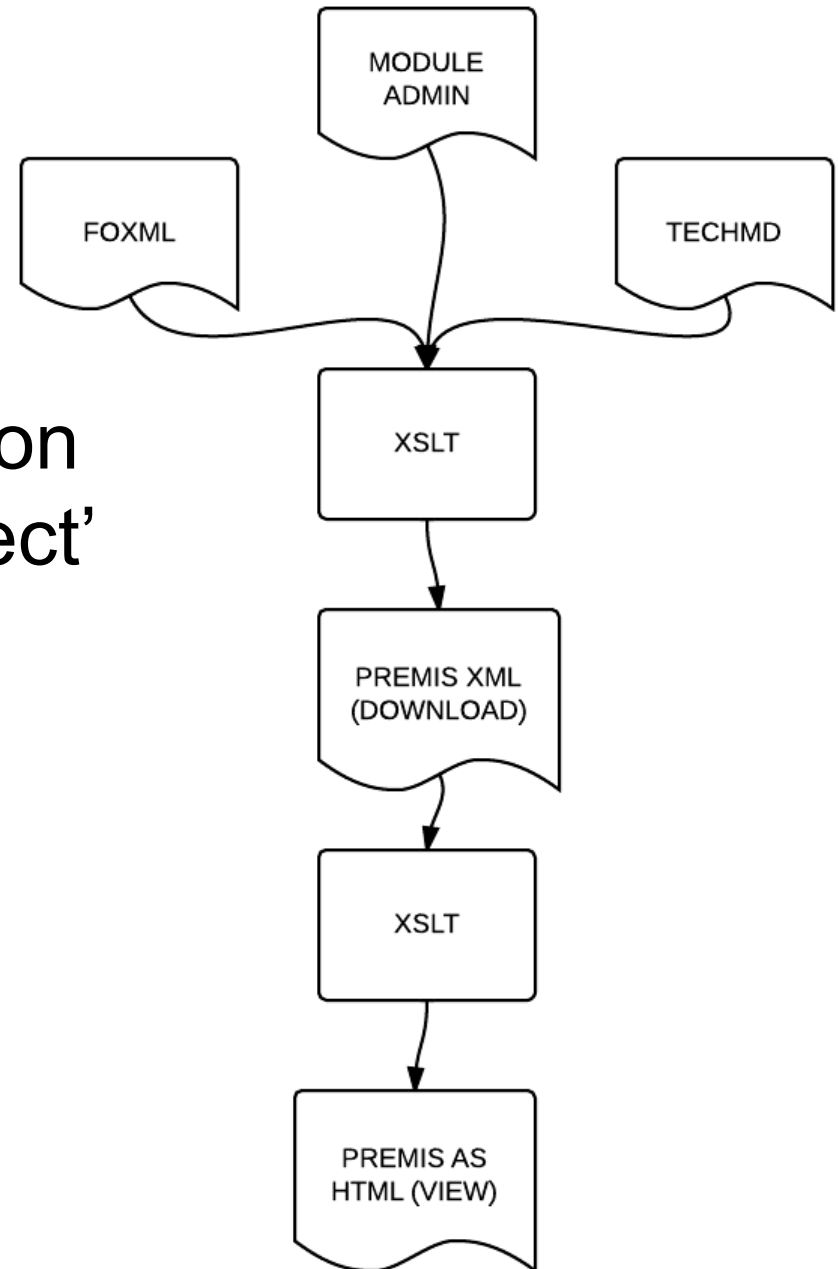
- Solution Packs follow preservation best practices
 - Archival / Preservation Formats
 - Ingested files can be normalized to a preferred archival format
 - Typical workflow would be to convert a PDF to PDF/a, a .docx to .odt, etc.
 - Normalize to preservation and access formats

Bitstream/Object Replication

- [BagIt Module](#) exports Bags for individual objects or entire collections of objects
 - Bitstream/Object Copying
 - manifest includes checksums
 - Highly configurable
 - Can include PREMIS XML
 - Can produce Archivematica transfer Bags
- [Islandora Vault](#) allows Islandora to communicate with Fedora Cloudsync and Duracloud

Preservation Metadata

- [Islandora PREMIS](#)
- Generates PREMIS XML on demand from Fedora Object's Audit Log, extracted technical, descriptive, and rights metadata
- Includes Agent, Event, Object and Rights entities



"City of Dover" : bought by Penetang group

View

Manage

MARCXML

PREMIS

[Download PREMIS](#)

PREMIS Object

Field	Value
objectIdentifierType	Fedora Commons datastreamVersion ID
objectIdentifierValue	AUDIT.0
compositionLevel	0
messageDigestAlgorithm	
messageDigest	
formatName	text/xml
contentLocationType	Fedora Commons contentLocation REF value
objectIdentifierType	Fedora Commons datastreamVersion ID
objectIdentifierValue	RELS-EXT.0
compositionLevel	0
messageDigestAlgorithm	SHA-1
messageDigest	8acd007d964a3bf29e44d0978c1369051a6abbd1
size	544
formatName	application/rdf+xml
contentLocationType	Fedora Commons contentLocation REF value
objectIdentifierType	Fedora Commons datastreamVersion ID
objectIdentifierValue	MODS.0
compositionLevel	0
messageDigestAlgorithm	SHA-1
messageDigest	a94e53eb3f379ccd43594ae55047583400a08bbb
size	2387
formatName	text/xml
contentLocationType	Fedora Commons contentLocation REF value
objectIdentifierType	Fedora Commons datastreamVersion ID
objectIdentifierValue	DC.0
compositionLevel	0
messageDigestAlgorithm	SHA-1
messageDigest	ad931b32519134be6074e22da8f332f79f268585
size	1276
formatName	text/xml
contentLocationType	Fedora Commons contentLocation REF value
objectIdentifierType	Fedora Commons datastreamVersion ID
objectIdentifierValue	OBJ.0
compositionLevel	0
messageDigestAlgorithm	SHA-1
messageDigest	ca62dacfbe4ec9ea85c140295102cefabb72b4d
size	16129943
formatName	image/tiff
contentLocationType	Fedora Commons contentLocation REF value

Preservation Documentation

- Develop a standard set of preservation policies, action plans and related documentation relevant to an Islandora install.
- Ideally a module that an Islandora Repository administrator could install and then customize the resulting documentation as needed.



Preservation Policy

- [Content Types](#)
- [Definition of AIP](#)
- [Definition of DIP](#)
- [Definition of SIP](#)
- [Designated Community Definition](#)
- [Digital Preservation Implementation Plan](#)
- [Digital Preservation Strategic Plan](#)
- [Environmental Monitoring of Preservation Formats](#)
- [Fixity procedures](#)
- [Registry of file formats](#)
- [Rights Policy](#)
- [URI Policy](#)

Preservation Action Plans

- [Audio](#)
- [Image](#)
- [Theses](#)
- [Video](#)
- [Web Archives](#)

Username *

Password *

Digital Preservation Policy

URI Policy

Submitted by nruest on Wed, 01/22/2014 - 19:06

Policy Statement

URIs created by York University Digital Library

- York University Digital Library uses a systematic convention to generate unambiguously unique identification for digital objects within its repository. This convention will create a stable name or reference to an object that can be permanently associated with that object, regardless of future changes to organizational structure or to digital access protocols.
- This is in conformance with section 4.2.4 of Metrics for Digital Repository Audit and Certification (CCSDS, June 2009) which states that a compliant repository "shall have and use a convention that generates persistent, unique identifiers for all AIPs" and "its components."
- This convention will ensure that "each AIP can be unambiguously found in the future" and that "each AIP can be distinguished from all other AIPs in the repository"

Implementation

Islandora object

York University Digital Library canonical URIs are consistently constructed in the following manner:

- `/islandora/object/PID`

These URIs are aliased using *Islandora Pathauto* to the following pattern:

- `[fedora:pid]/[fedora:label]`

Example:

- **Photograph:** New Woodbine : racehorses train for opening of season
- **Canonical URI:** `http://digital.library.yorku.ca/islandora/object/yul:88675`
- **Aliases URL:** `http://digital.library.yorku.ca/yul-88675/new-woodbine-racehorses-train-opening-season`

Tags:

- [Documentation](#)
- [Digital Preservation Policy](#)
- [Read more](#)

Environmental Monitoring of Preservation Formats

Submitted by nruest on Wed, 10/02/2013 - 11:34

https://github.com/yorkulibraries/preservation_documentation/

https://github.com/dmoses/preservation_documentation/

Islandora Preservation Interest Group

“The purpose of the [Islandora Preservation Interest Group](#) is to develop and communicate a common approach to address preservation within the Islandora framework.”

- [Repository](#) (Terms of Reference, Agendas, [Meeting minutes](#))
- [Members](#)

It is open and new members welcomed!

Islandora and preservation use cases

- Standalone preservation platform
- Content provider for Archivematica
- Other?