Preservation Policy for Humans
Where should I start?
What do you care about?
Identify it!

...and maybe prioritize it too!
Collection Policy

Principles

1. Collection criteria pertaining to quality and relevance should be paramount and applied consistently across all resources.

2. Principal considerations include:
   - establishing a coherent rationale for the addition of each resource into SP, thereby meeting faculty and student information needs;
   - providing orderly access and guidance to the digital resources, and integrating them into library service programs.

3. Striving for balance to be maintained among:
   - disciplines;
   - teaching and research tools;
   - diverse requirements of user groups (i.e. undergraduate, graduate, faculty, clinical faculty);
   - information formats (i.e. reference, abstracting/indexing, full-text, e-books, e-journals, data – both numeric and geospatial, etc.);
   - unique needs of each OCUL institution, while recognizing that local institutional collection development decision-making and practices must be respected.

4. Resources that offer economies of scale by benefiting the most students and faculty across OCUL will be taken into account.

5. Consideration will be given to loading digital resources which offer significant added value over print equivalents in such ways as:
   - more extensive content;
   - broader functionality, such as the ability to invoke linkages to local and/or related resources;
   - enhanced access due to the fact that there can be universal, rapid, and remote delivery of content;
   - improved resource sharing due to the ubiquity of digital resources;
   - ease of archiving, replacing, versioning, and preserving;
   - meeting accessibility requirements as described in the Accessibility for Ontarians with Disabilities Act, 2005.

6. Scholars Portal include content that supports undergraduate, graduate and faculty needs.

7. As permitted, collections will be added to SP more or less evenly among all disciplines so as to maintain a balance between broad subject categories while recognizing that some subject areas are more prolific in the production of digital content.
But how do we develop that?
Designated Community Definition

Submitted by nruest on Tue, 07/02/2013 - 15:51

The purpose of York University Libraries' digital preservation efforts is to ensure long-term access to a critical mass of materials of significance to our community. We will emphasize Canadian heritage and scholarship, knowledge produced by York researchers, and unique library and archival holdings from our collections. Our aim is to mobilize research and knowledge in an environment that allows for ease of searching, browsing, retrieval, and reuse. With this work, we intend to make a significant and ongoing contribution to the global digital library.

York University Libraries' primary user community consists of, York University:
- Faculty
- Staff
- Students

Secondary user communities include:
- Global community of researchers
- Wider community of scholarship
- Local community
- Elementary and secondary schools
- Journalist and data consumers
- General public
- Incidental users
We’ve identified some objects.

What next?
What can we preserve?

Immediate, low hanging fruit
What could we preserve?

Scope, rights
What can our infrastructure support?

Size, type
What could our infrastructure support?

Size, type
Preservation actions

What’s that?
Integrity
Authenticity
Usability

...anything we do to identify/maintain the
Image - Preservation Action Plan

Submitted by must on Wed, 10/02/2013 - 11:47

Introduction

This document describes the preservation plan for image content in the York University Digital Library. Most of the image content is from the Clara Thomas Archives and Special Collections. The preservation plan for image content follows policies and practices described in the Digital Preservation Strategic Plan and the Digital Preservation Implementation Plan. This document explains practical steps that York University Libraries take to preserve the Intellectual content of image in digital format. It outlines the basic tools, methods, and standards used for the long-term preservation of image content.

Content Formats

For the preservation of image content, York University Libraries require uncompressed TIF versions of the content, and descriptive metadata. During the ingest process, derivatives are created for display. York University Libraries continuously monitors developments in file formats to determine if and when formats require migration (see Environmental Monitoring of Preservation Formats).

SIP Format

Image SIPs (see Definition of SIP) generally consist of a TIF file, and an associated MODS descriptive metadata file.

Analysis on Ingest

Upon ingest, every file in the repository is subject to identification of its file format and validation using FITS. The output of the FITS identification and validation processes are recorded to a technical metadata datastore (TECHMD_FITS) that is associated with the object in the repository.

Content Excluded

York University Libraries do not ingest files that are not referenced (either as part of a representation or as associated datastreams) in the associated metadata. As the SIP is retained, those files can later be ingested if necessary.

Format Normalization

There is no format normalization if the submitted object is a TIF.

Metadata Normalization

When necessary, York University Libraries crosswalk descriptive metadata from MODS to Dublin Core. The repository creates preservation metadata for each file. The preservation level, explained in the Digital Preservation Implementation Plan, is applied to each file upon ingest and recorded in the preservation metadata for each file.

Acceptable Formats

For the Full Preservation level for image, currently the acceptable formats are TIF. Image submissions may be JPG or PNG format, however they will be preserved at the Bit-level Preservation level.

Tags:
Say what you do, do what you say!

Consistent, predictable… based on a plan.
Wait... how do you account for that?

Hint: It’s based on the plan part.
Planning!

In three simple steps...
1. What is our general approach?
2. What tools do we have available?
3. How do we apply said tools?

*cough*

Use cases!

*cough*
General Approach

Preservation Strategic Plan

Says things like e.g. “These are the important characteristics of the stuff we care about.”
Examples

Digital Preservation Strategic Plan

Submitted by user on Tue, 07/03/2013 - 15:43

YUL Digital Preservation: Strategic Plan

"Preservation is not a place into which content is put for safekeeping, but rather, it is a process in which content evolves progressively and receptively through the application of strategy-enabling services."

The purpose of the York University Library Digital Preservation Plan is to outline the digital preservation strategy used by York University Library to ensure continued access to its digital collections by the Designated Community.

Objectives:
The primary focus of this plan is to outline the digital preservation strategy used by York University Library to ensure continued access to its digital collections by the Designated Community.

The following are those which will be prioritized in all preservation activities:

- The intellectual content of the object in the repository. This will be defined on a collection-level, type-by-type basis and includes all supplemental materials and the relationship between those objects, as can be determined from metadata or other context at the time of ingest.
- Metadata included with the object at the time of ingest, especially that which relates it to other objects within the repository, or to the universe of its collection type overall.
- The intellectual rights to the object held by Scholars Portal and members of its Designated Community. While these properties are used to control access to the content and to determine its preservation level, they are also preserved themselves.

Secondary considerations in preservation include the following items. While not strictly a part of the intellectual content of the preservation object, these properties are necessary to ensure its preservation and as such must be tracked as well:

- The object's chain of custody, starting as early as possible but at the very least before the time it was entered into the repository. This is necessary in order to understand the history of the object, and to determine any metadata changes that have occurred to the content.
- Information on the object's representation. For every digital object, some level of interpretation is necessary in order to transform the object from binary data into a human interpretable item.
- Functional information. The repository will keep sufficient metadata on the object to ensure at any point in the future that the object remains in a complete and uncorrupted state.

Preservation of the above properties will be carried out using a transformative approach. That is, the formats both at the file level and the metadata level used in the repository will be constantly monitored (for the Environmental Monitoring of Preservation Formats policy) in order to ensure their suitability to long term preservation. In instances where a format is deemed to present an unacceptable level of risk to the long-term viability of the content, an appropriate successor format will be chosen, with input from the Designated Community, and all materials in the existing format will be migrated over.

Given Scholars Portal's mission of providing access to OCLR's licensed scholarly material, additional transformations may be made on the material in order to increase its findability. Such transformations will never be made in a way as to endanger the long-term preservation of the material, and in situations where this would occur, the material so transformed will not be considered as part of the preservation plan.

Scope:
Scholars Portal commits to preserving the materials for which it has accepted responsibility to the greatest degree possible. However, there are a number of criteria necessary to the repository's ability to carry out this mission. In order to provide some level of preservation on materials for which not every criteria is met, YUL has defined multiple preservation levels, which include a level of preservation behaviours that will be used to determine the preservation level. In all situations where this would occur, the material so transformed will not be considered as part of the preservation plan.

Criteria to be assessed when determining preservation level include:

- Rights: Scholars Portal should have appropriate rights to preserve the material in a material consistent with its Preservation Strategies. At a minimum, Scholars Portal should have the right to locally load the content for archival purposes. In most cases, this should also include the ability to transform the content into new formats in the event that an existing one should become obsolete.
- Appropriate Metadata: Content to be ingested into the repository should be accompanied by metadata sufficient to provide a meaningful context to the content, as understood by the Designated Community. This can include information situating the content within its universe (e.g., keywords, bibliographic metadata). In addition, metadata contributing to the object's usability (e.g., dataset codebooks). The criteria for acceptability under this measure will be defined on a Content Type basis.
- Validity: The content object must be a well-formed and valid instance of the type of object that it purports to be.
- Format Appropriateness: Scholars Portal will, for each Content Type, maintain a list of formats which will be deemed as acceptable for long-term preservation. This list will be based on the needs of the Designated Community, as well as the format's future prospects for migration.
Tools in the Toolbox

Given our overall goals, what tools do we have that can support it?
Example Tools

Archival Formats

Content Formats
For the preservation of audio content, York University Libraries require WAV or FLAC versions of the content, and descriptive metadata. During the ingest process, derivatives are created for streaming. York University Libraries continuously monitors developments in the formats to determine if and when formats require migration (see Environmental Monitoring of Preservation Formats).

Format normalization

There is no format normalization if the submitted object is a WAV or FLAC.

Integrity monitoring

Fixity procedures
Submitted by usuario on Thu, 06/27/2013 - 12:51
Policy Statement
York University Library are committed to maintaining the integrity of objects in its care. This includes creating checksums for all archival format objects—plus associated datasets—is ingested into the repository, and regular fixity checking of those objects.
Implementation
At the time of ingest an SHA1 checksum value is calculated for the archival format object, and is stored along the object in the repository.
Daily, a set of files in the repository will have their current checksum calculated (using a single checksum) and compared to this stored value, which is expected to match. In cases where the calculated and stored values do not match, this is reported to the repository manager.
Tags:
Documentation
Digital Preservation Policy

Format Normalization
Upon ingest, the publisher's XMS/OMX is converted to a Scholars Portal version of NLM XML. Where possible and when desirable, files that do not conform to Scholars Portal's preferred formats will be converted to preferred formats.
Other considerations

Are there different levels of preservation we can offer?

Acceptable Formats

For the Full Preservation level for audio, currently the acceptable formats are WAV and FLAC. Audio submissions may be MP3 format, however they will be preserved at the Bit-level Preservation level.
Preservation Implementation Plan

1. Preservation Activities

Scholars Portal's preservation strategies are based around the preservation of the intellectual content of the digital objects contained in Scholars Portal, through the transformation of these objects to delay or prevent file obsolescence. Initial preservation activities, prioritized to maintain the information contained in an individual object, as opposed to preserving its appearance or a specific presentation.

To this end, Scholars Portal utilizes the following approaches to preservation:

Archival File Formats: Scholars Portal is committed to the use of file formats that support long-term sustainability. In general, the considerations for selecting file formats include the "openness" of the file format, its level of support as a preservation format in the scholarly community, and its uptake among Scholars Portal's Designated Community, as well as its well-understood methods to delay file obsolescence.

Normalization: As mentioned above, Scholars Portal works to identify file formats well-suited to its approach to preservation and access. Upon ingest, materials not conforming to Scholars Portal's accepted standards will be converted to one of the previously identified formats. To the extent possible, SP will attempt to preserve the essential characteristics of the object. In cases requiring compromise, transformations that maintain the content of the object will be prioritized over those that preserve the presentation.

Format Migration: When Scholars Portal identifies a version of its content stored in a format that is at risk of obsolescence, a new version of this content will be created in a format more suited to long-term preservation and use. Format migration may consist of migration to a newer version of the content's existing format, or transformation to a different format altogether. In all cases, preservation of the object's intellectual content will be prioritized over the preservation or specific presentation style.

Bit Stream Copying: Scholars Portal maintains regularly scheduled backups of all information contained in Scholars Portal, for use in the event of data loss. In combination with regular integrity checks, which identify potentially damaged content, this process ensures the integrity of content in SP and provides a foundation for its disaster recovery plans.

Fixity Checking: All materials in the repository are subject to regular fixity checks – comparison of checksums calculated at a given point in time with those generated at the material's time of ingest. This activity, combined with the bit stream copying, mitigates the risk of objects becoming corrupt in the repository, as it enables the repository managers to identify damaged or corrupted content, and to revert to a valid version of the object from a previous point in time.

Documentation of File Formats: Upon ingest, every file in the repository is subject to identification of its file format. This process ensures that the format is known for the purposes of preservation and access. In combination with regular integrity checks, which identify potentially damaged content, this process ensures the integrity of content in SP's digital repositories, and provides a foundation for its disaster recovery plans.

2. Preservation Levels

These preservation activities are applied to materials in the repository according to the materials designated Preservation Level, as described in the Preservation Plan.

Bit Level Preservation: Preservation strategies are applied to the materials in the repository according to the materials designated Preservation Level, as described in the Preservation Plan.

Full Preservation: Preservation at this level will receive the benefit of all of the above-mentioned preservation activities, as appropriate. Upon ingest into the repository, the material will undergo format identification and transformation to archived file formats. As time goes on, these formats will be monitored by the Scholars Portal staff, and should the format become the subject of repair, the file will be migrated to a new format. Preservation activities associated with the "Bit Level Preservation" preservation level will be carried out.
Given a particular use case....

How (specifically!) do we use the tools in our toolbox to enact our general approach on this specific stuff?
Preservation Action Plan examples

Audio - Preservation Action Plan

Submitted by: user on Wed, 10/02/2013 - 11:39

Introduction
This document describes the preservation plan for audio content in the York University Digital Library, created from the Sound and Moving Image Library and the Clara Thomas Archives. A preservation plan for audio content follows from policies and practices described in the Digital Preservation Strategic Plan and the Digital Preservation Implementation Plan. This document explains practical steps that York University Libraries take to preserve the intellectual content of audio in digital format. It outlines the basic tools, methods, and standards used for the long-term preservation of audio content.

Content Formats
For the preservation of audio content, York University Libraries require WAV or FLAC versions of descriptive metadata. During the ingest process, derivatives are created for streaming. York University Libraries continuously monitors developments in file formats to determine if and when formats require migration (see Monitoring of Preservation Formats).

SIPs
Audio SIPs (see Definition of SIP) generally consist of a WAV or FLAC file, and an associated file.

Analysis on Ingest
Upon ingest, every file in the repository is subject to identification of its file format and validation using the FITS identification and validation processes are recorded to a technical metadata dataset associated with the object in the repository.

Content Excluded
York University Libraries do not ingest files that are not referenced (either as part of a representation datastream) in the associated metadata. As the SIP is retained, these files can later be ingested.

Format Normalization
There is no formal normalization if the submitted object is a WAV or FLAC.

Metadata Normalization
When necessary, York University Libraries crosswalk descriptive metadata from MODS to Dublin Core to create preservation metadata for each file. The preservation level, explained in the Digital Preservation Strategic Plan, is applied to each file upon ingest and recorded in the preservation metadata for each file.

Acceptable Formats
For the Full Preservation level for audio, currently the acceptable formats are WAV and FLAC.

Tags:
- Documentation
- Preservation Action Plan

Web Archives - Preservation Action Plan

Submitted by: user on Tue, 10/01/2013 - 15:07

Introduction
This document describes the preservation plan for web archives content in the York University Digital Library, created from the Sound and Moving Image Library and the Clara Thomas Archives. A preservation plan for web archives content follows from policies and practices described in the Digital Preservation Strategic Plan and the Digital Preservation Implementation Plan. This document explains practical steps that York University Libraries take to preserve the intellectual content of web archives in digital format. It outlines the basic tools, methods, and standards used for the long-term preservation of web archives content.

Content Formats
For the preservation of web archive content, York University Libraries require WARC versions of the metadata, and if possible, screen captures of the archived site. During the ingest process, derivatives are created for streaming. York University Libraries continuously monitors developments in file formats to determine if and when formats require migration (see Monitoring of Preservation Formats).

SIP Format
York University Libraries create their own web archive SIPs (see Definition of SIP) using their YUCL Web Archive.

Analysis on Ingest
Upon ingest, every file in the repository is subject to identification of its file format and validation using the FITS identification and validation processes are recorded to a technical metadata dataset (TEG) associated with the object in the repository.

Content Excluded
York University Libraries do not ingest files that are not referenced (either as part of a representation datastream) in the associated metadata. As the SIP is retained, these files can later be ingested.

Format Normalization
There is no formal normalization if the submitted object is a WARC.

Metadata Normalization
When necessary, York University Libraries crosswalk descriptive metadata from MODS to Dublin Core to create preservation metadata for each file. The preservation level, explained in the Digital Preservation Strategic Plan, is applied to each file upon ingest and recorded in the preservation metadata for each file.

Acceptable Formats
For the Full Preservation level for web archives, currently the only acceptable format is WARC.

Tags:
- Documentation
- Preservation Action Plan

Image - Preservation Action Plan

Submitted by: user on Wed, 10/02/2013 - 11:47

Introduction
This document describes the preservation plan for image content in the York University Digital Library. Most of the image content is from the Clara Thomas Archives and Special Collections. The preservation plan for image content follows from policies and practices described in the Digital Preservation Strategic Plan and the Digital Preservation Implementation Plan. This document explains practical steps that York University Libraries take to preserve the intellectual content of image in digital format. It outlines the basic tools, methods, and standards used for the long-term preservation of image content.

Content Formats
For the preservation of image content, York University Libraries require uncompressed TIFF versions of the content, and descriptive metadata. During the ingest process, derivatives are created for display. York University Libraries continuously monitors developments in file formats to determine if and when formats require migration (see Monitoring of Preservation Formats).

SIP Format
Image SIPs (see Definition of SIP) generally consist of a TIFF file, and an associated MODS descriptive metadata file.

Analysis on Ingest
Upon ingest, every file in the repository is subject to identification of its file format and validation using FITS. The output of the FITS identification and validation processes are recorded to a technical metadata dataset (TEG) that is associated with the object in the repository.

Content Excluded
York University Libraries do not ingest files that are not referenced (either as part of a representation or associated datastreams) in the associated metadata. As the SIP is retained, these files can later be ingested if necessary.

Format Normalization
There is no formal normalization if the submitted object is a TIFF.

Metadata Normalization
When necessary, York University Libraries crosswalk descriptive metadata from MODS to Dublin Core. The repository creates preservation metadata for each file. The preservation level, explained in the Digital Preservation Strategic Plan, is applied to each file upon ingest and recorded in the preservation metadata for each file.

Acceptable Formats
For the Full Preservation level for image, currently the acceptable formats are TIFF. Image submissions may be JPEG or PNG format, however they will be preserved at the BI-level Preservation level.

Tags:
- Documentation
- Preservation Action Plan
Parting thoughts...

RELEASE EARLY
RELEASE OFTEN
THERE IS NO SINGLE RIGHT SOLUTION
Preservation Documentation, York University Libraries

Description

This repository represents the version controlled draft versions of York University Libraries’ digital preservation policy and documentation. The public and canonical version of the documents live at YUDL in the ‘Documentation’ dropdown menu.

Thanks

Much of this documentation was inspired and derived from the Trusted Digital Repository documentation that Scholars Portal created during their ISO 16363 Audit.

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Discussion, Questions?

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