Towards Interoperable Preservation Repositories

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Redundancy

Migration

Succession planning
Transferring bitstreams is easy.

Transferring an object's history and relationships is not.
Transfer between repositories, regardless of architecture, without significant loss.
Towards Interoperable Preservation Repositories
RXP

Repository Exchange Package
Taming Metadata Standards
METS

structural relationships
PREMIS

history:

events and agents
<mets>
  mets header – ID, owner
  administrative metadata -> provenance
  file metadata – ID, other IDs, location
  structure map – object structure
</mets>

<premis>
  object – type, characteristics, format, etc.
  event – type, outcome, etc.
  agent – organizations, people, software
</premis>
The bigger picture

Organizational ownership

Repository rights
Ownership:

identifiers
change
Ownership:

Who did what?
Rights
sometimes gracefully

TIPR meets Duraspace

sometimes gracefully

sometimes laboriously
TIPR -> DSpace -> TIPR

a straight transformation path
TIPR -> Fedora -> TIPR

flexible data model =

many decisions
One digitalObj per file

many relationships
One digitalObj per object

many relationships
Content Models

TIPR does not describe object semantics
Fedora’s Audit datastream
Fedora’s Audit
datastream

RXP events
Fedora’s Audit

datastream

renaming objects in RXP
Fedora’s Audit datastream

RXP agents
The big picture again

The Service Level Agreement
Summary

- We want transfer without significant loss.
- The RXP is designed to carry significant preservation metadata along with the object.
- DSpace works well with the RXP process.
- Fedora’s flexibility presents creative challenges.
A Fedora Content Model with RXP transformation behavior

Is it possible?

Would it be useful?
Resources

• TIPR –
  http://wiki.fcla.edu:8000/TIPR
• RXP -
  http://wiki.fcla.edu:8000/TIPR/21
• METS –
  http://www.loc.gov/standards/METS
• PREMIS –
  http://www.loc.gov/standards/PREMIS