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.
TIPR
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
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 Inter-Repository 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