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

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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