July 2010 Partners Meeting Breakout Session

Modeling Interactions Between Repositories for the NDSA: Towards a Distributed and Collaborative Framework for Preservation, Breakout Session #8
NDIIPP Annual Meeting
Wednesday, July 21, 2010
4:15pm – 5:30pm

Presenters: Martin Halbert, University of North Texas
David Minor, UCSD, San Diego Supercomputer Center
Tyler Walters, Georgia Institute of Technology

Attendees: 13

MetaArchive & Chronopolis
- MetaArchive: fostering more knowledge and understanding of digital preservation
- Chronopolis: philosophically share purpose with MetaArchive, but operationally achieve them very differently
- we are tool-agnostic: we go for what’s best, not only what’s available to us now [currently use BagIT format]

Lessons learned from MetaArchive
- Cultural memory organizations must continue to evolve to maintain their historical role as cultural stewards
  ▪ preservation of digital assets as corollary to preserving physical ones
  ▪ importance of building in house expertise and knowledge
  ▪ value contributed by curators, librarians, and archivists to the digital preservation field
- Importance of catalyzing and capitalizing on cultural memory organizations’ proven preservation methodologies
  ▪ replication of content
  ▪ distribution of content
  ▪ partnering to keep costing affordable

Strengths of Distributed Digital Preservation
- Replicated copies stored in geographically diverse locations have a better chance of survival
- Can embed preservation infrastructure and knowledge in cultural memory organizations
- Can enable multiple instances to be monitored separately (lessens human error and malicious behavior possibilities)
- Emphasizes collaboration and trust

Many descriptive/proscriptive charts/representations offered [*see slides]

Important questions for DDP initiatives [like NDSA] to face
- With whom are agreements made?
- What happens if a replication site drops out?
- Tracking who has curatorial responsibility (is it transferred? To the network or to individual repositories)?
What data management is handled by the Producer and what is handled by the Repository?

When needed, which copy becomes the most appropriate Dissemination Information Package (DIP)?

Gap analysis of what the DDP field is lacking now

- analysis / abstracted model for distributed digital preservation:
  - Peer-to-peer roles
  - Hub-and-spoke styled preservation relationships
  - Centrally orchestrated
  - ingestion pathways
  - contingent elements

**DISCUSSION PERIOD**

- the more we analyze case studies, the more informed we are as we move into the NDSA
- leveraging expertise across geography and across industries: numerous partners, distributed geographically, collaborating toward common goals, having that collaboration happen over phone, webexes, conference calls, bringing together institutional goals to work together toward a larger effort

**Action Items.**

- develop and agree on definitions
- define and abide by different custodial types, in different situations and with different content
- examine different infrastructures across bodies involved in NDSA, as they vary greatly
- looking for an OAIS2 that will be relevant to NDSA, that would more fulsomely elaborate the problems and challenges we face in digital preservation [this would benefit the whole DP community, and those interested in joining it in the future]

What needs to be done in/with DDP initiatives

- We need models that build on the OAIS, but focus on inter-organizational Distributed Digital Preservation alliances, systems, and strategies
- Such models should abstract the functions and logical potential relationships between entities seeking to work together to further digital preservation aims
- These models should inform collaborative efforts between different groups seeking to preserve digital information
- They should also provide a common vocabulary for interoperable systems development

**Upcoming DDP Use Cases and Planning Meeting [undetermined date]**

- a cluster of DDP organizations including MetaArchive, Chronopolis, and others are considering a collaborative project to develop OAIS-based DDP models and use cases
- are in conversations with LC and other agencies about hosting an initial planning meeting to study this issue
- if you are interested, please contact us:
  - Martin Halbert  martin.halbert@unt.edu
  - Katherine Skinner  katherine.skinner@metaarchive.org
  - David Minor  minor@sdsc.edu