DPN EXANODE

DPN is pleased to announce the addition of a new node in partnership with the University of Southern California Libraries and their Digital Repository (USCDR) – the DPN Exanode. The DPN Exanode at USCDR was created to provide DPN members with a scalable preservation solution capable of storing petabytes of digital content at a reasonable cost.

This new node will implement the LibSafe Asset Management System from Libnova to ingest, catalog, and manage all content deposited into the node. Content and associated metadata is being registered and preserved in an open non-proprietary manner. Libnova was also contracted to create an ingest portal for digital content. There are multiple avenues for depositing content, including one option for a large, durable, portable drive that can be loaded and shipped for ingestion at USC. The various methods of deposit ensure that DPN members can deposit large amounts of data using an efficient process that works for them and eliminates bottlenecks.

Solving the issues of scale and cost

The DPN Exanode was created to answer the needs that were expressed by the community. Regarding huge collections of data (audio, moving image, and large research datasets), community members expressed concerns that it was not financially feasible to have three copies replicated around the country (the DPN Endowed model). While the DPN Endowed Preservation System is the "gold standard" for the most valuable content held by academic and cultural heritage institutions, at scale, it is to costly for extensive audio and moving image collections.

Use Case #1 - audio and moving image collections

Audio and Moving Image (AMI) content collections are some of the most difficult types of collections to preserve. Among the many hurdles are the extremely large files created during the digitization process, the lack of deep descriptive metadata, and curation questions related to which files to preserve and what derivatives to maintain.

As the nation's leading university repository for AMI content, USCDR has extensive experience in digitization, preservation, ingest and dissemination of AMI content for their partners around the world; including the Academy of Motion Picture Arts and Sciences and the Shoah Foundation's 30,000 hours of Holocaust survivor interviews.

Use Case #2 – one copy of content placed with a trusted third party

In the period since DPN was envisioned and since the Endowed Preservation system was designed and implemented, the infrastructure on many campuses has improved. Many central IT organizations have grown local infrastructure and are making assurances to libraries, researchers, etc. that they have robust backup systems that will assure the persistence of digital content. While there are better redundant systems in place, it is often the case that there are no off-site copies or that IT organizations are using cloud providers without assurances of persistence and data integrity. DPN Exanode provides an off-site, registered copy that is checked for integrity and supported by a deposit agreement to protect against institutional failure. It also allows for space to be freed up in the campus data center and provides more assurances than commercial providers.

Cost

This service is available to DPN members for a one-time fee of $1,000 per TB for 20 years of preservation. Additionally, DPN members have a choice to deposit content into DPN Exanode for a six-year period of preservation. The six-year term is available for a one-time fee of $600 per TB.

Additional services for DPN members

Through the new relationship with USCDR, DPN members will also gain access to other services (for additional fees) offered by USCDR. These services include media digitization, restoration of video content, development and use of an asset management system, cataloging and indexing of video content (segmenting), and web access for distribution of video content. As an example, through this arrangement, DPN members can ship a box of videotapes to USCDR for digitization, cataloging, segmenting, distribution via the web, with the content then being deposited into DPN for preservation.

Interested? What is the next step?

If you are interested in taking advantage of preservation through the DPN Exanode or want to discuss the possible benefits that the additional services may afford your institution, the DPN staff would be pleased to speak with you. Contact information is available at www.dpn.org.