What is DPN?

A federated preservation network *owned by and for the academy*, that ensures the objects and metadata of research and scholarship are replicated and preserved across diverse:

- software architectures
- organizations
- geographic regions
- political environments (after first launching within U.S.)
The Internet2 Approach

• Thesis: *The preservation world looks very much like the networking world:*
  • Many layers to the problem.
  • Huge cost advantages accrue to scaled solutions.
  • While we can buy commercial services, it's not clear what we are getting (preservation means different things to different people) and we risk recreating with data the lock in problem that we have seen around books and journals now.

• Waiting makes the problem harder and more expensive to solve

• We will either solve this problem institution by institution at great expense and with little chance of solutions that last, or we will solve it together at scale, just like we did for high performance networks.
Initial DPN Nodes

- Stanford Digital Repository
- HathiTrust
- Chronopolis
- University of Texas Research Data Repository
- Academic Preservation Trust

Representatives from these organizations make up the technical committee
Technical Committee

• Adam Soroka and Tim Sigmon (AP Trust)
• David Minor* and Mike Smorul* (Chronopolis)
• Cory Snavely and Sebastien Korner* (HathiTrust)
• Tom Cramer and James Simon* (SDR)
• Ladd Hanson* and Chris Jordan (UTRDR)
• Andrew Woods* (DuraSpace)

• Steve Morales*  DPN Program Director

*Attending today
Current tasks

- Define requirements
  - E.g. succession, brightening, metadata, packaging, auditing, transfer

- Design initial system
  - Prototype this Winter

- Begin testing
  - Spring 2013
Early design deliberations

- Registry: for tracking DPN items and status
  - fields, updates, uses

- Work queue
  - derived from the registry or from inter-node communication

- Inter-node communication
  - messaging, REST-based services
more...

• Content transfer
  • security, performance, non-POSIX file system compatibility

• Packaging: lightweight content wrapper
  • BagIt
Difficult questions

• Brightening data after succession

• Version retention policy

• Reconciling differing costs incurred when applying common requirements across heterogeneous replicating nodes
Current DPN Members

Arizona State University
Brown University
California Digital Library
California Institute of Technology
Columbia University Library
Cornell University
Dartmouth College
Duke University
Emory University
Harvard University
Indiana University Bloomington
Iowa State University
John D. Evans Foundation
Johns Hopkins University Libraries
Kansas State University
MIT
Michigan State University
New York University
North Carolina State University
Northwestern University
Ohio State University
Pennsylvania State University
Purdue University
Stanford University
Syracuse University
Texas Digital Library
Texas Tech University
Tufts University
Tulane University
University of Alabama
University of Arizona
University of California, San Diego
University of Chicago
University of Florida
University of Illinois at Chicago
University of Illinois Urbana-Champaign
University of Iowa
University of Kansas
University of Kentucky
University of Maryland
University of Miami
University of Michigan
University of Minnesota
University of Nebraska-Lincoln
University of North Carolina
University of North Texas
University of Notre Dame
University of Tennessee
University of Texas
University of Virginia
University of Washington
University of Wisconsin
Vanderbilt University
Virginia Tech
Yale University
Talk to us

Technical committee members present

Steven Morales, DPN Program Director
Steven.Morales@d-p-n.org
434-286-3436

HAPPY HOUR today immediately following the sessions