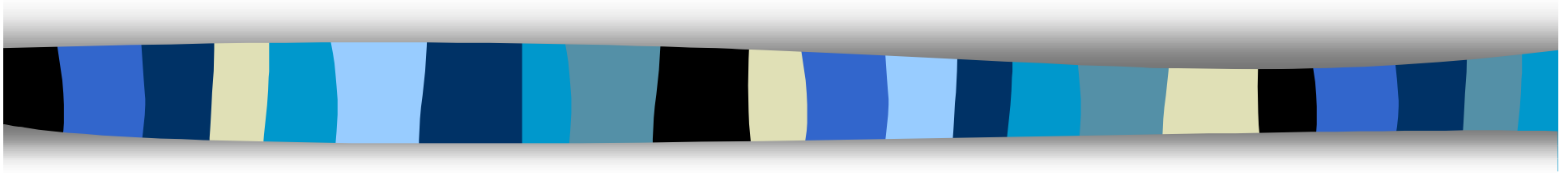


Open Archives Initiative

www.openarchives.org



Gail McMillan

Digital Library and Archives, Virginia Tech

Society for Scholarly Publishing: June 1, 2000



Open Archives initiative (OAi)

Forum to discuss and to solve interoperability concerns among electronic preprint (eprint) systems AND to promote global acceptance of the concept of open archives

Oct. 22, 1999

Santa Fe, New Mexico





Sponsors and Participants in OAi



- American Physical Society
- Assoc. of Research Libraries
- Cal Tech
- Coalition for Networked Information
- Council on Library and Information Resources
- Cornell
- Digital Library Federation
- Harvard
- HighWire Press
- Library of Congress
- Los Alamos National Laboratory Research Library
- Mellon Foundation
- MIT
- NASA Langley
- Old Dominion University
- Scholarly Publishing and Academic Resources Coalition
- Stanford Linear Accelerator Center
- University of California
- University of Ghent
- University of Southampton
- University of Surrey
- Vanderbilt University
- Virginia Tech
- Washington University



OAI introductory concepts

- Crucial components of eprint archive
 - Submission mechanism
 - Author self-archiving
 - Long term storage system
 - Preservation and retention of records
 - Open
 - 3rd parties allowed to collect data to create end-user services that support discovery, presentation, analysis of archive's contents





Guiding Principles for OAi

- Simplicity of standards
- Layered approach to interoperability
- Reuse of proven technology
- Harvesting approach instead of federated searching to minimize complexity of interoperability





Some E-print Initiatives

- Psychology, linguistics, and neuroscience
 - CogPrints
- Medicine
 - E-biomed
 - PubMed Central
 - clinmed
 - Netprints
- Computer Science
 - CSTC
 - NCSTRL
- Electronic Theses and Dissertations: NDLTD
 - VTETD
 - ADT
 - DissOnline
- Econometrics
 - RePEc
 - EconWPA
- Los Alamos National Laboratory's Physics Archive





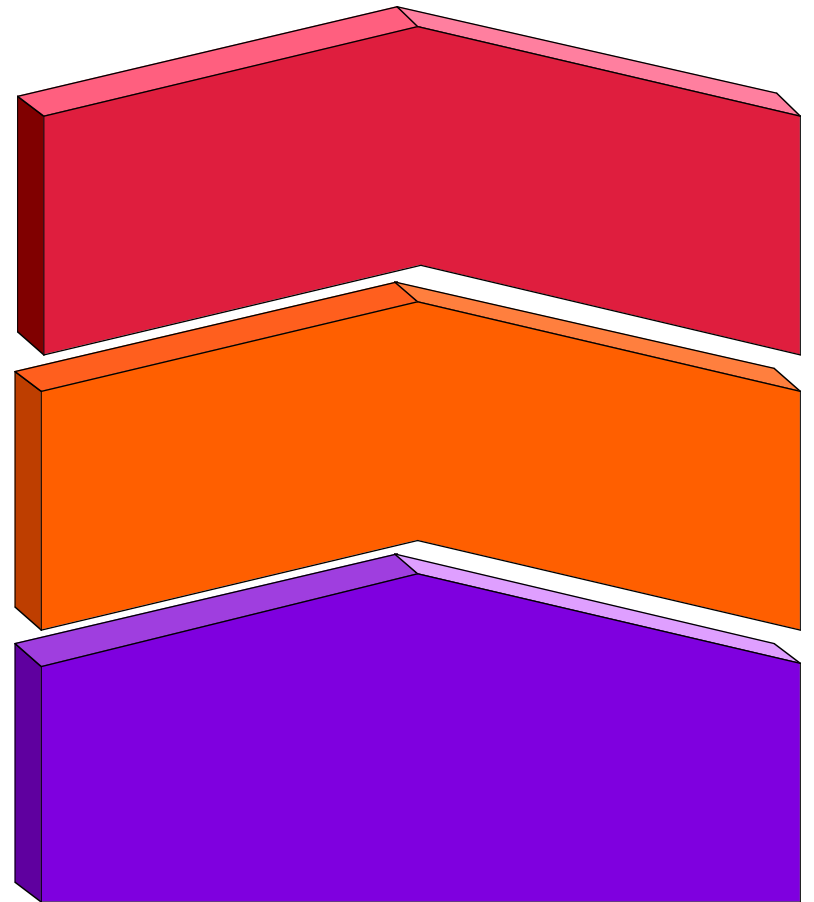
INTEROPERABILITY

- Of metadata formats
- Of underlying architecture
- To create 3rd party services
- To integrate with *established* scholarly communications
- To use in cross-disciplinary context
- To contribute to citation systems



Layered Interoperability Standards: Santa Fe Conventions

3. MEDIATOR SERVICES
2. METADATA HARVESTING
1. DOCUMENT MODELS





OAI: Santa Fe Conventions

- Discover content in distributed e-print archives through
 - Technical framework
 - Organizational framework
 - Data providers
 - Manager of eprint archive
 - Acts on behalf of authors
 - Service providers
 - 3rd party creating end-user services





For eprint archives to become part of OAI

■ Data Providers

1. Choose a unique ID for eprint archive
2. Use unique persistent ID for each record
3. Implement OA metadata set
4. Implement and document other metadata formats supported by your eprint archive
5. Implement Dienst harvesting interface
6. Let OAI know your eprint archive is open

■ Service Providers

1. Retain original identifiers in your service
2. Comply with usage restrictions specified by the data provider
3. Let OAI know you've developed a service based on OA data





Modest Results

- Agreement among diverse parties
- Organizational framework
 - Agreement encourages evolution of broad eprint community
 - Lowers entry cost (effort) for new participants
- Momentum for future agreements
- Evidence of success/momentum
 - Early adopters
 - International interest
 - Mediator services interested





Next steps

- More adopters at scholarly eprint archives
- Dissemination and implementation
 - Proof of concept: Determine if sufficient and practical at current level of interoperability standards
- June meeting: San Antonio, Texas
- September meeting: Lisbon, Portugal

