Service Layers

Access layer
- www.tdl.org, Google, etc...

Service layer
- Institutional Repositories
- Scholarly Publishing
- Learning Object Repositories

Systems layer
- Storage & Preservation Network
Architecture Layers

Services
Institutional Repositories
Learning Object Repositories
Scholarly publishing
Collection management
Preservation

Enablers
DSpace
Fedora
ADORE
SAKAI
Open Journal System
Eprints
Dpubs

Middleware
Shibboleth
OAI-PMH
Storage Resource Broker (SRB)
Preservation Software
Workflow
Directory Services

Network & Computing
Internet / Internet 2
Tigre / Learn
Storage / Server Systems
Preservation need

- TDL involves ingestion, storage and access to digital materials
- Preservation of those materials needs to be ensured
The TDL preservation network

The solution is to create a state-wide preservation system
Requirements

- Integration
- Selection model
- Resilience
- Flexibility
Integration

- Existing services
- Established user base
Selection model

- Varied content
- Selection criteria
- Preservation levels
Resilience

- Multiple copies
- Geographic distribution
- Organizational changes
Flexibility

- Structural
- Contribution
- Allocation
The Architecture
Preservation Stack

- User layer
- Service layer
- Preservation layer
- Storage layer

Producers and Consumers

Services offered by TDL: Repository, Journals, Faculty Archives, etc.

Management of preserved storage, handling of containers and policies

Federated storage nodes, geographical replication of data
User Layer

- Consumers and Producers
  - Researchers
  - Faculty and staff
  - Students and visitors
- Shibboleth authenticated or anonymous access
Service Layer

- Users select collections
- Add SIP-level descriptive metadata
- Generate the SIP
- SIP is preserved
Preservation Layer

- The user’s container is accessed
- AIP created
  - Preservation metadata
  - Access control
- Registry updated
- Container is distributed
Storage Layer

- Interface:
  - accepts container
  - adapts to the implementation

- Implementation:
  - physical media
Questions?