

# C-12: Partnership for Preserving the Records of the eLegislature

NAGARA 2007 Annual Meeting

Kansas City, Missouri

July 20, 2007



**SDSC**  
SAN DIEGO SUPERCOMPUTER CENTER

# Today

- Project Overview
  - Elizabeth Lighthipe, Minnesota Historical Society
- Testing Preservation Options
  - Shawn Rounds, Minnesota Historical Society
- Grid Technology
  - Reagan Moore, San Diego Supercomputer Center (SDSC)

# Purpose and Goals

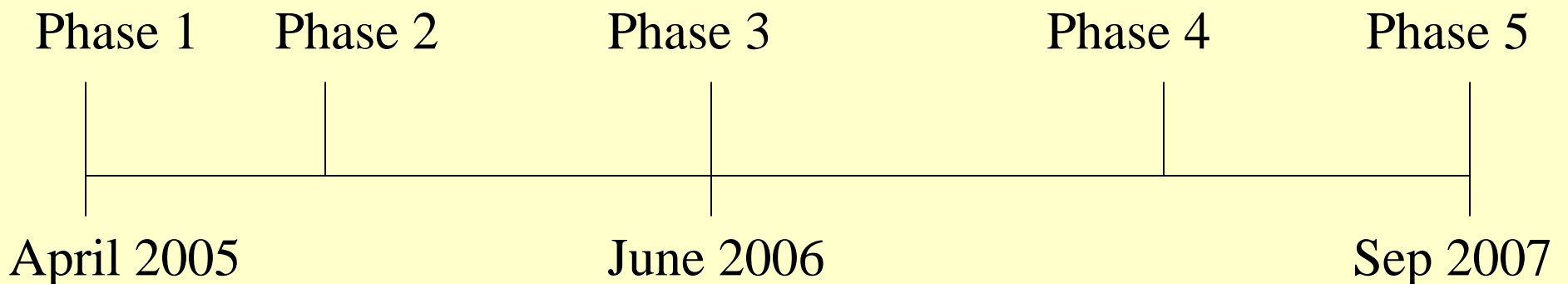
- Test use of grid technology and the SRB to preserve electronic records of the Minnesota Legislature in XML format
- Analyze and appraise legislative systems and records
- Create shared collection across distributed network (between SDSC, RO, MHS) for archival and disaster recovery purposes

# Project Partners

- NHPRC
- Minnesota Historical Society (MHS)
- San Diego Supercomputer Center (SDSC)
- Minnesota
  - Office of the Revisor of Statutes (Revisor's Office or RO)
  - Legislative Reference Library (LRL)
- Advisory Board
  - California Legislative Counsel
  - California State Library
  - California State Archives

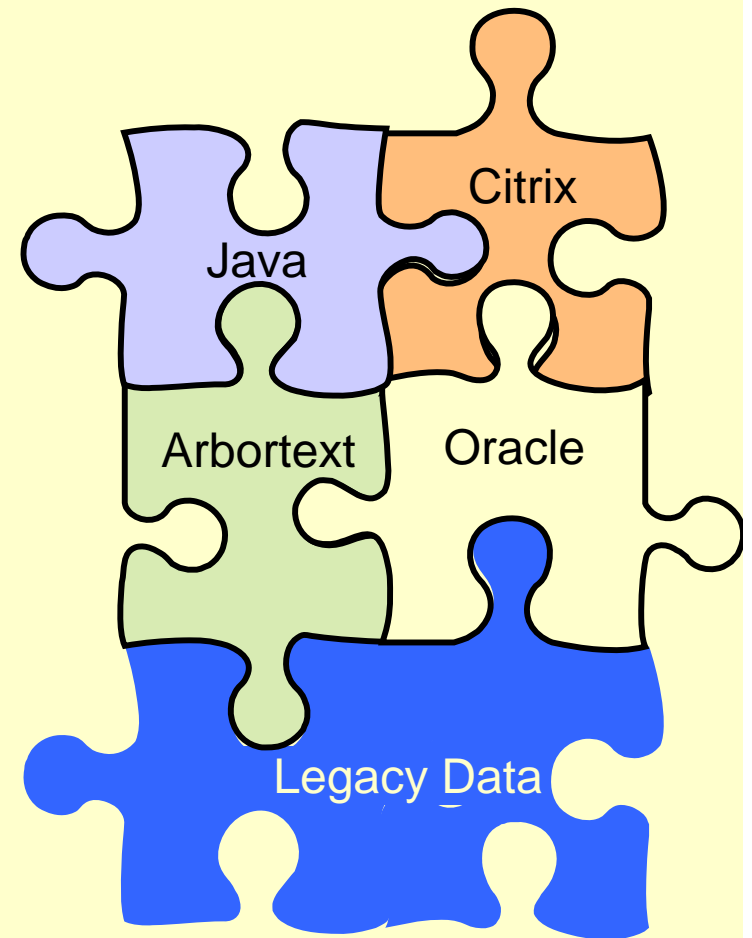
# Timeline

- Phase 1: Preparation (April – June 2005)
- Phase 2: Research and analysis (July 05 – June 2006)
- Phase 3: Testing and implementation (June 06 – June 2007)
- Phase 4: Evaluation and advocacy (Jan 07 – June 2007)
- Phase 5: Completion (June – September 2007)



# XTEND Bill Drafting System

- RO began using in Sept 2005
- XML based text editor
- Build upon Abortext and Oracle products
- Tailored for the MN Legislature



# Appraisal and Selection Process

- MHS and RO analyzed RO workflow with respect to XTEND bill drafting system
- Identified all records created and managed within system, including confidential and public records
- Worked with RO to determine disaster recovery needs, as well as archival records
- For purposes of testing the technology, RO only felt comfortable using with public records

# Selected Documents



1. Final, edited session laws
2. Final, edited statutes
3. Administrative Rules
4. Associated tables and indices (all of the above)



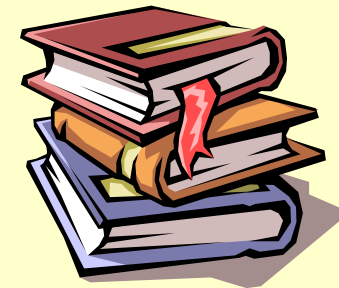
# Surveying Legislative Documents

- Extend project to larger world of legislative records
- Legislative Reference Library: Led series of meetings with legislative offices to learn about legislative records
- House and Senate IT, Joint Departments
- Summaries: Lists electronic records created by these offices (different formats and types)
- Interest in technology for disaster recovery and distributed access/sharing

# Work Products

Will include:

- Recommendations and best practices for other states looking at similar technologies and partnerships
- Analysis of archival and disaster recovery storage/preservation options, costs
- Project web site
  - [www.mnhs.org/elegislature](http://www.mnhs.org/elegislature)



# Preservation Technology Testing

- Distributed systems for dual purposes of disaster recovery and archival storage
- Using SDSC's Storage Resource Broker (SRB) software and data grid technology
- [www.sdsc.edu/srb/index.php](http://www.sdsc.edu/srb/index.php)

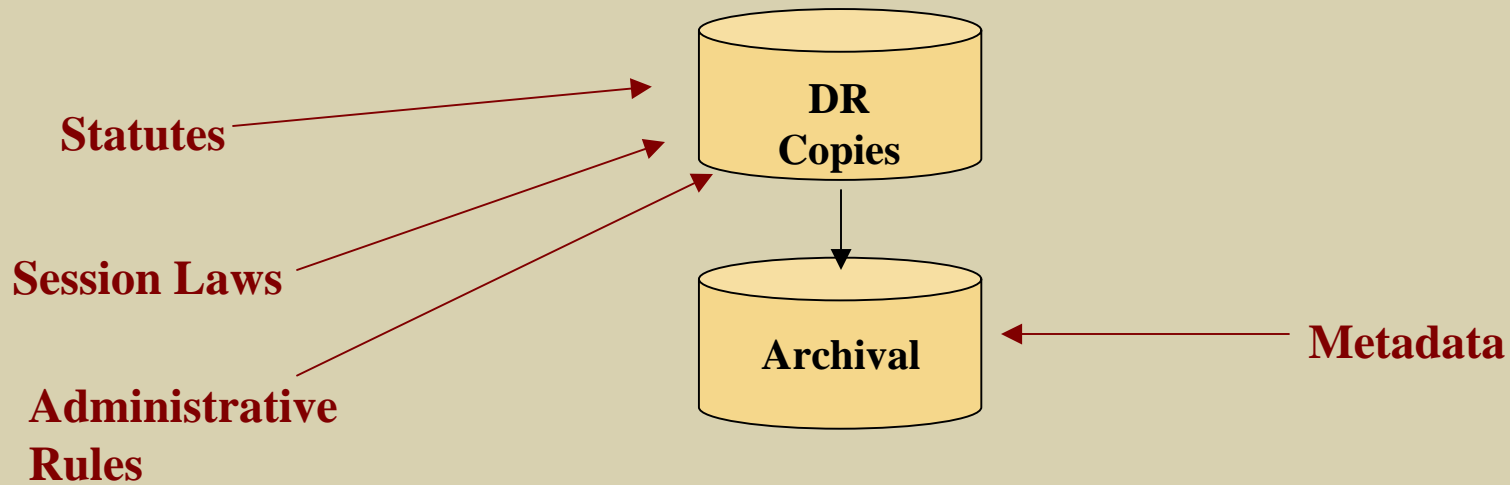


# Preservation Workflow

1. Revisor's Office

2. SDSC

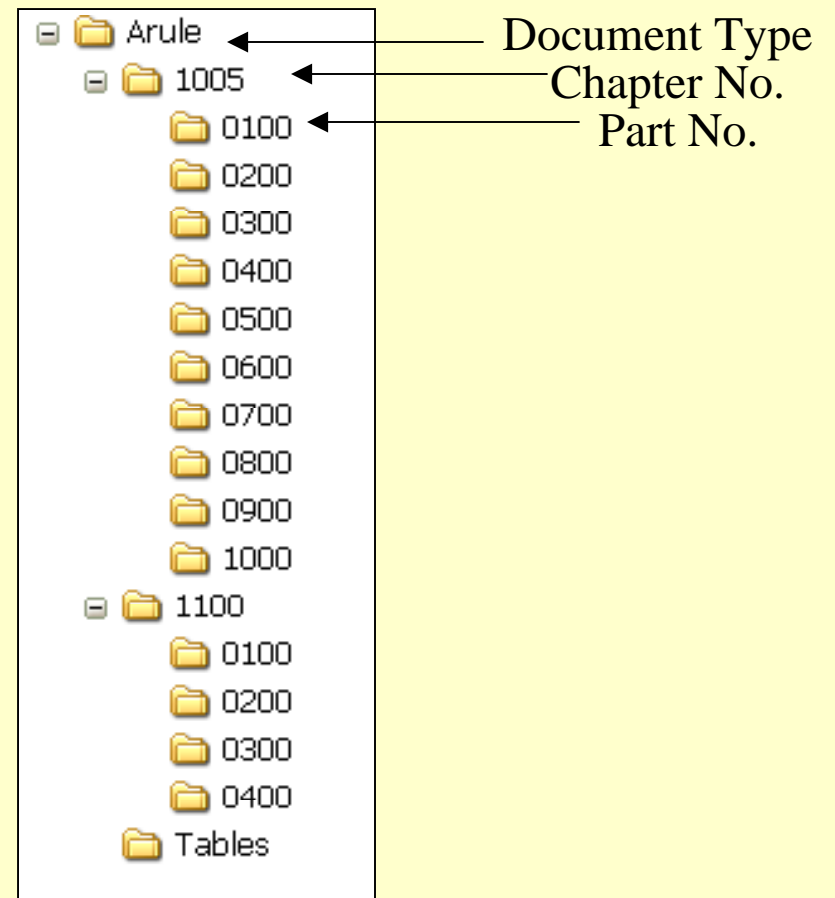
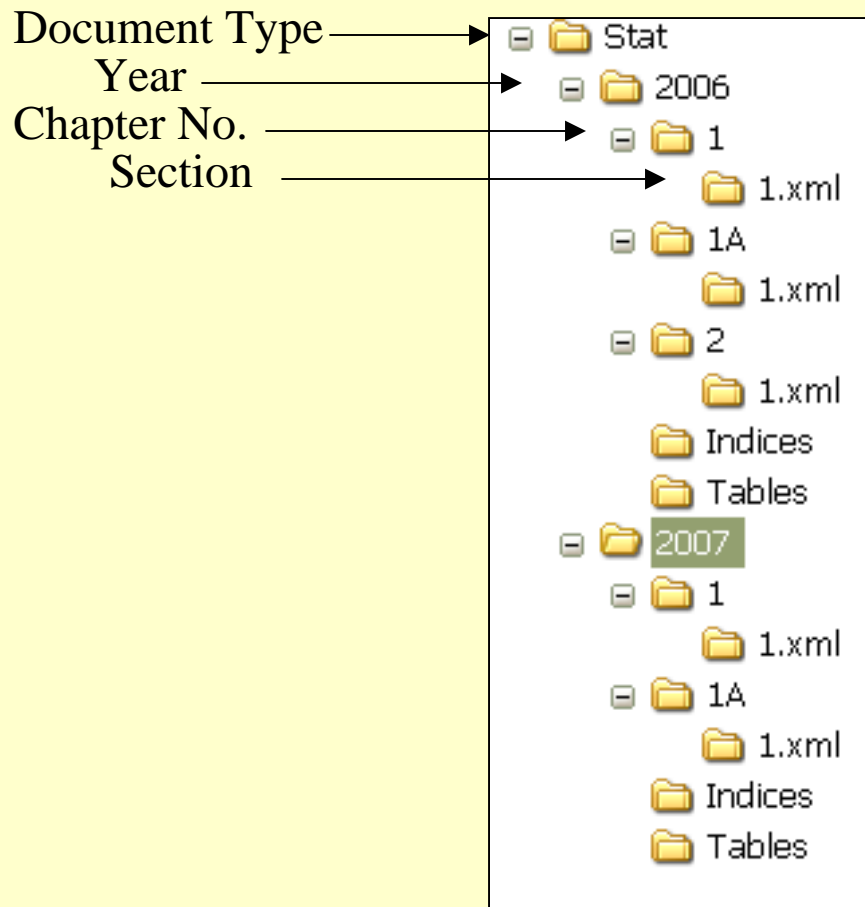
3. MHS



# Directory Structure and Naming Conventions

## Statutes/Session Laws

## Administrative Rules



# Metadata Standards

- Minnesota Recordkeeping Metadata Standard
- Based on National Archives of Australia Standard
- Crosswalks to Dublin Core, GIS
- Addresses access/use, preservation, and disposition

# Minnesota RKMS Elements

1. AGENT (\*\*Mandatory)
2. RIGHTS MANAGEMENT (\*\*Mandatory)
3. TITLE (\*\*Mandatory)
4. SUBJECT (\*\*Mandatory)
5. DESCRIPTION (Optional)
6. LANGUAGE (Optional)
7. RELATION (Optional)
8. COVERAGE (Optional)
9. FUNCTION (Optional)
10. DATE (\*\*Mandatory)

# Minnesota RKMS Elements

11. TYPE (Optional)
12. AGGREGATION LEVEL (\*\*Mandatory)
13. FORMAT (Optional)
14. RECORD IDENTIFIER (\*\*Mandatory)
15. MANAGEMENT HISTORY (\*\*Mandatory)
16. USE HISTORY (Optional)
17. PRESERVATION HISTORY (Optional)
18. LOCATION (\*\*Mandatory)
19. DISPOSAL (\*\*Mandatory)
20. MANDATE (Optional)



# Automated Processes and Specialized Tools

- SDSC expertise for such activities as:
  - Upload / download
  - Replication
  - Integrity checks
  - Metadata application

# Disaster Recovery vs. Archives

## Disaster Recovery

- Non-selective, everything saved, content changes over time
- Minimal metadata, often system-generated
- In-house file names
- High security, limited access
- Need for integrity checks
- Need for fast retrieval

## Archives

- Permanent, final records determined through appraisal, formal deaccession process
- Metadata applied by archivist
- Descriptive naming
- High security, limited access
- Need for authenticity, reliability
- Retrieval speed not critical

# MHS Technology Issues

- Issues with:
  - Firewall settings/access
  - Bugs in Scommands, initial lack of documentation and examples
  - Version changes
  - Bandwidth for file transfers
  - Extensive help needed from SDSC by e-mail, phone, remote log-in (very useful but labor-intensive and not fast)

**BUT....**

# Technology Opportunities

- Grid technology good for some environments and applications, those with required technical skill level, infrastructure, and records/content of high enough value to warrant expenditure
- Distributed storage for disaster recovery and distributed access/sharing can be persuasive argument for agency partnerships.
- Updates and new developments always underway at SDSC, commitment to making the technology work.

# For More Information

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