

# KEEP

## A Brief History, 1996-2011

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NDIIPP Meeting - December 6, 2011



# Overview

- Records management in Kansas
- Before KEEP
- KEEP
- Lessons Learned



# Records Management in Kansas Government



# Kansas Records Laws

- Government Records Preservation Act (K.S.A. 45-401 through 45-413)
- Public Records Act (K.S.A. 75-3501 through K.S.A. 75-3520)
- Open Records Act (K.S.A. 45-215 through K.S.A. 45-240)

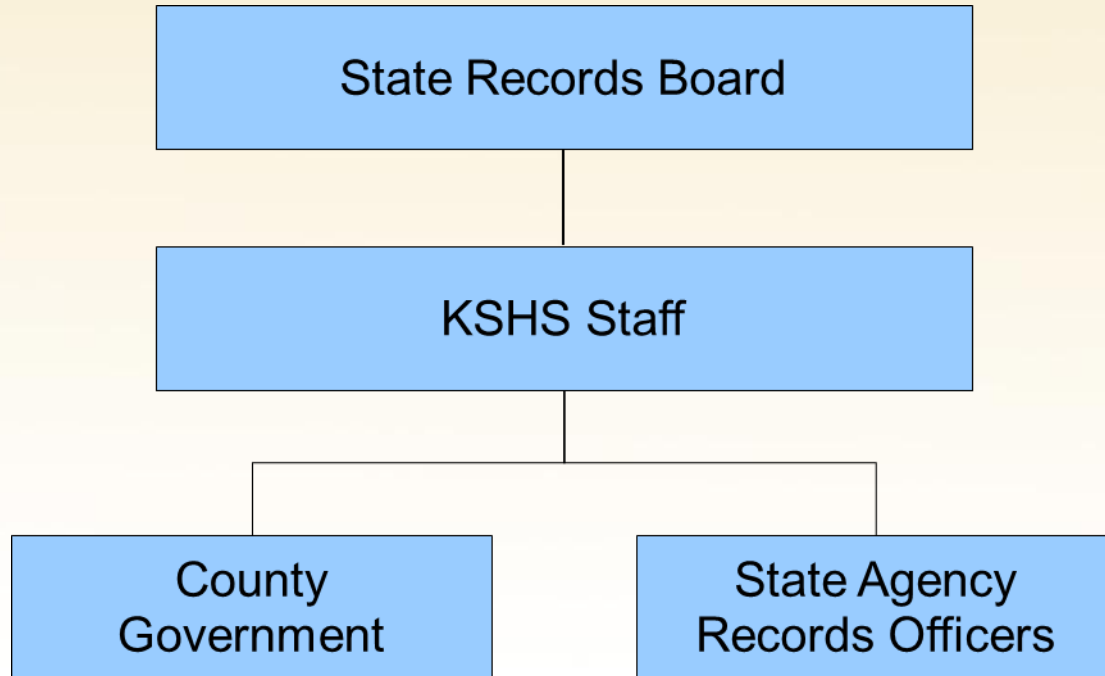


# Kansas Government Records

- K.S.A. 45-402: “all volumes, documents, reports, maps, drawings, charts, indexes, plans, memoranda, sound recordings, microfilms, photographic records and other data, information or documentary material,, storage media or condition of use, made or received by an agency **regardless of physical form or characteristics** in pursuance of law or in connection with the transaction of official business or bearing upon the official activities and functions of any governmental agency.”



# Records Management Governance



# KSHS Records Management & Archives Services, 1905-2011

- State Archives (est. 1905)
- Records scheduling (est. 1985)
- State Records Center (est. 1992)
- All developed for analog environment



Before KEEP  
Digital Age Strategies  
1996-2008





# Digital Age Strategies: Education & Training

- NHPRC Grants (1996 & 1999)
- Guidelines
  - Electronic Records Guidelines (1997)
  - Digital Imaging Guidelines (1998)
  - Email Guidelines (2002)
  - Web RM Guidelines (2004)



# Digital Age Strategies: Partnerships

- Business process owners
- Records officers
- Technologists
- Archivists & records managers



# Digital Age Strategies: Partnerships

- Electronic Records Committee (1999)
- Information Technology Advisory Board
  - State Archivist membership (2000)
- Electronic Records Summit (2008)



# Digital Age Strategies: Influence System Design

- Address records management and archival issues during design of new digital information systems



# Digital Age Strategies: Influence System Design

- KS Information Technology Architecture
  - E-recs chapter (1999)
  - Data asset management section (2007)
- Electronic Recordkeeping Plan (2001)
  - Addendums to retention schedule
  - Required for long-term electronic records



**A. File Formats**

1. Identify the file formats used by the system to create and store data.
  - a. Are these file formats proprietary?
    - i. If so, can the system export the data/records in a non-proprietary format? Which format(s)?
      1. Has this been tested?
2. Can system metadata be exported to XML?
3. Are images stored in the system?
  - a. Are the images stored in a database?
    - i. Can they be exported?
    - ii. Are the images and associated metadata kept together when exported?
4. Is the presentation **format** of the data/record key to understanding the records accurately?
  - a. If so, what procedures are in place to preserve the presentation?

**B. Data Integrity and Authenticity**

1. Describe the records capture and revision processes (e.g., how data is entered into and changed within the system).
  - a. Describe any audit trails in place to track the records capture process.
  - b. Describe any audit trails in place to track the records revision process.
    - i. If legacy data is replaced with new data during the revision process, is there a need to retain the data being overwritten (versioning)?
      1. If so, what is the process for retaining the legacy data?
2. What is the process for making and documenting changes to the system itself (e.g., changing a data field)?

**C. System Security**

1. Does the system contain any confidential or private data?
  - a. If yes, how does the system protect this data?
2. Does the agency have a plan to provide long-term access to public records contained in the system?
  - a. How will private/confidential data access be handled?



3. What audit trails are in place to track the security of the system and to safeguard data integrity and authenticity from unauthorized changes?
4. Is the data in the system encrypted?
  - a. If so, are the encryption keys placed in escrow?

#### **D. System Backup and Recovery**

1. How is the data in the system backed up?
  - a. Has the backup recovery process been successfully tested? How often?
2. Is there a disaster recovery plan in place?

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## Electronic Recordkeeping Plan Template

Version 2.0

- a. Has the disaster recovery plan been successfully tested? How often?

#### **E. Electronic Records Preservation**

1. What storage media is currently used to store backed-up/archived data?
2. Describe plans for refreshing storage media used to store records in the system.
3. Describe the process that will be used to monitor system and storage media obsolescence.
  - a. How will decisions be made on when and how to convert or migrate data in the system to new software or hardware platforms.
  - b. How will decisions be made on when and how to convert or migrate to new storage media?
4. If records are not going to be maintained within the active system how will they be preserved and retrieved during the entire retention period?



# Digital Age Strategies: Influence System Design

- IT Project Approval Process
  - IT projects > \$250K require a project plan
  - E-Recs Retention Statement (ERRS) (2000)
  - State Archivist review of ERRS (2010)
    - Does new system include long-term records?
    - Are appropriate plans in place to ensure long-term records preservation and access?





# Digital Age Strategies: Trusted Digital Repository

- KSPACe (2004)
  - DSpace digital repository for state publications
  - Remains in service but not fully OAIS or TRAC compliant



# KEEP System

- Kansas Enterprise Electronic Preservation
- Trusted digital repository for KS government records with long-term value
  - Long-term = long enough for there to be a concern about changing technologies
  - Long-term = 10+ year retention period



# KEEP System Goals

- Enterprise-wide
- Financial sustainability
- Standards and best practices based
  - OAIS
  - TRAC
  - PAIMAS
  - PREMIS
  - METS
- Open source tools
  - Fedora Commons, JHOVE, DROID, PRONOM, Linux, Django
- Access to authentic and authenticated digital records over time



# KEEP System Partners

- Legislature
- Judicial branch
- Information Network of Kansas
- Library of Congress
- Executive branch
  - Kansas Historical Society
  - Attorney General's Office
  - Office of IT Services
- Business partners
  - Imerge Consulting
  - Propylon
  - AOS

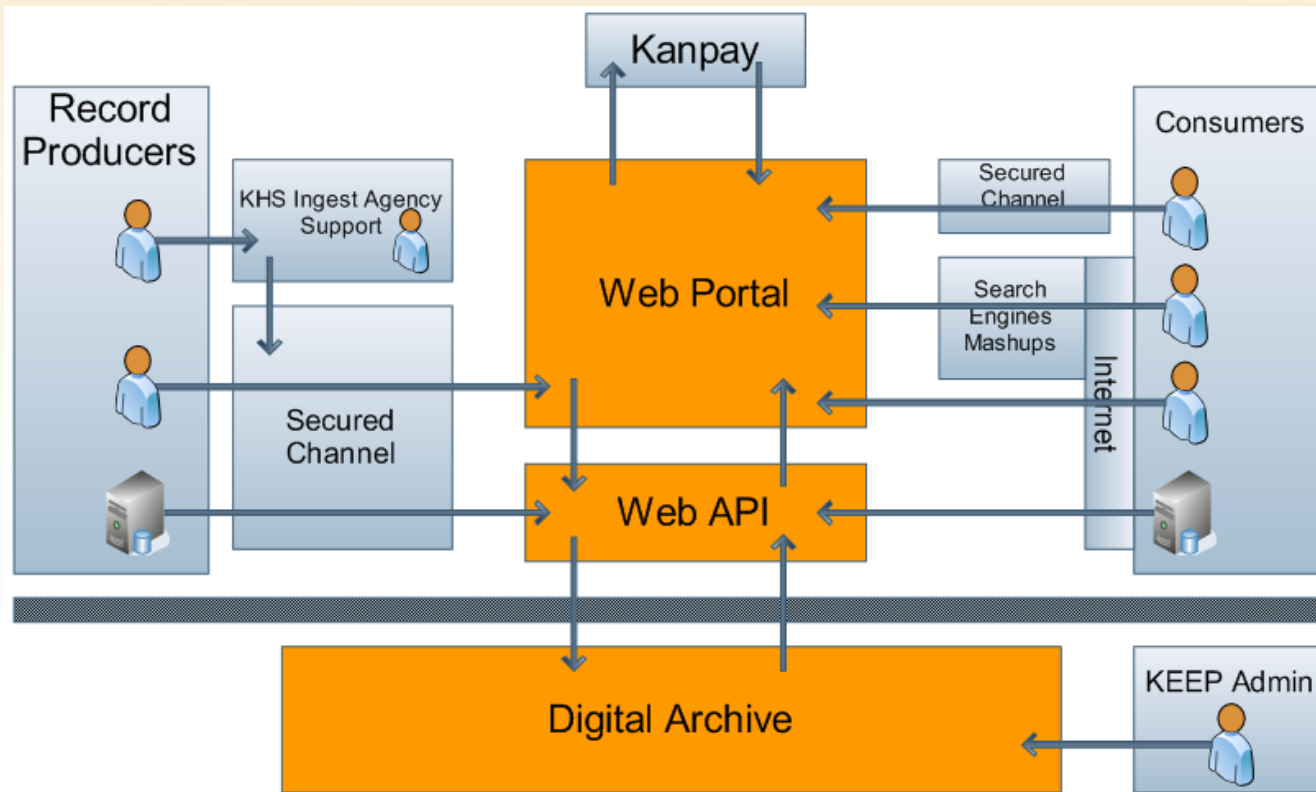


# KEEP System Development

- Policy framework v1.0: September 2010
- Prototype: June 2011
- Production
  - Ingest records: Spring 2012 (est.)
  - Provide access to records: Summer 2012 (est.)



# KEEP System



# KLISS-to-KEEP Connector

- KLISS
  - Kansas Legislative Information Systems and Services (Implemented January 2011)
- KLISS-to-KEEP Connector
  - Automated transfer of legislative records to the KEEP repository using RESTian API

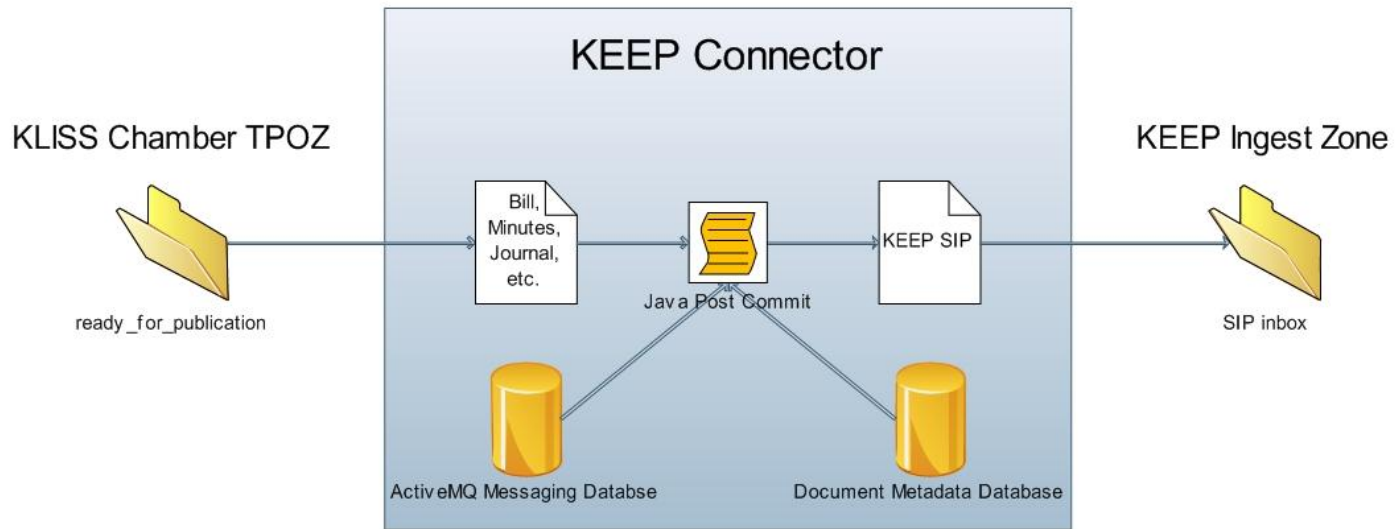


# KLISS-to-KEEP Connector: Individual Records

- Bills & Resolutions
- Calendars
- Journals
- Committee Rosters, Agendas, Testimony, & Minutes







# KLISS-to-KEEP Connector: “Time Machine”

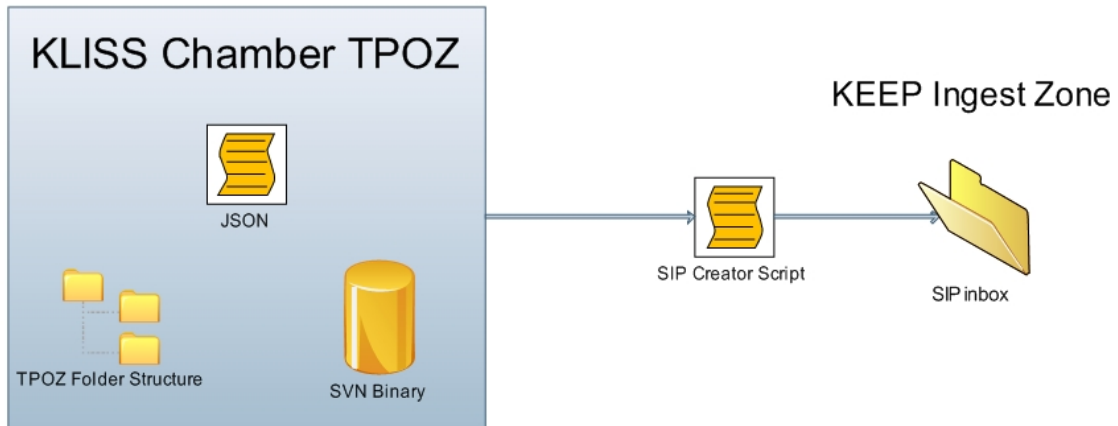
- KLISS repository snapshots the entire state of the system at every revision and allows for the repository to be reconstituted as it looked at any previous revision – the KLISS “time machine”
- Entire contents of KLISS repository for a biennium will be transferred to KEEP



# KLISS-to-KEEP Connector: “Time Machine”

- Components of KLISS “time machine”
  - Folders representing every revision of every document from legislative session.
  - JSON file that serves as a map between revisions and the documents affected.
  - SVN binary that facilitates recreating the legislative records as they looked at a given point in time.





# Lessons Learned

- Making business case is essential but must be flexible and pragmatic
  - Records = foundation of democracy
  - Transparency & accountability
  - Open records
  - E-discovery
  - E-democracy
  - IT consolidation
  - Access



# Lessons Learned

- Partnerships are essential
  - But require constant care and feeding
- Champion(s) are essential
  - But require constant care and feeding
- Influencing system design is essential
  - But hard
- Financial sustainability is essential
  - But hard



# Lessons Learned

- Education & training are essential
- Ultimately, providing tangible electronic records management and digital preservation services may be essential to success



# Contact

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