Applications Services, KLISS Update prepared by Alan Weis, Director of Application Services

AS--1.   Chamber Automation System:
A. KLISS Senate Calendar System
The Senate Calendar generation system was recoded using new methods and tested in the fall of 2015 and it was implemented into production prior to the 2016 Session. Corey Carnahan has reported that the Calendar system has been working very well during the 2016 Session.
B. KLISS House Calendar System
After the successful recoding of the Senate Calendar System it was decided to recode the House Calendar System and test it during the 2016 Session. The House system recoding was completed on 2/12/2016. Working with Susan Kannarr we implemented the new Calendar System in production so it could be run in parallel with the old calendar output to enable more thorough testing by Susan. It was put in production on 2/17/2016 and Susan is continuing to review the new calendar output while her staff uses the old system for publications. Once Susan has completed reviewing the output of the new Calendar and the output is acceptable, the House staff will start using the new system.
C. Chamber Issues resolved since Session start:
   1. Chamber Interface issue that caused the first GO bill to be moved to the end of the list on the Senate Calendar. Deployed 1/11/2016
   2. KLISS Model issue of the system returning an incorrect data type that does not work in the report generation system. Deployed 1/15/2016.
   3. Chamber Interface update to change the "Be Passed" action to copy the bill jacket to ready for publication instead of flagging. Deployed 1/27/2016.
   4. House Calendar update to resolve issues with days on Consent Calendar. Deployed 2/4/2016.
   5. View Chamber Events application update to display bills from the previous year and to fix issue with the update vote function. Deployed 2/4/2016.
   6. House Calendar update to resolve issue with Senate Bills in the incorrect reference section. Deployed 2/5/2016.
   7. Chamber Interface updates – Bills placed on the consent calendar were also being copied to flagging folder needlessly. Also some Legislators were missing from the motioner selection list. Deployed 2/11/2016.
   8. Chamber Interface update Motion to Reconsider to find bills in the messages/holding folder. Deployed 2/12/2016.
   9. Chamber Interface update for the Release CCR function to use the correct form data. Deployed 2/16/2016.
   10. Chamber Interface update Motion to Strike not in COW does not move the complete bill jacket. Deployed 2/19/2016.
   11. Chamber Interface update for House Test Calendar only shows Senate Information for Bills in Committee. Deployed 3/7/2016.
   12. Senate Calendar – duplicate bills were listed on the Consent Calendar when multiple bill versions existed. Deployed 3/11/2016.
D. Chamber Maintenance
The Chamber Maintenance cycle is scheduled for April and will start at the beginning of the Legislative break. Enhancements and issues are included in the cycle that will be completed for the Chamber Interface and the Legislative Interface.

AS--2.   Law Making System:

A. KLISS Law Making Amendatory Report Drafting Tools

1. KLISS was designed to allow the Revisor staff to create amendments in context of the bill documents using blue and red colored mark up to designate new and deleted language. The system then uses these in-context documents to generate the amendatory language documents automatically using a software template that contains programming code.

    There are currently issues with automatic title and repealer updates in the in- context documents that can cause the Revisor staff to do manual editing during crunch times of the Session. Working with the Revisor's office we decided to implement drafting tools to enable direct creation of the amendatory report documents to get us through the 2016 Session.

    These tools consist of locking text for markup editing, copy and paste enhancements, tools to add and renumber sections and subsections, and import of text from bill drafts, statutes, netted bills, in-context bills, and other amendatory documents.

    Primary development work was completed and the new functions were tested prior to the 2016 Session start. The new client build was accepted by the Revisor Office and the build was released for Production on 1/15/2016.

2. Two functions remained to be completed for the Amendatory Report Drafting Tools. The functions are to remove a section from the report and enhanced error handling on section imports. Coding on these functions was completed and included in a new acceptance build provided to the Revisor Office on 2/24/2016. The build is currently being tested by the Revisor Office staff.

B. Issues Reported During the 2016 Session that have been resolved and are currently being tested in an acceptance build by Revisor office staff:

1. Appropriations Bill Drafting: During the development of Amendatory Report Drafting, styles were added to the list of protected styles. Styles used for appropriations bills should not be protected. The update for amendatory drafting tools protected a list of styles that included appropriation bill styles. The common code for bill and amendment drafting caused these styles to show markup when they should not. After discussion with Revisor staff, it has been determined these styles should be unprotected in both bill and amendment drafting. Solution: a small coding change to remove these styles from the protected list.

2. Appropriations Bill Drafting: Appropriation language from netted bills is being imported into bill drafts as amendatory language instead of new language. It was found in the amendatory drafting update, a new code function in a file was named the same as a old function in another file. Solution: rename the new function. This does not change to code in the functions and therefore does not affect to purpose of the functions.

3. Amendment Drafting: Revisor staff reported an issue with substitute committee reports being created with the incorrect RS and Sponsors in metadata. It appears to be pulling the information from past bienniums. The incorrect information is being sent to the Chamber system and is displaying incorrect information on the LI and in reports such as the Actions and Index Report. This will require a code fix to the queries that retrieve the information in the LM thick client.

C. User Documentation
    The KLOIS quality assurance team is in the process of updating Law Making user documentation. The documentation is being implemented on a collaboration system that versions updates and allows easy access by the users.

AS--3.   Decision Support System (KLRD):

A. Budget Analysis System

1. A new interface to organize the Budget Analysis documents was developed and tested. Research Department staff are currently testing this new interface in preparation for implementation into production.

2. Issues with page numbers were resolved and successfully tested. The update was deployed to production on 2/18/2016.

B. Issues with Supp Notes and Conference Committee Report Brief associated bills were resolved and implemented into production on 2/23/2016.

AS--4.   Committee System:

A. Issue updates for the committee system were coded, tested, and deployed into production.

1. When using the backspace key, the cursor will "Jump" out of the text input box. Deployed on 1/20/2016.

2. In the minutes input page Chair in dropdown input is incorrect. Deployed on 1/29/2016.

AS--5.   Legislative Interface:

A. Follow up on functional enhancements proposed by JCIT members at 11/23/2015 meeting:

-- Committee testimony for a bill should be listed/linked on the LI bill page (work item LI-100)

-- Related bills should be listed/linked on the LI bill page (work item LI-96)

These two functions are currently in analysis and development. KLOIS is working closely with KLRD on the "related bills" item given that KLRD is the source of the "relationship" info and has included this info in some of their documents in text form in the past (this work item will require KLRD to enter this info into newly created metadata fields).

Current plan is to have these work items ready for testing by 3/28/2016 which should allow us to implement these enhancements during the April break.

B. A new "Hearings Page" is in development that will list all committee hearings for a day. The user will be able to select a specific day to view and hearing data will be presented in a sortable table. The hearing data will be linked to the committee and bill pages. A printable listing of the information can be displayed and printed. This page will be deployed when development and testing are complete which is estimated to be early in the April break.

C. Issues resolved during the 2016 Session:

1. Issue on vote pages caused by reference field not containing the correct file path. Deployed 1/22/2016.

2. Laws Full Report on the reports page was incorrectly listing vetoed bills as overridden. Deployed 3/8/2016.

AS--6.   Search System interface with KLISS:

A. Lexmark Search System development and implementation on KLISS data repositories was successfully tested in the KLISS Test environment. An issue was discovered in the production Lexmark Search system that is causing the system to not display any search results. The issue is currently being addressed by Lexmark.

Technical Services Update prepared by Terri Clark, Director of Technical Services

TS--1. **Legislative ELI/LI Website Performance:**
  A. To improve performance of the legislative website several enhancements have been made using a third party tool, Varnish Cache. The two areas addressed to improve performance are:
  1. Faster Response Times for User Queries:
      Changing how query responses are being cached dramatically improved performance of the site. Query response times on the original configuration ranged from 8 – 30+ seconds. Following the Varnish configuration changes, query response times for those same queries ranged from .007 to .01 seconds. Monitoring of the site is ongoing with configurations being adjusted based on user traffic and feedback.
  2. Manage Data Mining "Web Crawlers":
      A number of organizations use "web crawler" software to access legislative data on the website. Most web crawlers are configured with delays between queries so a website is not overwhelmed while other web crawler users are not so kind. If a web crawler is querying the legislative website at a high rate it will now be blocked and receive a message with recommended query delays and KLOIS contact information. These not-so-kind web crawlers are blocked until their query rates drop below an appropriate threshold.

TS--2. **Legislator Laptop Update:**
  A. The initial draft of the Request for Proposal/Quote is in final review and slated for release in early April. We are targeting July to receive the new laptops. It is likely the new laptops will have Windows 10 operating system. We are preparing a training program specifically for legislators to assist with the introduction of the new operating system.

TS--3. **Lexmark Perceptive Search Software:**
  A. The Lexmark Search tool is being rolled out to Legislators, Office Assistants, and Committee Assistants during March. Lexmark Search runs in a web browser, i.e. Firefox, and searches files on an individual's PC and in shared folders using full text or advanced search techniques.
      The system uses the Active Directory security schema to control user access to files and folders, so users can only access their own files. Advanced search techniques allow searches to be run on exact words or phrases, file metadata (i.e. file creation date), and natural language searches, and queries such as searching for "Jim Miller AND JCIT". During the interim Lexmark Search will be expanded to include the Legislature's LI/ELI website.

TS--4. **IPTV Replacement for House Chamber:**
  A. Several years ago, OITS conducted a pilot project to broadcast the House Chamber proceedings using an IPTV system. The IPTV broadcast was only available in leadership offices. Due to multiple hardware failures, OITS took the system offline. KLOIS has implemented a replacement system with limited capabilities.
      The system uses Axis camera software to mix the audio and video, then VLC software to convert the camera signal to digital and stream it on the network. Initially, due to limitations of the free software, the service will only available to legislators and legislative staff on the legislative network.

TS--5.   Exchange Server Upgrade:
   A. The upgrade to Exchange Server 2016 planned for December, 2015, was delayed due to software version conflicts. This work is now scheduled for April. This is an "in-line" upgrade, meaning the existing server will continue to be in use until the upgrade has been fully tested and verified. User connections are moved to the upgraded server in groups, so email service will not be affected. The existing server will be taken offline during the interim.

TS--6.   Insourcing Management of the Legislative Data Network:
   A. Background: The Legislature's data communications services are currently provided by the Executive Branch's I/T group (OITS) utilizing their staff and a combination of equipment housed within the Capitol building, equipment housed in its Topeka data center, and wide-area network services provided by several telecommunications vendors. Over the past 18 months OITS has implemented rate increases and service level changes that create a non-competitive cost structure for the Legislature.
   B. We are proposing a project to assess and validate the feasibility of the insourcing project as the first phase of insourcing management of the network.
   C. Rationale for the project: If the Legislature accedes to all of the rate increases and charging methodology changes currently proposed by OITS:
      1. FY2016 costs for data services increase by $1,067,000 or 150% versus comparable FY2015 budget numbers.
      2. In FY2017 these costs increase by $375,000 due to the expiration of an informal Capitol Renovation "credit agreement".
      3. Net-net, the cost of OITS-provided data services goes from $336,000 in FY2015 to $1,778,000 in FY2017.
      4. At an annual rate of $1,778,000 for OITS services, we estimate that the savings accrued from insourcing will likely pay for the cost of conversion in 3 to 4 years (or less).
   D. Details of Phase 1 Assessment and Feasibility:
      1. Timeframe: 3 months
      2. Estimated Cost: $220,000 - $260,000
      3. Deliverables:
         a. Assessment of existing environment
         b. Options to deal with technical hurdles
         c. Conceptual architecture including hardware transition, control/monitoring/security structure
         d. Refined cost estimates for Phase 2 (Detailed Design) and Phase 3 (Implementation)
         e. Define one-time costs for hardware
         f. Define ongoing costs including incremental staffing and wide-area networking/internet services.
      4. Preferred Vendor: Black & Veatch:
         a. Broad and deep expertise and experience in network planning, design, and deployment
         b. Comprehensive ability to support the Legislature in executing all aspects of the project
         c. Extensive knowledge and insight into all critical telecomm vendors but maintain a vendor agnostic approach
         d. Several B&V project members have worked with OITS and can provide immediate insight into our environment

TS--7.   Legislative ELI/LI Website Hosting:

A. The Legislature's external website (the External Legislative Interface or ELI) is currently hosted by the Executive Branch's I/T group (OITS) in its Topeka data center. We are investigating contracting with a third party vendor to host the website.

B. Functionality, beyond OITS capabilities, provided by a third-party vendor include the ability to:
    1. Increase/decrease capacity and bandwidth access based upon levels of activity
    2. Implement changes to the ELI application and virtual servers quickly
    3. Shift hosting to a backup site within minutes of an event at the primary site
    4. Project future costs with reasonable accuracy

C. The cost of hosting at a quality third party site will be about the same as our current costs with OITS and will provide the additional services and functionality noted above. Current annual cost is about $70,000.