

Legislative I/T Environment: Status

Edition #6: Updated as of Friday, April 27, 2012

Prepared By: Jim Miller, LCITO With Input From
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# 1	01/13/2012	JCIT on 01/19/2012			
# 2	01/27/2012	Government Efficiency Committee on 01/30/2012			
# 3	02/15/2012	JCIT on 02/15/2012			
# 4	02/28/2012	JCIT and LCC on 02/28/2012			
# 5	03/30/2012	JCIT and LCC on 04/02/2012			
# 6	04/27/2012	JCIT and LCC on 04/30/2012			

Attachment 2
JCIT 5-15-12

Legislative I/T Environment: Status as of April 27, 2012

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Status: Current Situation

a. Overview

At the end of week sixteen of the 2012 Session, the process of managing the work item queues for both applications and technical services deliverables is functioning effectively in the midst of the inherent pressure placed on a relatively new process by the pace of the Session. Participants in the process have adapted to the structure and familiarity of the standardized process for adding work items to the queue, prioritizing work items and re-prioritizing as the situation changes, assigning actions and follow up tasks, conducting daily progress checks and has extended to the ECR¹ process needed for implementing fixes or changes in an expedited manner. This overall workload management process continues to be anchored by daily scrum² meetings led by Alan Weis (Director of Applications Services) and weekly KLISS Leadership³ meetings.

As the 2012 Session has progressed the management process has been stressed by resource constraints and competing due dates for critical deliverables. The process continues to work quite well as we have been forced to re-prioritize active, high-priority work items and re-allocate limited resources to the highest priority issues (those that have the strongest potential to impede the work flow and business of the Legislature).

During January and February the management process evolved in its ability to deal with the "crisis of the moment" such that a "crisis" is now viewed as a critical problem that needs to be addressed with a focused sense of urgency while leveraging a deliberate, coordinated style and avoiding the chaos of "drop everything, the sky-is-falling" approach to dealing with the occasional critical problem.

During the initial months of the 2012 Session we have also managed to pull out of a historic break-fix-break spiral⁴ and eliminated most of our break-fix-break events. By assessing the risk potential of a given "fix" and structuring testing in a manner that matches the level of testing with the level of potential risk, we have significantly reduced the incidence of secondary issues resulting from fixes to a primary issue. We are also getting better at structuring and executing comprehensive testing but still have a long way to go in terms of having the required capacity and enabling automation in place.

During February and March the management process continued to evolve as we effectively flexed in order to deal with issues related to appropriations and floor amendments as well as issues arising from system functionality being used for the first time during the 2012 Session. As I noted in the February and March status reports, and it deserves repeating, much of this improvement in our management processes and the improving state of legislative systems is the result of the detailed involvement, leadership, and support provided by the Revisor of Statutes, the Chief Clerk of the House, the Secretary of the Senate, and adding the Assistant Director KLRD to the list with this report. These individuals are playing essential roles as members of the KLISS Leadership Team.

¹ ECR = Emergency Change Request. As the name implies, this process is intended to add structure and discipline to the efforts required to implement a change or fix that is critical to the operation of the legislative process in an expedited manner (outside the parameters of the normal change control process).

² A bit of history for those who are interested and, like me, know nothing about rugby: Scrum is a form of agile project management. Scrum's origins date back to 1986 when Hirotaka Takeuchi and Ikujiro Nonaka described a new tactic that would increase speed and flexibility and the cost of design and quality, based on case studies from manufacturing firms. They called this the holistic or rugby approach, as the whole process is performed by one cross-functional group across multiple overlapping phases, where the group "tries to go the distance as a unit, passing the ball back and forth" hence the word scrum which, in rugby, refers to the manner of restarting the game after a minor infraction.

³ KLISS Leadership includes: Revisor of Statutes (Mary Torrence), Secretary of the Senate (Pat Saville and Diane Minear), Chief Clerk of the House (Susan Kannarr), Director KLRD (designee Asst. Dir. KLRD Amy Deckard), LCITO, Director of Application Services, Director of Technical Services, and executive representation from Propylon (Tyson Deines, Beth Rice).

⁴ Break-fix-break spiral: a pattern of performance that involves an iterative scenario where the solution, implemented to fix a primary problem, creates one or more unintended secondary issues and the solution to the secondary issue creates another round of issues and so on, creating an ongoing series of disruptive "breaks".

Status: Current Situation

b. Legislative Applications

Intro

In the Legislative Applications space which includes KLISS¹, IRC², Sliq-Scribe Pilot³. The process we have implemented for managing the workload related to these key applications and the supporting infrastructure utilizes a Work Item Log⁴ structure to document and track work items at a level appropriate for management-level decision making and control. The Work Item Log is a MS Excel workbook. Sample pages of the Work Item Log are provided in the Exhibits section of this Status document. The sample page for Applications work is from the tab in the MExcel workbook labeled **Application Work Item Status Log** (sorted by Work Item Priority) which displays the 100+ applications work items in work item priority order. If you are interested in viewing a current version of the entire workbook, please let me know and I will send you a digital copy.

Current status of these applications is a mix of positives and negatives with the overall trend moving in the positive direction with respect to problems being resolved, effectiveness of the management process, and the quality of the output and deliverables. Status of specific applications is provided below.

KLISS

As I have noted in earlier status reports, KLISS, as the primary, end-to-end legislative business application, is a victim of its implementation legacy. As such, KLISS will continue to be a work in process for an extended period as we work through the growing list of functional, integration, and process issues. We are well into the task of working down the initial set of issues compiled back in November 2011 (a diverse set of 100+ issues including bug fixes, enabling smooth integrated flow, eliminating work-arounds, improving system integrity, and adding critical functionality. However, as we work down the initial list we are adding new issues as we:

- exercise integrated flows for the first time,
- create unintended but legitimate downstream issues resulting from upstream fixes,
- uncover unaddressed loose ends in downstream design as we correct upstream content,
- produce outputs with good data that, for the first time, exposes issues with styles and formatting
- run the system end-to-end and require the use of analytical tools including reporting and search

¹ KLISS – Kansas Legislative Information System and Services

² IRC – International Role Call - system used to manage voting process in Senate and House and also displays voting information in the House. This system is integrated with KLISS (calendar items passed to IRC, voting info passed back to KLISS).

³ Sliq-Scribe Pilot often referred to as Sliq is the system used by Committee Assistants and Research to organize calendars, minutes, and testimony and will eventually enable inclusion of video. This system is not yet integrated with KLISS and work is currently underway with vendor to define integration requirements.

⁴ The Work Item Log is a comprehensive, consolidated list of open issues and requirements (predominantly related to KLISS) from across all Legislative functions/divisions and provides key information about each issue including narrative description, status chronology, priority, ownership, and task accountability (see sample of Log pages in the Exhibits section of this Status document).

KLISS (continued)

It should also be noted that as existing issues are resolved and kinks are worked out of the system's flow, the legislative user community continues to learn how to better leverage the functionality of KLISS and concurrently develops a better understanding of the system's quirks and limitations. One natural outcome of this better understanding is a growing list of ideas from the legislative user community regarding how to improve the KLISS system and our enabling business processes. Consequently, we can expect the number of items on the *Application Work Item Status Log* to grow steadily over time along with the ratio of improvement-related work items to bug-related work items.

Reiterating my comments from the February and March reports, we continue to resolve existing issues with KLISS at a productive and responsive pace so as to enable the effective and efficient business processes of the Legislature. To date we have been able to address the numerous critical systems issues that have arisen and have avoided experiencing any "show stoppers." In some situations we have relied on manual work-arounds stemming from user ingenuity and/or extra effort to mitigate issues that are difficult to resolve programmatically or where risk management requires us to delay implementation to the post-Session period. It is worth noting that the issue resolution process is working in a just-in-time mode and we are staying a few steps in front of the power curve which allows minimal room for errors or unexpected delays.

We have made considerable progress in resolving integrity and integration issues "within" the KLISS application. However, as we have worked through the 2012 Session and exercised functionality for the first time we have encountered numerous issues with how data from within the application are presented for consumption - particularly in print formats where we have a long list of style and formatting issues. The current list of 100+ active KLISS issues spans the entire spectrum of KLISS functionality with clusters of issues in several key areas listed in the bullets below:

- Journal: numerous issues with functionality, styles, and formatting
- Calendar: numerous issues with functionality, styles, and formatting
- Law Making client: numerous functionality issues pending implementation of fixes
- Table styles: numerous style and formatting issues
- Enrolling bills: issues with templates and netting of engrossed bill.
- Integrity of process for amending, enrolling bills
- Drafting appropriation bills and handling committee, floor, and conference committee amendments to appropriation bills
- Budget Analysis: ongoing publication verification and issues with GASP functionality (e.g., pulling together all 2,000 pages of the budget analysis without some manual intervention)

Note: One point of caution in the area of KLISS support involves the departure of two key developers from Propylon's staff who were dedicated to the Kansas KLISS project. The loss of these two staffers creates a temporary vacuum in our ability to quickly and effectively deal with issues dealing with their respective areas of expertise. Propylon management has responded to this situation by leveraging other Propylon staff on the Kansas account and is actively working to replace the departed staffers.

Extending recent progress, the functionality and performance of the KLISS web applications continues to improve (both internal, ILI, and external, ELI). Recent improvements in the sites include the ability to link to the maps related to redistricting bills and allowing amendments to be viewed within seconds of those amendments being enabled within the KLISS system. We also continue to "tune" the performance of the web applications with the objective of improving response time re high-demand content and improving the discipline re the execution of operational tasks.

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IRC

After several difficult weeks dealing with several critical KLISS-IRC integration issues and an elusive IRC data base issue, the IRC environment is stabilized. The KLISS-IRC integration has been operating relatively smoothly in March and April with some minor issues relating to how IRC is in-taking some data from KLISS (or how KLISS is presenting data to IRC) - investigation is still underway in determining the root cause of these minor issues.

Several improvements to this KLISS-IRC integration remain to be implemented to improve information formatting and the operational stability of the overall process. These changes have been prioritized as "post-Session" work items to avoid any potential disruptions to ongoing Legislative operations. Also, the long-term viability of the IRC system and its related hardware components will be an open question for post-Session consideration.

Sliq-Scribe Pilot

The introduction of this application stumbled out of the gate during January given several critical functionality issues and problems with system stability in the version provided by the vendor. With hindsight, we should have performed more exhaustive testing after receiving the software from the vendor and prior to releasing it to our user community. These initial issues were addressed with a new version of the system implemented on all user PCs (Admin Assistants and Committee Assistants) in late January. This left us with a user community brimming with low confidence in the system and middling proficiency in using it. Don Kossler (I/T Customer Support Manager) and members of his team continue to focus significant energy and time quick response to issues as they arise and on providing training on the Sliq application but user acceptance will be difficult to regain during the 2012 Session.

Re futures, the plan is to implement a limited and prioritized set of enhancements to the core Sliq system and also implement automated KLISS-Sliq integration prior to the start of the 2013 Session. These improvements combined with thorough in-house testing and comprehensive training/documentation will enable a re-introduction of a stable, functionally-improved, and integrated Sliq in December of 2012.

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c. Session Technical Support and Training

Intro and Summary of HelpDesk Activity

Session Technical Support and Training activity remains well organized and well received by the Legislative user community. As we close out week sixteen of the 2012 Session and prepare for the continuation of the Veto Session next week, I believe we can characterize the Technical Support aspects of the Session to date as relatively calm, disciplined, and orderly. Credit goes to Terri Clark, Don Kossler (I/T Customer Support Manager), and members of their team in providing solid follow up to HelpDesk calls (see summary statistics below), ongoing training and communications with the Legislative community including "tip-of-the-day" emails, and a renewed, consistent service attitude across all I/T staff in executing their roles (i.e., built on a philosophy of owning the solution, establishing a constructive and positive on-the-floor presence, being proactive, taking care of the little things quickly, striving for an empty queue at end of day, treating all levels of the Legislative hierarchy with respect, etc.).

Week of:	Level 1 Tickets ¹			Level 2 Tickets ²			Totals		
	Opened	Closed	Open EoW ³	Opened	Closed	Open EoW	Opened	Closed	Open EoW
			335			115			450
01/09	306	307	334	57	97	75	363	404	409
01/16	179	416	97	41	70	46	220	486	143
01/23	224	272	49	23	48	21	247	320	70
01/30	194	216	27	13	22	12	207	238	39
02/06	144	161	10	32	33	11	176	194	21
02/13	220	227	3	126	126	11	346	353	14
02/20	224	227	0	94	94	11	318	321	11
02/27	165	161	4	85	87	9	250	248	13
03/05	105	106	3	117	117	9	222	223	12
03/12	164	165	2	80	87	2	244	252	4
03/19	124	126	0	114	108	8	238	234	8
03/26	114	111	3	106	107	7	220	218	10
04/02	67	68	2	63	62	8	130	130	10
04/09	0	1	1	8	8	8	8	9	9
04/16	0	0	1	37	40	5	37	40	6
04/23	0	1	0	35	35	5	35	36	5
Totals	2,230	2,565	0	1,031	1,141	5	3,261	3,706	5

¹ HelpDesk issues classified as Level 1 have minor to moderate impact on the Legislative user and present a low to moderate degree of difficulty to resolve.

² HelpDesk issues classified as Level 2 have moderate to severe impact on the Legislative user and present a high to very high degree of difficulty to resolve.

³ EoW = abbreviation for End of Week referring to the number of tickets remaining open at the end of that particular week. The math in this schedule for calculating the number of tickets remaining open at the end of the current week is: (prior week Open Tickets EoW) + (current week Tickets Opened) – (current week Tickets Closed) = (Tickets Open EoW)

Status: Current Situation

c. Session Technical Support and Training

Comments on Technical Services Projects and Work Items:

1. North Wing Wiring Project

This project involves the wiring of the North Wing, including the State Library, for all required telecommunications services including Unified Communications¹, wireless nodes, and audio and hearing assist capabilities for committee rooms. The project plan was reviewed and approved in a meeting with Senator Morris on Monday 30 April. Alltech, the vendor for wiring installation, was given the go-ahead and has begun work in the North Wing quad offices.

2. Exchange Service Issues (week of 23 April)

Users experienced performance issues with the email system during the week of 23 April. These issues were the result of Windows Server patches applied on 04/22 being incompatible with our current version of the Sophos Pure Message antivirus software on the Exchange servers. The Sophos Pure Message software was several versions behind current release levels. Sophos Pure Message was uninstalled. Team is researching which version is compatible with our Exchange environment. Once the correct version is identified, it will be reinstalled following completion of the veto session. Sophos tech support is working with us on this issue.

3. Transition from Dictated Passwords to Self Service Passwords

You may recall that the cutover to self service passwords for all users who previously used dictated passwords was completed on Tuesday 28 February. Legislators and session staff who have not yet changed their password since this cutover will be prompted (i.e., forced) to change their password by Sine Die. Notification of this requirement and instructions on changing passwords will be sent starting Monday 30 April. During the month of May, Legislators will receive a note from the LCITO on this topic and then weekly reminders from Tech Services reiterating that if any user, who previously used dictated passwords, has not yet changed their password they will be presented with the request from the system to change their passwords by Sine Die. It should be noted that, as each user changes their password, they will also need to make this password change in each personal device used to connect to the system (e.g., smart phone, personal pc's, etc.). Tech Services staff will be available to assist with this effort. The password system will be set up so that the next forced change of passwords will occur in December after Legislators are back in the Capitol.

¹ Unified Communications is a infrastructure technology which enables all types of communications, including data, voice, and video, to travel on one shared cable. This enables a simplified wiring structure and enhanced communications capabilities such as Voice-Over-Internet-Protocol.

4. Conversion of Phone System to Voice over Internet Protocol (VOIP)

The cutover is on schedule for the weekend of Friday 22 June. AT&T has been notified. All spreadsheets have been completed. Preparatory work with Office of Information Technology Services (OITS) has been completed. Terri is working with the Statehouse Architect and OITS to add additional jacks in the Revisor's Office as part of the cutover. The cutover schedule has been pushed back by one week to June 22 to insure that all configuration spreadsheets and OITS walk-throughs could be effectively completed and thoroughly verified (these elements drive the quality of the conversion to new phone equipment). The OITS team has performed high quality preparatory work in planning for and getting us up the learning curve on this new technology.

This project is one element of an overall telecomm strategy: Four years ago the (OITS) began implementing the state-wide Cisco Layer 3 network, provisioning voice, data and video over a single connection. The Legislature converted to the new network structure in the summer of 2008 and converted to the new voicemail system during the summer of 2010.

5. Work Item Comments - Other:

As noted in the Legislative Applications section of this report, the process we have implemented for managing the workload related to key applications and the supporting infrastructure is based on a "Work Item Log" structure. The tab in the Work Item Log relating to prioritized infrastructure work items is labeled: **Technical Work Item Status Log** (sorted by Work Item Priority). If you are interested in viewing a current version of this workbook, please let me know and I will send you a digital copy. The first few pages of this tab are shown in the exhibits section of this Status document.

Extract from Section 3 of "Legislative I/T Environment: Initial Assessment" Document
3. Applications and Infrastructure -- b. Current Challenges

Work Item Type ^A	3. Applications and Infrastructure b. Current Challenges -- Project / Work Item <i>(additional editing and content required)</i>
App	2012 End of Session Publications <ul style="list-style-type: none"> - KSA Publications, KSA Update - House and Senate Permanent Journals - Final House and Senate Actions and Subject Index Report - Summary of Legislation
App	Law Making Publication <ul style="list-style-type: none"> - Composition is critical gap in current functionality: Σ pre-print formatting work. - Rationalize, design and implement enhanced publications support and determine tool/process for "Composition"
App	Search, Query & Reporting <ul style="list-style-type: none"> - Structured search capability - Saved queries, query by example - Standard reports on demand
App	2011/2012 Biennium Closeout <ul style="list-style-type: none"> - Freeze Chamber repository and move to archive server - Update Legislative Interface to reference 2011/2012 biennium on archive server under historical data. - Reset Chamber repository for new 2013/2014 biennium - Reset Law Making and Decision Support zones for new 2013/2014 biennium
App	Open New Biennium <ul style="list-style-type: none"> - Update metadata and make code changes required - Document entire biennium roll over process/procedures - Recommendation for management of new metadata during a biennium - TESTING
App	ELI/LI integration across Biennial boundaries <ul style="list-style-type: none"> - Architect from where the old biennium will be served (ELI/LI) - Close up and make "read only" view of old biennium - Archive old biennium and enable access - ELI/LI changes to accommodate viewing of past biennium data
App	Sliq—KLISS Integration <ul style="list-style-type: none"> - Software construction for the SLIQ committee system interface - Committee agendas, minutes, testimony, and hearing data

^A **App** indicates this project is an Applications project, e.g., related to KLISS, Sliq, IRC.
I/F indicates this project relates to I/T infrastructure, e.g., voice or data telecommunications, data center, software utilities.

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Work Item Type ^A	3. Applications and Infrastructure b. Current Challenges -- Project / Work Item <i>(additional editing and content required)</i>
I/F	Red Hat Linux¹ Operating System Upgrade - Bring KLISS servers to desired version utilizing slow-follow ² strategy - Increased system security, stability
I/F	VMWare³ Upgrade - Bring data center environment to desired versions (slow-follow strategy) - Increased functionality - Increased system security
I/F	Exchange Server Upgrade - Increased functionality - Integration with Voice Over IP system
I/F	Legislator Laptop Refresh - Lease on existing laptops expires 08/01/2012 - Options <ol style="list-style-type: none"> 1. Implement traditional laptop lease model 2. Lease new laptops and deploy VDI⁴ 3. Replace laptops with tablet computers 4. Replace laptops with tablet computers and deploy VDI 5. Combination of laptops, tablets, and VDI
I/F	Security Audit - KLISS Application - Exchange ⁵ and Active Directory ⁶ - Network

¹ Red Hat Linux is the operating system for most of the KLISS system servers. There are several flavors of the Linux operating system available. Red Hat was chosen for their reliability and ability to support and enterprise installation.

² Slow-follow is a strategy for deploying a version of a specific technology (hardware or software) that is usually one version or an extended list of releases behind the most current, leading (*or bleeding*) edge version of that technology. The slow-follow strategy is based on the premise that some high-end technology clients require the bleeding edge version of the technology and are willing to invest the significant resources, time, and energy required to deal with and resolve the high incidence of bugs and operational issues inherent to "just out of the oven" software and hardware. The slow-follow strategy allows these eager users to work out the bugs and other issues, the fixes to which are then provided by the vendor in later releases. Once the technology is thoroughly shaken out (i.e., patches available for most of the bugs inherent to the version as introduced), the slow-follow user can implement the technology with minimal bugs and issues and can often acquire the technology at a more reasonable price-point.

³ VMWare is the virtualization software used on legislative servers. VMWare is the industry leader, and provides the capability to support our requirements of 99.999% uptime through their High Availability functionality.

⁴ Virtual desktop infrastructure (VDI) is the practice of hosting a desktop operating system within a virtual machine (VM) running on a hosted, centralized or remote server. Desktop virtualization involves encapsulating and delivering either access to an entire information system environment or the environment itself to a remote client device (e.g., your laptop or tablet computer). The client device may use an entirely different hardware architecture from that used by the projected desktop environment, and may also be based upon an entirely different operating system. Users may be geographically scattered, but all must be connected to the central machine by a local area network, a wide area network, or the public Internet.

⁵ Exchange Server 2007 is the server-level email system used by the Legislature. State owned laptops have Outlook installed as the local email client software.

⁶ Active Directory is a software utility (Microsoft) which provides user authentication and file and print services on the Legislative network.

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Work Item Type ^A	3. Applications and Infrastructure b. Current Challenges -- Project / Work Item <i>(additional editing and content required)</i>
I/F	Battery Replacement for Data Center UPS¹ - Existing batteries are 4 years old (Data Center UPS battery life is 5 – 7 years.)
I/F	Microsoft Office Upgrade to Office 2010 - Repositions Legislature at desired, slow-follow state re software version - Improved functionality from MS-Word and MS-Outlook - Enables integration with VOIP telephone infrastructure (to be installed June 2012)
I/F	Upgrade Capitol Telephone System to VOIP² - Implement VOIP capability (provided by OITS ³ Division) by replacing all Legislative and State Library telephones with VOIP telephones - VOIP telephone system will be administered by Computer Services enabling faster response for Moves, Adds, and Changes - Enables 911 emergency locator - Integration with Legislative Active Directory network - Integration with Exchange Server/Outlook email
I/F	North Wing Data, Telecom, and Audio Infrastructure - Implement/finalize required I/T infrastructure to enable operation of North Wing - Move and install PCs, printers, and other hardware as required
I/F	Policy and Procedures Updates - Complete COOP ⁴ /Disaster Recovery Plan - Conduct Disaster Recovery Test - Update Security Policy
End of List: 3. Applications and Infrastructure -- b. Current Challenges	

¹ UPS = Uninterruptible Power Supply. In the Legislative environment this is a battery-based back-up power supply system which provides continuous electric power to the Capitol data center complex in the event of an outage in the building's conventional external utility-provided electric power supply. A UPS differs from an auxiliary or emergency power system or standby generator in that it will provide instantaneous or near-instantaneous protection from input power interruptions. Vendor for this UPS is APC (APC by Schneider Electric, formerly known as American Power Conversion Corporation, is a manufacturer of uninterruptible power supplies, electronics peripherals and data center products).

² VOIP is Voice Over Internet Protocol. Internet-based telephony refers to communications services —voice, fax, SMS, and/or voice-messaging applications— that are transported via the Internet, rather than the traditional public switched telephone network (PSTN).

³ OITS is the Office of Information Technology Services a division of the Executive Branch I/T organization which provides centralized computer processing and overall telecommunications and networking services.

⁴ COOP = Continuity Of Operations Planning. COOPkansas.com is the system used to coordinate and document agency Continuity of Operations Planning.

Extract from Section 3 of "Legislative I/T Environment: Initial Assessment" Document
3. Applications and Infrastructure -- c. Future Opportunities

Work Item Type ^A	3. Applications and Infrastructure c. Future Opportunities -- Project / Work Item <i>(additional editing and content required)</i>
App	Legislative Member Interface (LMI) <ul style="list-style-type: none"> - Integrated with the LI - Member Dashboard providing member-specific content, e.g., dynamic calendars - Member Notes - Dynamic calendaring
App	Geo-coding <ul style="list-style-type: none"> - Standardized Map Structure (and supporting data model) - Data (spreadsheets) - LI Integration
App	Video Services (beyond pilot in Old Supreme Court room) <ul style="list-style-type: none"> - Standard configuration - Streaming from multiple committee rooms - Captioning
App	Electronic Message Boards <ul style="list-style-type: none"> - Outside of committee rooms - Agenda & Minutes - Committee video
App	KLISS Longer Term Topics <ul style="list-style-type: none"> - Lawmaking business process enhancement - Rework Virtual Views, Sharing and other work processes - Business Process enhancement for dual engrossing/flagging (x-redundancy) - Explore possibility to simplify the 26 flavors of chamber markup (simplify) - Explore standardizing page sizes between Lawmaking Draft format, Bill format, Enrolled page size - Explore using Deltas (Amendments in context) rather than balloons and displaying them on the ELI/LI
App	New process to remove bill index entries from chamber zone <ul style="list-style-type: none"> - Speed up process: High numbers of these docs (sometimes hundreds per bill) result in slowing things down pulling packages over to the CA (chamber) zone and take up space on the CA TPOZ¹. These are only needed to get info back to the RO (Revisor) for reporting purposes. - Austin, Kristy and Tyson from Propylon architected a new method for doing this that we never had time to implement over the interim.
I/F	KLISS Infrastructure: <ul style="list-style-type: none"> - LDAP² integration - Auto Provisioning of Thick client updates

^A **App** indicates this project is an Applications project, e.g., related to KLISS, Sliq, IRC.

I/F indicates this project relates to I/T infrastructure, e.g., voice or data telecommunications, data center, software utilities.

¹ TPOZ= KLISS Content Repository. Document and data store containing three main components; the versioning content store, the event framework, and the extensible metadata framework (and just in case you were wondering, as I was when I first encountered it, TPOZ has nothing to do with the three pillars of Zen (teaching, practice, and enlightenment) as taught within the discipline of Zen Buddhism.

² LDAP = Lightweight Directory Access Protocol. This software utility will be used to enable users' single sign-on to the KLISS application through Active Directory authentication.

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Work Item Type ^A	3. Applications and Infrastructure c. Future Opportunities -- Project / Work Item <i>(additional editing and content required)</i>
App	Member Services: <ul style="list-style-type: none"> - Update UAM¹ to allow for additional personal links to be added to the members' pages (e.g. Face book, twitter, other URLs – anything that would be allowed by Legislature policy.) - Add v-Card² link and QR code to member pages for quick integration into individuals' personal devices. - Add v-Cal³ links to all areas that would benefit (e.g. committee pages with standing times/dates/rooms, hearings on bills and committee pages, any data that can be pulled from currently available calendar docs in chamber) - Create Committee Bulletin Board page with listings of all updated committee/hearing information displayed for reading and with v-Cal links. (Suggest link from Committee drop menu) - Auto notification of bill status – link to established free services which can be pulled from existing RSS⁴ feeds, e.g., Tweets, Email, Twillio⁵ (text, calls) - Modify LI/ELI for optimized use with mobile devices
App	LI/ELI Enhancements: <ul style="list-style-type: none"> - Current happenings page: By default, only show current day - Make previous days available by a calendar widget, similar to journal pages - Remove hearing notifications from current events page - Create updated Senate seating chart to replace existing scanned image - Publish the chamber calendars in HTML⁶ (this will support the other items from the list of member suggestions) - Add a download link for conference committee list - Possibly convert the conference committee schedule to html
App	Constituent Services (legislative version of CRM – Customer Relationship Mgmt.) <ul style="list-style-type: none"> - Constituent Relationship Tracking (profiles, communications, notes, ...) - Electronic Newsletter - Outlook integration - LI integration

¹ UAM = Universal Asset Manager. This is the management system interface used to update system data such as members, committees, staff, sessions, chambers, and their relations to each other.

² V-Card is a file format standard for electronic business cards. v-Cards are often attached to e-mail messages, but can be exchanged in other ways, such as on the World Wide Web or Instant Messaging.

³ v-Cal or the new i-Cal are computer file formats which allow Internet users to send meeting requests and tasks to other Internet users, via email, or sharing files with an extension of .ics. Recipients of the iCalendar data file (with supporting software, such as an email client or calendar application) can respond to the sender easily or counter propose another meeting date/time.

⁴ RSS = originally RDF Site Summary, often dubbed Really Simple Syndication, is a family of web feed formats used to publish frequently updated works, such as blog entries, news headlines, audio, and video, in a standardized format. An RSS document (which is called a "feed", "web feed", or "channel") includes full or summarized text, plus metadata such as publishing dates and authorship. In KLISS an RSS feed is a standardized XML file format allows the information to be published once and viewed by many different programs. RSS feeds can be read using software called an "RSS reader" which can be web-based, desktop-based, or mobile-device-based. The RSS reader checks the user's subscribed feeds regularly for new work, downloads any updates that it finds, and provides a user interface to monitor and read the feeds.

⁵ Twilio is a fee-based, cloud communications IaaS (Infrastructure as a Service) company. Twilio allows software developers to programmatically make and receive phone calls and send and receive text messages using its web service APIs. Twilio's services are accessed over HTTP and are billed based on usage.

⁶ HTML = Hyper Text Markup Language, a quasi programming and formatting language. Publishing the chamber calendars in HTML will allow the calendar content to be dynamically linked to the associated web pages or documents allowing the user to click the link for instant access. For example a committee name would be linked to the committee page or a bill number would be linked to the bill document.

Legislative I/T Environment: Status as of April 27, 2012

Prepared By: Jim Miller, Legislative CITO With Input From
 Alan Weis, Director of Applications Services and Terri Clark, Director of Technical Services

Work Item Type ^A	3. Applications and Infrastructure c. Future Opportunities -- Project / Work Item <i>(additional editing and content required)</i>
App	Misc. Development <ul style="list-style-type: none"> - Standardize all Post Commit Services on Acme/Diablo framework¹ (this allows for more consistent management of the services) - Make Photos available and stored in UAM and push to the LI (photos don't have to be updated by a developer, require a Change Control) - Assist with updates to ELI/LI for Accessibility compliance - Enhanced search features in all zones - Review information available via RSS/ATOM and API, enhance as needed - Enhance automation on handling EROs - Review the process and make code changes required to ensure italics in statute are preserved throughout the legislative process
I/F	Move ELI to Legislative Data Center <ul style="list-style-type: none"> - ELI is currently being operated by OITS - Current funding grant for OITS hosted services expires in 2013 - Need to assess risks and costs of continuing "as is" verses bringing ELI in house
I/F	Data Center Server Hardware Refresh <ul style="list-style-type: none"> - Active Directory servers will be 6 years old in FY 2014 - KLISS Servers will be 5 years old in FY 2014 - Increase utilization of VMWare² - Options <ol style="list-style-type: none"> 1. Expand existing cluster, extend current maintenance 2. Replace existing servers and SAN³ 3. Phase hardware replacement: P1-post2012 session, P2- post2013 session
I/F	Automate Applications Testing <ul style="list-style-type: none"> - creation of standard test scripts for all zones for main process flows which can be used by non-process experts
I/F	Upgrade Service Desk Applications <ul style="list-style-type: none"> - consolidate ReadyDesk and Altiris⁴ into one new application
End of List: 3. Applications and Infrastructure -- c. Future Opportunities	

¹ Acme/Diablo framework = programming and development tools for coding web applications.

² VMWare is the virtualization software used on Legislative servers. VMWare is the industry leader, and provides the capability to support our requirements of 99.999% uptime through their High Availability functionality. The "virtualization" capability enables the ability to establish two or more "virtual" server environments on one physical server allowing for workload segregation and highly effective use of hardware resources.

³ SAN = Storage Area Network. The SAN provides flexible data storage options in the data center by providing storage capacity using small, relatively low cost storage drives assembled into a modular, easy-to-expand array.

⁴ ReadyDesk and Altiris are applications currently used by the Service Desk to track user help calls, manage pc inventory, and allow remote support of pc's on the network. Combining these into one application will increase the efficiency and capability of the Service Desk operations.

Legislative I/T Environment: Status as of April 27, 2012

Prepared By: Jim Miller, Legislative CITO With Input From

Alan Weis, Director of Applications Services and Terri Clark, Director of Technical Services

Sample of Exhibit A.1 Application Work Item Status Log (sorted by WI Priority)

Work Item #	Work Item Name	Priority	Owner	Task Manager	Status	Function	Log entries in reverse chronological order (latest on top). // prefix indicates Plan or Assign is completed. -- Status Update, format= Update event date-author; event name (if any); narrative re update, issues, next steps. -- Task Assignment, format= Assign due date; person assigned to; description of task and/or deliverable. -- Action Plan, format= Plan expected date of action; activity or action planned and any narrative explanation.	Related Tickets
42.0	3R. Table styles - functioning properly. Original WI#45 6R. Testing - table formatting.	0	MT	JL	O	LM	Update: 04/19-AW LM client deployment - it was decided to wait until veto session is complete to deploy the updated LM thick client. Note from 04/12L: AW to talk with Sandy and Chad re status of this work. Technical work is complete but requires validation. Update: 02/24-AW ticket issue has been resolved and fix will be implemented in the next LM build deployment /	4046
51.0	12R. End User report to verify statutory language unchanged.	0	MT		O	LM	Update: 04/19-AW LM client deployment - it was decided to wait until veto session is complete to deploy the updated LM thick client. Update: 04/04-AW: Ready for testing and can be implemented in the next LM client deployment.	4012
73.1	Original WI#77 Publishing of statute images to the LI.	0	MT	BK	O	LM	Update: 04/27-AW List of statutes with images provided by RS. Source documents still being gathered. Note from 04/04: work not yet completed due to other priorities. Update: 02/15-AW Item is being worked, RS staff is creating list of statutes with images, grids, and forms.	
115.0	Search in DS zone	0	AD	LL	O	DS	Update: 04/27-AW Propylon will provide some resources to get the search system implemented asap. Alan W will complete CR for processing. Note from 04/19: Held up due to resourcing issues - AW will follow up Note from 04/12: AW to check/verify implementation date on this work. ? re implementation.	
141.0	IRC issue: sort voting records re report	0	PS	AW	O		Note from 04/12: PS to follow up with IRC; AW to provide PS with inputs to IRC to verify content Update: 04/04-AW: Pat will check with IRC to see when fix can be installed. WI discussed in 03/02 meeting: requires clarification..... IRC issue - sort voting records to write report (PS area)?	
142.0	LM Conflicts Report	0	MT	AW	O	LM	Update: 04/19-AW LM client deployment - it was decided to wait until veto session is complete to deploy the updated LM thick client. Update: 04/04-AW: Ready for testing and can be implemented in the next LM client deployment. Update: 03/23-AW Scripts were written to check and fix netted bill section metadata used for the report. Netted bill section metadata verified and report created. Report is ready to use. WI added during week of 03/12:	4142 4169
143.0	Conference Committee Report	0	MT	AW	O	LM	Update: 04/19-AW LM client deployment - it was decided to wait until veto session is complete to deploy the updated LM thick client. Update: 04/04-AW: Ready for testing and can be implemented in the next LM client deployment. Note from MaryT on 03/22-23: We are at the point in the session when we will be drafting a lot of conference committee reports. Debbie and the secretaries have been testing today to see what output they get. Unfortunately it is not good. Instead of producing the amendatory language for the report, it pulls in the entire delta into the report. Can we get someone working on this as soon as possible? We will be into it hot and heavy next week!	4208
151.0	CCR tables not coming into Journal	0	PS	AW	O	CA	Update: 04/19-AW Journals - Warren and Timothy have been working with Pat and Susan to review and update the new journal templates. The house is already using the new template and the Senate will start using the new template for veto session. A final pre-veto session template will be ready by Monday 4/23/2012. Any issues identified during veto session will be fixed and released asap. Note from 04/12: Get update from WS re status of work.	4239
156.0	Audit of long titles	0	PS	WS	O	CA	Update: 04/19-AW Report scheduled to be ran on Friday 4/27/2012. Update: 4/13-AW Priority on this is after the Journals are ready for veto session and to run this report before the veto session. Comment from 04/04: Based on results of "long title" audits conducted to date by WS, group agreed that WS would execute similar audits for House and Senate areas and provide results to SK and PS. SK/PS will review and discuss remediation with AW/WS prior to making any changes."	

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Legislative I/T Environment: Status as of April 27, 2012

Prepared By: Jim Miller, Legislative CITO With Input From

Alan Weis, Director of Applications Services and Terri Clark, Director of Technical Services

Sample of Exhibit A.2 Technical Work Item Status Log (sorted by WI Priority)

Work Item #	Work Item Name	Priority	Owner	Task Manager	Status	Function	Log entries in reverse chronological order (latest on top). // prefix indicates Plan or Assign is completed. -- Status Update, format= Update event date-author; event name (if any); narrative re update, issues, next steps. -- Task Assignment, format= Assign due date; person assigned to; description of task and/or deliverable. -- Action Plan, format= Plan expected date of action; activity or action planned and any narrative explanation.	Related Tickets
9.0	North Wing Wiring	0	jcm	TC	O	I/T	<p>Update 4/27 TC; The meeting with Senator Morris has been rescheduled to 4/27. Once the project has been approved Alltech will begin work in the North Wing quad offices.</p> <p>.....</p> <p>Update 4/19 TC; The wiring contractor, Alltech, has completed their walk through of the project. Jim and Terri will meet with Senator Morris on 4/25 to review the project and receive final approval. Work is scheduled to begin on 4/30.</p> <p>.....</p> <p>Update 3/30 TC; The MEI quote for the audio systems has been finalized. The architectural drawings have been finalized. The project plan draft has been completed. The wiring costs have not been finalized yet, this is expected to be done by 4/4.</p> <p>.....</p> <p>Update 3/23 TC; Drawings have gone to OITS for final review. The project plan draft will be Update 4/27 TC; Windows Server patches applied on 4/22 were incompatible with our current version of the Sophos Pure Message antivirus software on the Exchange servers. The Sophos Pure Message software was several versions behind current release levels. Sophos Pure Message was uninstalled. Steve is researching which version is compatible with our Exchange environment. Once the correct version is identified, it will be reinstalled following completion of the veto session. Sophos tech support is working with Steve on this issue.</p> <p>.....</p>	
13.0	Exchange Patch Issue	0	jcm	SR TC	O	All	<p>Update 4/27 TC; The scope of work statement for the integration with KLISS is on schedule for a review by all involved parties on 5/4.</p> <p>.....</p> <p>Update 4/19 TC; CSD ran additional training for committee assistants the last week of session. This was well attended and very helpful as this user group finished up their committee work. The scope of work statement for the integration with KLISS is 90% complete. It will go to all involved parties for final review 5/4.</p> <p>.....</p> <p>Update 3/30 TC; Staff changes at Sliq have delayed discussions on the new feature requests. CSD has offered additional training this week for committee assistants. This has been well attended. User comments have been taken into account and the new system better understand the</p>	
5.0	Liberty Migration Included as WI#108.0 in the App Status log	2	AD	TC	O	DS	<p>Update 4/27 TC; approximately 40,500 documents in the KLRD Public folder have been exported. These still need initial validation and have not been released to Propylon yet.</p> <p>.....</p> <p>Update 4/19 TC; approximately 39,500 documents in the KLRD Public folder have been exported. These still need initial validation and have not been released to Propylon yet.</p> <p>.....</p>	none
11.0	Sliq-Scribe Pilot: KLISS Integration and Enhancement List	2	KC	TC	O	LAS	<p>Update 4/27 TC; The scope of work statement for the integration with KLISS is on schedule for a review by all involved parties on 5/4.</p> <p>.....</p> <p>Update 4/19 TC; CSD ran additional training for committee assistants the last week of session. This was well attended and very helpful as this user group finished up their committee work. The scope of work statement for the integration with KLISS is 90% complete. It will go to all involved parties for final review 5/4.</p> <p>.....</p> <p>Update 3/30 TC; Staff changes at Sliq have delayed discussions on the new feature requests. CSD has offered additional training this week for committee assistants. This has been well attended. User comments have been taken into account and the new system better understand the</p>	
6.0	Transition from Dictated Passwords to Self Service Passwords	4	jcm	TC	O	I/T	<p>Update 4/27 TC; Legislators and session staff who have not changed their password during session will be prompted to change their password at Sine Die. Notification of the change and instructions on changing passwords will be sent starting 4/27.</p> <p>.....</p> <p>Next Actions: May 2012 timeframe - next milestone in this process will evolve at the end of Session when all newly converted users will be presented with the request from the system to change their passwords. As each user changes their password, they will also need to make this password change in each personal device used to connect to the system (e.g., smart phone, personal pc's, etc.)</p> <p>.....</p>	none
4.0	Streaming Video/Audio Switching	5	TC	MC TC	O	DS	<p>Update 4/27 TC; The replacement hard drive has been received and the encoder will be back in production by COB 4/27. We will start testing the software solution for the kill switch the week of 4/30.</p> <p>.....</p> <p>Update 4/19 TC; The replacement hard drive for the primary encoder has shipped. Sliq and av+ design have developed a software solution for the kill switch. It will be installed on the encoder. This will go into testing late next week.</p> <p>.....</p>	none
7.0	Conversion of Phone System to Voice over Internet Protocol (VOIP)	5	jcm	TC	O	I/T	<p>Update 4/27 TC; The cutover is on schedule for 6/22. AT&T has been notified. All spreadsheets have been completed. LDAP work with OITS has been completed. Terri is working with the Statehouse Architect and OITS to add additional jacks in the Revisor's Office as part of the cutover.</p> <p>.....</p> <p>Update 4/19 TC; The cutover schedule has been pushed back by one week and is now scheduled for 6/22. OITS walk throughs to determine telephone number configurations have been completed. LAS and the Revisor's Office are completing their review of the configuration spreadsheets in the next few days. The configurations must be verified and that information supplied to AT&T on 04/27 (originally 04/20) for the cutover to proceed on schedule.</p> <p>.....</p>	