

**Joint Committee on Information Technology
 KLISS Infrastructure Status Report
 Terri Clark, Assistant Director Computer Services
 February 15, 2011**

Mr. Chairman and members of the committee:

Thank you for the opportunity to present on KLISS information technology infrastructure. My responsibilities are in six areas:

1. Data Center Management
2. Customer Services to include client machines, e-mail, and help desk
3. Network Voice, Data, Video (to include Capitol Restoration wiring/switching)
4. Technical Support for system level and 3rd Party Software used by KLISS
5. Change Control
6. KEEP Digital Archive of Legislative Permanent and Enduring Records

Data Center Management

- We have replaced four data centers with new KLISS data centers in the Statehouse with failover in Wichita. The new centers for KLISS allow for 15 minute real time recovery using RAID 5 technology. There are six Hewlett Packard Proliant785 servers and 96 TB of EMC SAN storage available. Avamar Grid is used for data de-duplication backup.
- The KLISS architecture uses VMWare to manage 130+ virtual machines with one technical staff member for all sites.

Old Center Services	Responsible Organization Old	New Center	Responsible Organization New
Print/Composition Penta	State Printer	KLISS SW Vault/Wichita	LAS Computer Services
Text DBMS/Bill Status	DISC Mainframe	KLISS SW Vault/Wichita	LAS Computer Services
Lobbyist in a box/Leg Portal	INK/KIC	DISC Hosted Services	LAS Computer Serv/DISC
IRC & Word Perfect Macros	Chambers	411 W	LAS Computer Serv/IRC

Customer Services Help Desk

- From January 10 to February 14, 2011 LAS Computer Services has received 2,211 trouble tickets and closed 2,192 tickets; this represents 6.6% more volume than the same time last year
- There is an average of 3 hours and 5 minutes from the initial report to full resolution
- KLISS war room received 446 trouble tickets from January 10 to February 9, 2011. Propylon and state staff closed 265 tickets. No “process blocker” severity level 1 trouble tickets have been reported to the war room.

Technical Support Software and VMWare Services

- LAS Computer Services uses the same technologist, Mike Baker, for Data Center Services to support third party software versioning and installs. This staff person is assisted by a technologist on Propylon’s staff.
- System testing is performed by three testers using automated tools such as MacroScheduler for regression testing and FunkLoad for system load testing. The testers are temporary employees,

two of them have been with us over a year. The testers also provide customer support of the KLISS application.

- For the session, LAS Computer Services has contracted with Alexander Open Systems for additional support of the third party client and server software. This support covers Red Hat Linux and Windows Server operating systems, VMWare, Exchange Server e-mail and Active Directory. Propylon pays one half the cost for this in-session infrastructure support.
- DISC technical staff provide hosted services and technical support for the public facing web site, including load balancers, web servers and database servers. DISC also provides perimeter security services, such as intrusion prevention services.
- INK has allowed up to \$350,000 funding for DISC hosted public KLISS WEB site services. INK also pays DISC up to \$50,000 per year to provide technical services for the site. LAS Computer Services manages the DISC service level agreement and architects the site in cooperation with DISC staff.

Change Control and Security Council

- LAS Computer Services has an enterprise Security Council with membership from each of the Legislative Divisions/Departments and the LCITO. The Council is staffed by myself for general controls, Alan Weis for Application Controls, and Stan Wiechert at Post Audit for technical audit and quality assurance. Dave Larson chairs the Council. The council uses Mark Thomas, a certified COBIT advisor to recommend change control policies and best practices.
- There are two change control boards. I chair the change control board for normal versioning of our systems, software and hardware. Requests are made to the board; the change is fully tested and documented by a test team, then a recommendation is made to put the change into production.
- Alan Weis serves as the release manager. He reviews the change request and process used to test the change. If the review is favorable the change is put into production, the system infrastructure and application software is versioned, and the code is frozen.
- Emergency Change Control is handled by Dave Larson, with assistance from Don Heiman. The requests go through an expedited test process and are sent to release management for quality assurance and release. More complete testing may be required for the change to become a part of the version release for application or infrastructure.

Network Services

- Steve Roach handles our local area network and I serve as project manager for Capitol Restoration data, voice, and video wiring, network switching and audio systems.
- We have completed the switching and wiring of the East, West, and South Wings of the Statehouse. Design and engineering work is under way for the North Wing.
- For East, West, and South Wings LAS Computer Services, working with DISC Telecommunications, have managed the design and installation of 139.6 miles of Category 6e copper wire; 1,736 jacks, 87 Cisco switches; and 60 wireless access points. The installation includes a high speed fully redundant fiber backbone network connecting Cisco building router and distribution switches.
- LAS Computer Services operates Microsoft File and Print Services and Active Directory. Computer Services also supports various network services for instant messaging, virus detection, and patch management. Customer Services supports over 650 in-session network users. Finally, staff assists the Security Council with network security audits from third party providers.

KEEP (Kansas Enterprise Electronic Preservation) Digital Archive

- I provide Technical Project Management for an application under development to preserve and authenticate the State's electronic records. The project was approved by all three branch CITO's and the Chief Information Technology Architect for the State. The project prototypes an Open Archival Information System (OAIS) compliant architecture demonstrated using Supreme Court Opinions, Attorney General Opinions, and Legislative Meeting Minutes and Testimony. The prototype is schedule to complete 2/22/2011.
- Funding includes an SGF appropriation (\$150,000); Library of Congress grants (\$200,000); and an INK Board grant (\$175,000). This is a total of \$525,000 in funding. The project's goal is to put in place a system that can be used to satisfy the provisions of HB 2195 for authenticating electronic records for use in a court of law.

Video Grant

- Don Heiman is negotiating a KanEd grant to provide streaming video services, including interactive video, for the Senate Ways and Means and House Appropriations committees. The grant request includes technology for the control room located on the ground floor next to the media offices. A pilot project of the system completed successfully in the 2010 session, including application, design and engineering work.
- We have received \$80,000 for closed captioning of video if the grant request from KanEd is approved.