



NALIT

National Association of Legislative Information Technology

Summer 2010

National Conference of State Legislatures ♦ 7700 E. First Place ♦ Denver, CO 80230 ♦ 303-364-7700

The last Chair's Corner submission for the summer edition of the newsletter historically includes some comment about how quickly the year has flown by. My last letter will be no exception. It seems like just a few short months ago I began my service as your chair, and we were making plans for the Fall PDS in Austin.

CHAIR'S CORNER by Linda Pittsford

As I sit here on a rather rainy, humid day in Austin, I realize that my year as chair is quickly coming to a close. However, I feel there is still much to do and much to look forward to! With travel restrictions in many states, I know it may be difficult for many of our members to attend the upcoming professional development opportunities at the Summit, but I want to make sure you know what has been planned so far.

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The NALIT executive committee is finalizing plans for the Legislative Summit being held in Louisville, Ky. July 25 - 28, 2010. The preliminary agenda is linked from page 5 of this newsletter. It includes sessions on such timely issues as *Information Anytime, Anywhere*; *Cloud Computing for a Rainy Day*; *Greening the Legislature*; and *Protecting Legislative Records in a Digital Age*. We also will be conducting our annual NALIT business meeting during the Summit. In addition to our normal business agenda, we hope to preview a new NALIT collaboration website that the Marketing and Outreach Committee has been working on. If testing goes well, this would be an additional communication tool and work area for our organization.

As with many things we undertake in life, we know that we would not be able to accomplish what we have without the assistance of others. So before I close, I want to thank all who have contributed to our organization throughout this past year. First, I want to thank my fellow officers, Duncan, Dave and Rich, who have provided me with sound advice and guidance throughout the year. Y'all are the best and I appreciate each of you so much. Second, I want to thank all of the NALIT directors, committee chairs and members whose contributions continue to positively impact our staff section. The extra time you take out of your already hectic work day to participate in NALIT conference calls and other related business has not gone unnoticed, and I appreciate your involvement this year. (Just a few more conference calls to go!) Finally, I want to thank Pam Greenberg. Her commitment to NALIT and to those IT staff who have the honor to serve the organization is unparalleled. She is the epitome of professionalism, and I could not have survived this year without her support. Thank you Pam, for all that you do!

In closing, I want to express my gratitude for the opportunity you gave me to serve our organization. I feel like I've gained more from the experience than I ultimately contributed. Until the next time we meet, I'm sending you all my very best.

Linda Pittsford
Chair, NALIT

New Mexico Legislative Information Systems: Leadership Gets “IT”

By Brad Schroeder, Systems Analyst, New Mexico Legislative Council Service

The New Mexico State Capitol (known as the Roundhouse¹) is enriched with deep traditions and long-standing leadership that has cautiously accepted new technologies while being mindful of the effects those technologies may have on the institution. One of the more difficult tasks the Legislative Information Systems (LIS) staff has faced has been to effectively communicate to leadership the growing need to improve technology at the Roundhouse not only for legislators and staff, but also for the various constituencies across New Mexico. Partly pressed by new legislators who have arrived with their own technologies and a familiarity with Web 2.0 and other social media, leadership has now taken an interest in these changes and is starting to realize the need to explore improvements in our strategic information systems.

One of the biggest steps the Legislature took to implement new technology was to webcast the floor sessions. We all know webcasting is not “new,” but its use at the Roundhouse was. The question of permitting it was as hotly debated as solutions to the recent budget shortfalls.² Three years after approving \$75,000 to begin webcasting the floor proceedings from both chambers, only the Senate was ready to begin. That effort was stalled weeks before the 2009 session due to third-party hosting costs and other budget issues. Unrelated efforts by proponents in both chambers raised the issue again. Senate proponents pushed for lower-cost solutions, and a few representatives, armed with their own laptops, web cameras and air cards began their own webcasts from committee meetings.³ During the remainder of the 2009 session and the beginning of the 2010 session, legislative staff, including LIS staff, were brought back into the discussion as each chamber made slightly different decisions on what type of webcasts to offer. During the last two sessions, we testified before the House Rules and Order of Business Committee and a subcommittee (both of which were, ironically, webcast by caucus staff and at least one news organization) and

prepared reports for a Senate leadership committee on various webcasting scenarios, their costs and implementation schedules. In the end, the LIS staff and building services staff were able to install the necessary equipment and internally host both House and Senate floor proceedings within days of being given the order to do so.⁴

It was a huge step for the Legislature, and now more technologies are being considered within the LIS network. Most of these include the Tablet PC to reduce paper and printing costs (already getting questions about the iPad!), Smartphone integration to increase voice and data communications (we support Blackberry, iPhone, Droid and other Windows Mobile phones), and a number of caucus websites and social media pages have been developed by caucus staff.⁵ Although budget constraints weigh heavily in our final decisions, we are now in discussions about providing more robust disaster recovery plans, cloud computing and storage options, and desktop and server virtualization solutions.

A communication divide has been bridged, allowing policymakers and technicians to gain a greater understanding of the tension between what’s possible and what’s desirable. We are able to make better informed decisions about our strategic information systems and both short-term and long-term goals are defined more clearly as the Roundhouse is getting “IT”!

Endnotes:

¹ http://en.wikipedia.org/wiki/New_Mexico_State_Capitol

² <http://www.santafenewmexican.com/Local%20News/Budget-crunch-delays-session-webcasting>

³ <http://newmexicoindependent.com/16306/webcasting-revolution-begins-this-afternoon>

⁴ <http://www.nmpolitics.net/index/2009/03/staffers-working-hard-to-get-webcasting-right>

⁵ <http://www.facebook.com/pages/NM-House-Democrats/254268702788?ref=mf&v=wall>
<http://twitter.com/NMHouseDems>

<http://www.facebook.com/group.php?gid=50710806327>

<http://twitter.com/NMHOUSEGOP>

<http://www.nmhousegop.com>

<http://www.nmsenate.com>

<http://www.newmexicorepublicansenators.com>

Stopping Malware with Black Holes

By Jerry Gamblin, Security Specialist, Missouri House of Representatives

If you manage machines that have access to the Internet, you have had problems with machines being overrun by malware: taking 20 minutes to start up, popups, changing the home and default search engine, etc. Malware can even turn a machine into a “zombie” and be an unwilling participant in one of the dreaded botnets we have read so much about.

One of the more popular emerging techniques for fighting malware is using a DNS-based block list—or, as the lexicon that I am accustomed to and will use the rest of this article, BlackHole DNS. It is a simple concept that involves changing the host record of a “known bad site” from a routable IP address to a loopback address on your DNS server. Thus, when a computer tries to access a site serving the malware it is really just accessing a local non-routable IP on the local machine.

The Missouri House of Representatives has been using a BlackHole DNS server in conjunction with our Internet service provider (<http://www.more.net>) since the spring of 2007. It was a move we took to help prevent malware infections on our network, since our end-point protection seemed to miss more and more malware every day. As of June 2010, our block list has swelled to nearly 30,000 known bad sites that no longer can infect our machines.

As with all security measures, this is only a layer and doesn’t totally stop malware infections. However, it has become an invaluable tool in our attempt to keep our network safe. The best part was that it was *FREE* and you can implement this same technology on your network for probably the same cost.

A good place to start your investigation about using a BlackHole DNS server would be: <http://www.malwaredomains.com/>

A few emerging commercial services also have started to provide these services:

- Google Public DNS (free): <http://code.google.com/speed/public-dns/>

- NortonDNS (free for now): <http://www.nortondns.com/>
- OpenDNS (not free): <http://www.opendns.com/>

If you would like to have a more technical discussion on implementation or usage of a BlackHole DNS server, feel free to send me an email at jerry.gamblin@house.mo.gov, and I will do my best to share my knowledge of this technology with you.

Are You a Member of NALIT?

NALIT general members are legislative information technology professionals employed by a legislature of one of the 50 states, insular possessions, or territories of the United States. If you’d like to be included in our [membership directory](#), please contact [Pam Greenberg](#) with your name, title, office, address and contact information.

News from the Staff Vice-Chair

By Tim Rice, NCSL Staff Vice Chair, Legislative Information Services, Illinois

Last July at the NCSL Legislative Summit in Philadelphia, I was elected staff vice chair for the 2009-2010 conference year. Since so many of you actively encouraged and supported my candidacy, and because Rich was desperate for content, I thought I’d provide a look into the role of an NCSL staff officer, at least from my perspective. The first five months of my term as staff vice chair were [outlined](#) in the NALIT Winter 2010 newsletter.

Update: Rich is still fishing for material, even after deadline, so here’s a look at the second five months. The winter 2010 Legislative Staff Coordinating Committee (LSCC) / NCSL Executive Committee meeting was held in Savannah, Ga., at the end of January. (If you’re not familiar with those groups, refer to my [previous article](#) or to the NCSL website pages for the [LSCC](#) and [Executive Committee](#).)

Gary Schaefer and Gary Wieman were there as members of the Executive Committee and LSCC, Linda Pittsford as a member of LSCC due to her

position as NALIT chair, and Michael Adams as an overall staff vice chair of standing committees. February and March brought a lull in NCSL activity for me while things were going full-bore with the regular session of the Illinois General Assembly.

The NCSL Spring Forum was held in Washington, D.C., April 7-10. This is one of the regular meetings of the standing committees and allows for in-depth policy discussions as well as interaction with federal counterparts. Michael Adams, Duncan Goss and Gary Schaefer also were there in their various roles. We just missed the cherry blossoms, but the weather was unseasonably warm, and the spring flowers were in full bloom.

The rest of April and the first part of May were filled with session work and supervising our LFP fellows (see accompanying article in this newsletter).

The spring 2010 LSCC/EC meeting was in Denver May 21-22. I went a couple of days early and spent the time meeting with various NCSL staff about the upcoming year. It is going to be a challenging year, mostly because of budgetary issues, but it is also an opportunity to strengthen and refine the things we do.

The meetings went well, including being hosted at the Colorado State Capitol by Michael Adams and others. The full LSCC meeting was held in the House chamber. NCSL hosted an open house at its headquarters Friday evening. Along with Michael, Linda, Gary and Gary were able to attend.

On a personal note, I left Denver on Saturday afternoon to fly to St. Louis, where Nancy picked me up. We proceeded to Greenville, Ill., where the following day our youngest, Luke, graduated from Greenville College, along with his fiancé Lydia and our daughter Annie's fiancé Tyler. The next day was the beginning of a moving marathon that involved over 500 miles with a rental truck and transporting goods between several different locations.

Luke ended up near St. Louis, where he has begun work as a developer for AT&T. Tyler ended up in Cincinnati, where Annie will start law school at UC in the fall semester.

On June 1-2, I was at the NCSL office in Washington, D.C. I met with Sen. Richard Moore of Massachusetts, who is the NCSL president-elect, along with several NCSL staff, to begin the process of appointing officers to the standing committees.

As staff chair for the coming year, one of my responsibilities is to appoint the legislative staff chairs and vice chairs of the various standing committees along with a group of overall officers. It can be a daunting task because it involves so many people I do not know, but NCSL staff are very helpful in the process.

I'm back in the office for two days to get caught up and to prepare for my next adventure. I leave Sunday, June 6, on an NCSL study tour of Austria and Germany in association with the Partnership of Parliaments (PoP). NCSL has a long-term relationship with the PoP that includes alternating trips by delegations from one country to another. A number of PoP participants always attend the NCSL Legislative Summit.

Our trip will take us to Graz, Austria, and Dresden and Berlin, Germany. We'll learn about their parliaments, visit with counterparts, experience the culture and take in historical sites. Our group consists of eight legislators from around the United States, two legislative staff, and one NCSL staff. We return home on June 16.

Looking ahead to the summer, Luke's and Lydia's wedding will be July 3 here in Springfield and Annie's and Tyler's wedding will be August 7 at our home. In between those events will be the NCSL Legislative Summit in Louisville July 25-28. I look forward to returning to the site of the 2008 NALIT PDS and seeing some of my Kentucky friends once again. Hopefully many of you will be able to attend as well.

The end of the Summit marks the beginning of my year as NCSL staff chair. It seems to have gotten close very quickly, and I'm sure the year itself will go by in a flash. Thanks for your support, and I'm looking forward to what can be accomplished in the upcoming months.

NALIT at the NCSL Legislative Summit, Louisville, Kentucky July 25-28, 2010

The NCSL Legislative Summit in Louisville is the only place where state lawmakers, legislative staff and national policy experts from across the country converge to share ideas, best practices and strategies. Sessions designed specifically for NALIT members will focus on unified communications, green IT, cloud computing and preserving legislative digital records. Join NALIT members at the Legislative Summit in and expand your legislative knowledge and leadership skills in all areas! See the online NALIT Agenda for details.

NALIT Annual Business Meeting and Luncheon

NALIT's Annual Business Meeting will be held at the NCSL Legislative Summit in Louisville on Wednesday, July 28, 2010, from 12:30 pm-2:00 pm. NALIT members will elect new officers, hear about NALIT committee activities, congratulate winners of the NALIT Achievement and Online Democracy Awards, and consider other business of the association. All NALIT members—legislative IT professionals who serve the nation's 50 states, its commonwealths and territories—are invited to attend.

Running for Office: The NALIT Process

By Pam Greenberg, NCSL Liaison to NALIT

Officers and directors of the NALIT Executive Committee play a major role in steering the overall direction of the association. As a member of the NALIT leadership team, they develop the agenda for NALIT sessions at the Legislative Summit and implement strategies to promote information exchange among legislative IT professionals across the country and internationally.

NALIT officers typically serve their terms in a progression from secretary to vice chair, and from vice chair to chair, which gives the secretary and vice chair the chance to gain the background and

experience that can be helpful in taking on the responsibilities of the role of chair. Therefore, the nominating committee usually focuses its work each year on recruiting and interviewing for the secretary position.

The secretary's primary duties include taking minutes of NALIT Executive Committee and business meetings, soliciting articles for the NALIT newsletter and publishing the newsletter at least twice a year. The secretary also could be called upon to preside over meetings in the absence of the chair and the vice-chair.

NALIT also needs volunteers to serve on the Executive Committee or to participate in NALIT committees. Directors and committee members are appointed by the NALIT Chair shortly after new officers are elected at the NALIT Business Meeting each year. The NALIT website lists the responsibilities of directors and the purpose of NALIT committees.

Saddle Up! Race to NCSL's 2010 Legislative Summit in Louisville!

By Nancy Cyr, NCSL Staff Chair, Nebraska

As you know, the Summit is NCSL's premier meeting and offers top-quality programs and professional development training for legislators and staff. This year's summit will offer more than 150 sessions. Programs sponsored by all 10 staff sections offer a great opportunity for staffers from every walk of legislative life to reap the benefits of nationally known speakers and to share information and ideas.

This year, NCSL's Legislative Staff University presents "Leadership in Challenging Times," featuring Representative Jay R. Kaufman from Massachusetts. Rep. Kaufman is the director of the Center for Leadership and Public Life at Northeastern University in Boston. On Monday, July 26, he will share his ideas and perspective on essential leadership skills necessary to motivate and inspire others and to make a difference in policymaking and personnel management.

NCSL's "Salute to Legislative Staff" takes place on Wednesday morning, July 28. Join staff from around the country as we recognize those who have

contributed to their legislatures, staff sections and standing committees. Former Nebraska state Senator, David Landis, will share his insights on the valuable contributions legislative staff make to the process. And, of course, NALIT's own Tim Rice will receive the gavel as he begins his term as 2011 NCSL Staff Chair.

Plenary sessions throughout the week feature former Florida Governor Jeb Bush and pollsters Peter Hart and Neil Newhouse. And while education and networking opportunities are the focus of the summit, a visit to Louisville would not be complete without a trip to Churchill Downs, the site of the summit's closing event.

Can you think of any other meeting that offers all of these opportunities in one meeting? I hope to see you there!



Legislative Fellows Program

By Tim Rice, NCSL Staff Vice Chair, Legislative Information Services, Illinois

The Legislative Fellows Program (LFP) is sponsored by the U.S. State Department and administered by the American Councils for International Education and NCSL. A follow-up to the LEAP program begun in 2005, it provides opportunities for young professionals from Georgia, Russia and Ukraine to gain practical experience in and exposure to U.S. government, particularly at the state legislative level.

After passing through a screening regimen, successful LFP candidates are assigned to U.S. legislative entities for a period of one month. As a group they go through an extensive orientation with NCSL staff before going to their placements, and they also participate in a post-placement conference.

Along with learning about American government and experiencing American culture, the fellows are expected to do meaningful work for their hosts. They also prepare a proposal for a reciprocal visit to their home country; if approved, someone from the host site goes to the fellow's home country to participate in the approved program.

I never participated in the LEAP program because it involved a four-month placement, which I did not think would work well for our agency. I still had some misgivings about the LFP program, which is only a one-month placement, because none of the candidates were likely to be IT staff or have a high level of IT skills or interest. However, I know firsthand the value of intercultural exchanges and wanted to find a way to make it work for us and the participants.

The solution for me was to work with the secretary and assistant secretary of the Illinois Senate and the clerk and assistant clerk of the Illinois House. We applied for and received two fellows—one from Tbilisi, Georgia, and the other from Izhevsk, Russia. While I served as the actual supervisor for the fellows, they spent time not only with me but also with the House and the Senate.

Each of us gave them different tasks. Since we were in session, the Senate prepared a list of bills in areas of interest to the fellows for them to analyze and follow through committee and floor debate. The House had them work with staff handling FOIA requests and with a local representative and his staff as they dealt with constituent matters. I had them do some research on legislative websites.

Senator Pamela Althoff also hosted a fellow from Cherkasy, Ukraine, who shadowed her in her various duties. I conducted the initial orientation to Illinois government and the legislature for all three. Together, they also were able to experience a variety of governmental functions and activities, from a field trip to a prison to visits with several state agencies to attending a city council meeting. They also got a healthy dose of culture, touring the various historical sites in the area as well as St. Louis and Chicago.

It's important to note that as their supervisor, I was responsible for them only during work hours. American Councils found the host families for them, and the host families and fellows were responsible for making sure they got to and from work and for providing many of the cultural activities.

The month went by quickly for everyone involved. Sure, there were some bumps along the way, but overall it was a very worthwhile experience. I always appreciate hosting visits from other states and countries, because I learn about them and expand my horizons, and I get to see my own situation through a fresh perspective. I made some new friends, established some personal relationships across international boundaries, and I might even get to visit them in their home countries and learn from them.

The next round of LEP fellows will be coming to the United States in October. You can learn more about the program at www.ncsl.org/default.aspx?tabid=18790. Maggie Lamborn is the NCSL contact. Of course, you can contact me as well (tim.rice@ilga.gov). I urge you to consider it—if you can do it, it will be worth it.

Avamar Grid Backup and Disaster Recovery Project

By Terri Clark, Assistant Director for Infrastructure Kansas, and Dave Larson, Director of Legislative Computer Services, Kansas

During the last several years, the Kansas Legislature tried various methods to securely back up data, including a hosted Tivoli solution and CommVault tape backup solution. When VMWare was identified as a critical component of the Kansas Legislative Information System Services Infrastructure (KLISS-I) project, there was an immediate need to identify a reliable and secure backup and disaster recovery system that could integrate with the VMWare environment. Several options were considered.

1. Extend the use of CommVault tape backup across the KLISS-I environment. Using CommVault to back up the VMWare environment posed several risks:

- It would take days to complete a full backup of the amount of data in the KLISS application.
- Purchasing CommVault agents for 200 virtual servers was cost-prohibitive.
- Restoring virtual servers from the CommVault environment was difficult and time-consuming. Data would be stored across multiple tapes. Each of the tapes involved would need to be located, then loaded in the correct order.
- CommVault had not been installed successfully in the Legislative Exchange Server 2007 system.
- A larger tape library purchase would be required at an estimated cost of \$27,100.

2. Extend the use of CommVault tape backup with vRanger application. vRanger converts the 200 virtual servers into flat files that can be stored on a Windows server. The converted flat files can then be backed up to tape within CommVault without purchasing 200 CommVault agents for the virtual servers. Risks with this solution include:

- It would take days to complete a full backup of the amount of data in the KLISS application.
- Restoring virtual servers in this method is extremely difficult and time-consuming. First, the converted flat files would need to be converted back to virtual servers. The virtual servers could then be restored. Data would be stored across multiple tapes. Each tape involved would need to be located, then loaded in the correct order.
- CommVault had not been installed successfully in the Legislative Exchange Server 2007 system.
- A larger tape library purchase would be required at an estimated cost of \$27,100.

This option provided the best cost. The only new expenses were the vRanger application and a larger tape library. The ability to recover data, however, would be severely affected. The time required to restore systems would be extended. The Legislative Strategic Plan requires a 99.999 percent uptime for the KLISS application that could not be met with this option.

3. Implement Avamar Grid disk backup solution. Avamar Grid is a hardware device similar to a Storage Area Network (SAN). Avamar Grid uses Random Array of Independent Nodes (RAIN) technology. Data are stored both horizontally and vertically across the SAN drives, providing a higher level of redundancy than RAID 5. This option had several advantages:

- The Avamar Grid also performs data de-duplication at the data source. Once the initial backups are run, data de-duplication technology checks each file for identical data chunks already stored on the disks. Only unique data is written to the disks. Data de-duplication will allow the large amounts of data in the KLISS application to be backed up and restored within a reasonable amount of time.
- A second Avamar Grid device was installed in the Wichita offsite data center for full disaster recovery services.
- The Avamar Grid device provides a backup solution for all legislative systems, including the Exchange Server 2007 system.
- Although the Avamar Grid had the highest start-up costs, a cost comparison to CommVault tape backup showed start-up costs would be recovered within two months.
- This project would stabilize the legislative backups and provide full disaster recovery capability.
- Implementing the Avamar Grid met the Kansas Technical Architecture standards, is a key component of the legislative technical architecture, and is a viable business model for seven-plus years.

Construction delays at the new Wichita Offsite Data Center moved installation of the secondary Avamar Grid System back to January 2010. The production Avamar Grid System was installed and in full production in the legislative Topeka Data Center on time. The project was completed under budget. User satisfaction with the new system is high. Restoration of user files is completed quickly and accurately. System administration is about 80 percent lower than with the CommVault system, averaging only one to two hours per week.

Project Objectives

1. Secure and reliable backups of all legislative data and systems, including user files, application data, Exchange Server 2007 and the new KLISS application development environment.
2. Identify and implement a backup and disaster recovery solution that would meet the Legislative Strategic Plan goal of 99.999 percent uptime for the KLISS application.
3. Reduce system administration hours required to perform and maintain legislative backups.
4. Implement the Avamar Grid Backup System within the reduced legislative budget for information technology.

What was the business problem that needed to be solved?

The cost to include the KLISS-I VMWare environment in the current CommVault backup system was beyond the legislative information technology and KLISS-I budget amounts. There were also technical issues with backing up and restoring the Exchange Server 2007 e-mail system in the current CommVault configuration. System administration staff were spending five to eight hours each week with backup and file restore duties.

Through investigation and vendor demonstrations, legislative staff recommended the Avamar Grid Backup System for the legislative data center.

Project History and Timeline

An overview of the major activities of the project and how they were accomplished follows.

- A work breakdown schedule and Gantt Chart showing a high-level summary of the activities and timeline.
- Project Planning – The initial project plan was developed by the project manager.
- Avamar Grid Backup System Build – The initial build of the Avamar Grid Backup System was performed by AOS consultants. Computer services staff were heavily involved and benefitted from knowledge transfer during the process.

- Acceptance of the Avamar Grid Backup system – Acceptance testing was performed by computer services staff. Both data and system configurations from legislative servers were backed up. Restores were tested at both the file and system levels. E-mail from the legislative Exchange Server 2007 system also was restored.
- Once the system was installed in the Wichita Offsite Data Center, the system replication was tested and monitored.

Risk Assessment and Mitigation Techniques

One of the highest risks associated with this project was late delivery. Schedule slippage of the initial production environment in the Topeka Data Center could have placed the Legislature at a high risk of being able to preserve and recover data. If a catastrophic event should occur and data backup services failed, there was the possibility the business of the Legislature would be seriously affected. The Legislature relies on the backup and disaster recovery systems to preserve data and provide for timely restoration of systems to continue business.

The Avamar Grid System is a new technology for computer services staff. There was successful knowledge transfer from the AOS consultants during the implementation process. Staff have also used on-line learning resources from EMC. Computer services staff have demonstrated the ability to backup and restore files, maintain replication services between the Topeka and Wichita data centers, and perform system repairs.

Change Control, Quality and Configuration Management Techniques

The Legislative Change Control and Configuration Management procedures were followed during this project. No technical changes were made during the project.

Project Communication

Communication techniques employed during this project were:

- Weekly status meetings.
- Weekly status reports from this meeting were published to the steering committee and computer services director.

- Steering committee meetings were held monthly, and written reports were submitted in advance on the project status.
- The project manager testified to the Joint Committee on Information Technology on the project status as required by statute.

Customer Expectations

The ability to preserve and restore legislative data and systems following an event is critical to the business processes of the Legislature. Data replication to the Wichita Offsite Data Center must be accurate and timely to mitigate additional risks. If users request a file restore service, they expect the data to be restored quickly and accurately.

Following implementation of the Avamar Grid System, computer services staff have been able to meet all customer expectations.

Project Success Factors

Project success factors were established before project start-up. The ability to measure success is instrumental to best practice in project management.

1. Avamar Grid System in production in the Topeka Data Center on time.
2. Replication of data to the secondary system in the Wichita Offsite Data Center is accurate and timely.
3. Ability to recover data and systems quickly and accurately.
4. Computer services staff can operate and maintain the new system with minimal support from outside consultants.
5. The project is completed on time and on budget.

Project Results

The project schedule planned a start date of Aug. 27, 2009, and a finish date of Nov. 3, 2009. The project started on schedule. Implementation of the Avamar Grid Backup in the Topeka Data Center production environment was completed on Oct. 2, 2009. At this point, legislative systems, including user data, Exchange Server 2007 and the KLISS development environments were moved to the Avamar Grid Backup.

Due to construction delays at the Wichita Offsite Data Center, installation of the secondary system was delayed until January 2010. The secondary

system was installed Jan. 25, 2010, with full system testing and acceptance completed Feb. 10, 2010.

Although this delayed the project schedule, work on the secondary system was suspended until construction in Wichita was finished. The delay was beyond the control of the Legislature. However, the delay did not involve additional costs.

Planned Versus Actual Final Resource Data

- The project planned resources were 492 work hours.
- Actual work hours totaled 415, 77 less than planned.

Lessons Learned from the Project's Implementation, Organized by Key Areas

Vendor Management

What worked well:

- Thorough vetting of vendor credentials and experience.
- AOS technicians assigned to the project were knowledgeable and experienced with this technology. The technicians were thorough during knowledge transfer and tested computer services staff on the technology.

Areas to improve:

- Implement better internal methods to track vendors' time on the project. This will save time in verifying invoices later in the project.

Communications

What worked well:

- Regular team status meetings.
- Regular updates of status to the steering committee and executive sponsor.
- Briefing Joint Committee on Information Technology on project status and benefits of new technology. This benefited relations with the committee in the Legislature that oversees IT appropriations.

Areas to improve:

- Clarify project scope to legislative departments. Our research department assumed the initial Avamar Grid implementation would have the capacity for the 2010 redistricting project. The initial sizing of the Avamar Grid encompassed only the existing operational and KLISS requirements.

Funding

What worked well:

- Negotiations with AOS and EMC to obtain Avamar Grid technology within the reduced KLISS-I project budget.

Areas to improve:

- KLISS-I project funding was cut in half due to the poor state economy. Some things are beyond our control. However, a little better job projecting risk would have left us in a better position to manage it.

Technology

What worked well:

- Implementation of primary Avamar Grid Backup system. It appears to be the correct technical choice.
- Replication of primary to secondary Avamar Grid Backup system in Wichita Offsite Data Center.

Areas to improve:

- There was some frustration in resolving network issues during the Wichita system implementation. Getting all involved parties together early in the troubleshooting process could have resulted in quicker resolution.

Implementation

What worked well:

- Installing the Topeka system and learning it first helped with the Wichita installation.

Areas to improve:

- Identify and build firewall rules before implementation.
- Work more closely with the state's WLAN network engineering staff to identify system configurations, such as packet sizes during replication, to be sure the network switching and routing configurations are compatible.

Conclusion

All things considered, the acquisition and implementation of the Avamar Grid system went well. Through the support of the steering committee, the director of computer services, the statewide WLAN engineering team and good project management, the system is today installed and functioning. We are pleased with the technology and believe it will be instrumental in supporting the completion of the KLISS vision.

Executive Committee – 2009-10 Officers and Directors



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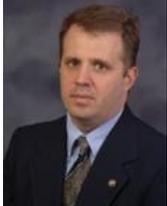


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NALIT's Purpose

1. To promote the exchange of ideas and information on all aspects of legislative information systems. This includes, but is not limited to, the management and technical development of these systems.
2. To provide a network of information exchange among persons involved in providing management and technical support for legislative information systems.
3. To provide improved communications and foster better relations between legislative information systems management and staff, and the legislators and legislative staff they serve.
4. To promote the service of the Association membership on the various committees, subcommittees, task forces, etc., of NCSL.
5. To enhance the professionalism of the members of the Association through activities supporting the purposes noted above.

Call for Newsletter Articles

Publishing this newsletter would be impossible **without your participation.**

What kind of articles do we need?

- Descriptions of IT-related projects undertaken by your office.
- Reviews or studies that your office has done on IT-related issues.
- IT-related policies or systems implemented in your state (not just by your office) that affect legislative IT operations.
- Anything at all that you think would be interesting to your peers in other states.

No word limit (or minimum). A typical article is two or three single-spaced pages, but longer or shorter articles are fine. The more articles we have, the better the publication!