Chair’s Corner

By Cindy O'Dell, NALIT Chair, Service and Support Manager, Legislative Research Commission, Kentucky

Springtime thankfully brings a breath of clean fresh air and the beautiful buds and blooms of renewal. Another season (session) is in the books too here in Kentucky!

I know I’m not the only one who can hardly believe how quickly time goes by. Thank you to Vinay Dattu and the entire Tennessee Office of Legislative Information Systems staff for hosting the outstanding Professional Development Seminar (PDS) in Nashville back in September. The NALIT Professional Development Seminar never fails to inspire and energize me. A big shout out to Pam and Jackie for all your hard work keeping everything on track as well. We could not do it without you!

During our PDS in Nashville we asked everyone who attended the “new to NALIT” session to share something about themselves that no one else in the room knew about them. The diverse backgrounds and interests that our group collectively brings to the table are amazing.

We learned of people with nursing, biology, engineering, and astronomy backgrounds along with someone who used to do blood spatter analysis! We also learned that some had interest in violin, trumpet, drums, scrabble, unicycles and historical reenacting. We even had a foreign film star and two people who were actors portraying Judas in our midst!

Some of us were not good at sports and a couple of us had experienced an uncanny number of broken bones. One of us was born during a hurricane and we had backgrounds in whitewater photography, orchid gardening and breakout room game design. An organ grinder’s monkey even once bit one of us! While some of us came straight into information technology as a career it was a more accidental process for others. And yet we come together brilliantly to share the ins and outs of supporting information technology needs in our respective state legislatures. The comradery that we all share over the hustle and bustle of preparing for and the constant on high alert status during legislative session days is a great bonding agent.

What does NALIT mean to me? It’s a walking, talking, breathing knowledge base of best practices in legislative information technology. NALIT is a great place to share and test our theories of ways to keep information technology flowing and thriving in our state legislatures.

The NALIT Executive Committee members have been working hard developing topics for presentation at the NCSL Legislative Summit Aug. 5-8 in Nashville. The PDS Planning Committee is also in full swing and we are very excited about the upcoming PDS Oct. 1-4 in Boise, Idaho. But before either of these meetings occur, we have an opportunity that everyone in NALIT can participate in. Jeff Ford and Michael Norris will be revisiting their well-received cybersecurity presentation with a Cybersecurity Inside State Legislatures Webinar at 2 p.m. (ET) May 22. I hope everyone will try to join us for the webinar.
**Legislative IT Profiles**

Starting with the Winter 2016 edition of the NALIT Newsletter, we began a series of articles profiling legislative IT offices. Since then, we’ve highlighted IT offices in 17 states: Alaska, Colorado, Hawaii, Illinois, Indiana, Kansas, Kentucky, Maine, Minnesota Office of the Revisor, Montana, North Carolina, North Dakota, Ohio, South Dakota, Tennessee and Virginia. This edition highlights Idaho. Send in your state’s profile now!

**Idaho**

*By Soren Jacobsen, IT Specialist, Legislative Services Office, Idaho*

The Idaho Legislature convenes annually at 12:00 noon on the Monday closest to the 9th of January. Session begins each year with both bodies meeting in the House of Representatives chamber for the Governor’s State of the State address. There are no limits to the length of a session of the Idaho Legislature, although they usually end in late March or early April. A typical legislative session runs 80-90 days; however, the longest in Idaho’s history lasted 188 legislative days in 2003. Idaho has a balanced budget mandate that governs much of the fiscal process as well as a one topic/subject per bill requirement.

The Idaho Senate has 35 members each representing one of the states 35 districts while the House has 70, two for each district. Each member of the House, while designated as seats “A” and “B,” represents their entire district rather than dividing the district between them. The number of districts is not permanently set and can be changed during the redistricting process that takes place every 10 years. Despite currently being predominantly Republican, the state has a bipartisan redistricting committee, equally divided, with three Republicans and three Democrats with at least 4 votes required to approve a plan.

The IT division for the Idaho Legislature resides in the Legislative Services Office (LSO) and serves all 105 legislators as well as about 70 full time legislative staffers and roughly 100 session only staff. LSO is a non-partisan office and supports all legislators, staff, and caucuses. IT staff includes four developers and a Development Supervisor, two network administrators, and a Help Desk staff of two which includes the Division Manager. Additionally, the budget office has its own “swiss army knife” IT staff person.

We support all electronic systems used by the legislature including computers, the content/bill management system (GEMS, written in house), automated chamber systems, Phones, AV, Networks, Web based services, printers and pretty much anything else legislators or staff are clever enough to try to implement in the workplace. Strictly speaking we are not a BYOD shop as we provide laptops for all legislators, but we allow legislators to bring in personal devices and increasingly find ourselves supporting a variety of devices on various platforms, from laptops to mobile devices. Service commitments are different for personal devices, however.

Short term projects on our horizon include migrating all computers to windows 10 and replacing our SANs. We are also beginning the process of an IT audit to take a holistic and long term look at the technology services we offer. This past session we did a pilot for a general cross platform (email, text message, mobile device app, recorded phone message) emergency alert system for potential Capitol building events like an active shooter or chemical attack. That project went well and we intend to put into full production over this interrim. A little bit about the Idaho Legislatures IT division can be found here: https://legislature.idaho.gov/iso/it.

**Contribute Your State’s Profile**

Please consider contributing information about your office for the next edition of the newsletter. Send a profile of your office to Soren Jacobsen, NALIT Secretary, at sjacobsen@iso.idaho.gov. Here is some of the information to include in your state's IT profile narrative:

- What is your normal legislative assembly schedule?
  - Convene and adjournment schedule.
  - Any constitutional limitations on legislative days.
  - Session types.
• How many members and staff are supported by IT?
  o Number of legislative members by chamber.
  o Number of full and/or part time legislative assembly staff, including types of staff.
  o Number of council staff.
  o Any offsite locations supported.
• Do you have IT staff that support specific chambers or caucuses? If so, what does the IT staff support versus overall IT support staff?
• What areas of IT does your office support, and how many staff support each area?
• Do you support “bring your own devices” or do you provide equipment to members and staff?
• How is your IT organization governed?
  o Any major projects in progress that you want to share?
• Provide a website link to your IT or office website.

You’ll also want to attend the annual NALIT Business Meeting and the NALIT Dutch Treat dinner at a local restaurant. For more information, visit www.ncsl.org/nalit and www.ncsl.org/summit.

Give a Colleague a Shoutout and Win!

Do you have a colleague, either in your legislature or another, who’s gone above and beyond on a project? Served as an excellent resource? Demonstrated commitment to the legislature? Give them a shoutout!

Complete this short form to praise someone who deserves it (and feel free to spread the word)! We’re recognizing legislative staffers for their contributions to their legislatures and NCSL. We’re also giving away prizes: Everyone who is either nominated or nominates a colleague before 5 p.m. Pacific Time on Friday, May 10 will be entered into a drawing for one of two Amazon Echo Dots! And there will be a very special prize for staff in the state that receives the most shout-outs! NCSL’s blog post has more information.

NALIT Annual Business Meeting

NALIT’s annual business meeting will be held at the NCSL Legislative Summit in Nashville on Thursday, Aug. 8, from 10-11 a.m. At the meeting, NALIT members will elect new officers, vote on proposed NALIT By-Laws changes, recognize the winners of the Legislative Staff 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.

NCSL Legislative Summit

Attending the NCSL Legislative Summit is a fantastic opportunity to learn from a variety of sources and perspectives. NALIT will be sponsoring the following sessions at the Summit, which also offers dozens of other professional development and policy sessions. Two of the sessions sponsored by NALIT include “The Changing Cyber Threat Landscape,” and “Recruiting and Retaining Top Tech Talent.”
Virtual Test Environments in California

Contributors: Harjot Bains, Information Technology Manager; Bill Chally, Jerry Suo and Shannon Young, IT Specialists; Office of the Legislative Counsel, California.

Software testing is an activity to ensure if a software application is defect-free by checking actual results against the expected results. In a situation when multiple testers are testing an application, the quality of this activity is dependent on testers’ business knowledge, documentation of system requirements, testing methods, test planning and test environments. In our view, availability of test environments is very critical.

When testing applications, testers may use a dedicated lab environment, or they may install the new application on their current system for testing. If budget permits, another option is to purchase new PCs for testing. But, if there are more testers than lab space, budget isn’t available, or a technical constraint prevents the old and the new system from co-existing on the same machine, a virtual test environment may be a helpful solution.

By creating a virtual version of an Operating System (O/S), desktop, application, etc., a user can access a virtual machine (VM) from their own computer and perform testing that emulates how the behavior of the new system would interact with other components. This not only saves budget and hardware costs but typically enables faster testing cycles for testing teams that traditionally share test machines or lab space.

Below are three examples of utilizing virtualization with software testing at the Legislative Data Center (LDC) in California. The first employs application virtualization, where users connect to the VM and only see a web-based application. The second example utilizes desktop virtualization to perform the primary test scenarios of functional testing. The third example also utilizes desktop virtualization but only as an initial testing step as the project scope included both an O/S and hardware replacement.

Our examples
One of the first project efforts at LDC to use virtualization in software testing was the Legal Services 2.0 Project, involving the replacement of the COTS workflow component (TeamConnect) with a new application developed in-house (Legal Services 2.0). A group of more than 50 end users (attorneys and legal support staff) representing multiple business groups was asked to perform User Acceptance Testing (UAT). Due to the technical configuration, a TeamConnect/bill drafting interface could not co-exist with the new Legal Services 2.0/bill drafting interface on the same PC. Creating a virtualized software environment allowed all members of the UAT team to test the new system using their own desktops without affecting the current configuration.

In order to accomplish this, technical staff:

- Created a virtual machine (VM) for each tester.
- Installed a client component on each tester’s PC.
- Modified the virtual software to display only the Legal Services 2.0 application in the web browser and Adobe Acrobat (as opposed to the whole desktop).
- Customized security so that the user’s credentials were passed to the virtual application.

The biggest benefit from this approach was that the UAT team tested on a virtual environment that was realistic enough for them to identify several defects and enhancements—which were subsequently fixed prior to going live. Staff appreciated being able to test at their convenience from their own workspace. The biggest challenge for this approach was that it required the installation of a client component on each user’s desktop, which took time.
In our second example, the Voting System and Floor System were deploying critical maintenance releases, requiring extensive and thorough testing. At LDC, quality control (QC) testing for the systems used in the chambers is typically done by technical staff in a dedicated lab accessing a test environment. However, because there were more testers than lab machines for this project, using virtualization for software testing allowed them to test in parallel at any time from their desks—without competing for lab time and without having to procure additional test machines.

Technical staff created one virtual (master) PC and cloned it so testers could access multiple VM’s. Deployments did not involve disruption to the testers’ machines and were managed by easily replacing the .jar file on the virtual PC’s only. Based on the Legal Services 2.0 Project, technical staff decided to redesign the virtual solution so installation of a client component on each tester’s desktop was no longer necessary; testers simply accessed a URL through a web browser to display the VM console. After clicking on either the Voting system or Floor system icon, they could begin testing.

The primary benefit of using a virtual environment for software testing for this project was that regression testing was shortened from four weeks to one week. The main challenges included the potential to run out of memory on the VMs as well as technical differences that may not have occurred using the test lab (for example, a different memory configuration and different performance). In addition, because all testers were using the same test environment, the potential for testers to create test data affecting each other simultaneously had to be managed by assigning each tester a specific year to test. This allowed testers to ensure they would not cause confusion when simulating various test scenarios.

Our third example involved a project to upgrade the operating system and PC hardware for our customers. The target implementation date was specifically selected to minimize impact to their schedules. However, when the new image was ready, but the new hardware was unexpectedly delayed, the project team divided testing into two phases to keep testing on-track: 1) testing the updated O/S with applications using a virtual environment and 2) testing the same configuration but on the new hardware. This avoided wasting valuable time, enabled engineers to make fixes as early as possible, and allowed the testing team to complete testing deliverables in a timely manner.

For this project, technical staff had streamlined their process to create a virtual master and clone the image consistently. Since this project entailed upgrading the O/S, the virtual environment displayed the entire desktop of the virtual machine. Because some testers were responsible for testing only specific applications, there were approximately 100 virtual accounts created. Testers were not reliant on physical hardware to begin testing and were able to provide useful test results quickly. However, because this project included replacing a major hardware component, virtualized software testing was an initial step only. The second round of testing on the new PCs was essential (and did identify additional defects not found using the virtual environment).

In conclusion, our examples reinforce the general understanding that virtualization with software testing is useful when the number of testers exceeds the number of lab workstations or when procurement of new testing machines is not realistic or practical. We also found it beneficial when the technical configuration of tester PCs did not permit testing of the current and new applications simultaneously. Consistency in deployments and test environments is easily managed without disrupting testers. Although virtualization may have differences from the production configuration and at times may be supplementary, it is still beneficial, particularly for functional testing and when testing is on a tight timeline (which is almost always the case).
NALIT Cybersecurity Webinar

State legislatures are vulnerable to many different types of cyberattacks—politically motivated cyber attackers and hacktivists, organized attackers, disgruntled employees, or even benign computer trespassers. Legislative IT CIOs and managers are very familiar with these threats: They named cybersecurity as the No. 1 priority in recent NCSL surveys.

Learn how legislatures are dealing with cyber threats, including what kinds of funding, staffing, training, preparation and policies are needed to respond. Join us to discuss the current challenges legislatures face and actions they are taking to protect the institution.

Register now! The webinar also will be recorded and will be available for on-demand viewing.

NALIT Logo Contest

This edition of the NALIT Newsletter will be the last to display the logo you see at left. NALIT is in the midst of a contest for a new logo! The current logo was selected in a similar contest in 2004. In April, NALIT members submitted entries, which were included on an online survey form. A link to the survey was sent to the NALIT listserv.

NALIT members (U.S. legislative IT professionals) may vote once online (contact Pam Greenberg for a link) through May 15, 2019. The submission with the most votes will be the winner. The winner will be notified, and the new logo will be announced the week of May 15.

The winning design and designer will receive recognition at the NALIT Business Meeting at the Legislative Summit, at the NALIT Professional Development Seminar, on the NALIT website and in the next NALIT newsletter.

Serving as a NALIT Officer

Would you like to make valuable contacts, learn more about IT in other legislatures, and be involved in planning the NALIT Professional Development Seminar and Legislative Summit programs?

Consider being involved in NALIT! The 2019 NALIT Nominating Committee is seeking candidates to run for the office of secretary. The deadline for nominations is June 14, 2019.

The primary role of the secretary is to record minutes of meetings and to solicit articles for and publish the NALIT newsletter at least twice annually. Serving as secretary is a great way to share your ideas and provide direction for NALIT while working with a great group of people.

Typically, the secretary succeeds the following years to the office of vice chair and then chair. In those roles, you will serve on the NCSL Legislative Staff Coordinating committee, which meets four times a year in various locations. Attending all the meetings is not mandatory but is a worthwhile way to represent NALIT.

If you are interested in serving in NALIT, please contact Nominating Committee Chair Kyle Forster at kwforster@nd.gov and Pam Greenberg, NCSL Liaison to NALIT, at pam.greenberg@ncsl.org by Friday, June 15, 2019. Members of the nominating committee are Terri Clark, Kansas and Linda Wettstone, Senate of Virginia.
Proposed NALIT By-Laws Changes

The NALIT Executive Committee in March 2019 adopted the following recommendations for amendments to the NALIT By-Laws. These amendments, if adopted by a majority vote of the general members present at the Aug. 8, 2019 NALIT business meeting, would become effective upon adoption.

The changes in the By-Laws were proposed to reflect changes in terminology and practice that have taken place since the last revisions of the By-Laws in August 2007. For example, “bylaws” is the more common spelling of that word, rather than “By-Laws.” Also, NCSL has adopted the name “Professional Staff Associations” instead of “Staff Sections” to describe the nine staff groups affiliated with NCSL. Also, the NCSL “Annual Meeting” referred in the NALIT By-Laws is now known as the “Legislative Summit.” In addition, some changes are for clarity, such as changes in Article 9, sections 1 and 2, relating to succession in case of vacancies in the chair or vice chair positions.

The full text of the proposed NALIT By-Laws will be available on the NALIT website soon and printed copies will be provided at the Annual NALIT Business Meeting. Changes are designated in underline and strikethrough. Article 11 of the current By-Laws govern procedures for amendments.

2019 NALIT Seminar, Boise

The 2019 NALIT Professional Development Seminar (PDS) will be held in Boise, Idaho on Oct. 1-4, 2019. The seminar provides a combination of educational sessions, tours and briefings by our host state at the Idaho State Capitol, legislative showcases and vendor exhibits and plenty of opportunities to talk with your colleagues in other state legislatures.

The PDS begins mid-day on Tuesday, Oct. 1 with Legislative Showcases. We are looking for volunteers to show their applications in an informal, exhibit-style format. Other sessions that highlight IT issues specific to legislatures include the “Five Minutes of Fame” session, a fast-paced session that highlights projects underway or recently completed. Roundtables each day give attendees the opportunity to ask questions and share solutions informally. Among the topics to be covered are:

- Cybersecurity
- Bill drafting
- Handling public records requests
- Promoting and marketing IT
- Agile and other development methodologies
- Building teams and building morale
- Electronic and remote testimony.

"Home to a spirited arts community, an explosion of award-winning wineries and craft breweries and a socially responsible shopping district, Boise is what cool looks like before the rest of the world has figured it out." So said Lonely Planet when naming Boise its No. 2 destination in its “Best in the U.S.—Destinations you need to see in 2018.”

Less than a 10-minute walk from the Grove Hotel, you’ll find a 25-mile long riverside Greenbelt path, a Ridge to Rivers trailhead leading into wild and scenic foothills, or one of the expansive, interconnected parks that line the city. Plan your trip by visiting the Boise Visitors & Convention Bureau website and take a virtual tour of Boise.

A big thank you to our hosts in Idaho, Glenn Harris, IT director; Soren Jacobsen, IT specialist; and other staff in Idaho! Make your plans to attend!
NALIT Executive Committee

The NALIT Executive Committee is made up of the four officers and six directors. It guides NALIT efforts in all areas, including sessions and activities at the NCSL Legislative Summit, outreach to NALIT members and other programs and activities.

NALIT officers are the chair, the vice-chair, secretary and past chair. The terms of officers commence at the close of the annual meeting at which they are elected and continue through the next ensuing annual meeting.

2018-19 Officers

Chair: Cindy O’Dell
Service and Support Manager
Kentucky Legislative Research Commission

Vice Chair: Jeff Ford
Chief Technology Officer
Indiana Legislative Services Agency, Office of Technology Services

Secretary: Soren Jacobsen
IT Specialist
Idaho Legislative Services Office

Past Chair: Kyle Forster
Information Technology Manager
North Dakota Legislative Assembly

Directors

Directors are appointed by the NALIT Chair. Directors serve staggered two-year terms, i.e., three are appointed in even years; three are appointed in odd years. The terms of office of the NALIT Directors commence at the close of the annual NALIT Business Meeting after which they are appointed and continue two years until the next Business Meeting.

Jim Bell
Director, Senate Technology Services
New York State Senate
Term of Office: August 2017-August 2019

Guillermo Cordon
Digital Media Specialist
Louisiana House of Representatives
Term of Office: August 2018-August 2020

Doug Farr
IT Manager
Utah Office of Legislative Research & General Counsel
Term of Office: August 2018-August 2020

Michael Ganesan
Programmer/Analyst
Kentucky, Legislative Research Commission
Term of Office: August 2018-August 2020

Brian Hansen
IT Director
Legislative Computer Center
Alabama Legislature
Term of Office: August 2017-August 2019

DeLynn VanDriel
Computer Systems Facilitator
Washington Legislative Service Center, LEG-TECH
Term of Office: August 2018-August 2020

Call for Newsletter Articles

This newsletter would not be possible without contributions from our members. If you have ideas for articles—short or long—please contact Soren Jacobsen, Idaho, NALIT Secretary and Newsletter Editor, at sjacobsen@lso.idaho.gov.