Chair’s Corner

Kyle W. Forster, NALIT Chair, Information Technology Manager, North Dakota Legislative Council

We are rapidly approaching my favorite time of year. Now I am sure most of you have surmised that I must be referring to summertime. Well you would be correct, but we are also approaching another favorite time of the year, the two upcoming NCSL events, the NCSL Legislative Summit and NALIT PDS!

The Legislative Summit is in Los Angeles from July 30-Aug. 2. NALIT is sponsoring and co-sponsoring several sessions relating to legislatures, including cybersecurity threats, security, emergency response systems, IT best practices, and turning legislative needs into deeds.

The Professional Development Seminar (PDS) will be in Nashville on Sept 11-14. We have an exciting program planned. If you are interested in demonstrating an application during the legislative showcase sessions, please let Pam Greenberg or myself know. The showcases are great way to share your legislative team’s accomplishments. The information and knowledge shared at the showcases is very beneficial to legislative staff from other states. If you have not registered to attend the PDS yet, please see the PDS website for details. I look forward to seeing you at the PDS!

My year as your chair is coming to close soon. I would like to thank everyone for the opportunity to serve as your chair. I have enjoyed working with everyone to make NALIT successful. Success requires commitment and time from many people. I thank all of you for your commitment to NALIT. I also encourage all legislative IT staff from all states to get involved and participate in NALIT. I am confident you will also find your experience with NALIT to be valuable. If you would like more information about participating in NALIT, please contact me (kwforster@nd.gov, 701-328-4261) or Pam Greenberg (pam.greenberg@ncsl.org, 303-856-1413).

2018 NALIT Seminar

The NALIT Professional Development Seminar will be held Sept. 11-14 in Nashville, Tenn. Visit www.ncsl.org/nalit18 for more details.

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 NALIT Secretary, c/o Pam Greenberg, pam.greenberg@ncsl.org.
Legislative IT Profiles

In 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 16 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 Wyoming. Send in your state’s profile now!

Wyoming

By Jamie Schaub, Information Technology Manager, Wyoming

The Wyoming Legislature is a 90-member citizen legislature, consisting of 60 members of the House of Representatives and 30 members of the Senate. While the part-time nature of the institution allows members to stay in close contact with their constituents, it also means that they do not enjoy the same accommodations, such as personal staff, provided to full-time legislators in larger states.

The legislature meets in a general session in odd numbered years, beginning on the second Tuesday of January. The general session is limited to 40 legislative days. In even numbered years, the legislature convenes in a budget session beginning on the second Monday of February, which typically lasts 20 legislative days. Except for the budget bill, all other bills require a two-thirds vote from the Senate or House for introduction during a budget session. The Legislature may not meet for more than 60 legislative working days within a biennial period. Special sessions may be called at any time by the Governor or the Legislature.

The Legislative Service Office (LSO) is the permanent, non-partisan central staff office of the Wyoming Legislature. LSO was created by the Legislature in 1971. Policies, rules, and regulations governing the general operations of the LSO and its relationship to legislative committees and individual legislators are made by the Management Council, composed of 13 legislators primarily in leadership positions.

The LSO director is employed by, and subject to the direction of, the Management Council. Other employees are employed by the LSO director with the approval of Management Council. The staff is selected and services are performed on a non-partisan basis.

The Information Technology (IT) division has four staff members; one manager, one network/pc support and two developers. IT staff provide computer support for 40 full-time staff and 35 session staff. www.wyoleg.gov

Contribute Your State’s Profile

Please consider contributing information about your office for the next edition of the newsletter. 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?
  - Number of legislative members by chamber.
  - Number of full and/or part time legislative assembly staff, including types of staff.
  - Number of council staff.
  - 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?
- Major project information.
  - Any major projects in progress that you want to share?
- Provide a website link to your IT or office website.
NALIT sponsors several sessions during the NCSL Legislative Summit, along with dozens of other professional development and policy sessions. If you’re unable to attend, watch for handouts from NALIT sessions on the NALIT Summit web page and see which sessions will be live-streamed and recorded.

NALIT Website Resources

NALIT’s web presence, at www.ncsl.org/nalit, may have more resources than you realize! In addition to the current and past editions of this newsletter, you’ll find information about upcoming meetings and activities, handouts from past meetings, information and contact information for your legislative IT colleagues and offices in other states.

Also, NALIT has sponsored surveys on various legislative IT issues over the years, and survey results in aggregate are posted on the website. Watch for results from a new survey on cybersecurity coming soon, and see the results of past surveys, including the 2017 trends survey, 2016 trends survey, 2014 Tablets in Legislatures and IT Priorities, and a 2013 Bill Drafting Survey.

Be sure to visit the Legislative Information Technology portal on the NCSL website as well. It includes articles from State Legislatures magazine, links to 50-state charts with information about legislative webcasts and broadcasts, social media policies, and more.

Quality Control (QC) Testing of California’s Legal Services 2.0 System

By Kathy Fujii and Shannon Young, IT Specialists, Office of the Legislative Counsel, California

In California, the Legal Services system is comprised of multiple, major components: workflow (TeamConnect), editor for bill drafting (XMetaL), publishing, indexing and code compilation. TeamConnect, a COTS product, was the largest component–managing the workflow of requests (bills, amendments, etc.), measures, indexing, and California Codes (compilation of chaptered bills). In 2014, OLC management chartered a project team to rewrite TeamConnect functionality into a new application developed entirely in-house: “Legal Services 2.0”.

At a minimum, the new system needed to provide all critical functionality used by end users to ensure no disruption of service to the Legislature. Data converted from TeamConnect to Legal Services 2.0 would also need to be tested. In addition, testing was required to ensure the interfacing components and downstream systems would work seamlessly with the new system as well.

Kathy Fujii was assigned as the QC Test Lead and explained how she approached managing the testing effort to ensure the highest level of quality:

“Testing Legal Services 2.0 was a daunting task because of the complexity of the program. Our first task was to create a solid Test Plan and Strategy. The Test Plan described the scope, approach, objectives, resources, and schedule of the software testing effort. It identified the items to be tested, items that would not be tested, and pass/fail criteria. The Test Strategy was a subset of the Test Plan that described how the system was to be tested such as integration, performance/load, functional, exploratory testing, etc.”

The QC Team then developed Test Designs based on Use Cases/ Requirement Specifications, Report Specifications and User Interface (UI) Specifications. Test Designs validate the functional behavior and user interface, utilize a wide range of normal to erroneous inputs, and
ensure 100 percent coverage of all requirements. Given the relatively fast timeline, changing requirements, and knowledgeable testers (who already had multiple years of experience using the old system), the QC Test Lead recommended that Test Designs were sufficient and that Test Cases and Test Scripts (step by step instructions) were not necessary. A screenshot from one of the Test Designs is below:

<table>
<thead>
<tr>
<th>Test Case</th>
<th>Test Objective</th>
<th>Test Strategy</th>
<th>Expected Result</th>
<th>Requirement</th>
<th>Tracking Value</th>
<th>Defect</th>
<th>Defect Tracking Status</th>
<th>Tester</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC 4-10 Manage Prior Measure Versions</td>
<td>View all measure versions for the following measure type: - Bill (AB/SE)</td>
<td>All measure versions are viewable including current state.</td>
<td>4-10 I</td>
<td>Passed</td>
<td>KT</td>
<td>RF</td>
<td>PS</td>
<td></td>
</tr>
<tr>
<td>1.1 MeasureTypes</td>
<td>View all measure versions for the following measure type: - Constitutional Amendment (ACA/SCA)</td>
<td>All measure versions are viewable including current state.</td>
<td>4-10 I</td>
<td>Passed</td>
<td>KT</td>
<td>RF</td>
<td>PS</td>
<td></td>
</tr>
<tr>
<td>1.1.2 View all measure versions for the following measure type: - Resolutions (AB/HR/BCE/SC/SE/BSE)</td>
<td>All measure versions are viewable including current state.</td>
<td>4-10 I</td>
<td>Passed</td>
<td>KT</td>
<td>RF</td>
<td>PS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.3 View all measure versions for the following measure type: - Resolutions (AB/HR/BCE/SC/SE/BSE)</td>
<td>All measure versions are viewable including current state.</td>
<td>4-10 I</td>
<td>Passed</td>
<td>KT</td>
<td>RF</td>
<td>PS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.4 View all measure versions for the following measure type:</td>
<td>All measure versions are viewable including current state.</td>
<td>4-10 I</td>
<td>Passed</td>
<td>KT</td>
<td>RF</td>
<td>PS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Throughout the project, the QC team consisted of 5-8 testers. Four are full-time staff dedicated to Legal Services while the others were temporary LDC testers or temporary end users who were loaned for three-month assignments to perform QC testing. The Test Lead was responsible for training testers on QC testing methodology or system knowledge as needed to ensure a common foundation.

In collaboration with the Business Team and Technical Team, the QC Team used an automated defect tracking tool for defect management. Once QC testers submitted a defect, the Business Team would set priority, and the Technical Lead would assign it to a developer. Once deployed, the defect would be returned to the QC team for retesting and closure. By using this tool, defect reports could be done easily by the Project Manager or leads at any time.

The QC Test Lead is involved in daily conversations with the Technical Lead, the Business Lead, and Project Manager and ensures that the priorities of the QC team are aligned with all project deliverables. In addition, the QC Team relied heavily on the expertise of the software developers, peers, management, business analysis, and customers. QC Test Lead states: "Having good requirements and specification for testing purposes is very important, but having a good rapport with the project team is invaluable because they are one of your best sources for information." The Test Lead also represents the QC team at weekly customer meetings.

To help with testing prioritization, the QC Team continuously applied a Risk-Based Testing approach: analyzing the system for areas that were critical to the business, more complex, highly visible, and defect prone and focusing testing on those areas first. In consultation with others, the Test Lead identifies whether the change affects the UI, mid-tier, database, editor, or publishing and how to test appropriately. In addition, if a build contains new development for one subsystem and defect fixes in several other subsystems, the Test Lead evaluates what is most risky, how thorough testing should be, and in what order subsystems should be tested. This was especially critical when assessing whether Legal Services 2.0 was ready for production deployment. There were many builds that the QC team tested, and because of the QC team, many defects were fixed before ever reaching the live system. Since its production release in November 2016, there have been very few issues, and the Project Manager believes the strong QC team is a big reason for the high level of quality.
2018 NALIT Seminar, Nashville
Register Now!

Your NALIT Professional Development Seminar (PDS) planning committee has plans well underway for Nashville. The 2018 NALIT PDS will be held Sept. 11-14, 2018.

Legislative Showcases
The popular Legislative Showcase sessions will be held Tuesday afternoon—a great opportunity to get a close look at applications your colleagues have built.

Cutting Edge Sessions
Our opening keynote session will feature Ben Apple, chief data officer and chief data scientist for the Office of Naval Intelligence. His expertise is in using machine learning and data science to improve cybersecurity, especially since our current methods aimed at user behaviors will no longer be effective. He has yet to see an environment where artificial intelligence couldn’t be implemented to improve security.

The seminar will also feature an exploration of blockchain technologies and how they could be employed in state legislatures.

Sessions Relevant to Your Work Today
Other sessions will cover Office 365, digital signage, search tools, recruiting and retaining IT staff, and other sessions covering the many different aspects of legislative IT work. There will also be plenty of opportunities to explore many different issues important to you in small group discussions.

State Capitol Tours and Briefings
NALIT seminars are typically held in capital cities so that attendees can tour state capitol and see and learn the IT applications and systems in place. In Nashville, we’ll see and hear about the chamber dashboard, voting system, new committee rooms and IT offices.

Nashville
Spotlighted as one of the top destinations for 2018, Nashville, capital of Tennessee, is also known as the capital of country music. Visit attractions like the Country Music Hall of Fame and the Music Row district. Plan to attend and register now! www.ncsl.org/nalit2018

NALIT Professional Development Seminar Planning Committee

The NALIT Chair each year appoints members to the PDS Planning Committee. This year’s committee is guiding the selection of topics, content and speakers for the seminar to create the only conference created for legislative IT professionals by legislative IT professionals.

NALIT Chair:
- Kyle Forster, North Dakota

Host State Chair:
- Vinay Dattu, Tennessee

PDS Planning Committee Members:
- Troy Adkins, House, Virginia
- Jim Bell, Senate, New York
- Jeff Ford, Indiana
- Glenn Harris, Idaho
- Manish Jani, Colorado
- DeLynn Magura, Washington
- Cindy O’Dell, Kentucky
- Mendora Servin, California
- Ronda Tentarelli, Washington
- Shay Wilson, Alaska
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Early morning</td>
<td></td>
<td>Breakfast Sponsored by Propylon</td>
<td>Welcome &amp; Opening Session: Using AI to Improve Cybersecurity</td>
<td>Breakfast</td>
</tr>
<tr>
<td>Mid-morning</td>
<td></td>
<td>Data Visualization and Reporting Tools</td>
<td>Tours and Briefings at Tennessee State Capitol</td>
<td>Roundtable: Security Awareness Programs</td>
</tr>
<tr>
<td>Late morning</td>
<td></td>
<td>Five Minutes of Fame</td>
<td></td>
<td>Future-Proofing Legislative Data</td>
</tr>
<tr>
<td>Noon</td>
<td></td>
<td>Lunch Sponsored by Thomson Reuters</td>
<td>Lunch Sponsored by International Roll-Call</td>
<td>Birds of a Feather Roundtables: Management, Applications, Support, Infrastructure, Women in IT</td>
</tr>
<tr>
<td>Early afternoon</td>
<td>Legislative Showcase I</td>
<td>Security Incident Response</td>
<td>Networking Break</td>
<td>Concurrent Sessions: Search Tools OR Digital Signage</td>
</tr>
<tr>
<td>Mid afternoon</td>
<td>Legislative Showcase II</td>
<td>Blockchain Technologies in the Legislature</td>
<td>Concurrent Sessions: Recruiting &amp; Retaining Staff OR Bulletproof Coding</td>
<td></td>
</tr>
<tr>
<td>Late afternoon</td>
<td>Meet &amp; Greet and Orientation to NALIT</td>
<td>Moving to Office 365</td>
<td>Concurrent Sessions</td>
<td>Web Development OR Creating a Case for Security Staffing</td>
</tr>
<tr>
<td>Evening</td>
<td>Opening Reception Sponsored by Tallan</td>
<td>Exhibitors Reception</td>
<td>Tallan, International Roll-Call, Propylon, Thomson Reuters, Commvault, Silex Data Solutions, Trint</td>
<td></td>
</tr>
</tbody>
</table>