# Information Technology Coordination in the Minnesota Legislature

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House Information Technology Senate Information Systems Revisor of Statutes Legislative Reference Library Legislative Coordinating Commission

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## Background

The 2007 Legislature adopted this provision giving direction to its staff:

"All legislative offices should, whenever possible, implement information technology systems that are compatible and work seamlessly across the legislature. Wherever possible, single systems should be implemented to avoid unnecessary duplication and inefficiency. The directors of information technology for the senate, House of Representatives, and the Legislative Coordinating Commission must submit a written report describing their efforts to collaborate on implementing shared information technology systems. The report must be submitted to the chairs of the house of representatives and senate committees with jurisdiction over rules and to the Legislative Coordinating Commission on January 15, 2008, and January 15, 2009." (Chapter 148, article 1, section 3, Subd 4 (e).)

The House, Senate and joint legislative offices have worked together for years to efficiently provide unified Information Technology (IT) services to members and staff of the legislature, the public, and to state agencies. The Legislature's bill drafting system and the uniform access to legislative information on the Internet are two examples of major efforts (both historical and on-going) by legislative staff to provide seamless services.

Nonetheless, this provision in the State Government Finance Appropriations bill helped legislative staff focus on additional ways that our offices could improve our coordination and provision of services. This report summarizes those activities, some that are new and some that have been on-going work for several years.

## 1. Voice over Internet Protocol

**Background.** Voice over Internet Protocol (VOIP) is a technology where an organization uses its computer network to not only process data, but to also process phone calls. These systems are attractive because the organization needs to support only one network (instead of two), and there are significant cost savings. The House converted to VOIP in early 2005.

With support of leadership, staff from House, Senate and joint legislative offices met in various combinations for almost a year working through the concept of a centralized phone system. In late fall, 2007, staff reached consensus across all of the affected offices about how to locate, manage and maintain a single phone system that would serve the legislative branch.

We believe that a centralized phone system will result in significant benefits:

• When the House, Senate and joint legislative offices have completed their migration to the new system, we will have five digit dialing across legislature;

• We will have a single on-line phone directory that includes all members and legislative staff;

• Legislative offices will be able to rely on telephone support staff from other offices as backups, if needed, to perform critical support tasks.

• We will have significant cost savings: Phone charges will be \$6.95 per month per handset (compared to \$47.10 for the Senate, \$22.95 for the LCC, and \$9.95 for the House). There are additional charges and fees such as for trunk phone lines and long distance.

**Description of system.** The centralized VOIP system requires an integrated core system of computer devices that in turn connect with House, Senate and joint legislative agency computer networks. The core system is comprised of equipment originally installed by the House when it converted to VOIP in 2005. That core is being significantly supplemented by additional hardware that will support the additional demands of the joint offices and the Senate.

The core system will be managed on a day to day office by the Information Services Office in the Office of the Revisor of Statutes. The VOIP system will be generally overseen by a committee of IT staff and other managers from each of the offices involved in the system. In addition, each office will provide staff support to deal with the myriad of administrative tasks involved in adding, changing and deleting users of the phone system.

The joint legislative offices are migrating to the centralized system with the House prior to the 2008 session. Because the Senate is overhauling its computer network, the Senate will migrate to VOIP after the 2008 session is completed.

**Other background.** Agreeing to migrate to a single phone system required each institution to make significant changes to make a centralized system work.

• The House understood and agreed that a centralized phone system needed to be managed by a neutral organization that was neither the House nor the Senate. The IT staff in the Office of the Revisor of Statutes will manage the system on a day to day basis. There will be a committee consisting of appropriate House, Senate, and commission staff to provide oversight.

• The Senate understood and agreed that to limit risks relating to compatibility, it would need to modify its computer network using switches and other hardware that were more closely compatible with the House and joint legislative offices.

• As with all large scale, inter-office projects, the process to reach agreement to implement a centralized phone system was time-consuming, and sometimes frustrating. In the end, the Legislature will have a phone system that is efficient, supports the entire legislature, will provide for improved benefits, and will cost less.

## 2. Wireless internet access in the Capitol and State Office Building

**Background.** The Senate installed wireless access in its Capitol Building hearing rooms in 2006. The wireless signal can often be picked up in public areas near those hearing rooms. Users who have computers with wireless access capability can use these access

points and connect to the internet. (This service is similar to that provided in many coffee shops and some restaurants.)

The Senate configured the system with three tiers: one for Senators and staff, one for state agencies, and a limited tier for public access. The first tier also provides secured access to the Senate network. The Senate also provides wireless access for the Legislative Reference Library. The House had not provided wireless access for its members or staff.

Members (and staff) in both houses discovered during the 2007 session that having wireless access was becoming critical in the legislative process. Especially during conference committees, members of the House were in the Capitol Building, unable to access files that were on the House network. When Senate members and staff were in the State Office Building, they learned that files they could access wirelessly in the Capitol were inaccessible in the State Office Building.

**Description of system.** IT staff in the House and Senate concluded that for their members and staff to have on-going access to files on their respective networks, no matter where they were in the Capitol or State Office Building, that they would need a centralized system that allowed secure access to both.

The new legislative wireless network, which is expected to be implemented during the 2008 Legislative session, will cover all legislative spaces in both the Capitol and State Office Building, will allow all legislators and legislative staff access to the own networks from any location within the two buildings, and provide Wi-Fi access to members of the public within the same spaces.

The project has been designed, developed and implemented jointly by the House, Senate and LCC technology staffs with the review and guidance of the OET Security staff. The Revisor's Office will configure and maintain the core network hardware, while House and Senate staff will maintain committee room hardware.

## 3. Legislative Networking Group (LNET)

**Background.** Membership of the Legislative Networking Group (LNET) includes legislative staff from the House, Senate, Revisor's Office, the Legislative Reference Library and the Legislative Coordinating Commission. LNET manages the Legislative World Wide Web service and acts as a forum for all legislative offices to share and discuss technology issues. IT staff from the House, Senate and joint legislative offices work within LNET to plan upgrades to the Legislative Web Site. The group meets yearround to continuously improve usability and content on the legislative web pages. LNET members act as consultants for one another on issues of Web technology.

Many Legislative Web Site activities are collaborative. The House maintains a personalized "My Bills" tracking service for both the House and Senate. The tracking of Legislative Web Site usage statistics is a shared responsibility. The LCC collects the

server logs from various offices and Legislative Library staff members produce spreadsheets based on the data.

In 2007, user testing conducted by the LNET group led to suggested improvements for the Legislative Web Site. House, Senate and joint agency IT staff are involved in the ongoing Legislative Web Site Refinement Project. The project is addressing several issues, including access by users with disabilities, creating a new portal/home page, updating graphics, improving the legislative history process, improving the consistency of House and Senate Web functions, and looking at new technology.

LNET members collaborate to ensure that citizens can easily find needed information from both bodies and from joint departments. The Minnesota Legislative Web Site was recognized as best in the country with the National Conference of State Legislatures "Online Democracy" award in 2006. Legislative web servers received 120 million hits in 2007.

## 4. Legislative Security and Infrastructure Group

**Background.** Information technology staff from the Office of the Revisor of Statutes, the Legislative Reference Library, the Legislative Coordinating Commission, the Senate, and the House of Representatives continue to collaborate through an informal group referred to as the Legislative Security and Infrastructure Group (LSIG). While the Revisor's office takes the lead on security measures for the core networks maintained by that office, each legislative office has independent networks for which security must be maintained. Through LSIG, members discuss and address general, technical, and security topics. Each agency is kept abreast of projects or changes in systems and architectures that may have relevance to their respective operations and computer networks. LSIG members act as consultants to one another for technical problems.

The issue of legislative information security has grown tremendously as the Legislature increasingly relies on technology for the creation and dissemination of information. New developments bring new challenges of coordination among offices. For example, implementation of VOIP telephone technology and wireless Web access within the buildings adds to the complexity of maintaining firewalls within the Legislature and to outside users. LSIG maintains close contact with state IT developments, and has worked with the Office of Enterprise Technology on security audits for the various legislative offices.

It is through the work of this staff working and collaborating with each other that the various networks in the legislative branch are able to work together seamlessly, while protecting the networks and their underlying users. This group usually meets once a month.

# 5. XTEND bill drafting system

**Background.** The Minnesota Legislature relies on a sophisticated and highly customized system to manage all of the legislative documents that are created in the process of

considering and passing laws. With extensive input by staff members from legislative offices which use the system, a new system was developed and is managed by the Office of the Revisor of Statutes.

The current system, being used for its third legislative session, is a third-generation application called XTEND (XML-based Text Editor, New Development).

Over 125 legislative staff in these offices use XTEND:

- Revisor's Office
- House Research
- House Desk
- House Journal
- House Duplicating
- Legislative Commission on Pensions and Retirement
- Senate Counsel
- Senate Desk
- Senate Engrossing
- Senate Journal
- Senate Index
- Senate Duplicating

XTEND is used to create, edit, print, and transmit documents for use by the House and Senate. The legislative documents processed in XTEND are:

- bills
- resolutions
- amendments
- committee reports
- conference committee reports
- engrossments
- side-by-sides
- Senate agendas
- Senate calendars
- Senate journal
- Senate journal permanent index

In 2008 XTEND will also edit, print, and transmit Administrative Rules and Court Rules.

The Revisor's Office Help Desk provides training annually to all the legislative offices using XTEND.

## 6. NDIIPP (Minnesota Historical Society)

**Background.** In late 2007, the Library of Congress awarded the Minnesota Historical Society (MHS) a grant of \$608,000 to explore how to preserve and provide access to legislative records in digital formats. The grant is funded by the Library's National

Digital Information Infrastructure and Preservation Program (NDIIPP). The National Conference of State Legislatures is a key partner. In Minnesota, the formal partners in the project are the Revisor's Office and the Legislative Reference Library. Six other states are collaborating: California, Illinois, Kansas, Mississippi, Tennessee and Vermont.

State Legislatures, including Minnesota, face tremendous challenges in managing, preserving and providing access to the vast quantities of digital content they now routinely produce. Work funded by this grant will help guarantee that both legislatures and citizens will be able to find and use the information on which they depend into the future.

The MHS will manage the project, working closely with its partners in several legislative offices. Planning is underway, with specific products and deliverables to be determined by MHS staff and Minnesota legislative staff colleagues.

## 7. Duplicating and Print Facilities

**Background.** Over the past decade, in-house printing within the legislature has become better managed through the application of information technology and resulted in savings of hundreds-of-thousand of dollars, while providing more timely production of essential documents. Composition and printing have become highly automated and personalized to the PC workstation level. The House and Senate's print shops now incorporate some of the latest printing and networking technologies. The House and Senate share the work loads, provide backup capabilities to the other, and create an increased joint capacity through this synergy There exists a high level of cooperation and coordination by the facility supervisors allowing for their high productivity, especially during the closing days (hours) of session. The speed of printing at the end of session has also been enhanced by the ability of the new XTEND system to print legislative documents directly to the House and Senate equipment. Although generally invisible, the print facilities of the legislature are an extremely essential component in the legislative process.

## 8. Email

**Background.** E-mail is one of the most important IT services provided to members and staff in the legislature. In order to facilitate communication across the legislature, the House, Senate and the joint legislative offices share data so that all members and staff are included in each of the email system directories.