

South Central Library System

Technology Plan

2014

I. Background

Mission

The mission of the South Central Library System (SCLS) is to help member libraries provide the best possible service to the public. To this end, the system has adopted staff and system principles, which are included as Appendix A.

Description of SCLS

SCLS, one of 17 public library systems in Wisconsin, provides services to 53 libraries in Adams, Columbia, Dane, Green, Portage, Sauk and Wood Counties. These counties include nearly 815,000 people, with the majority residing in Dane County. System population density ranges from sparse rural to dense urban. Municipalities vary greatly in size, from villages with populations well under a thousand, to the city of Madison, representing approximately 29% of the entire population of the system.

The SCLS Staff is comprised of 24 staff members at the Headquarters office and 36 staff members working for the Delivery department. Eleven staff members at Headquarters work for the Technology Team. An organizational chart can be found in Appendix B.

Current Technology Environment

The Technology Team is comprised of 11 staff members:

- Help Desk Technician: responsible for first line response to help desk questions (including PC and software, network, Koha ILS, third party product services such as pc time management, print management, e-commerce solutions, database authentication and wireless support and email services) and installing and upgrading PC software.
- Computer Systems Integrator: responsible for central server support, testing new technologies, network and firewall support, scripting and process automation
- Systems Support Specialist: responsible for first line response to help desk questions (see Help Desk Technician above), internal websites, Library Online and access to subscription databases (authentication) and writing reports for the Koha ILS
- Network Administrator: responsible for network hardware installation and support, and consulting on new building projects
- Two Computer Technicians: responsible for purchasing and maintaining PC workstations, hardware and software troubleshooting
- Technology Services Support Specialist: responsible for coordinating technology communication services, coordinates special projects and large scale technology installations
- System Administrator/Innovator: maintains and provides support for systems hardware and software; researches, develops, and implements new technology projects; works with PC technicians
- Technology Support Assistant: Half time LTE who assists with imaging PCs, managing spares and help desk coverage
- PC / Server Support Specialist: PC / Server Support assists with Windows server management and is responsible for Windows hard disk image creation, documentation and deployment

- Technology Services Coordinator: responsible for overall project and staff management

The majority of the SCLS technology services are available to all member libraries. However, not all SCLS libraries participate in the shared integrated library system (ILS) and public online catalog. Currently, the Technology Team supports PCs on the SCLS network and a small number of PCs that access the Internet through commercial Internet Service Providers (ISPs), such as Charter or Verizon. SCLS is almost finished with a transition to a unified SCLS network where all PC support is provided through one network connection.

Relationship of Technology Team services to SCLS Strategic Plan

The SCLS Strategic Plan is based on the belief that, as a community, SCLS can do many things that none of the individual entities could successfully undertake alone. Many technology services described below would not be possible for individual libraries to implement on their own without significant expense and expertise. With system-level management, provision of services becomes cost-effective and efficient for the whole SCLS community. Specific initiatives from the Strategic Plan that are supported by existing and planned technology services include:

- Investigate new developments in information technology and implement those most desired and of greatest worth to the public we serve.
- Determine ways that selected new technologies can be implemented with available resources, or seek out new resources for such implementation.
- Offer goods and services that meet at least some of the needs of each unit of our diverse member population.
- Cooperate with member libraries to offer a wider spectrum of online electronic resources to the public.
- Promote new and existing services to library staff and public through training and widespread communication using varied media formats.

II. Description of Services

General system services

SCLS provides many services to its member libraries, making them more effective and efficient by:

- Helping them share materials so that thousands of dollars expended locally equal millions of dollars in services provided to the general public through the shared system environment;
- Providing them with leadership in the areas of technology and telecommunications;
- Providing them with the training and expertise to cope with new and constantly changing technologies and demands for service.

Specifically, SCLS provides non-technology services in the following areas:

- Contracts for library resources: SCLS pays the Madison Public Library more than \$75,000 annually to purchase extra copies of popular items and items not owned by other member libraries.

- Cooperative management services: SCLS coordinates orders and shipping for everything from library cards and fliers to puppets and computers, saving libraries money. The system manages county library budgets on request and cooperative projects in all areas of service.
- Interlibrary loan: SCLS contracts with Madison Public Library to provide for interlibrary loan services for all SCLS libraries, providing access to items not found within the ILS.
- Delivery service: Delivery is essential to resource sharing, so SCLS delivers materials requested by area residents to their local libraries. The cost to send an item from one library to another in SCLS costs 14 cents (down from 20 cents), a vastly less expensive solution than the U.S. mail. Delivery staff and member libraries continually work together to increase the effectiveness of the service.
- Professional consultants & continuing education: SCLS consultants field a variety of requests from member librarians for assistance with library-related issues ranging from creating a budget to building design and layout. To educate library staff, SCLS maintains a collection of professional materials for use by member libraries and also organizes continuing education programs on a variety of topics. SCLS also helps libraries develop programs to serve children, young adults, families, and to provide services to users with special needs.

Ongoing services provided by the Technology Team

- Operation of a time and print management solution: SCLS maintains two servers and provides support for the Library Online product from Active Network. Approximately 36 member libraries use this service with four libraries using the Print Management Option.
- PC support: Currently, computers supported by SCLS are primarily on the SCLS Network. In 2012 and 2013 SCLS made a concerted effort to integrate all PCs onto the SCLS network or SCLS managed ISPs. The services include assisting libraries with hardware replacement plans, purchasing and staging of new equipment, securing the computers, updating the operating system and other software as necessary, and troubleshooting of hardware and software problems. The computers connected via the Wide Area Network (WAN) are updated frequently through remote control and automatic updates either through the SCLS network or by the use of VPN over SCLS managed 3rd party ISPs.
- Network support: Activities to support the SCLS Network include working with DOA TEACH, MUFN, Wiscnet and other 3rd party ISPs to ensure that member libraries continue to have adequate telecommunications access and capabilities, maintaining network security by providing an antivirus solution, continually patching the latest security holes, educating library staff about safe internet and email practices, monitoring the network for bandwidth usage, and maintaining servers.
- Wireless access support: All 53 SCLS member libraries and branches have wireless internet available. In 2011 SCLS developed a new wireless service offering that provides access to wireless in libraries via central site hardware and software and local routers. By 2012 20 libraries had transitioned to this new form of wireless service. In 2013, SCLS used LSTA funds to transition additional libraries to the new wireless services and to upgrade the existing wireless software to Cisco Prime Infrastructure. This new software will allow us to prevent bandwidth

“hogs”, direct internet traffic directly to the internet instead of SCLS headquarters for libraries on VPN, and to offer the same support for wireless laptops as for wired PCs, and will allow us to accommodate the next generation of access points.

- Email list services: SCLS creates and maintains email lists for member libraries and SCLS to use for communication among staff and between libraries. SCLS also assists libraries in finding appropriate providers for email list services for patron lists.
- Website services: SCLS staff assist member libraries to maintain library websites by providing hosting for websites, redesigning library websites, providing training and assistance in maintaining websites, investigating and using new technologies in library websites, assisting libraries in getting and understanding usage statistics for websites, purchasing alternate domain names, and creating online forms for libraries as requested.
- New building support: SCLS Technology staff work with libraries that are undertaking remodels or new building projects to ensure that the building meets the technological specifications for the ILS, public computing services, and new technologies such as RFID and automated handling equipment.
- Reference database support: Patrons in the SCLS service area have access to a number of online reference databases. Some databases are purchased by SCLS, some are purchased by all SCLS libraries, and some are purchased by sub-groups or individual libraries. In addition, SCLS works with the Wisconsin Public Library Consortium (WPLC) for access to OverDrive. Regardless of the funding source, SCLS provides user authentication services for all databases, along with interface design and technical support and troubleshooting.
- Gadget Packs: The SCLS Technology Team maintains a collection of gadgets including a wide variety of e-book readers, Apple mobile devices such as iPads and iPods, MP3 players, and portable gaming devices. Member libraries can request and check out the equipment for staff training and experimentation rather than purchasing the equipment themselves.
- Continuing education support: Because SCLS includes libraries in a seven-county area, distance education options are a necessity. SCLS maintains videoconferencing for continuing education events and for planning meetings, and contracts for service for web conferencing. Technology staff work with the Continuing Education Coordinator to provide online tutorials for priority projects and to teach training sessions, as appropriate. SCLS also provides equipment for training activities, including several wireless labs, which technology staff support.
- Youth services support: Technology staff members assist in the Summer Library Program by creating and maintaining a blog for teen book discussions and registration forms for the program.
- Day-to-day operations support: There are many technologies used to ensure that internal operations at SCLS are as efficient and cost effective as possible. Technology staff support administration databases, financial and personnel software (currently QuickBooks), office equipment, internal file shares, personal digital devices and office computers and other software.

- ILS System support: The Technology Team supports the ILS group and the Integrated Library System by providing server maintenance, helpdesk support, and statistical report creation, for the Koha Open Source ILS system, and maintaining the Talking Tech telephone calling system.
- New technology services: As a "trailblazer, an innovator, and a catalyst," SCLS looks for new technology services to introduce to member libraries as appropriate. These services may be pilot projects to prove the utility of a certain device or service, or it may be training opportunities on new technology for all libraries in the system.
- Communication about technology: The Technology Team continually investigates new methods of communicating with member libraries to raise awareness of and improve the technology services we provide. One method is TechBits (<http://scls.typepad.com/techbits/>), a blog that provides information about ongoing projects, tips and tricks, announcements of new services, information about new technologies, and more. The Technology News Blog provides in depth updates to libraries on the progress of various technology projects. Another method is the SCLS Status Wiki (<http://sclsstatus.pbworks.com/>) The Status Wiki provides a continuous update of server uptime and downtime, known network problems, and any issues with the Delivery Service.

III. Funding and Budgets

Technology projects are purchased through contributions from both SCLS and the member libraries. A cost sharing model was developed in 2011 and 2012 that re-defined how costs are distributed to libraries participating in technology and ILS services. SCLS is once again re-evaluating the cost sharing model in preparation for 2015 budget planning.

IV. Planning Environment

Planning for technology is a continual process, and requires communication both within the team providing technical support and between the team and its customers. The Technology Team plans for changes and develops projects by gathering input in a variety of ways:

Internal Discussions

The Technology Team meets formally every Monday morning to review current projects, diagnose any technology-related problems that cannot be solved individually and plan for upcoming services or updates. If a project or issue lends itself to a more detailed discussion, the team schedules additional meetings devoted to that issue. In 2013, a Planning Team was formed to work on high-level project planning. This group meets bi-weekly. Also in 2013, a Help Desk team was formed to focus on front-line support issues. This group meets weekly. Help Desk team members also have a daily 5 minute checkin to share information and identify anything that needs escalation.

Conversations with member libraries

The Technology Team meets both formally and informally with member libraries throughout the year, gathering information about the library environment and the various technological issues facing the libraries. The formal process involves scheduled consultation visits where Technology Team members

visit member libraries and consult, as a group, in order to solve problems. Informally, Technology Team members, especially the Computer Technicians and the Technical Support Specialist, visit the libraries on a regular basis in order to repair PCs. During those visits, they're able to gather information and bring it back to the team.

Technology Committee

The Technology Committee (TC), a sub-committee of the Administrative Council, is the primary advisory group to SCLS on technology services. Comprised of 12 committee members, representing 13 clusters of libraries, the Technology Committee:

1. Oversees technology projects and schedules.
2. Serves as a forum for discussion and first-level decision-making concerning technology issues and services.
3. Oversees SCLS technology plan and annual projects plan and recommends elements for inclusion in SCLS annual planning efforts.
4. Determines procedures and makes recommendations to Administrative Council for policy changes and technology projects with budget implications.
5. Creates working groups as required subject to the approval of the Administrative Council. Participation on working groups is not limited to committee members.
6. Makes recommendations concerning annual budget.

V. Priorities for 2014

1. Server Administration:

- a. Repave the Drupal sandbox VM and the Drupal production platform with current software versions.
- b. Research, plan, budget and schedule a Windows domain upgrade to Server 2012 R2, with related support infrastructure upgrades.

2. Network Administration:

- a. Replace obsolete HQ firewall hardware and upgrade software components to current versions.
- b. Continue to evaluate libraries' broadband needs and identify the most viable option for each, including VPN, Badgernet (increasing where possible) and potential Community Area [Fiber] Networks (CANs).
- c. Research, purchase and test non-Cisco LAN hardware and assess if it is compatible, stable and easily supportable.
- d. Evaluate existing network management tools and compare with other options (including Cisco Prime Infrastructure)

3. Explore options for new email services:

- a. Define the scope of 2014 email service development work (either migration to a cloud based service, or remediation of internal SCLS email hosting) and present options to the Technology Committee for their review.
 - b. Implement the chosen email service path by the end of 2014 (end of hardware life for the current SCLS email server)
4. Develop a more robust on-call team for off-hours support issues with an emphasis on network, server and ILS support failures.
 - a. Identify the scope of off-hours support
 - b. Develop documentation and complete training for as many components as possible with respect to changing the pager role distribution
 - c. Phase in new on call team members and potentially expand over time
 - d. Educate libraries on any changes to the after-hours support process
5. Continue to cross train amongst team members wherever possible:
 - a. Updating patron and staff images
 - b. PC support procedures
 - c. Server and Network Administration
 - d. In 2013, SCLS added 3 additional broadband solutions to the SCLS-supported (Wiscnet VPN, MUFN, and Charter VPN). We are working to expand front-line and system administration network support to include these new solutions as well as to expand network support in general across the entire technology services team.
 - e. Configure and activate staff, patron and printer switch ports.
6. Explore the use of Spiceworks Inventory for doing device counts for cost formula purposes
7. PC Support:
 - a. Investigate Windows 8 and Windows 8 deployment methods
 - b. Complete upgrades for XP machines to Windows 7 or Vista on eligible PCs (by April 2014).
 - c. Get all of SCLS HQ PCs on Windows 7. Upgrade HQ PC rotation schedule.
 - d. Finish updating Wireless Lab 1 and 2. Conform Wireless lab 3 to the same as 1 and 2. Plan for routine replacements.
 - e. Get all LOL Print Management library labs on Windows 7, LOL 4.4
8. Continue to fine tune help desk practices
 - a. Increase knowledge of Spiceworks inventory software

- b. Fine tune procedure for taking Help Desk calls and online submissions, creating tickets, escalating problems and creating knowledge base entries.
 - c. Continue to develop Knowledge Base entries for common Help Desk problems.
 - d. Evaluate and select a new Help Desk ticketing software
9. Upgrade Library Online pc reservation and print management software so that we can do real-time authentication with the ILS. This is technically possible, but there may be policy issues to resolve.
10. Review and revise system security practices.

VI. Potential Services

Potential Services are those that we may work on if they are prioritized and there is opportunity to do so. Future services are divided into a two year plan (2014 / 2015)

- In 2013, the Technology Team identified a “do-it-yourself” wireless print management option that any library can deploy on its own with minimal support from SCLS. SCLS also worked with Madison Public Library to make sure that their “wired” print management solution will work with the SCLS Windows images. SCLS also worked to make the SCLS-supported solution (Library Online) work with SCLS Windows images. SCLS still has as a long-term goal to explore new wired print management solutions.
- The Technology Team completed their implementation tasks for the E-commerce solution to allow patrons to pay library fees online using a credit card. This service will be integrated into the SCLS shared ILS (LibLime Koha) in early 2014. This process will be fine-tuned in 2014 and other payment options, such as stand-alone kiosks, and integration with print management may be considered.
- Member library PC data backup
The Technology Team has started the preliminary investigation in offering possible PC data backup services to libraries. The scope and potential cost to member libraries will be examined and shared with the Technology Committee. If such a plan is feasible both technically and economically, the service will be offered to member libraries by 2015.
- Producing a “thin client” alternative for libraries for public access catalog PCs and other limited use machines is a desirable service. Preliminary investigation of this has begun, but there is not a viable solution at this time. SCLS will continue to monitor the status of this type of service and will work toward implementing a solution, should one become available, at some point in the future.
- Other products and services as needed

VII. Assessment

Priorities and projects are important to any technology plan but fall flat without a plan for assessment during and after the project is complete. Our goal is to develop a comprehensive assessment method

that will help provide technology staff and member libraries a clear view of where projects are at, what's going well, and how we can improve in the future.

Assessment Tools

The Technology Team will utilize several tools to help with the assessment process:

- Surveys

Member libraries will be surveyed

After the next major project the SCLS technology team will continue to utilize survey methods to best gauge the scope and interest of our member libraries.

- Focus Groups

Focus groups made up of member library staff members will be utilized when applicable to examine projects or services in their initial stages.

- Usability Studies

If a project involves a user interface, the Technology Team will run usability tests on the interface, using member library staff members and patrons if necessary. The results of the usability studies will help shape the overall look and feel of the interfaces.

- Project websites

The Technology team will attempt to create websites listing the various projects and their timelines, making project information available to member libraries at all times.

2014 Assessment Plan

In 2014, we will review the projects completed in 2013 and use our findings to help shape any new projects or projects that are already started. Timelines for the two year projects will be reviewed and any mid-course corrections will be applied at that time.

2015 Assessment Plan

The 2015 assessment plan will be similar to the 2014 plan. Previous years' projects will be reviewed and timelines for the two-year projects will be corrected if necessary. Since technology is a rapidly changing world, modifications to the three year goals may be necessary and mid-course corrections will be applied as appropriate.

Appendix A: SCLS Staff and System Principles

Staff Principles

SCLS staff stay focused on our mission and measure all of our work, plans, programs, activities and behaviors against it.

SCLS staff do excellent work and endeavor to exceed member expectations.

SCLS staff are responsible for achieving and maintaining good working relationships with every member library and with every coworker. We make it a high priority to treat people well. We are always courteous to members and to each other. When we make mistakes, we acknowledge them, apologize, and move on.

SCLS is a community of people who are different from each other in many ways, however, staff work as a team, respecting the contributions and viewpoint of each member. We freely share information and communicate our plans, activities and concerns to the other members of our team and give credit where credit is due.

SCLS staff work toward solutions for problems.

SCLS staff keep our commitments, meet our deadlines, and take responsibility for getting the training and resources we need to do our work.

SCLS staff are sensitive to member's perceptions and strive with each interaction to make them more positive than before.

Our work is far too important for us to always be serious. We approach it with a sense of fun and include as many laughs as we possibly can.

SCLS Basic System Principles

Every member library must have a voice in the planning and governance of the South Central Library System (SCLS) and clear opportunities for input into system direction, management, and service priorities. Every member library has an accompanying responsibility to participate in these planning and governance processes.

SCLS and member libraries will attempt to clearly communicate library issues to all stakeholders.

SCLS is a community of libraries that differ from each other in many ways. SCLS must be designed so as to offer something of value to all its members, to respect diversity, and to engender mutual respect among members and between members and system staff. Because of this diversity, SCLS may have different structural relationships with different counties within the system. To the extent feasible, each county should have the primary responsibility for determining the general nature of that relationship.

SCLS exists to make its members stronger. To this end, SCLS will concentrate on providing services to and through its member libraries rather than directly to the public. An exception to this principle may occur when an existing agency cannot deliver a needed service, or when the system can provide the service in a substantially more effective manner.

SCLS should be a trailblazer, an innovator, and a catalyst. SCLS should initiate projects and then empower local libraries to continue them. System funds must in no way replace local efforts for established services.

SCLS, as a whole, must be greater than the sum of its parts. The services provided to each member library must be of greater value than that member could achieve by simply spending its own share of the funds separately.

SCLS must operate within the framework of statutory requirements while striving to meet member needs.

Appendix C: Staff Strategies and Library Responsibilities

SCLS Technology Staff Strategies

How we work with each other and SCLS member libraries significantly impacts our ability to develop and implement technology solutions. It is important to keep in mind some basic service strategies.

Try to understand technology from the library's perspective

- Communicate about technology in a way both parties are comfortable with and can understand.
- Recognize the value of a project or suggestion from the library's perspective, and trust the expertise and knowledge of library staff.
- Actively involve the libraries as partners.
- Be open to ideas and suggestions from the libraries. Be positive when you consider possibilities.

Empower and encourage the libraries

- Don't do things for people that they can learn to do themselves, but instead empower them to act on their own behalf.
- Be proactive and encourage libraries to investigate and employ new technologies.
- Be appreciative when libraries do tasks we ask them to do.

Make the best of difficult situations

- Be receptive and open to feedback and criticism.
- If we can't do something, explain why in easy-to-understand terms.
- Let people also know the mechanisms to change things if they are unsatisfied.
- Keep in mind that we can't make everyone happy all of the time.

Work together as a team

- No matter your position, you have the power to identify solutions.
- All involved staff should have a voice in the planning and decision-making for a project.
- No body of knowledge can only be in one person's head. It limits input and creativity and poses significant risk.

It's important to "Get Stuff Done"

- No plan or project is perfect, and perfection should not be our goal.
- Look for simple solutions, and avoid substituting complicated solutions when they aren't warranted.
- It's okay to trim it down to the essential steps, and you should never feel the need to "cover yourself."
- Ask for feedback, but don't let the absence of feedback keep you from acting.
- Cost isn't just about dollars. Time, effort, and support must also be considered.
- You can't do everything, and it's okay to let go of some things.

Don't be afraid to think big

- Challenge assumptions about how things are now.
- When faced with choices, take the one that provides the best possible service to the greatest

number of people.

- Sometimes a small change is the right change. Sometimes making a larger change could make the service even better. Consider both when finding solutions to problems.

Technology Responsibilities of Member Libraries

How the SCLS member libraries work together with each other, with SCLS, and with SCLS technology staff significantly impacts our local and collective ability to develop and implement technology that provides the best possible service to the library patron.

Recognizing that we are stronger collectively than we are individually, it is important for member libraries to keep these tenets in mind.

Try to understand technology from SCLS's point of view.

- Remember that SCLS supports nearly 1,200 computers and that uniformity is the price of lower costs and faster response time.
- Recognize that there are 52 other libraries suggesting projects and asking for local exceptions.
- Be open to ideas and suggestions from the system that would improve service for everyone even if it comes at the cost of some local autonomy.

Develop the skills & knowledge to be a partner in technology.

- Don't ask system staff to do things that you can learn to do yourselves.
- Communicate about technology among your own staff. Let them know of updates, conversations, and problems, and any communication you've had with SCLS staff. When all staff at a location have the same knowledge, it's easier to communicate with SCLS staff, and vice versa.
- Be proactive and investigate and employ new technologies. Share those investigations with SCLS staff.
- Realize that SCLS staff provides service to many library staff with varying levels of technology skill and knowledge. When they ask a long series of questions, it is to find out data to help them diagnose the problem, not to imply a lack of technical expertise.
- When given instructions by SCLS staff, use them. Call staff if you have questions while following the instructions, or if the instructions fail to fix a problem.
- Stay current with information sent out by SCLS.

Work together as a team.

- Libraries need to let the system know when there is a problem - a problem can't be fixed unless it's known.
- When letting the system know about problems also let them know about possible solutions.
- Be part of the planning and decision-making process.
- Follow the rules as much as possible and when you can't, explain why you cannot.
- Don't forget to let SCLS staff know about what is working well.

It's important to keep moving forward.

- No plan or project is perfect. Not deciding is also a decision.
- Having everyone on board as we move forward is important.

- Cost isn't just about dollars. Time, effort, and support must also be considered.
- We may not be able to provide all the services we want without letting go of some other things.

Remember to think big

- It's a large system both in terms of numbers of libraries, PCs on the network, and geography and the needs of each local library may not always be satisfactorily met.
- When faced with choices, we should encourage the system to take the one that provides the best possible service to the greatest number of people.