

The Library Network Technology Plan June 2008 – 2011

The mission of The Library Network is to improve, enhance, and extend library service to its member libraries.

The Library Network has the largest service population of a library cooperative in the state of Michigan, serving residents located throughout Wayne, Washtenaw, Oakland, Livingston and St. Clair counties. The cooperative strives to provide and facilitate quality library services to its member libraries thereby improving library services to their communities.

The TLN staff is committed to the provision of quality services that meet member library needs. TLN recognizes that different libraries have different needs and attempts to design services and products that meet this wide range of needs.

Goals, Objectives and strategies

The Library Network has an emphasis on service goals, not technology goals. Our members view technology as a tool-box with specific tools that will help us to meet our service goals. To that end we have identified specific objectives and strategies related to the use of technology that are critical to the ability of TLN and our members to meet our service goals.

A. To facilitate resource sharing among all TLN members.

Support for resource sharing is a cornerstone of TLN's service program and is supported through our state aid funded delivery system. Technology objectives related to resource sharing are:

1. Expand participation in MeLCat by TLN member libraries.
2. Provide members with access to electronic interlibrary loan on a timely basis. TLN uses OCLC's Interlibrary Loan system to electronically submit and track member initiated interlibrary loan requests. (ongoing activity).
3. To maintain and operate a telecommunications network linking TLN members with each other and with the Internet. TLN operates a fiber backbone telecommunications network linking 58 buildings.
 - a. In late 2008 TLN staff will send out an RFP to telecommunications vendors seeking a new 3 year bid for the fiber backbone network. A new contract would be effective July 1, 2009.

b. TLN will market its expanded network capabilities to other libraries within our membership.

4. To maintain and upgrade a telecommunications infrastructure that allows members to communicate with TLN for support of member service activities. In 2004, TLN purchased a new telephone system, changed local and long distance service providers and upgraded the voice mail system. It is anticipated that current hardware and software will serve our needs through 2011. We will re-evaluate local and long distance service in 2008.

5. In addition to facilitating communication between members and TLN, we also have a resource sharing obligation to facilitate communication among the membership and our committees and Board. To do this we use email, discussion lists, our newsletter and web pages. To improve delivery of this service goal TLN plans the following:

- a. Continue to evaluate and update the TLN communication plan.
- b. Improve calling tree. Investigate internet fax system.

B. To assist libraries in the management of their collections and operations through the administration of a shared library automation system.

1. Support a system that provides a full complement of library collection management and patron management tools including a public catalog, catalog creation and maintenance, circulation, acquisitions, serials control, reporting and statistical analysis capabilities and other information management functions.

2. Work with the Shared System Users' Group, iBistro Committee and Shared System Executive Committee in the continued evaluation of improvements and enhancements to the SirsiDynix Unicorn system implemented in 2004.

3. Upgrade from SirsiDynix Unicorn system to SirsiDynix Symphony in 2008.

4. Test Unicorn/Symphony client with Windows Vista, once SirsiDynix supports use of the client with Vista.

5. Expand use of the Acquisitions module to further facilitate the electronic ordering of materials, as well as to continue to support the electronic tracking of funds, and provide library staff and patrons with up to date on-order information. As of 2006, TLN's Acquisitions department uses the shared system acquisitions module.

6. Improve the ability of SAS libraries to access analytical data about their library as well as comparative data from libraries across the country. In 2006, TLN purchased and implemented Director's Station. TLN will continue to promote the use of Director's Station. Evaluate participation in the Normative Data Project to provide SAS libraries with detailed peer group comparisons of library use data.
7. Evaluate Smart Access Manager (SAM) workstation management software every 3 years.
8. Evaluate add-on products.
9. Explore other avenues for providing shared technology services for libraries participating in the shared automation system.
10. Evaluate Shared System every 5 years. The Shared Shared system was purchased in 2004. The next evaluation will take place in 2009.
11. Investigate streamlining of delivery.
12. Investigate federated searching.
13. Investigate e-commerce form on Unicorn to pay bills online.

C. To provide quality continuing education and training in multiple formats through the identification of new areas of need and the marketing of TLN developed programs to new audiences.

1. Develop training and continuing education programs based on identified member needs. TLN offers a regular calendar of technology training classes to support our menu services. These are scheduled on a quarterly basis and are held at our administrative building as well as at member library sites. TLN will investigate implementing training classes conducted over the web.
2. TLN's Technology Committee has developed and continually revises a set of Basic and Advanced Technology Competencies that have been approved by the TLN Steering Committee as recommendations for all member libraries. These standards will be revised as needed by the Technology Committee.
3. TLN's Technology Committee has developed several end user tutorials, most notably the Mouse tutorial and the web catalog tutorial. These will be reviewed annually by the Technology Committee and revised as needed. Additional tutorials may be developed to meet member needs. In 2007 the

Technology Committee developed Search Path tutorials to further enhance the training options available to patrons. These tutorials will be updated and maintained as needed.

4. TLN will continue to maintain a training center at its Southgate headquarters.
5. Develop and enhance remote training opportunities through the use of the wireless lab and remote training software.
6. Explore opportunities to partner with other organizations to facilitate training.

D. To assist member libraries in acquiring, supporting and maintaining the technology necessary to achieve their service-related goals.

TLN provides a variety of services to member libraries to assist them in the day to day management of technology in the library. The TLN Technology Committee will assist in helping TLN to identify technology-related needs and assist TLN in developing strategies to meet those needs.

Specific ongoing activities include:

1. Providing discounts on technology and telecommunications related products as well as the REMC purchasing programs.
2. Negotiation of discounts with vendors whose products are of interest to libraries.
3. Purchasing support.
4. Review minimum workstation specifications annually.
5. Provide Technology Services to the libraries as requested.
6. Continue to support readinglog.info.
7. Providing Helpdesk services to the member libraries.

Specific projects include:

1. Maintain a network security program including anti-virus, desktop lock down and PC management tools, to address both single-workstation as well as network wide security (ongoing).

2. Provide enhanced support for patron authentication in a wireless environment.
3. Investigate providing a program registration and calendaring tool.

E. To collaborate with members on the identification, assessment, application, and/or implementation of emerging technologies.

One of the ways in which a cooperative like TLN can assist its members is in the identification and evaluation of new technologies and/or applications. By taking the lead for its members, cooperatives can help individual libraries spread out the risk associated with new technologies. Working with the Steering Committee, Technology Committee and the Shared Automation System Users Group we will develop specific plans that will include:

1. Develop a pilot Internet II project
 - a. Technology Committee will take the lead on this.
2. Develop a plan for testing and implementing the use of video conferencing in member libraries to facilitate training and programming. Seek grant money to implement the plan.
3. Investigate a cooperative-wide virtual reference service/homework service. Consider seeking grant funds to implement.
4. Develop a guide for implementing RFID. Explore a system wide purchase of RFID technology if there are cost benefits to the membership.
5. Explore the feasibility of the creation of a cooperative-wide catalog of foreign language materials.
6. Investigate a bandwidth management system.

Technology Assessment

Central Site

Telecommunications Circuits

TLN operates a wide area network to 58 library buildings throughout the cooperative. Member sites are connected to the wide area network via 1.5 Mb T1, 3Mb bundled T1, or 5Mb/10Mb/20Mb fiber connections. The member sites and TLN share a path to the Internet through Merit Networks.

Over the last three years about one third of our wide area network participants have upgraded from their 1.5mb T1 connection to either a 3mb T1 connection or opt-e-man fiber.

Shared Automation System

TLN operates a shared automation system for 41 member libraries. It consists of 6 servers.

The Unicorn software server houses all the Database files required for the daily operations of the TLN Shared Automation System.

Running under Sun Solaris 9.0, the Unicorn software server is installed on a Sun Sunfire v880 with 6 processors, 12 GB Memory and 219 GB of hard disk storage configured under RAID 1 for assured data integrity.

The iBistro web server houses the web interface for the iBistro Online Catalog.

Running under Sun Solaris 9.0, the iBistro server is installed on a Sun Fire V440 with 2 processors, 4GB of memory and 73GB of hard drive storage configured under RAID 1 for assured Data integrity.

The Minicorn Training server houses a copy of the database information on the Unicorn software server for purposes of training and testing new software releases.

Running under Sun Solaris 9.0, the Minicorn Training server is installed on a Sun Blade 2000 with 2 Processors, 4GB of memory and 146GB of hard drive storage configured under RAID 1 for assured data integrity.

The SVA server interfaces with the Unicorn Software server to provide the ability for notification via phone for differing types of notifications that are available under the SirsiDynix Unicorn Software.

The SVA software is installed in a Windows 2000 server environment on a Dell PowerEdge 1600SC with a 1 processor, 512MB of memory and 40GB of hard drive storage.

All servers have a 100Mb network connection and use TCP/IP communication protocols native to the operating environment of each server. Additionally, the Unicorn Software Server uses an additional 100Mb network interface to facilitate communication with the iBistro Web Server.

Director's Station

Director's Station is hosted on 2 Dell Servers. Both servers run Windows Server 2003. The Database server for Director's Station is a Dell Poweredge 2850 (Dual 2.8Ghz Xeon processors with 4GB of RAM). The second server is a Dell PowerEdge 750 (2.8Ghz P4 with 2GB of RAM). This server is used for web access to the director's station data.

Internet Server

TLN has several Linux based servers which provide web services (including storage of member library home pages). In 2007, TLN contracted with Merit to provide email and DNS services.

Administrative Servers

TLN has three administrative servers to support accounting and general office management services. Current plans to upgrade the accounting software may require the purchase of a new server in 2008.

Staff Workstations

Virtually all TLN staff workstations are now Pentium level machines and are regularly upgraded or replaced. Each department is responsible for budgeting the funds to upgrade their equipment and to plan for a three to four year life cycle for computers.

Networking

The TLN Building is wired with standard category five cable. Three firewalls are installed protecting the network from external intrusion.

Telephone System

TLN has PRI circuit based phone service which includes local, local toll and long distance through a contract with McLeod. TLN also has a Vodavi Infinite XTS

phone system with voice mail that includes 47 phone sets, a server with three 24 port digital station cards and an 8 port analog card.

Battery Backup Protection

Power assurance/conditioning as well as emergency battery power backup for all network equipment and associated peripherals are controlled by parallel PowerWare 9390 units.

Member Libraries

TLN member libraries have a variety of technology available to them. Those participating in our shared library system have, at a minimum a Cisco 2620 series Router, 24 port 10/100 Cisco Enterprise Edition Switch, and various computer operating systems including Windows 2000 and Windows XP. The libraries are wired with standard Category five cables, tested to 100 MB. These computers are connected to TLN through the use of the network protocol TCP/IP across TLN's WAN.

Training

Technology training has been addressed elsewhere in this document, as it is a fundamental and integral part of what we do. All TLN staff are able to take advantage of the types of training previously outlined. TLN's staff has a past practice of building their technology skills through a combination of in-house training and external training opportunities. The current contract with TLN professional staff requires that each staff member be allotted \$500 per year for use in support of continuing education and professional development. The skills required by TLN staff are identified in the Basic and Advanced competencies documents appended to this plan.

Budget	2008/2009	2009/2010	2010/2011
Hardware	\$ 111,000	\$ 117,000	\$ 122,000
Software	\$ 50,000	\$ 53,000	\$ 55,000
Telecommunications	\$ 700,000	\$ 735,000	\$ 772,000
Database Licensing	N/A	N/A	N/A
Contract Services	\$ 106,000	\$ 111,000	\$ 117,000
Staff Training	\$ 11,000	\$ 11,000	\$ 11,000

Evaluation

TLN believes that in the current climate of change and technology advancement it is challenging to develop a technology plan that provides the guidance necessary to chart its course without being so confining as to make mid-course corrections impossible. The TLN Technology Plan evaluation component will be its most important and most evolutionary component. While the plan includes some broad targets and specific objectives, it will be assessed and new objectives identified annually.

The Technology Committee and the Executive Committee of the Shared Automation System Users group will review the TLN Technology Plan annually. Progress reports on achieving objectives will be made to the TLN Board after each annual review (December). Each annual review will include an evaluation of the previous fiscal year's accomplishments as well as the specific objectives to be achieved in the coming year. The TLN Board will be asked to incorporate any new objectives as an addendum to the original plan.

Specific benchmarks and timelines have been identified throughout the plan.

Impact of USF savings on TLN

TLN passes all USF discounts directly to its member libraries. Decisions about how to use savings are local decisions. The steady increase in the bandwidth capabilities of our libraries attests to the overall impact of this program on our libraries' individual ability to provide enhanced technology-based services to their patrons.