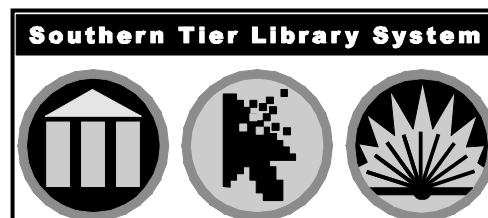


Technology Plan 2013 – 2016



Creation Date: December 12, 2012

Mission

The Southern Tier Library System, a regional system of public libraries, works in partnership with its members to support and strengthen them through clearly defined, cost-effective services which make possible the coordination and sharing of resources, enabling all individuals in the five-county region to have equal access to excellent library service.

Introduction

The Southern Tier Library System (STLS) is a chartered, cooperative library system serving the public libraries in five counties – Allegany, Chemung, Schuyler, Steuben and Yates. The system is one of twenty-three similar systems in New York State created to provide support services and promote cooperation among its member libraries. It receives most of its financial support through the New York State Department of Education.

STLS serves 43 member libraries, 1 bookmobile, and 5 reading centers.

STLS provides the following services to its members:

- Resource sharing: Online union catalog, inter and intralibrary loan, patron-placed holds through centrally administered integrated library system, downloadable audio and eBooks, music mp3s, videos and access to online databases
- Electronic reporting, including Directors Station software, on integrated library system functions
- Online circulation used by 40 member libraries, and 1 bookmobile
- Secure access to STLS resources, Internet access and filtered content for libraries that receive Federal E-rate discounts
- Help Desk with 9am – 5pm, Monday through Friday support and an urgent assistance extension with 8am – 9pm, Sunday through Saturday support
- E-mail communication (with spam blocking), accounts and distribution lists
- Cataloging services
- Physical processing of library materials
- Delivery service
- Consultant services for member libraries on topics such as adult and youth services, annual reports, state grants, public library districts, administration, information technology
- Education and training through workshops, on-site one-on-one sessions, remote training, and customized consulting
- Web site hosting for member libraries
- Outreach service to institutions

Plans for Using Technology

Access

Goal 1: Strengthen the ability of member libraries to provide print and electronic information.

Actions:

- Work with members to adopt high speed broadband and obtain the most effective Internet service with adequate bandwidth for emerging technologies and the most bandwidth at the least cost
- Maintain a secure wide-area network that offers diverse connection methods (data circuits, cable virtual private network, DSL virtual private network, wireless virtual private network, fiber Ethernet, other) and redundancy
- Continue to enhance network technology and bandwidth for access to the integrated library system, online resources, NOVEL databases, online training and other electronic resources
- Maintain and enhance an integrated library system, currently SirsiDynix Symphony
- Assist member libraries to maintain modern staff and public PCs
- Continue to develop partnerships with Z39.50 sites to allow access to other library catalogs
- Continue working with small member libraries to find cost-effective ways to participate in the integrated library system
- Encourage additional members to participate
- Assist members to implement local wireless networks
- Provide secure access to electronic communication methods such as e-mail accounts, distribution lists, messaging
- Provide means to enable libraries to manage, report and publicize information services
- Strengthen remote STLS support to members

Technology Assessment

See Appendix A

Content

Goal 2: Increase member library access to electronic information.

Actions:

- Maintain and enhance the STLS website, indexing and making it searchable
- Continue to include patron authentication and links for easy patron access to NOVEL and regionally purchased databases (currently including Academic One File, Art Museum Image Gallery, Business Insights: Essentials, Chilton Library, General One File, Grolier Online, Health Reference Center Academic, InfoTrac Newsstand, Literature Resource Center, National Newspaper Index, New York State Newspapers, Novelist, OCLC FirstSearch, OmniFile Full Text Select, Primary Search and Twayne's Authors Series).
- Add electronic databases as funds are available (e.g. 2012 Central Library funds used to purchase Chilton Library and Novelist)
- Enhance content in the regional catalog (e.g. book jackets, best sellers lists, reviews, previews, samples) to offer users a modern online experience
- Encourage members to participate in such information sharing resources as distribution lists system wide, state, and national
- Host web pages for member libraries and provide training and access to enable them to update the pages remotely including a Content Management System (CMS)
- Maintain fast content filtering as required by the Children's Internet Protection Act and the Federal E-rate program
- Assist libraries to create and have access to digital materials (e.g., digitized images, e-books, video, mp3s, etc.) and make those materials available online
- Assist members to deliver information by new digital methods (e.g. social networking, mobile access, RSS feeds, blogs, podcasts, etc.)
- Participate in initiatives for one-search options which would allow library staff members and patrons to search multiple information sources at the same time
- Provide residents with downloadable audio books, e-books, music mp3s and access to new digital formats as they become available

Training

Goal 3: Train staff members at STLS and member libraries to 1) use existing and new information resources, and 2) use and maintain necessary technology equipment. The STLS Information Technology Consultant will coordinate professional development activity. The Electronic Services Librarian, the ILS Coordinator, other IT and Outreach staff members will provide training for System and member library staff.

Member libraries make local decisions on participating in professional development activities. STLS works to provide continuous training, incorporating grant-funded training as available. STLS staff members are available to provide local training, as well as organizing multiple workshops in multiple venues.

Actions:

- Obtain training for STLS Information Technology/Outreach staff in:
 - Network management, with emphasis on providing security and privacy of data, and redundancy electronic data
 - Accessibility of content
 - Operation of integrated library system, SirsiDynix Symphony
 - New Symphony modules as they are acquired
 - Messaging
 - Microsoft operating systems and MS and other productivity software
 - Video Conferencing and other online collaboration methods
 - Assistive technologies
 - Other topics as they become necessary

- As funds are available, budget for staff training and look for outside funding sources. Enable System staff members to:
 - Meet with peers from other regions
 - Attend workshops and conferences
 - Attend vendor training
 - Participate in courses delivered via distance learning or over the Internet
 - Take advantage of other options

- Coordinate work among STLS departments to provide member libraries with ongoing training in use of the integrated library system (currently SirsiDynix Symphony) using multiple approaches

- Train staff in member libraries in the use of:
 - NOVEL and other databases
 - creation and maintenance of library websites
 - use of Help Desk software
 - use of filtering software
 - new SirsiDynix Symphony modules as they are acquired
 - basic networking, troubleshooting PCs
 - productivity and remote meeting software
 - working with downloadable audio books, eBooks, downloadable video and music, and new digital media as available
 - working with mobile devices

- Assist staff in member libraries to teach library patrons to use electronic library services
 - Provide STARCat training and tutorials.
 - Provide mobile device training and opportunities for library staff to become familiar with new devices.
 - Ensure that library staff are aware of and can meet New York Digital Literacy Standards, so that they, in turn, can promote digitally literate communities.
 - Promote broadband usage and access.

- Provide member libraries with access to multiple training opportunities.
 - well-organized, indexed training information on the STLS website
 - one-on-one training
 - train-the-trainer
 - hands-on training in small groups
 - workshops, seminars
 - remote training, both one-on-one and in workshops
 - other

- Maintain a portable lap-top computer laboratory and mobile device kits for use in multiple locations by STLS staff and staff in member libraries. Seek funds to replace as necessary

Current Training Chart
See Appendix B

Analysis of Telecommunications Costs
See Appendix C

Evaluation of 2010 – 2013 Technology Plan

The Southern Tier Library System has been successful in meeting its goals.

STLS has:

Upgraded member library access to Internet connectivity and quality automation services:

- Upgraded telecommunications connections by upgrading to two fiber Internet connections and upgrading the Time Warner Road Runner connection to improve speed and reliability where needed; moved libraries to cable or other high-speed connections. All members have secure connections
- Participated in Gates Foundation “Broadband phase 1 and 2” grants to increase high speed broadband adaptation by our member libraries
- Replaced the Internet router and installed a Cisco ASA device to secure a fiber Internet connection
- Replaced Internet perimeter devices in 25 libraries to improve speed, security, add a captive portal for segregated wireless networks, provide for usage statistics, dual WAN connections and Quality of Service (QoS)
- Worked with nine additional libraries to circulate electronically; three more are bar-coding in preparation for electronic circulation
- As a result of the increase in number of automated libraries, there has been a huge increase in residents who reserve library materials online
- Facilitated the implementation of a two phase grant program to procure and install over 100 new Public Access Computing PCs in member libraries
- Upgraded the SolarWinds Network Performance Monitor which monitors all of the AT&T, Verizon, Time Warner Road Runner, DSL connections and the servers for which the IT department is responsible
- Replaced the platform STARCat runs on to provide active content in the OPAC

Used the automated network to connect libraries to electronic information:

- Maintained an STLS web page and upgraded library web site support by adding the Joomla, Drupal and WordPress CMS hosting platforms that allows libraries to maintain their own web sites without being knowledgeable in html.
- Cooperated with neighboring library systems to use New York State regional bibliographic database funds to obtain subscription databases
- Continued to use EZProxy software to allow patrons remote access to available online databases.
- Maintained thirty six distribution lists for staff in member libraries and at STLS

Trained staff at STLS and in member libraries on current platforms and new technologies and software:

- The IT consultant and other System staff have attended national conferences; the IT department conducts in service training, attends local workshops in addition to training from outside sources
- Provided regular training for member libraries in new operating systems and application software
- Obtained grant funding to hire an STLS technology trainer, providing workshops and one-on-one training in member libraries
- Subscribed to "Go-to-Assist" software to provide remote desktop support and utilized "Go-to-Meeting" and other online collaboration software for workshop and one-on-one training
- Provided workshops for STLS and member library staff for upgrades of SirsiDynix Symphony software - to Java Workflows client and to GL3.4
- Participated in the NYS BTOP grant with JobLink the STLS mobile training program
- Assisted member libraries to install local virtual servers to manage their PC's through group policies
- Installed zero clients using Microsoft MultiPoint server and N-Computing clients to upgrade some public access PC's
- Added a number of mobile devices such as tablets and e-Readers cellphones and trained system staff, member library staff and patrons
- Purchased videoconferencing equipment and provided training to system staff and member library staff

Evaluation

Member libraries regularly discuss information technologies services, make suggestions and plan for the coming years through quarterly meetings, discussion lists, advisory committees and an annual evaluation of STLS services

Goals insufficiently met:

To find the time and finances to provide training for STLS staff at the level we would like. STLS has increased funding for staff training and reorganized the department so that more time can be spent in training. Any cut in state aid funding to STLS creates staffing and training difficulties.

Emerging Developments in Technology:

Dark fiber and fiber Internet access are becoming increasingly attractive transports for high speed Internet access for libraries. We are integrating these technologies and participating in any available resource for making this more

affordable for member libraries to help provide better service through faster Internet access.

Identifying Potentially Useful New Technologies:

STLS information technology staff members attend vendor and other conferences, vendor training, read journals, and consult with peers, including participating in electronic discussion lists.

Evaluation of 2013 – 2016 Technology Plan

STLS staff will evaluate the effectiveness of the Technology Plan in cooperation with STLS member libraries, attendees at quarterly Information Technology meetings, the Southern Tier Library Directors Association, and the STLS Directors Advisory Council. Regular evaluation makes it possible for the System to make mid-course corrections in response to new developments and opportunities as they arise. STLS will use various evaluation measures that monitor progress:

- annual member library evaluation of System services
- increase in the number of STLS members participating in the wide-area network
- increase in the number of STLS members using the integrated library system, SirsiDynix Symphony, to circulate materials
- enhanced skills and knowledge of staff members at STLS and member libraries
- incorporation of objectives based evaluation in evaluating STLS education and training activities
- annual review of information technology services by Information Technology staff, executive director and Board of Trustees

STLS is actively engaged in technology planning through:

- Quarterly Information Technology meetings with member libraries
- Meetings of the STLS Directors Advisory Council to discuss funding
- Participation in the New York State SirsiDynix Users Group. Users group members share expertise and submit requests to SirsiDynix for software improvements in library system-level functionality
- Attendance, as funds are available, at the annual users group conference where information is exchanged and new software is demonstrated
- Cooperative efforts with four neighboring library systems that use SirsiDynix Symphony
- Participation in the Public Library System Directors Organization (PULISDO). STLS joins with the 23 public library systems in New York to plan cooperatively.

- The System director and Information technology consultant together annually review the technology plan, member needs and the technology budget in order to update plan activities.

Budget

As members of the public and member libraries require more electronic services, STLS is budgeting an increasing percentage of its operating funds for information technology services and staff training. Member libraries also contribute toward such costs as staff, staff training, and annual maintenance fees for the integrated library system (ILS). (ILS software provides inventory control, circulation and shared patron registration.) STLS stretches dollars through careful purchasing and has obtained grant funding to purchase servers and extend staff services. The STLS Board of Trustees has created a replacement reserve fund for building maintenance and replacing hardware valued at over \$5,000.

Southern Tier Library System Capacity

STLS has the capacity to carry out all the programs and services noted above and provide services under the Federal telecommunications discount program:

- has the staff, stable funding, and the necessary equipment, telecommunications connections, and Internet access
- has provided access to library automation software since 1986
- has necessary capacity for simultaneous users (data circuits, Internet, POTS)
- has required electrical capacity
- has required maintenance contracts

STLS Technology Budget and Activities – 2013–2016
Revised December 2012

2013/2014 Changes and Expansion

\$422,523 Budget

Revenue

\$ 192,000 member library cost-share,

\$ 62,634 E-rate discount

\$ 167,889 Operating Budget

Expenses

\$ 265,748 Salaries and benefits

\$ 2,975 Equipment repair, software, supplies, dues, manuals

\$ 85,800 Telecommunications

\$ 8,000 Training

\$ 60,000 Annual maintenance hardware, SirsiDynix Symphony, Help Desk, Barracuda updates, OverDrive and filtering software

Provide network services. Enhance and speed up network for all libraries:

- Negotiate for discounts from Internet and telecommunications vendors
- Continue to apply for E-rate discounts
- Develop and implement security, backup and disaster recovery policies
- Transfer billing for members that wish to become the billed entity for their service
- Evaluate network for most cost-effective alternatives—dark fiber, cable, wireless, data circuits, DSL or other options for increased bandwidth at lower costs
- Work with members to explore alternative methods of connection. Arrange installation or upgrade of cable connections and assist libraries to move to other methods as requested

Automation:

- Assist one libraries to begin circulating online
- Assist two remaining libraries to bar-code collections in preparation for online circulation
- Explore new features such as taking online Credit Card payments
- Continue to develop updated Online Public Access Catalog
- Assist libraries implementing PC Reservation and print management software
- Provide members with information on third-party collection agency services

Content

- Continue subscription to filtering software at multiple levels: filtering at central site and in member libraries
- Assist members to create digital content (Images, PDFs, audio and video files and others) and make them accessible electronically
- Purchase enhanced content for STARCat regional database (\$4,741 annual)
- Explore additional rich multimedia content available for the regional database
- Annual maintenance authority control
- Purchase downloadable content

Training:

- Provide ongoing training in use of SirsiDynix Symphony, including train-the-trainer materials, small group sessions, one-on-one training, workshops
- Develop curriculum and provide training on searching the regional online library catalog, STARCat, using SirsiDynix features
- Develop curriculum and provide training on interlibrary loan procedures
- Coordinate training by STLS staff members in various departments
- Attend SirsiDynix users conference (2 System staff members \$3,700)
- Train system staff on firewall implementation and VM server installation
- Train system staff on updated Microsoft Windows 7 and Office 2013 applications
- Train member library staff members on:
 - creating and maintaining their web site
 - utilizing online tools that market their library (Facebook, Twitter, RSS feeds)
 - basic networking troubleshooting skills
 - use of online databases

Technology Support for Member Libraries:

- Meet with STLS cost-share committee to discuss formula for 2016-2019 member contributions
- Continue to host web pages and domains for member libraries utilizing a Content Management System for web site maintenance
- STLS will remotely monitor, when appropriate, library routers, circuits, and other equipment used in multiple methods of connection
- Partner with member libraries to monitor, maintain, and repair internal equipment and systems such as local area networks, hubs, cabling, PCs, peripherals, and software
- STLS will provide support for application software members use to connect to the System
- STLS will recommend specific firewalls, switches and routers, provide a vendor list for cabling, list computer vendors and brand names that have been satisfactory for members and STLS. Because specifications change so quickly, it is not productive to attempt to recommend specs. In general,

libraries should buy the most computer capacity possible along with a four-year maintenance contract from a reputable vendor.

2014/2015

\$442,925 Budget

Revenue

\$ 197,760 member library cost-share,

\$ 62,634 E-rate discount

\$ 182,531 Operating Budget

Expenses

\$ 284,350 Salaries and benefits

\$ 2,975 Equipment, software, supplies, dues, manuals

\$ 85,800 Telecommunications

\$ 8,000 Training

\$ 61,800 Annual maintenance hardware, SirsiDynix Symphony, Help Desk, Barracuda updates, OverDrive and filtering software

Provide network services. Enhance and speed up network for all libraries:

- Negotiate for discounts from Internet and telecommunications vendors
- Continue to apply for E-rate discounts
- Enhance and implement security, backup and disaster recovery policies
- Transfer billing for members that wish to become the billed entity for their service
- Evaluate network for most cost-effective alternatives—fiber, cable, wireless, data circuits, DSL or other options for increased band-width at lower costs
- Work with members to explore alternative methods of connection. Arrange installation or upgrade of cable connections and assist libraries to move to other methods as requested

Automation:

- Assist one library to begin circulating online
- Assist one remaining library to bar-code collections in preparation for online circulation
- Assist reading centers to bar code their collections
- Assist libraries implementing PC Reservation and print management software Explore new features such as having Self Checkout stations
- Upgrade Directors Station software

Content:

- Connect to additional Z39.50 sites to enable more point-to-point ILL
- Purchase enhanced content for STARCcat regional database (\$4,500 annual)
- Explore additional rich multimedia content available for the regional database
- Annual maintenance authority control

- Purchase downloadable content

Training:

- Provide ongoing training in use of SirsiDynix Symphony, Enterprise and Directors Station, including train-the-trainer materials, small group sessions, one-on-one training, workshops
- Create on-line training using web-casting; interactive tutorials using Flash
- Coordinate training by STLS staff members in various departments
- Attend SirsiDynix users conference (2 System staff members \$3,900)
- Train system staff on updated Microsoft Windows 8 and Office 2013 applications
- Attend training on networking and security infrastructure, virtualization and hardware implementation 2 IT staff members
- Train member library staff members on:
 - creating and maintaining their web site
 - utilizing online tools that market their library (Facebook, Twitter, RSS feeds)
 - basic networking troubleshooting skills
 - use of online databases

Technology Support for Member Libraries:

- Continue to host web pages and domains for member libraries utilizing a Content Management System for web site maintenance
- STLS will remotely monitor, when appropriate, library routers, circuits, and other equipment used in multiple methods of connection
- Partner with member libraries to monitor, maintain, and repair internal equipment and systems such as local area networks, hubs, cabling, PCs, peripherals, and software
- STLS will provide support for application software members use to connect to the System
- STLS will recommend specific firewalls, switches and routers, provide a vendor list for cabling, list computer vendors and brand names that have been satisfactory for members and STLS. Because specifications change so quickly, it is not productive to attempt to recommend specs. In general, libraries should buy the most computer capacity possible along with a four-year maintenance contract from a reputable vendor.

2015/2016

\$464,684 Budget

Revenue

\$ 203,692 member library cost-share,

\$ 62,635 E-rate discount

\$ 198,356 Operating Budget

Expenses

\$ 304,254 Salaries and benefits

\$ 2,975 Equipment, security appliances, software, supplies, dues, manuals

\$ 85,800 Telecommunications

\$ 8,000 Training

\$ 63,654 Annual maintenance hardware, SirsiDynix Symphony, Help Desk, Barracuda updates, OverDrive, VM licensing and filtering software

Provide network services. Enhance and speed up network for all libraries:

- Negotiate for discounts from Internet and telecommunications vendors
- Continue to apply for E-rate discounts
- Enhance and implement security, backup and disaster recovery policies
- Transfer billing for members that wish to become the billed entity for their service
- Evaluate network for most cost-effective alternatives—fiber, cable, wireless, data circuits, DSL or other options for increased band-width at lower costs
- Work with members to explore alternative methods of connection. Arrange installation or upgrade of cable connections and assist libraries to move to other methods as requested

Automation:

- Assist one library to begin circulating online
- All libraries are full participants in the integrated library system
- Assist reading centers to bar code their collections
- Assist libraries implementing PC Reservation and print management software
- Explore new features such as RFID

Content:

- Connect to additional Z39.50 sites to enable more point-to-point ILL
- Purchase enhanced content for STARCcat regional database (\$4,883 annual)
- Annual maintenance of authority control
- Explore additional rich multimedia content available for the regional database
- Purchase downloadable content

Training:

- Provide ongoing training in use of SirsiDynix Symphony, including train-the-trainer materials, small group sessions, one-on-one training, workshops
- Develop curriculum and provide training on searching the regional online library catalog, STARCat, using new Enterprise features
- Coordinate training by STLS staff members in various departments
- Attend SirsiDynix users conference (2 System staff members \$3,000)
- Attend training on networking and security infrastructure, virtualization and hardware implementation (3 IT Staff members \$8,000)
- Train system and member library staff members on Microsoft Office applications
- Train member library staff members on:
 - creating and maintaining their web site
 - utilizing online tools that market their library (Facebook, Twitter, RSS feeds)
 - basic networking troubleshooting skills
 - use of online databases

Technology Support for Member Libraries:

- Meet with STLS cost-share committee to discuss formula for 2016-2019 member contributions
- Continue to host web pages and domains for member libraries utilizing a Content Management System for web site maintenance
- STLS will remotely monitor, when appropriate, library routers, circuits, and other equipment used in multiple methods of connection
- Partner with member libraries to monitor, maintain, and repair internal equipment and systems such as local area networks, hubs, cabling, PCs, peripherals, and software
- STLS will provide support for application software members use to connect to the System
- STLS will recommend specific firewalls, switches and routers, provide a vendor list for cabling, list computer vendors and brand names that have been satisfactory for members and STLS. Because specifications change so quickly, it is not productive to attempt to recommend specs. In general, libraries should buy the most computer capacity possible along with a four-year maintenance contract from a reputable vendor.

Appendix A Technology Assessment

Computer Equipment Available

Equipment	Details	Next Year	Future Years	Budget
System staff computers with access to the internet and system servers, used to enter materials into the database and communicate with member libraries	<p>(2) IBM Lenovo 821595U, Core Duo, 2Gb, Win7</p> <p>(3) HP EliteBook 8560p, 4GB, Core I7, Win7</p> <p>(2) HP Compaq 8200 Elite, 8GB, Core I5, Win7</p> <p>(1) Dell Vostro 1500, Core 2, 3GB, Win7</p> <p>(1) Dell OptiPlex 745, Core 2, 2GB, Win7</p> <p>(1) Dell OptiPlex GX620, PD, 1Gb, Win7</p> <p>(3) Dell Vostro 400, Core 2, 2Gb, WinXP</p> <p>(1) Dell Vostro 200, Core 2, 2Gb, WinXP</p> <p>(3) HP Elite 7000, Core i7, 4Gb, Win7</p> <p>(4) HP LaserJet 2100TN Network Printers</p> <p>(2) Dell 3100cn Color Network Laser Printer</p> <p>(1) HP P3005n Network Laser Printer</p>		Continue to upgrade staff PCs and monitors	

Appendix A Computer Equipment Available cont.

Equipment	Details	Next Year	Future Years	Budget
System Staff computer equipment available for training.	<p>(10) HP 14" notebook, 4GB, Win7, Office 2010</p> <p>(4) HP 15" notebook, 4GB, Win7, Office 2010</p> <p>(4) HP 17" notebook, 4GB, Win7, Office 2010</p> <p>(10) Dell Latitude D600 notebook, 1GB, 802.11g wireless, Win7, Office 2010</p> <p>(4) Dell Latitude D520 notebook, 1GB, 802.11g wireless, Win7, Office 2010</p> <p>(1) LifeSize Team 220 Video Conference system with 46" LED monitor</p> <p>(2) Sony LCD Projector</p> <p>(1) Sanyo XM100 large format room projector</p> <p>(1) Sharp DLP Projector</p> <p>(2) Panasonic small room projectors</p> <p>(1) InFocus LCD Projector</p> <p>(2) 50" portable screen</p> <p>(1) 80" portable screen</p> <p>Misc mobile equipment</p>		<p>Upgrade or replace notebooks, mobile equipment and Projectors as needed and budget allows.</p> <p>Upgrade software on existing notebooks.</p>	

Appendix A Computer Equipment Available cont.

Equipment	Details	Next Year	Future Years	Budget
System Servers and Related Equipment	<p>HP C7000 Blade Enclosure with (8) HP BL460c G6 Citrix XenServer Host Blade Servers, Ipswitch I-Mail Server V11, STLS Web site, Drupal Server, .Net Web Server(Windows Server 2008R2)</p> <p>(1) Sun Microsystems Sun Blade 2000, Symphony Test Server (Solaris 9, Symphony Beta Test 3.4.1)</p> <p>(1) Sun Microsystems Sun Fire V880, Symphony Test Server, Backup services (Symphony 3.4.1)</p> <p>(1) Sun Microsystems T5520 Server, Global Zone Server and Virtual Symphony Production Server, Symphony Production Server (Symphony 3.4.1), Backup Server in Non-Global Zones (Solaris 10)</p> <p>(1) Sun Microsystems ST2540 Storage Area Network 4 TB Storage Module</p> <p>(2) Cisco MDS9124 Multilayer Fabric Switch for SAN data transport</p> <p>(1) Barracuda Networks SPAM Firewall 400 device e-mail</p> <p>(1) Barracuda Networks SPAM Firewall 300 backup</p>	<p>Expand Virtual Machines on Citrix Zen Server.</p> <p>Retire outdated servers.</p>	<p>Migrate Sun Oracle applications to Linux VM's, upgrade Cisco routers and ASA.</p> <p>Add RAM to Blade Servers to HP rack as utilization dictates.</p> <p>Add Fibre channel Storage space as utilization dictates.</p>	

Equipment	Details	Next Year	Future Years	Budget
	device for e-mail (1) Barracuda Networks SPAM WebFilter 310 Backup Internet Content Filter (2) Cisco 2821 Router for Internet Access, VPN Server (1) Cisco 2811 Router, for Internet Access, VPN Server (1) Cisco ASA5510 Firewall for Internet Content Filter (1) Watchguard XTM23W STLS staff and public captive portal filtered Internet access (3) Linksys 48, 24 and 16 port Gigabit switches for Internet switching (2) Cisco 2600 24port Switches, Internal and External switching			

Appendix A Internal Networks Available

Connection	Details	Next Year	Future Years	Budget
STLS Office	LAN with Windows Server 2003 Active Directory Sharepoint Server and ISA 2006 Server.			
STLS WAN	(2) Fiber connections, (1) Broadband Cable connection, (2) 802.11 Wireless connections, (36) Broadband Cable connections, (1) Cell			

	Wireless and (7) DSL connections providing secure VPN access to the ILS server.			
STLS Internet	AT&T Managed Internet Fiber, Time Warner Cable Business Class RoadRunner.			

Client Communications Software Available

Location	Details	Next Year	Future Years	Budget
STLS Office	Internet Explorer, Outlook Express, Outlook, Workflows Symphony Client, Symantec Endpoint Protectin Client/Server, STARCat Web Catalog, Cisco ASA/IOS VPN Servers/Client, McAfee SmartFilter, WatchGuard URL filtering			
STLS Libraries	Internet Explorer, Outlook Express, Workflows Symphony Client, Norton Antivirus Client/Server, STARCat Web Catalog, Cisco VPN Client			

Maintenance Contracts

Location	Details	Budget
STLS Integrated Library System	STLS has a software contract with SirsiDynix Corporation for both the production and test servers. This includes phone and email support. STLS has a hardware contract with Sun Microsystems for the production server and backup device for on-site service.	
STLS Cisco Routers	STLS has a hardware contract with Cisco Systems for Cisco routing and switching equipment.	

Capacity of Electrical System

Location	Electrical System
Southern Tier Library System 9424 Scott Rd Painted Post, NY 14870	Electrical system is adequate for system servers. A permanent backup generator with sufficient capacity to power the STLS headquarters is maintained.

Technology Assessment

MEMBER LIBRARY CONFIGURATIONS

Library	Transport Media	ILS System	Download Speed	Internet Service Provider	Web Page	No. of PCs
Addison	Cable	Symphony	5M	Time Warner	Y	10
Alfred	Cable	Symphony	15M	Time Warner	Y	12
Almond	Cable	Symphony	5M	Time Warner	Y	3
Andover	Cable	Symphony	5M	Time Warner	Y	12
Angelica	Cable	Symphony	5M	Time Warner	Y	2
Atlanta	Cable	Symphony	5M	Time Warner	Y	9
Avoca	Cable	Symphony	5M	Time Warner	Y	8
Bath	Cable	Symphony	10M	Time Warner	Y	30
Belfast	Cable	Symphony	5M	Time Warner	Y	7
Belmont	Cable	Symphony	5M	Time Warner	Y	3
Bolivar	Cable	Symphony	5M	Time Warner	Y	5
Branchport	DSL	Symphony	1.5M	Empire	Y	6
Canaseraga	Cable	Symphony	5M	Time Warner	Y	5
Canisteo	Cable	Symphony	5M	Time Warner	Y	5
Cohocton	Cable	Symphony	5M	Time Warner	Y	5
Corning	Cable	Symphony	20M	Time Warner	Y	50
Cuba	Cable	Symphony	20M	Time Warner	Y	17
Dundee	Cable	Symphony	5M	Time Warner	Y	11
Elmira (inc 2 br)	Cable	Symphony	28M	Time Warner	Y	84
Fillmore	Cable	Symphony	5M	Time Warner	Y	7
Friendship	Cable	Symphony	5M	Time Warner	Y	8
Hammondsport	Cable	Symphony	5M	Time Warner	Y	26
Hornell	Cable	Symphony	15M	Time Warner	Y	25
Horseheads	Cable	Symphony	5M	Time Warner	Y	10
Howard	Dedicated	Symphony	1.5M	Verizon	Y	10
Jasper	Cable	Symphony	5M	Time Warner	Y	5
Genesee	Cable	Symphony	5M	Time Warner	Y	3
Montour Falls	Cable	Symphony	5M	Time Warner	Y	5
Odessa	Cable	Symphony	5M	Time Warner	Y	6
Penn Yan	DSL	Polaris	10M	Verizon	Y	14
Prattsburgh	DSL	Symphony	1.5M	Empire	Y	10
Pulteney	DSL	Symphony	1.5M	Empire	Y	9
Richburg	Cable	Symphony	5M	Time Warner	Y	7
Rushford	Wireless	Symphony	1.5M	Southern Tier Wireless	Y	12
Savona	Cable	Symphony	5M	Time Warner	Y	7
Scio	Cable	Symphony	5M	Time Warner	Y	7
Van Etten	Cable	Symphony	5M	Haefele	Y	1
Watkins Glen	Cable	Symphony	5M	Time Warner	Y	18
Wayland	Cable	Symphony	20M	Time Warner	Y	25
Wellsville	Cable	Symphony	20M	Time Warner	Y	36
Whitesville	DSL	Symphony	1.5M	Armstrong	Y	6
Arkport	Cable	Symphony	5M	Time Warner	Y	3
Greenwood	Wireless	Symphony	1.5M	Armstrong	Y	2
Hector	DSL	Symphony	1.5M	Verizon	Y	3
Middlesex	DSL	Symphony	1.5M	Frontier	Y	2
Rushville	Cable	Symphony	5M	Time Warner	Y	4

Appendix B
Current Training Chart

Libraries that participated in training	Symphony	STARCat	Databases	Security	Website
STLS	X	X	X	X	X
Addison Public Library	X	X	X	X	X
Alfred Box of Books Library	X	X	X	X	X
Almond, 20th Century Club Library	X	X	X		X
Andover Free Library	X	X			
Angelica Free Library	X				
Atlanta, EJ Cottrell Memorial Library					
Avoca Free Library	X	X	X	X	X
Bath, Dormann Library	X	X	X	X	X
Belfast Public Library	X	X	X	X	X
Belmont Literary & Historical	X				
Big Flats	X	X	X	X	X
Bolivar Free Library	X				X
Branchport, Bedient Memorial Library	X	X	X	X	X
Canaseraga, Essential Club Free Library	X				
Canisteo, Wimodaughian Free Library	X	X	X	X	X
Cohocton Public Library	X				X
Corning, Southeast Steuben County	X	X	X	X	
Cuba Circulating Library	X	X	X	X	X
Dundee Library	X	X	X		X
Elmira, Steele Memorial Library	X	X	X	X	X
Fillmore, Wide Awake Club Library	X		X		X
Fred and Harriett Taylor Memorial Library	X	X	X	X	X
Friendship Free Library	X				
Hornell Public Library	X	X	X	X	X
Horseheads Free Library	X	X			
Howard Public Library	X	X	X	X	X
Jasper Free Library	X	X			
Little Genesee, Genesee Library					
Montour Falls Memorial Library	X	X			
Odessa, Dutton S Peterson Memorial	X	X			
Penn Yan Public Library		X			X
Prattsburgh Library	X	X	X	X	X
Pulteney Free Library	X				
Richburg, Colonial Library		X	X		X
Rushford Free Library					
Savona Free Library	X	X	X	X	X
Scio Memorial Library	X				X
Watkins Glen CSD Free Public	X	X		X	X
Wayland Free Library	X	X	X	X	X
Wellsville, David A Howe Public Library	X	X	X	X	X
West Elmira	X			X	
Whitesville Public Library	X				
VanEtten, Reading Center	X			X	
Arkport Reading Center	X				
Greenwood Reading Center	X				
Hector, Elizabeth B. Pert RC	X				
Middlesex Reading Center	X				
Rushville, Blodgett Memorial Library	X				

Appendix C Analysis of telecommunications Costs

Internet Service:

STLS currently maintains a 10Mbps X 10Mbps Fiber connection to AT&T that provides internet access to STLS, web sites for member libraries. \$14,656 annual cost.

STLS currently maintains a 25Mbps X 25Mbps Fiber connection with Time Warner Cable that provides filtered internet access to STLS and 24 member libraries. \$26,436 annual cost.

STLS currently maintains a 15Mbps X 2Mbps Cable Modem Business Class RoadRunner connection with Time Warner Cable that provides VPN to STLS 49 library and reading centers. \$3,000 annual cost.

STLS is maintaining Internet Connections thru Time Warner Business Class Road Runner that currently provides internet access to 24 member libraries. \$28,662 annual cost.

Telephone Service (POTS):

STLS has a total of 7 lines for tariffed local and long distance services. Annual line and usage costs are approximately \$4,500.

Data Circuits:

STLS has 1 data circuits via T1 line connecting 1 member libraries to the Internet. The cost of this circuit is \$19,800 annually.

The discount application is based on the above costs.

Discount application:

STLS will apply for discounts on these telephone services (POTS), two T1 lines and Internet connections via broadband cable. We are eligible for discounts ranging from 60% to 75% for these services.