REQUEST FOR BOARD ACTION

ITEM NO. 5b.

DATE OF MEETING: May 20, 2013

REQUESTED BY: Mike Taylor, Library Director/Claiburn B. Watson, Finance Officer

SHORT TITLE: Resolution Authorizing Contract and Purchase Order to The Library Corporation: $15,000

BACKGROUND: This proposal will replace two out-of-date library servers with a "cloud hosted solution" by a vendor, The Library Corporation (TLC), that the county has relied on for nearly 20 years to provide integrated library software (ILS) service. This approach will guarantee compatibility of hardware, existing software, and 24-7 secure management and a seamless transition for consistent customer service. Funding for this purpose is available through State Library of NC grant funds and library department funds already budgeted. All the county IT Dept will have to do is maintain county network connectivity to the Internet.

The library system relies on two servers providing an integrated approach to managing the library's collections, including digital ones. The web server is seven years old and no longer eligible for maintenance support. This month the data server will be five years old and ineligible for support on May 31. A crash would be crippling and costly closing the libraries to the public.

Simply replacing the hardware as they are now hosted in the county would cost between $11,770 and $14,800. However for the next five years this proposal also includes the provision of state-of-the-art hosting facilities with redundant data communication lines and load balancing to endure the best performance, all security and virus protection, nightly back-up, database monitoring, operating system updating, relational database management system (RDBMS) configuration and updating, TLC software updating, and the fastest possible response time for any server related issues. On the sixth year the county may opt for a $4,500 annual fee, or possibly another multi-year discounted subscription.

SPECIFIC ACTION REQUESTED: To consider a resolution authorizing a five year service plan for server hosting services with The Library Corporation and issuance of a Purchase Order in the amount of $15,000.

COUNTY MANAGER'S RECOMMENDATION

Respectfully recommend approval.

Initial

RESOLUTION

NOW, THEREFORE BE IT RESOLVED by the Pender County Board of Commissioners that:

the Board hereby authorizes a Purchase Order to The Library Corporation in the amount of $15,000 for integrated library software hosting as an application service provider for a term of five years. The Chairman/County Manager is authorized to execute any/all agreements necessary to implement the resolution.

630-404500 Contracts $15,000.

AMENDMENTS:

MOVED_____ SECONDED_____

APPROVED_____ DENIED_____UNANIMOUS

YEA VOTES: Brown___ McCoy___ Tate ___ Ward___ Williams ___

_____ 5-20-2013
George R. Brown, Chairman Date

_____ 5/20/13
ATTEST Date

Hosted Solution Services

OVERVIEW

TLC's hosted solution was designed to offer our products to libraries who desire a higher level of outsourced server hardware service and support.

Hosted Service & Maintenance includes:

- State of the art hosting facilities with redundant data communication lines and load balancing to ensure the best performance.
- All security and virus protection.
- Nightly backup
- Database monitoring
- Operating System updating
- Database configuration and updating
- TLC Software updating
- The fastest possible response time for any server-related issues

Additional services that TLC provides as part of the Hosted Solution include:

Protection against the most common causes of outages (power spikes/failures, fire, and flood). We utilize APC and Minuteman equipment to clean up the line-in power and provide a failsafe should our facility experience a sudden loss of power. If the outage lasts longer than 30 seconds, our 100Kw generator takes control ensuring that communications continue uninterrupted. It is fully automatic and integrated to ensure that communications remain seamless.

The data center environment is monitored around the clock by automated equipment to detect increased levels of heat or humidity. Should an issue arise; the monitors immediately take action and contact key personnel.

In the event of an unrecoverable, localized disaster, such as an equipment malfunction, the customer's hosted solution would be restored to a standby server and any lost data would be restored from the nightly backups. Should we experience a disaster that would affect the entire data center, operations would be temporarily relocated to one of our alternate data centers in Denver, CO or Minneapolis, MN.

Hosting Services

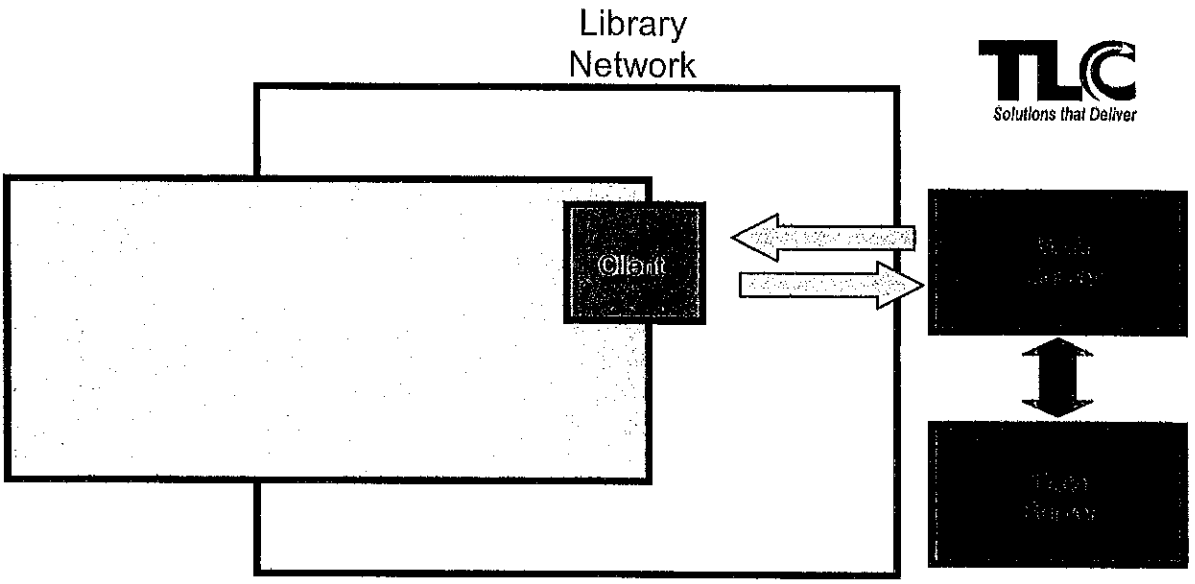
OVERVIEW

TLC's ASP or hosted solution was designed to offer our products to libraries who desire a higher level of outsourced service and support. The same products are available hosted in TLC's secure data center. This allows the customer to reap all the benefits of our products without all the headaches. TLC utilizes a virtual server environment running Citrix Xen Server to manage and maintain the hosted server environment.

COMMUNICATIONS

In a hosted environment, the web and data servers reside at our facility in Inwood, WV. The library workstations communicate strictly with the web server. This communication occurs over the normal ports for the Hyper Text Transfer Protocol (HTTP) and can be configured to utilize the Secure Socket Layer (SSL) for enhanced security. Data retrieval occurs on the back end of the communication stream between the web and data server and is transparent to the client. Due to the fact that all of the data transfers occur within TLC's network, there is no risk of data becoming exposed or compromised.

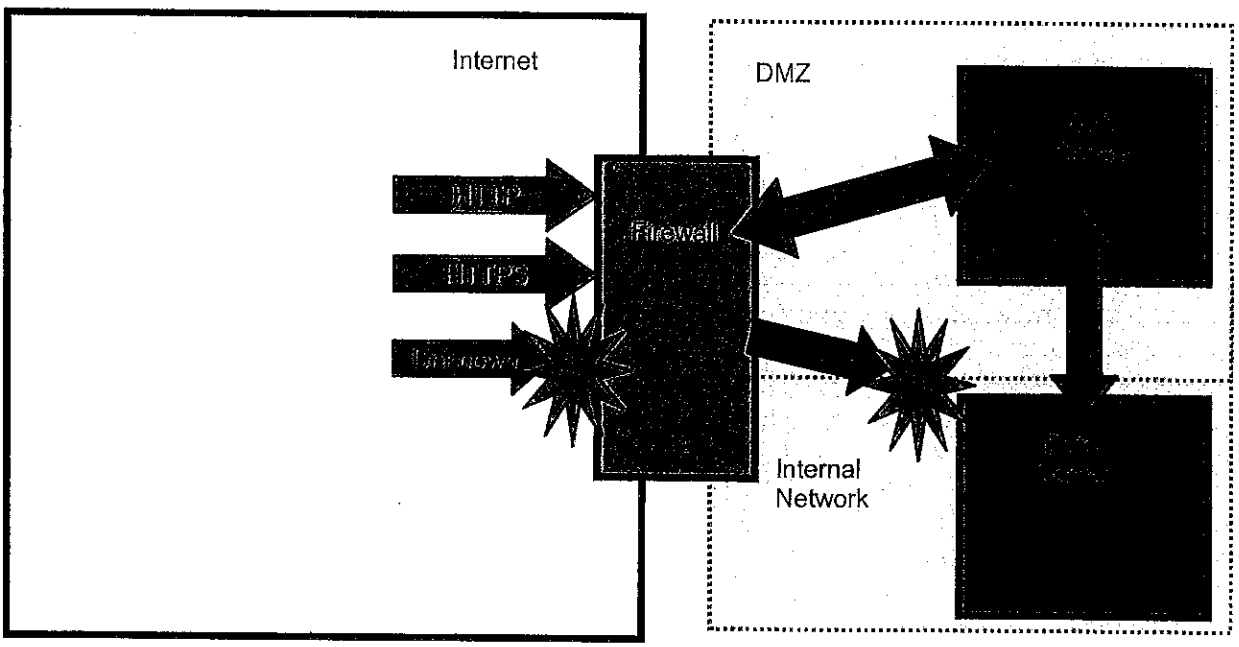
Figure 1 – Communications Overview



SECURITY

To further enhance communications security, the servers are protected by logically and physically separating them from the outside world, only allowing business critical communications to occur through the perimeter firewall. Communications occur strictly between the client and the web server. Database communications take place only between the web server, which resides in a DMZ and the database server which No network traffic from the outside world is allowed to pass through to the database server.

Figure 2 – Firewall Overview



In the event that malicious traffic bypasses the firewall using an exploit of an open port, we have implemented multiple intrusion detection servers (IDS) throughout the facility in order to quickly discover and block the unauthorized activities.

The TLC data center is physically secured as well. The data center remains locked to all but authorized personnel. Persons entering the data center are required to possess a key and pass-code. The data center is monitored 24 hours a day, 7 days per week using video surveillance.

DISASTER RECOVERY

In our data center, we provide protection against the most common causes of outages (power spikes/failures, fire, and flood). We utilize APC and Minuteman equipment to clean up the line-in power and provide a failsafe should our facility experience a sudden loss of power. If the outage lasts longer than 30 seconds, our 100Kw generator takes control ensuring that communications continue uninterrupted. It is all fully automatic and integrated to ensure that communications remain seamless.

The data center environment is monitored around the clock by automated equipment to detect increased levels of heat or humidity. Should an issue arise, the monitors immediately take action and contact key personnel.

In the event of an unrecoverable, localized disaster, such as an equipment malfunction, the customer's hosted solution would be restored to a standby server and any lost data would be restored from the nightly backups. Should we experience a disaster that would affect the entire data center, operations would be temporarily relocated to one of our alternate data centers in Denver, CO or Minneapolis, MN.

SERVICES

Additional services that TLC provides as part of the Hosted Solution include:

- Nightly backup
- Database monitoring
- OS updating
- RDBMS configuration and updating
- TLC Software updating

Library.Solution Hosted Customers

LIBRARY	ST	CONTACT	PHONE	SITE	Circs	EMAIL
Muscle Shoals Library	AL	Denita Lester	256.386.9212	1	342034	dslester18@gmail.com
Sheffield Public Library	AL	Beth Ridgeway	256.386.5633	1	74000	bridgeway@sheffield.lib.al.us
Helen Keller Public Library	AL	Judy Murphy	256.383.7065	1	38000	jmurphy@hkpl.lib.al.us
Carl Elliott Regional Library	AL	Sandra Underwood	205-221-2568	6	124239	sjfu@hotmail.com
Baxter County Library	AR	Gwen Khayat	870-580-0980 x2980	2	333664	gwen.k@baxtercountylibrary.org
Defense Language Institute	CA	Tammy Lowery	831-242-5623	2	42092	tammy.t.lowery@conus.army.mil
Concordia University	CA	Carolina Barton	949.214.3093	1	14221	carolina.barton@cui.edu
La Jolla Country Day School	CA	Michelle Ohnstad	858.453.3440 X252	1	21915	mohnstad@ljcds.org
Clear Creek County Library District	CO	Sue Lathrop	303-569-2403	2	54343	director@clearcreeklibrary.org
Buena Vista Public Library	CO	Gail Nottingham	719-395-8700	1	84014	gnottingham@buenavistalibrary.org
Denver Seminary	CO	Nadine Ginkel	303-762-6955	1	44538	nadine.ginkel@denverseminary.edu
Elbert County Library Dist Office	CO	Kari May	303-646-3792	4	149300	kbaumann@elbertcountylibrary.org
Stonington Free Library	CT	Margaret Victoria	860-535-0268	1	55090	mvstoningtonfl@comcast.net
Beardsley and Memorial Library	CT	Karin Taylor	860-379-6043	1	72055	ktaylor@beardsleyandmemorial.org
Carlos Rosario International Public Charter School	DC	Tina Guzman	202.797.4700	2	2367	tguzman@carlosrosario.org
Rasmussen College	FL	Emily O'Connor	952-806-3966	28	8038	emily.oconnor@rasmussen.edu
Westminster Schools	GA	Liesel Krueger	404-609-6319	3	36376	lieselkrueger@westminster.net
The Lovett School Library	GA	Robyn Martin	404-262-3032 X1543	2	31825	rmartin@lovett.org
Atlanta Public Schools	GA	Warren Goetzel	404-802-2760	88	434538	wgoetzel@atlantapublicschools.us

Kendall Young Library	IA	Angie Martin-Schwarz	515-832-9100/9104	1	77030	director@kendall-young.lib.ia.us
Fort Madison Public Library	IA	Sarah Clendineng	319-372-5721	1	56753	sarahclen@FortMadison.lib.ia.us
Waukee Public Library	IA	Erik Surber	515-987-1280 x302	1	162213	eriks@waukee.lib.ia.us
Mercy College of Health Sciences Library	IA	Jennifer Thompson	515-643-6613	4	2933	jthompson@mercydesmoines.org
Kaplan University - Online	IL	Matt Stevons	312.777.6850	11	25000	MStevons@kaplan.edu
Culver Academies	IN	Sue Freymiller	574.842.8442	1	3183	freymis2@culver.org
Jasper County Public Library	IN	Becky Amalong	219-866-5881	3	346528	bamalong@myjcpl.org
Natl Soc for Sons of the American Revolution	KY	Michael Christian	502.588.6138	1	0	mchristi@sar.org
Bracken County Public Library	KY	Valerie Clark	606.735.3620	1	62423	vclark15@gmail.com
Washington County Public Library	KY	Tara O'Hagan	859.336.7655	1	6746	director@wcplky.org
Acadia Parish Library	LA	Ted Landry	337-788-1880	7	131291	tlandry@state.lib.la.us
St Bernard Parish Library	LA	Ethel Llamas	504-279-0448	1	52525	llamas1720@netscape.com
East Carroll Parish Library	LA	Christina Engel	318-559-2615	1	35208	cengel@state.lib.la.us
Jackson Parish Library	LA	Crystal Gates	318-259-5697	1	319755	cgates@myjpl.org
Claiborne Parish Library	LA	Pamela Suggs	318-927-3845	2	52612	psuggs@state.lib.la.us
St Mary Parish Library	LA	Julie Vidos	337-828-1624	7	381186	jchampag@state.lib.la.us
Morehouse Parish Library	LA	Ellen Highsmith	318-281-3696	6	72746	ehighsmi@state.lib.la.us
Richland Parish Library	LA	Amanda Stewart	318.728.4806	3	99650	astewart@state.lib.la.us
West Carroll Parish Library	LA	Marian Phillips	318-428-4100	1	68316	wc.library@gmail.com
Northfield Mount Hermon School	MA	Pamela Allan	413.498.3360	1	72499	pallan@nmhschool.org
Isaac Franck Jewish Public Library	MD	Avi West	240-283-6218	1	92	awest@pjll.org
Comstock Township Library	MI	Meg King-Sloan	269-345-0137	1	130702	msloan@voyager.net

Northfield Township Area Library	MI	Zaley Nelson	734-449-0066	1	31218	znelson@northfieldtownshiplibrary.com
Van Buren District Library	MI	Ryan Wieber	269-423-4771	7	323166	rwieber@vbdl.org
Atchison County Library	MO	Janice Rosenbohm	660-744-5404	3	49290	rockport@aclibrary.net
Sanford-Brown College - St Peters	MO	Lisa Ehrhardt	636.696.2126	4	637	lehrhardt@sbc-stpeters.com
High Point Public Library	NC	Mary Sizemore	336.883.3694	5	496658	mary.sizemore@highpointnc.gov
Hickory Public Library System	NC	Louise Humphrey	828-304-0500 x7275	2	0	lhumphrey@hickorync.gov
Meredith Public Library	NH	Erin Apostolos	603-279-4303	1	91770	erin@meredithlibrary.org
Kent Place School Library	NJ	John Walz	908-273-0900 x295	1	9002	walzj@kentplace.org
Taos Public Library	NM	George Jaramillo	575-737-2590	1	147461	gjaramillo@taosgov.com
Alamogordo Public Library	NM	Bonnie Meagher	575-439-4152	1	218788	bmeagher@ci.alamogordo.nm.us
Sullivan County BOCES	NY	Lynn Miller	845-295-4090	21	166263	lmiller@scboces.org
St Joseph's Seminary	NY	Barbara Carey	914-367-8262	1	3253	bcarey@corriganlibrary.org
Portsmouth Public Library	OH	Becky Schultz	740-354-5688 x10518	6	418795	bschultz@yourppl.org
Herbert Wescoat Memorial Library	OH	Clint Walker	740-596-5691	1	53632	walkerer@oplin.org
Jackson City Library	OH	Laura Thorne	740-286-4111	1	112804	thornela@oplin.org
Meigs County District	OH	Kristi Eblin	740-992-5813	4	1315385	eblinkr@oplin.org
Sylvester Memorial Wellston Public	OH	Karen A. Davis	740.384.6660	1	65201	daviska@oplin.org
St Xavier High School	OH	Julie Conlon	513.761.7600 X358	1	4114	jconlon@stxavier.org
Oak Hill Public Library	OH	Peggy Johnson	740-682-6457	1	39026	johnsope@oplin.org
Briggs-Lawrence County Pub Lib	OH	Rick Sturgill	740-532-1124	4	498403	aut@briggslibrary.org
Will Rogers Library	OK	Sherry Beach	918-341-1564	1	168753	sbeach@claremorecity.com
Upper Canada College	ON	Mari Roughneen	416.488.1125	2	18152	MRoughneen@ucc.on.ca
Seaside Public Library	OR	Esther Moberg	503-738-6742	1	127806	emoberg@cityofseaside.us
Shaw Public Library	PA	Paula Collins	814-765-3271	1	192726	pcollins@clearfield.org
Clearfield County Library	PA	Dan Bogey	814-236-0589	3	144457	ccpl@verizon.net
Dimmick Memorial Library	PA	Susan Sterling	570-325-2131,	2	124159	dimmicklibrary@gmail.com
Eastern University	PA	James L. Sauer	610.341.5957	5	100000	jsauer@eastern.edu
Pike County Public Library	PA	Ellen Schaffner	570-296-8211	3	149120	director@pcpl.org
Clarion County Library System	PA	Matt McClelland	814-226-6340	5	146875	ccls@clarionfreelibrary.org

Pennsylvania Institute of Technology	PA	Lynea Anderman	610-892-1524	1	13269	landerman@pit.edu
Palmer Theological Seminary	PA	Jeron Frame	484-384-2945	1	39344	jframe@eastern.edu
Oconee County Library	SC	Philip Cheney	864-638-4138	4	431225	pcheney@oconeesc.com
Walters State Community College	TN	Douglas D. Cross	423-585-6901	1	5696	doug.cross@ws.edu
Rusk County Library	TX	Pam Pipkin	903-657-8557	4	448937	pipkinp@rclib.org
US Army Sergeants Major Academy	TX	Angelica Garcia	915.744.8122	1	1675	angelica.garcia1@us.army.mil
Virginia Wesleyan College Library	VA	Sandra Brooks	757-455-3262	1	18784	ssbrooks@vwc.edu
James L Hamner Public Library	VA	Dora Byrd Rowe	804.561.4559	1	58664	dbrowe@hamnerlibrary.org
Orange County Public Schools	VA	Linda D. Carlton	540.661.4550 x1621	9	89564	lcarlton@ocss-va.org
Southside Regional Library	VA	Leigh Lambert	434-738-6580	6	579403	llambert@srlib.org
St Christopher's School	VA	Mary Horne	804.282.3185 x4329	2	0	hornem@stcva.org
TRADOC Technical Library	VA	Lucy Buchwald	757-501-7136	2	2450	lucy.buchwald@us.army.mil
Quechee Public Library	VT	Kate Schaal	802. 295.1232	2	43618	quelibra@sover.net
Gundersen Lutheran	WI	Melinda Orebaugh	608-775-5406 x3442	2	9218	mgorebau@gundluth.org
Charles Town Library	WV	Marcella Genz	304.725.2208	1	52157	octldirector@frontier.com