



## SaaS/Software as a Service - ASP/Hosting Questions & Answers

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### 1. Security, Connectivity and Response Issues

- Do you host your own hardware or use a third party?

**We host our own software on our own hardware. We also work with a professional co-location management company. We own and manage multiple servers that reside at a co-location facility. We copy data from co-location servers to identical servers in multiple locations daily.**

- Where is your or your host's data center or co-location facility?

**Co-location services are managed at two secured sites via Net1Plus in Leominster, Massachusetts, and Somerville, Massachusetts, two locations distinct from CyberTools business offices.**

How do we access the application? Public Internet, VPN/Extranet, other?

#### **Public Internet.**

- Is any extra software is needed on our PC's?

**No extra software is needed for OPAC users. Staff use requires a free download of Java, if the latest version is not already on the workstation. Library personnel may access staff functions from any PC, laptop, or workstation.**

- Any additional hardware or on-site servers?

**Nothing else is needed for the staff or end user, just a PC with an Internet connection.**

- Any secure access requirements, tokens, etc.?

**Staff functions are user-identifier and password protected. Patron access is typically anonymous but can be user-identifier and password protected, and IP authenticated, at the option of the library. This last option is most commonly selected by proprietary research organizations that have not established a secure Intranet.**

- What kind of site protection is in place?

- **Facility:** The cement building is staffed and accessed only via multiple locked doors. Each door is video recorded and relayed to a security center. Doors are opened via an electronic key pass. The server room has multiple video cameras. A generator can feed the server room UPS and is tested weekly. Staff is highly responsive and accessible to CyberTools 24/7.
- **Network:** Three OC12s from three different tier one providers run BGP. Thus, an effectively infinite amount of redundant bandwidth feeds our 100 mbs server portal.
- **Servers:** The primary server has a real-time secondary mirror server. Thus every update on the primary server is immediately duplicated on the mirror. Each server runs RAID 1 hot swap disk drives. RAID 1 means that each logical disk drive has two identical physical disk drives to record the data. If one physical drive fails then the server notifies the system administrator to replace it in real-time without pausing the server: no downtime and zero failures! The databases are duplicated on each server and copied daily to identical servers in CyberTools offices which are remote from the co-location site. At any point in time there are six (6) current copies of a library's database in our control.

- What kind of audit reports can we get regarding access?  
**All transactions are logged and can be reported on demand.**
- What server/software security measures are in place?
- **Firewall: CyberTools uses a FortiGate 60 and the FortiNet subscription service. Ports 25, 80, 443, and 20004 have unlimited access, all other ports are restricted. Our Linux servers also run IP Tables to restrict access.**
- **Virus Checking: We use FortiGate 60. Linux does not have the virus issues that MS Windows does.**
- **Intrusion Detection: We use very long system user identifiers and passwords, both randomly generated. All access is reported to the system administrator automatically every four hours. All files size and date changes are reported every fifteen minutes to the system administrator. All logs are automatically reviewed hourly and anomalies reported.**
- **Authentication/Encryption: Long user identifiers and passwords, all encrypted. System admin access is via ssh or VPN. Library staff user access is via encryption by the application and controlled by user identifiers and passwords.**
- **Backup policy: First, all database writes are cached on disk prior to being applied. Second, databases are journaled in real-time. At night every database is duplicated on the same server, then copied to a spare server. The spare server archives the database and transmits it to a server in CyberTools offices where it is extracted. At any point in time there are six (6) secure copies of a library's database.**
- **Ability to restore a system: Although tested regularly, in fact we have never had to do this for a client database. If we did, we would restore the database from one of five sources, depending on the nature of the failure, then update the database from the journal file.**
- **Disaster Recovery: Every hardware component is in triplicate form and can be replaced in minutes with minimum down time. If the collocation facility failed and could not be recovered, we still have the data copied to identical servers in our offices.**
- How is the database set up and partitioned?  
**All databases are in one of two Linux file systems. No database is partitioned.**
- Do we have our own database or is it shared?  
**Each CyberTools library has its own database, these are never shared.**

## 2. Redundancy and Fail Over Procedures

- If the application or hardware fails is it down or does it rollover to another server?  
**This depends. Most of it can roll over. In the case where it would need to rollover, it can. This would take minutes and is regularly tested.**
- Is the server(s) mirrored?  
**Yes!**

## 3. Hours of Operation and Access Time

- Are there any times that the application is unavailable?  
**No. Since CyberTools first released a hosted version in 2000, our libraries have experienced near 100% uptime. The average since 2005 has been better than 99.999%, and an amazing 100% uptime during the period May 2007-December 2008! Ask our librarians!**
- Is there emergency response 24/7?  
**CyberTools staff has emergency response contracts for its servers. CyberTools libraries enjoy highly responsive customer support from CyberTools staff 9 AM – 8 PM ET, 7 days a week including holidays.**
- Is it part of standard support?  
**Yes!**

#### 4. Communication and Notifications

- If there is to be scheduled downtime or upgrade work how are we notified and when?

**Sunday mornings are used for periodic scheduled downtime (maintenance and upgrades).**

**Otherwise, scheduled and unscheduled downtime is infrequent. Backups occur without hindrance to your uptime.**

#### 5. Upgrades

- Are upgrades part of the standard support fee?

**Yes.**

- How often are upgrades applied?

**An upgrade is installed when it becomes available; we do not wait to install these only at the end of each month, for example. For hosted libraries, the CyberTools Support Group installs all upgrades. On average, two to three major upgrades occur each year. Minor upgrades occur monthly on average, or lately with Electronic Resource Management, more frequently. Notices are posted (1) at the Staff User login, (2) at our private Librarian Resources web site, and (3) we also send email notifications to library contacts. Major upgrades occur with close partnering among our librarian beta testers.**

- Are upgrades automatically applied or scheduled?

**Automatically applied, although we communicate major updates significantly in advance. Are all customers upgraded at once or individually scheduled?**

**All are upgraded at once.**

- How many application upgrades have you performed?

**Countless.**

- Have you performed hardware and/or operating system upgrades on the system?

**Yes. We regularly update primary and secondary hardware at all server locations including the co-location facility. Latest major hardware upgrade occurred in October 2008.**

#### 6. Support

- Who do we call and what hours are they available?

**We encourage librarians to email [Support@CyberToolsForLibraries.com](mailto:Support@CyberToolsForLibraries.com) - 24/7. We regularly monitor email and we have found that a well-thought-out email will give us the information we need to answer the question, helps the librarian formalize the question, and allows a response in writing, so the librarian can follow-up at his/her convenience. This process also allows us to share knowledge gained from this client interaction with all our staff to enhance our ability to continue to be responsive.**

- What is the call back time?

**Clients can expect a reply within two hours during normal business hours, 9-5 EDT/EST. A separate individual at CyberTools reconciles all Support contacts at the end of each business day to insure that all were resolved.**

- What is the average turnaround time for problem resolution?

**One hour or less. However, most questions to our Support Group are requests for assistance with using existing features.**

- What kind of problems have you incurred to date?

**Support calls cover a range of topics: Libraries with new computers may need to disable pop-ups, or require help in downloading Java. Librarians with little cataloging experience might call with questions about MARC, how to download bibliographic records, or the use of bar codes, and we are pleased to assist them. Librarians occasionally call with suggestions for enhancements to the software. Commonly asked questions are answered in a series of FAQs provided at our private Librarians Resources web site, and we add to this FAQ list when a particularly good question comes up!**

## 7. Library Data

- Do you sell or share library data with anyone?

**No. Never. You own the data and although it remains on the CyberTools server, your contract with us states that you have ownership.**

- How do we get our data back if there is a problem? In a readable format?

**In CyberTools, your library's data in MARC21 is universally compatible with other major integrated systems and can be exported at any time.**

- Can we get regular downloads of the data for our use in other in-house apps?

**Yes. CyberTools also provides an ODBC interface.**

## 8. Business Continuity Issues

- What happens if your company goes out of business?

**CyberTools has been in business since 1986, has no debt, owns its business offices, entered the library automation marketplace in 2000 and has been in the top tier of numbers of new library sales since 2005 (per Library Journal). Libraries own their own data which can be exported to another system at any time – this is written in your agreement with CyberTools. Note that your data is in a standard format that is highly portable.**

- Do you give us the opportunity to bring the application in house?

**Yes. However, the trend among our libraries is to migrate in the other direction, from their own servers to an SaaS/hosted configuration.**

- Is there an option to purchase the hardware?

**You have complete flexibility to purchase any hardware anywhere. You do not purchase this via CyberTools for Libraries, and we do not take a portion of the hardware fee. CyberTools for Libraries is completely portable to virtually any web-enabled platform.**

- Do we have the ability to get copies of our data and a program to read them with?

**The MARC 21 data is easily read with the freeware MarcEdit.**

- What timeframe do you give us to be able to find another vendor?

**You can download your data on demand.**

## 9. Other Issues

- What else should we be checking?

**We encourage you to test our application with our web demo to make sure that you do not have connectivity issues. You should also check our references. Note that the last time such a survey was conducted, Computers in Libraries readers ranked CyberTools in the **very highest category among all ILS vendors (at any fees) for (1) Overall Customer Satisfaction and (2) User Support. We are particularly honored to rate this high while also being committed to fair and reasonable pricing.****

- Are there any additional charges that are considered “extras” that are not in the service contract?

**No. CyberTools aims for simple, integrated, all-in-one service.**

- What are our responsibilities?

**Please check news we post at your daily login, read our periodic e-mail notices, and regularly check the CyberTools private “Librarian Resources” web site.**