Remote Access

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INTRODUCTION

Remote access to library resources is an expectation of students, faculty and staff. After the physical library is closed for the day students and faculty still need the ability to access the library's collection. With the increased number of on-line classes, it is important that students who are unable to come to campus to use the library still have the ability to use the library's databases and other on-line resources. In order for remote access to happen, the institution needs to have the infrastructure in place for off-campus access. Most campuses require students and faculty to login through a proxy server that will validate them as current students or employees of the campus. Unless there is a problem with the proxy server, they can access library services anytime of the day or night throughout the year. With the growth of mobile technologies, it is necessary for campuses to ensure their websites and other resources are compatible with mobile devices.

BACKGROUND

Distance education was the impetus for the need for remote access to library resources. The original distance education courses were correspondent courses where students received and submitted their assignments through the mail. With the advent of the Internet, those courses were offered online through course management systems. Students using their computer have access to lectures, assignments and exams. Many online courses are taught asynchronously and students access the materials after the instructor uploads them to the course management system. The student submits the assignments by their due date through the course management system. Some courses are taught synchronously where students work in real time with the instructor. Another option is hybrid courses that are a mixture of on-line and classroom instruction. All distance education courses are taught using one of the three aforementioned models.

The Association of College and Research Libraries approved the Standards for Distance Learning Library Services in 2008. These standards provide guidelines for the types of services and necessary personnel libraries need to offer for distance education students. Distance education or online courses continue to grow at almost every university and academic libraries must be prepared to meet the needs of distance education students' (ACRL, 2008).

The use of proxy servers allows library users to access library resources once the physical library is closed. A proxy server allows a person affiliated with the university to log into the network and access the library's resources remotely. Most universities have a single sign-on that verifies the person either works or is a student at the university. Once the person is authenticated they can use the library's resources and print, download or save articles from the databases.

The ability to digitize collections expanded the types of users could access. Special collections are no longer relegated to a forgotten area of the library with limited access for researchers. Universities can digitize materials from their special collections allowing researchers to access them without the need to make an appointment. There are several excellent digital libraries. The University of Georgia offers the Digital Library of Georgia and the Civil Rights Digital Library. Both of these collections include videos, photos, newspapers, maps, audio, and government materials. The Digital Public Library of America is the most recent example of digitized materials available for researchers. This digital library has collaborated with major universities and other digital libraries to build the collection. As they develop more partnerships, the number of digital collections available will substantially increase. The American Memory Collection from the Library of Congress offers digital collections on a number of topics from slavery to baseball.

A literature review finds recent articles that examine the possibility of an online academic library (Cerbo, 2012). Cybertheft of articles from JSTOR(Cain, 2003; Baker & Tenopir, 2006) and access security (Webster, 2002). Other articles focused on user services (Bancroft & Lowe, 2008; Lockerby & Stillwell, 2010; Sewell, 2011; Handler, 2011; Hoffman, 2011) and with the proliferation of mobile devices more recent articles focused on access to library collections with small-screen devices (West,Hafner & Faust, 2006; DeMars, 2012). Another factor with remote access is contracts with vendors and copyright (Shelly & Jackson, 2012; Mattson & Schneider, 2013). The articles provide readers with an overview of how access to library services and resources extend beyond the physical library. Remote access is not limited to database searches but includes research help. Most libraries participate in some type of chat reference service and others include texting in addition to email.

ISSUES, CONTROVERSIES, PROBLEMS

Remote access is necessary because students and faculty need to use library resources on and off-campus. In order to provide remote access libraries and campuses developed the infrastructure to provide seamless access to library resources. Most campuses use proxy servers and VPN (virtual private networks) for users to access library resources. One of the first steps to providing access is including off-campus access in the contract with the vendor.

Contracts with publishers for electronic resources should include a clause specifying that access is limited to current students, faculty and staff. Your contract will contain a clause listing authorized users usually it is limited to current students, faculty, staff, distance education students, visiting scholars, and community members provided they are in the library. Many states provide access to databases through the state library. The user is authenticated as a resident of the state through a library card, driver's license, or IP address. In the state of Alabama users are verified through their IP address, New York State requires uses your driver's license or library card to determine residency and provide access to their electronic resources.

Accessing materials off-campus requires they be password protected. The use of the materials is limited to personal research. If links to resources are embedded in on-line courses, the links need to be removed at the end of the semester in order to comply with copyright law. Some of the other issues include technology that fails such as, the server is down or the website is not compatible with mobile technology. Copyright law compliance is also necessary for not only print resources but also videos. Similar copyright issues are prevalent in Europe. European copyright law is similar to the United States with some minor differences regarding fair use for educational or research purposes (Shelly & Jackson, 2012). One difference between the laws is U.S. copyright law provides specific provisions for libraries and archives to copy materials for their collections. It also includes provisions for distance education students. In the United Kingdom multiple copies for educational purposes requires a license. (Shelly & Jackson, 2012).

Users trying to access library resources off-campus can be hindered by a firewall in place to prevent hacking into the computer network. A firewall on a personal computer can prevent the user from accessing the library's resources when they are off-campus. There are two options to prevent this from happening to your users. One is the use of a proxy server such as, EZProxy and the other option is a virtual private network (VPN) (Mitchell & Ennis, 2010).

A proxy server authenticates users through their user name and password. In order to access the library's resources through a proxy server the server would validate their user name, which is usually their email address, and the password they use for their email account. Once the user is authenticated, they can access the library's databases. The use of a proxy server is to prevent unauthorized access. Since all contracts contain a clause pertaining to authorized users validating library users through their email address and password prevents unauthorized access. (Webster, 2002) Unfortunately, people can still hack into library resources recently highlighted with the case of Aaron Swartz who downloaded millions of articles from JSTOR account of the Massachusetts Institute of Technology with the intention of making the downloaded articles freely available. He was indicted for wire and computer fraud. If convicted he faced a $1 million fine and up to 35 years in prison. Swartz who was the founder of Reddit and helped create the RSS feed committed suicide in January 2013 (Jaschik, 2013).

Virtual private networks (VPN) allow users to access an organizations internal network (intranet)

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