Chapter 6
Technology for Remote Access

ABSTRACT
Technology to access materials remotely has gone from document delivery via snail mail to documents received electronically. No longer do users have to come into the library to find articles in scholarly journals, magazines, and newspapers. Books are not always available electronically, but users can search the library’s online catalog to find print and e-books without going to the library. The primary technologies used to access materials off-campus are virtual private networks (VPN) and EZproxy. These technologies authenticate users through a password. Once they are authenticated they can access the library collections for their research.

INTRODUCTION
Students are no longer required to access all the materials they need for a research project by coming into the library. The first step was automating the catalog. When libraries moved from the card catalog, which was labor intensive and time consuming to maintain, students could find books for their research from home. The next step was the creation of databases where full text articles were scanned and users could search without the need for a print index. Yes, print indexes still exist but, there are many indexes available from database vendors. With the creation and growth in databases and the improvement in technology users could search for materials from home. They have the option to print, e-mail, or save the article. No longer does a researcher need to physically be in the library to do their research. Articles obtained through interlibrary loan are usually delivered electronically. Some distance education students may still receive some materials via mail but it is usually the exception rather than the rule. Remote access has changed the way library resources are delivered and made the library available 24 hours a day throughout the year.

DOI: 10.4018/978-1-4666-0234-2.ch006
BACKGROUND

EZproxy and virtual private networks (VPN) allow users to access materials, library resources, from off-campus locations. Most libraries connect their databases through EZproxy or a similar technology. This method provides the library with the ability to authenticate the user since databases are only available off-campus to current students, faculty and staff. Security is a major issue associated with remote access to library collections. Another is multiple passwords required by users to gain remote access to the materials they need. This can become a barrier to access because passwords change on a regular basis.

Link resolvers are part of remote access to library collections. Link resolvers are used to determine if a journal article is available in another database, the library’s print collection of journals, or through interlibrary loan. Using a link resolver with remote access helps users find the materials they need without having to start a new search in another database. Another method users have to access library material is through their student portal. Most student portals allow students access to e-mail, course management systems and library materials. A big issue with remote access is privacy versus the need to identify authorized users. Another form of remote access is a link resolver such as SFX. A link resolver provides the researcher with the ability to find an article within the other licensed databases or through interlibrary loan. For example, if you are searching in Academic Search Complete and the article is not available in full text but there is a link resolver button the researcher can use the link resolver to find the article in either another licensed database or obtain a copy through interlibrary loan. Depending on how the link resolver is set up, the researcher might also be able to determine if the article is only available in print in the library’s journal collection.

MAIN FOCUS OF THE CHAPTER

Students cannot always come to the library to study in spite of the fact many academic libraries are open 24 hours a day or have extended hours during the week until one or two in the morning. The other factor is students are not required to go to the library to do research, unless they need to use a book or journal in print. Personal experience from working at the reference desk indicates they would rather use an electronic resource than an item in print that requires them to come to the library. Remote access technology allows users to search the library’s catalog and licensed electronic resources. They have all the functionality as if they were physically in the library. Remote access technology makes accessing electronic resources off-campus possible. The two primary technologies in use are proxy servers and virtual private networks (VPN). Both types of technologies allow users, through the use of authentication, gain access to licensed electronic library resources. A third remote access technology is a link resolver. Not every database has the full text of an article and a link resolver helps the user find the article either in another database subscribed to by the library, in print at the library or through interlibrary loan.

There a couple of basic terms related to remote access of library collections. The first is proxy server. A proxy server basically intercepts requests for information. It serves as a firewall to prevent unauthorized users from gaining access to resources that are for internal use only. In order to gain access through the proxy server a user needs a password to gain access. Proxy servers are just one method of security to prevent outside users from gaining remote access to a library’s electronic resources (Webster’s New World Computer Dictionary, 2003). Database licensing agreements prohibit the use of the resource by someone who is not affiliated with the institution.

In the chapter on collection development policies (Chapter 4) access to a licensed resource