

# INTERNET ACCESS FOR LIBRARIES AND INFORMATION CENTRES

Mrs Rachna Patnaik, Mrs B R Kharod & R S Sharma

## ABSTRACT

This paper discusses the need of networking for libraries and information centres. The utility and need of networks are discussed in detail specially with reference to Internet access for libraries. Internet aims and objectives are described giving an elaborate account for its use and accessibility in the field of libraries and information services.

## WHAT IS LIBRARY NETWORK

A library network is broadly described as a group of libraries coming together with some agreement of understanding to help each other in order to satisfy the information needs of its users. Today, computers can be connected together using various electronic techniques called networks. A network can be as simple as two personal computers connected together using modem, or as complex at TCP/IP. The interlinking of two computer nodes through communication links is called networking.

## NEED FOR LIBRARY NETWORKS

The growth in number and size of information and documents has created many problems for libraries. Libraries cannot dream of acquiring all the literature published worldwide individually, but the users have right to access all. Thus, libraries have to cooperate to share their resources so that every demand for documents is met not only from the libraries own collection but also from the collection of other libraries. Therefore, networking of libraries and information centres is an urgent need of the present era.

After the automation of Libraries the need for library networks arose because of the following reasons:

1. Library networks are the only means for the sharing of expensive resources to provide information at optimal cost. Thus, networking of libraries plays a major role for the effective transfer of information.
2. Through resource sharing an effective library network eliminates the size, distance and language barriers. Also, it reduces the cost and time in retrieving information.
3. Library networks reduces the wasteful

uplications of human efforts and expences but also increase the opportunities for improving performance of specific service through enhancing the speed of coverage of information.

## OBJECTIVES OF THE LIBRARY NETWORKS

The objectives laid behind in networking of libraries are as below:

1. The main objective of a network is to fulfill the needs of the users, providing current and exact information within an economical cost for maximum benefit.
2. Optimum utilization of existing library and information software, their resources and services.
3. Provision of information precisely and exhaustively accessible within a reasonable minimum time, in a manner which is convenient to thesaurus.

## WHAT IS AN INTERNET

The internet is the world's largest computer network i.e. "Network of networks". It is an outgrowth of ARPANET (Advanced Research Project Agency) started by the Department of Defence in the USA in late 60's. The term Internet first appeared around the 1980's and it was only in 1991 that the Internet was first opened for commercial users.

Today, the Internet connects around 20 million users worldwide and is growing at an accelerated rate by more than a million users each month. It joins over 10,000 networks and over a 1000 computers join the Internet each day. It was started by the National Science Foundation of the United States. ISOC, or

the Internet Society is the only group that controls the Internet.

Internet connects Universities, federal and state government agencies, professional associations, commercial firms, colleges and secondary and even elementary schools. Thus, the Internet is a community of people who work together to use the network. It is a cooperative effort of many people and organisations, all working to enhance the Net by their participation.

One reason behind the development of Internet, is to help the research community by giving engineers and scientists real-time access to remote resources and to let them share information through electronic mail.

### **HOW CAN ONE GET CONNECTED TO THE INTERNET :**

One can be connected to the Internet by getting any of the following connections:

1. Direct connection - A permanent direct connection is available to a TCP/IP (Transmission Control Protocol/ Internet Protocol) network. This whole network is turn gets connected to the rest of the Internet. Direct Internet connections requires huge initial investments and dedicated high-speed lines.
2. On demand direct Internet connection - This type of connection is almost identical to the one above, except that the requirement of dedicated high-speed lines is replaced by the standard system of telephone lines and a modem. The connection protocol used is Point-to-Point Protocol (PPP). With this type of connection, the full range of Internet tools are available.
3. Dial-up terminal connection - Here the connection to Internet is not direct but through an Internet service provider. The entire range of Internet tools like Gopher, Archie, etc. are available. In this one gets a dial-up connection to the service provider and the software on the service provider's computer responds and sends back its response back to you.
4. E-mail connections only - This is the easiest and the cheapest type of Internet connectivity and is similar to the previous category except that none of the other Internet tools are accessible.

### **Requiements to access the Internet:**

To access the Internet one need a computer that is connected to it. It could be a PC, a Macintosh or a multi-user system (UNIX based). One can be connected to the Internet via a phone line or through a dial-up connection.

## **NEED OF INTERNET IN LIBRARIES**

The Internet has increased the vitality of and accessibility to library resources. The library catalogs, books, journals, references, periodical indexes are all available on the Internet and are accessible, usable and useful and can be retrieved using software tools such as Gopher, Veronica, Archie and World Wide Web (WWW). Because, so many resources are available on the Net which are beneficial to library users the need to get an Internet connection in libraries is of great concern. Many libraries all around the world is looking towards in this direction so that they can help its users to keep current of latest happenings in the world and to provide current data on various subjects as and when required by them.

Several sources also exist to help users to keep themselves current with new resources and changes to existing ones. Hundreds of libraries around the world have plugged into the Internet, accessible to anyone who can do a remote login i.e. Telnet and can search library catalogs.

Internet is now being used by academic, corporate, public and school libraries for sending mails, cooperative research, subscription to journals and to get bibliographic and full-text resources. Resource discovery services help users to locate and retrieve information. These services contain tools for browsing, searching and organising information distributed throughout the Internet.

The information that is available on Internet ranges from commercial databases, text of newspapers, magazines, journals, newsletters to nes groups. One have access to fresh and recent text feeds for many newspapers, journals and columns through Campus Wide Information System (CWIS's) or in Usenet if you subscribe to the ClariNet groups. The library and archive catalogs are searchable via RLIN and OCLC. This information may be general reference information such as the contents of encyclopedia, dictionaries and atlases or it may be real-time information such as weather readings, stock quotes and currency exchange rates.

The types of information available via the Internet can be categorized as:

1. Indexes, Abstracts and Full-text information - Information such as table of contents for journals and books, newspaper headlines and article summaries are all available on the Net. Also, full text information is available for searching and retrieving either in ASCII, fonted text, graphics or audio format.
2. Periodically generated information - One can get a lot of information which is generated on an hourly,

daily or other basis, such as newspaper articles, weather maps, stock quotes, magazine contents and more on the Net.

3. Periodically revised information - Airline schedules and prices, product information, etc. are available on the Net.

4. Reference information - Reference information such as dictionaries, encyclopedias, legal references, etc.

5. Miscellaneous facts and fiction - Textbooks, novels, poetry, music, etc. are available on the Net.

6. Online databases - Economic indices, scientific data, etc.

7. Holdings - List of items available from institutions such as book collections, recordings, maps, etc. not available in online digitized format.

Online information services provide better access to the information and better management i.e. searching, evaluating and delivering it. These services include online databases, online search and retrieval and information brokers put the data into computer readable format and make it accessible to use from terminals/ computers.

#### **Some of the commercial services are :**

1. DIALOG Information Services - It is used by researchers and Librarians.

2. DELPHI, CompuServe, etc. - They provide quick online access to stock quotes, the online Airline guide, encyclopedias and other information.

3. Library Catalog, Reference and related services - OCLC (Onlined Computer Library Centre) and RLIN (Research Libraries Information Network) provide searching facility for library holding. RLIN is an online database service from the Research Libraries Group (RLG). RLIN has an online bibliographic database containing descriptions of the cataloged holdings of special collections, research libraries and archives. OCLC databases include archival and manuscript records from many state, museum and society archives. Information from the U.S. Library of Congress is available via the Internet. LOCIS (Library of Congress Information System) is available via telnet.

The Library resources available on the Internet are:

1. Library Catalogs - Now many academic libraries, a large number of public libraries and a small number of school libraries can access library catalogs using

telnet access. The easiest way to access library catalogs is to connect to one site that already has collected this information and provide links to the catalogs. Such a resource is included on many Gophers and WWW servers.

2. Books - Many books are available on the Internet on Gopher, FTP and WWW.

3. Periodicals - The advantage of periodicals on Internet is their full-text searching capabilities. They are free publications available through discussion lists, FTP, telnet, Gopher, WWW and e-mail requests. These periodicals are on commercial services with Internet access such as DIALOG and LEXIS/NEXIS.

4. Periodical Indexes - They are the most important feature of a library. Locating what articles have written on a subject or by a particular author is vital to research. Some of these indexes are located on Gopher or WWW servers, whereas others are located on library catalogs that are accessible via telnet. Some sites offer full-text searching of electronic journals, but usually the searching must be done one journal (or even issue) at a time.

5. Reference sources - The reference collection of the library is available on the Net. Directories, dictionaries, guides, gazettes, maps, etc. are available on the Internet. These sources are updated frequently and they can be made full-text searchable. Two excellent example are weather forecasts and currency exchange rates. Both of these are located on the Internet in forms that are updated at least once a day.

6. Current services - There are various sources available to keep current including discussion lists, Gopher sites and WWW pages.

#### **CONCLUSION :**

Computer networks are growing rapidly around the world. The amount of information available on these networks is also spreading very fast. Computer and communication technologies are providing the library and information professionals with a challenge as well as chance. The major link for these resources and services is the Internet.

In India, ERNET is connected to it via National Centre for Software Technology, Bombay. This network is providing e-mail, FTP (File Transfer Protocol) and telnet modes of access to various resources and services available on the Internet. Internet facilities are working round the clock and helps the user to access local as well as remote resources and services from his desktop.

Among the Libraries IIT, Bombay and Kharagpur and

BONET (Bombay Library Network) have already made their rich resources available to the Internet community. Thus, the Internet is a GIANT library, rapidly becoming a viable information delivery system for all its users.

## REFERENCES :

1. The Internet guide for new users  
by Dem. Daniel. P.

2. The Internet basic reference from A to Z  
by Falk. Bennett.
3. Mastering the internet  
by Cady. G. H. and McGregor Pat.
4. IT Challenges and Opportunities,  
CSI proceedings No. 9-12, 1995  
ed.: by Bagga R K and Bhargava S C