

## APPENDIX 2: A BRIEF INTRODUCTION TO THE INTERNET

The **Internet** is a worldwide collection of computer networks that use telecommunications standards, or protocols, and telephone lines to communicate. The Internet permits users to communicate with one another electronically (e-mail), to transfer large files, and to log into a remote site to conduct database or library catalog searches. It also provides a wide variety of other information services.

The Internet is based on **client-server technology**. A "client" is a program which requests services from another program, often called a "server." These programs operate on different computers and communicate with each other over a network. Internet tools such as Gopher and World Wide Web are examples of client-server applications. The client-server model can be compared to how a waiter in a restaurant interacts with a chef. The waiter (client) takes the food order and sends it to the chef (server). The chef prepares the food according to the order and allows the waiter to return and serve the food.

Connecting different computers and transferring data successfully between them requires a set of rules. These rules are referred to as "**protocols**." These protocols are like a common language spoken between people of different backgrounds. The Internet protocols, usually referred to as **Transmission Control Protocol/Internet Protocol (TCP/IP)**, allow computers connected through networks to communicate with one another.

There is a wide variety of Internet tools or information services available. Each performs a specific function. Internet tools or services can be categorized according to function, as follows:

- Communication
  - E-mail
  - Mailing Lists
- Remote Login
  - Telnet
- File Exchange
  - File Transfer Protocol (FTP)
- Searching and Information Retrieval
  - Gopher
  - World Wide Web (WWW)

**Mailing lists**, an extension of e-mail, are available on the Internet. Users send an electronic message to an e-mail address or a "mail reflector." The message is then forwarded to a list of "subscribers." A subscriber or a number of subscribers may respond by sending a message back to the entire group. Mailing lists are usually organized according to subject or professional