TurboGopher: A Gopher Client

Gopher is an easy and efficient method for finding and retrieving files from remote computers that run a gopher server. The files can be text, programs, pictures, sounds or movies. In addition, gopher can be used to connect to remote computers that include publicly accessible accounts (*e.g.*, library catalogues) and to send queries to remote databases (*e.g.*, electronic phone books). This "handout" describes the TurboGopher program (from the University of Minnesota), a gopher client for a Macintosh.

World Wide Web (WWW) clients (browsers) can access gopher servers, and hence a gopher client is not necessary. However, TurboGopher uses less than 10% as much memory as does Netscape Navigator (a WWW client). If the item you want is available from a gopher server, it is almost certainly faster to get there with gopher.

SUMMARY

The basic elements in using gopher are:

Start the TurboGopher Program to Access a Default (home) Gopher Server

Follow Links in Gopher Lists or Use Bookmarks to Move to the Items of Interest

View Files with or without Saving Them on the Local Machine

Using Bookmarks

Open a Telnet Connection to a Remote Machine

Search Gopher Titles for Something of Interest

Search Documents at Gopher Sites for Something of Interest

Quit the TurboGopher Program

Getting the Latest Version of the Gopher Program by FTP

Getting the Latest Version of the Gopher Program using Gopher (or the WWW)

START THE TURBOGOPHER PROGRAM TO ACCESS A DEFAULT (HOME) GOPHER SERVER

Locate the TurboGopher program. The program



(where i.j is the program version

number) and, perhaps, some other files should be in a folder called "TurboGopher *i.j* Folder". If you cannot locate the program, you can use FTP to get a new copy from boombox.micro.umn.edu (see detailed instructions below).

Start TurboGopher by double-clicking on the program icon. You will probably get one list (called Bookmarks) immediately, and a second list (from your home gopher server) after a short delay.

FOLLOW LINKS IN GOPHER LISTS, OR USE BOOKMARKS, TO MOVE TO THE ITEMS OF INTEREST

When you start TurboGopher you will get one or more windows. By default, TurboGopher shows you a list called "Bookmark Worksheet." You can add and remove items from this list, and they will be saved for future sessions. Selecting an item form the Bookmark list is just like selecting the original item.

TurboGopher will usually attempt to retrieve a list from a Home Gopher Server (by default, the master server at the University of Minnesota). It is possible to change the home gopher server accessed by the copy of TurboGopher on your machine by selecting the "Preferences..." item in the "Gopher" menu.

Items in a gopher list are preceded by an icon that tells you what type of object you will get if you retrieve that item. Some of the items require a helper program on your local machine.² Generally you can transfer any kind of file to your machine, a helper program is only necessary to view, hear, taste, or

¹ Such original names.

² The same helper programs can also be used by World Wide Web clients, such as Netscape Navigator.

otherwise experience, the contents. Appropriate programs are available both from file servers for WWW clients, or from the University of Minnesota server.

Some of the icons and items types and their TurboGopher icons are:

- Retrieves another gopher list.

 Allows you to search gopher items for text (search the data on a remote machine, not just in the name of the item). You get back a list of gopher items that contain the text.

 Allows you to search an electronic phone book for a desired entry. Requires the "ph" program on your computer.

 Opens a Telnet terminal session to a remote computer. Requires Telnet on your computer.
- Retrieves a text file.
- Retrieves a picture file. Requires a program (e.g., JPEGView) on your computer to display it.
- Retrieves a sound file. Requires a program (*e.g.*, SoundMachine) on your computer to play it.

 Retrieves a movie file. Requires a program (*e.g.*, Sparkle) on your computer to show it.
- Retrieves a StuffIt Archive file for a Macintosh. Requires a program (e.g., StuffIt Expander) to expand the archive.
- Retrieves a file for IBM-PC compatible computers.
- Retrieves a Unix file (tends to be a file compressed with the Unix compress utility).
- Retrieves a hypertext document (a World Wide Web page). Requires a WWW browser on your computer to display the document.

Another navigation tool that TurboGopher offers is the "Recent" menu. It lists the items that you have most recently visited, and allows you to go directly back to any of them without finding the old window. This is particularly useful for two reasons. First, Gopher tends to accumulate many windows, so it can be hard to find an old one.⁵ Second, you can close windows as you go, to keep things from getting too crowded on your screen. You can retrieve a closed window using the "Recent" menu.

VIEW FILES WITH OR WITHOUT SAVING THEM ON THE LOCAL MACHINE

When you double-click on a document (text icon) in a gopher list, a copy of the file is moved to your machine. If the file is plain text, then its contents are displayed. If the file is smaller than a critical size (about 32,000 characters), the file is displayed without saving a copy on your disk (this is just like the Fetch "View File" command). If the file is large, after the first 32,000 characters are read, you will get a dialog box asking where you want the file stored on the Macintosh. Note that there will be a default file name, which you will usually accept. However, before you press return, you might want to change is the directory to put the file in on your local machine. By default, the files will go into the same folder as TurboGopher (which you will rarely want). Click in the upper box (or press the tab key), and select the place that you want the file to be written.⁶

You can use the "Save As..." command in the "File" menu to force the storing of any file that you are viewing, regardless of its size.

³ To search for text in a list, use the "Find..." item in the "Edit" menu.

⁴ The ph program and ph servers are available from Northwestern University.

⁵ Unlike a web browser, TurboGopher opens a new window for each new list or document.

⁶ The most common file transfer problem is not noticing where the file was placed. You can move it later, but it is easier to save it where you want it from the start.

USING BOOKMARKS

There is a special window in TurboGopher called "Bookmark Worksheet".⁷ Items are added by selecting the desired item in a list, selecting "Copy" in the "Edit" menu (or typing Command_C), moving to the bookmark window, and selecting "Paste" in the "Edit" menu (or typing Command_V).

To access a list or document recorded as a bookmark, just double-click on it.

OPEN A TELNET CONNECTION TO A REMOTE MACHINE

Many libraries with on-line card catalogs alone Telnet access from anywhere. There are Gopher servers that list this libraries, and will start a Telnet session with the appropriate remote host.

SEARCH DOCUMENTS AT GOPHER SITES FOR SOMETHING OF INTEREST

Gopher lists can be very long. In the TurboGopher "Edit" menu are "Find..." and "Find Again" items. Thus, to find a particular university, it is often easier to find the one of interest by searching the gopher list with the find function.

QUIT THE TURBOGOPHER PROGRAM

Just closing all the windows does not cause the TurboGopher program to quit running, so when you are done, be sure to quit the TurboGopher program by selecting "Quit" in the "File" menu, or typing Command_Q. This is important because leaving the program running consumes resources (especially memory) on your machine.⁸

GETTING THE LATEST VERSION OF THE GOPHER PROGRAM BY FTP

The primary distribution of the TurboGopher program is from a machine with the host name "boombox.micro.umn.edu". You can use Fetch to get a copy. There is a separate description of Fetch. In brief, double-click on the Fetch program icon to start it. Connect to the host "boombox.micro.umn.edu" with the user ID "ftp" and your e-mail address as password (and no directory). Open the directory called pub (for public). Open the directory called gopher. Open the directory called "Macintosh-TurboGopher". You should find a file with a name like "README". If you double-click on this document, it should include the most recent (current) version number. This is the version that you should get.

Use the Fetch "get" command to get the file "TurboGopheri.j.sit.hqx". Do it in automatic mode. Save the resulting file under its default name (the name suggested in the file dialog box, but use the directory listing at the top right of the file dialog to put it where you want it (which is almost certainly *not* in the default location, the Fetch folder).

GETTING THE LATEST VERSION OF THE GOPHER PROGRAM USING GOPHER (OR THE WWW)

The TurboGopher program is distributed with a bookmark entry for "TurboGopher Distribution" at the University of Minnesota. By double-clicking on this line you can easily navigate to the appropriate BinHex file. Double-clicking on this line transfers a copy to your machine. Newer versions of TurboGopher require an Apple System Extension called the Thread Manager. If you try running TurboGopher and get a complaint about the program needing this extension, a copy is supplied with the program.

For the World Wide Web, the URL is "gopher://boombox.micro.umn.edu:70/11/gopher/Macintosh-TurboGopher".

⁷ If the window is not visible, use the "Show Bookmark Worksheet" item in the "Gopher" menu.

⁸ There is no equivalent of disconnecting from an FTP server; gopher connections go away immediately when a data transfer is complete.

⁹ You might find that the last part of this name is something strange like 8b4, meaning that this version is still under testing, and might change.