



5-1-1996

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Recommended Citation

Tenopir, Carol, "Front-End Software Proliferates" (1996). *School of Information Sciences -- Faculty Publications and Other Works*.

https://trace.tennessee.edu/utk_infosciepubs/386

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LJ INFOTECH □ ONLINE DATABASES □

BY CAROL TENOPIR

Front-End Software Proliferates

SOME OF YOU MAY remember almost 15 years ago when LEXIS/NEXIS obtained exclusive rights to the New York Times Information Bank. Information Bank searchers who were new to LEXIS/NEXIS were outraged because the system had the audacity to require a dedicated terminal. All of the other online services widely used by librarians could be accessed from a single dumb terminal, but a separate dedicated machine was required for LEXIS/NEXIS.

Shortly thereafter the growth of microcomputers allowed LEXIS/NEXIS to replace dedicated hardware with specialized search software. Loading the LEXIS/NEXIS front-end software was less convenient than using the terminal emulation software that worked for every other online system, but it was far better than a separate piece of hardware. For years, LEXIS/NEXIS remained unique in requiring special front-end software.

Heightened expectations

Fast forward to the mid-1990s: Our computers are now more sophisticated, with much more disk capacity and much faster modems. At the same time, widespread use of Windows interfaces, Internet access, and other client/server applications have heightened our expectations for software. Terminal emulation software like Procomm+ or HyperTerminal allows us easy access to many different online systems and affords experienced searchers speed and efficiency. But they don't do much more than facilitate the connection, upload, and download.

Nancy Garman, editor of *Online* magazine, explained in a November-December 1995 editorial, "I used to keep my communications software scripted with logons to all the services and passwords

I used and switched from one to another, to yet another, in seconds. If a service required standalone software to log on, it was relegated to occasional use on an 'absolutely must search' basis." Once logged onto a system, the searcher must know the host commands well, since the generic software knows nothing about the individual systems we search.

One way online systems are providing the graphical user interfaces (GUIs), better help functions, and friendlier search experience that searchers now expect is to require use of a proprietary front-end software package to access their system. Instead of one piece of generic terminal emulation software that works for most online systems but leaves the power to the online host, searchers now often use a separate piece of front-end software for every commercial online system they search. The downside of having to load and maintain dozens of inconsistent packages is tempered by the many bells and whistles these front-end packages bring to searching.

Front-ends

Front-end packages reside on your computer and handle not only the telecommunications functions such as logging on, uploading, and downloading, but they also "know" something about the system to which you are connecting. LEXIS/NEXIS, for example, includes help messages and function keys in the DOS, Windows, and Mac versions of its software. STN Express contains system documentation as well. Grateful Med includes knowledge of the thesaurus and special search capabilities of MEDLINE and the other National Library of Medicine databases. New software required to access NewsNet Baton, DataTimes EyeQ and M.A.I.D. Profound each provide the icons, functions, and help messages of a GUI. Many of these front-ends have been reviewed in the past in this column (see "Online Images on STN," February 1, 1995, p. 31-32, and "Retooling Online Services," September 1, 1995, p. 124,126).

Front-ends are often aimed at the novice end user market, but they may

also be targeted to experienced online searchers who do not search a particular system enough to keep up-to-date on all its features and databases.

Front-ends for the intermediary market have a checkered history, especially those that have attempted to provide access to more than one online host. Some of you may remember Sci-Mate Searcher and ProSearch. In the days before a widespread end user market, these products were third-party attempts that failed in part because they couldn't keep up with system or database changes and simplified the online search process to a point that functionality was lost.

The successful front-ends are mostly created and maintained by the host online system, have an end user market in addition to the professional market, and maintain or increase the capabilities of the system, while at the same time making it easier to search. They should contain specific information about each database available on a system and replace a searcher's memory with menu choices that list features and functions.

KR ProBase

Knight-Ridder Information (KRI), owner of both DIALOG and DataStar, last year introduced a front-end for information specialists. The first version of "KR ProBase" is aimed at professional searchers who may be experienced users of DIALOG but are not proficient with DataStar commands. KRI is enhancing a version that will connect to both DataStar and DIALOG with a single interface. It will be introduced in 1997.

The front end to DataStar was developed in KRI's Swiss office and will interact in English, French, or German. In a Windows environment, KR ProBase is meant to facilitate the online searching process without sacrificing functionality.

Good front-ends allow a searcher to build much of the search strategy offline and replace many of the volumes of printed documentation that accompany each online system. KR ProBase contains information about all DataStar databases, invoked by clicking on the Databases icon. (The icon pictures a



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shelf of books, not a bad idea, but so small it is hard to recognize.)

Database names can be displayed alphabetically in a single master list, or arranged in the subject groupings of business, companies, news, biomedical sciences, drug information, sciences & technology, and social sciences & general reference. If you are not familiar with DataStar, these subject groups will give you a good idea of the main focus of the system. DataStar includes European business sources, wire services, and science databases not available on DIALOG among its more than 200 sources. It has databases in English, French, German, and Italian.

The description of each database includes information about contents, coverage, language, and producer and a sample record. Prices are available for each database only when you are logged on.

Searching with KR ProBase

The search window (represented by a magnifying glass icon) allows you to enter a search before connecting to DataStar, but full search capabilities are only available after connecting. (Connecting is done by pointing and clicking from the menu bar, not from an icon.) A "search in" window shows fields available in the database selected, allowing you to restrict a search to specified fields, such as title, publication date, descriptors, etc.

A "reference box" lists special fields available in each database, such as language, ticker symbol, publication type, countries, etc. Most of these require specific values to be entered, which can be viewed once an online connection is made. When connected, you can view the index for any of the fields.

The search screen replaces a large amount of database documentation, but it does not substitute for knowledge of online searching. The searcher still must enter statements with correct use of Boolean operators, truncation, etc.

Once a search is run online, the titles of retrieved items are displayed. Titles of interest can be flagged for viewing in one of several display options. A list of viewing formats and fields for viewing are available for each database. DataStar preset formats are especially easy to understand, with names like free (whatever fields are available for free viewing in that database), short, medium, long, all, and KWIC. The Document window displays records in the format selected or you may choose

to download records continuously.

Complete search options are available as menu choices, including limiting, saving a search for repeating in another database, viewing search history, deleting sets, setting automatic plurals on, sorting records, creating alerts, etc. Although help is available for nearly all functions, KR ProBase does not serve as

Online use goes up if power and ease are combined—not a simple task, but one that many are depending on the web to accomplish

a tutorial for online searching, nor does it attempt to mask search powers. Users should be familiar with online searching and somewhat familiar with DataStar in order to best use KR ProBase.

Advanced features

KR ProBase facilitates several of DataStar's term selection features. "Root" (to view the index of any database) is invoked by entering a word in the "search in" box while connected; thesaurus terms for databases that have an online thesaurus can be viewed from the "reference box options." Since reference box options are database-specific, only those with an online thesaurus on DataStar (notably MEDLINE and EMBASE) will offer the thesaurus viewing options. Restricting to major descriptors, searching with subfield delimiters, and "exploding" hierarchies are also offered for those databases.

DataStar's CROS feature is a database selection tool similar to DIALOG's DIALINDEX. CROS contains a master index of all words from all of the DataStar databases. A CROS search helps identify those databases with the most information on a topic. In KR ProBase, the window is opened by clicking on the CROS icon (a magnifying glass over a single book). After entering a search, CROS asks users to select a pool of databases, either all in a subject area or by database name. A search can be transferred from the CROS window to the database or databases that looked

the most promising in the search.

All of the thesaurus and search functions are not run until after you log on to the DataStar computer. The front-end software makes them easier because you don't need to remember specific features that vary from database to database. KR ProBase replaces the database catalog and database Data Sheets, but it does not replace the searcher's knowledge of the fundamental principles of online searching (although a tutorial is shipped with the software). Database information is automatically updated each time you connect. Software revisions are sent on diskette.

Solutions?

ProBase is pretty good but, sometimes, like *Online's* Garman, I get tired of all the specialized front-end software in the commercial online world. Sure, GUIs are easier (unless, like the visually handicapped, you are dependent on text-based software), and it is nice to have documentation on the screen instead of in big binders on the table or on my lap. But loading and learning a separate piece of software for each online service is just as tiresome as remembering separate commands to do the native mode searching of each online host.

Unfortunately, solutions that work for end users don't often work for information specialists. Databases that are compatible with the Z39.50 standard can be made available with online catalog interfaces, but functionality and power are almost always lost. Some online systems are now moving to the World Wide Web, but sophisticated search features may be sacrificed. KR ScienceBase is an end user web product that aims for push-button access.

The web thrives because a de facto standard front-end came on the scene almost from the beginning. With Netscape (which grew out of Mosaic), virtually all sites can be accessed with a single browser. Still, if you don't like Netscape, standardization means you can use any other web browser.

Many believe that the web will be the solution of the future for both novices and information professionals alike as the ability to add system-specific power increases. KRI is considering web versions of ProBase and BusinessBase, their other end user product. Online use goes up if power and ease are combined—not a simple task, but one that many are depending on the web to accomplish.