STN Mentor Laboratory: A Review of Software

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STN Mentor Laboratory is a training and tutorial program for the use of the STN International bibliographic databases. The instruction provided in this package is a continuation of the material presented in earlier STN Mentor software offerings, but it also provides a convincing emulation of the actual on-line interaction which an STN International user has with the database. A user of the installed package will experience little technical difficulty in the operation of the program; the administrator, course instructor, or whoever is responsible for setting up and maintaining the program for student use should be moderately knowledgeable about the PC/DOS operating system so as to smooth out a few potentially awkward places.

As provided by the publisher, STN Mentor Laboratory consists of a "system disk" and a series of data diskettes. The system diskette installs the tutorial program and the dial-up emulation software to the user's hard disk; it also transfers and installs the simulated STN file databases from the data diskettes to the hard disk.

The installation and operation of the program were tested on a variety of systems: a PC-XT clone (DOS 3.3) with 20MB hard disk and Hercules monochrome monitor, an IBM PS/2 55sx (DOS 4.0) with 60MB hard disk and VGA monitor, and a 486DX (DOS 5.0) with 200MB hard disk and super VGA monitor were available. In all instances, both the installation and the subsequent operation were successful; it should be noted, however, that even with a slow XT-class machine, the simulation of an STN dial-up exercise is deceptively fast paced! The program is not intended for execution from a Windows environment.

The user is adequately guided through the installation process by the instruction manual. There are, however, a few items which could lead to confusion, particularly for an individual unfamiliar with the inner workings of disk operating systems; a novice might wish to retain the assistance of a knowledgeable individual. The first difficulty is one of terminology; during the installation of a simulated STN file, the user is prompted to insert a "laboratory install disk" and not the "system disk".

A second problem is more awkward and points up the need to prepare back-up copies of software for archival purposes as permitted by the license. The installation program is also the de-installation program; should the user wish to remove a STN file simulation from the hard disk, the only safe way is through the use of the (de)installation program and not via third-party file management programs. Should this inadvertently be done, work-around procedures can be devised to salvage the files and restore the emulation.

The third problem will be encountered only by individuals who have the earlier STN Mentor tutorials installed on their computers. The instruction manual makes no mention of possible conflict; however, because both STN Mentor systems have identically named files which are used and executed in different ways, it is the reviewer's opinion that STN Mentor Laboratory should be installeed to a subdirectory different from that of the earlier STN Mentor system. This option is easily exercised during the installation process.

A fourth problem may arise if one installs STN Mentor Laboratory to a subdirectory other than the expected default (C:\MENTOR) and then forgets that this had been done when an attempt is made to execute the program. The instruction manual does sketch out the necessary corrections, but this might be overlooked. The knowledgeable individual retained earlier might be prevailed upon to properly modify and relocate the provided batch files MENTOR.BAT and START.BAT so that the appropriate subdirectory is selected and the STN Mentor Laboratory program is executed with a single command.

The first step of the setup process installs both a tutorial program (which is executed through MENTOR.BAT) and the emulation software (which can be entered from the tutorial or executed directly through START.BAT) for the dial-up simulation. If the dial-up simulation is executed at this point, only an emulation of the HOME file is available; further installation using the data diskettes is required to construct emulations of the BIOSIS, CA, INSPEC, and PHYS files. The number of these files which can be simultaneously installed is limited only by the hard disk space available; each file simulation requires about 3 MB of disk memory.

The tutorial program presents information on the structure of several bibliographic databases, including some of those which are presently supported by the emulations. The commentary which is appended to reproductions of actual data file records is generally useful. There are, however, a few inaccuracies, the most significant of which is in the discussion of how author names are entered and searched. Most files, including CA, use the form LASTNAME, FIRSTINITIAL (with a comma) while a few, including BIOSIS, use the form LASTNAME FIRSTINITIAL (without a comma). This distinction is evident upon close inspection of the reproduced data file records, but the commentary discusses author searching only in terms of the CA-type format.

The next section of the tutorial discusses the process of doing on-line searching. The user is introduced to the various terms, commands, and operators which are used in the STN International system. This is followed by an entry into the simulation software; the tutorial concludes with a review test and summary of the material presented.

The simulation of an on-line session with STN International is the real feature of this software package. Upon executing START.BAT, one is greeted with the "Welcome to STN International. Enter x:" prompt. The loginid (STN), the password (MENTOR), and terminal type (3) inquiries appear in the usual fashion; the user is finally greeted with a modified HOME file header and the STN arrow prompt.

Most of the STN function commands are fully supported, the instruction manual describes the few limitations: the EDIT, SELECT, ORDER, PRINT, and SDI commands are not available as are portions of DISPLAY, EXPAND, and

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SEARCH; these restrictions do not limit the utility of the package as a training aid. A special feature of the emulation is that the *F1* function key can provide an index of additional information available at a touch of the various function keys.

Each of the simulation's database files consists of about 500 records. These selected records are combined subsets of answer sets which resulted from several different searches performed on the original STN International files. The same search strategy as would be used on the actual STN files can be followed by the student to obtain the subset records. Once the search strategy is executed, the answer sets can be displayed to the screen in the same way as they would be done while on-line. At least six search problems are given for each file simulation; these are recorded in the instruction manual as well as via the *alt-function* key combinations.

In addition to using these model problems, either in part or in whole, the instructor can define additional exercises using these records; an especially effective demonstration can be constructed to show the power of the right-truncation and masking operators for identifying additional records which meet a search criterion; the left-truncation operators are not supported. The frustration which a user experiences upon executing improper commands is fully simulated; authentic error messages result for impossible commands.

Many exercises which might previously have been done using the "LEARN" files on STN International can be duplicated with the dial-up emulation even though these simulation data files are significantly smaller. Students can be asked to devise strategies which lead to specific answer sets. The relative efficiencies and completeness of alternate strategies can be compared.

The single biggest advantage to using STN Mentor Laboratory is that the students' instructional and practice time is "off-the-clock", the price of the training software will be easily recovered in just a few hours of saved STN International dial-up time. The dial-up emulation using the simulation database files fully meets the goal stated in the manual, "the simulation ... must make sense."