STN Express for the Macintosh, Version 3.21

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STN Express, the Windows and Macintosh front-end software package to search databases on the STN International and other online search systems, has been extensively reviewed in this journal and others.[1] Version 3.2 of STN Express was selected by readers of *R & D Magazine* as a winner of a 1994 R & D Elite Award, presented to high-tech products deemed of greatest importance in conducting research and development assignments in industry, government, and education. Shortly after the original production version (3.2) of STN Express was issued, STN replaced it with version 3.21.

This review will concentrate on the new features found in STN Express version 3.21, especially features that facilitate the capture of images. It remains to be seen what impact the newest STN end-user search assistant, SciFinder, will have on the future development of STN Express. For the present, it appears that SciFinder is not to be marketed to individuals. Hence, STN Express is likely to remain a viable product for the low end of the market for some time to come.

New features found in version 3.21 of STN Express include the following:

- stereosearchable structure queries for the STN Registry and Beilstein files
- generation of Derwent fragmentation codes for structure searching in the WPI file
- the ability to modify uploaded structure or reaction queries online
- the ability to input structure searches to the SPECINFO database
- display of patent images in the Derwent World Patents Index file and the retrieval of images from other databases
- better Internet set-up routines and network access
- compatibility with MS Word or MacWrite or other word-processors for exporting transcript files with both text and graphics.

Since more than 60 databases on STN are indexed by CAS Registry Numbers, results from a structure search in the Registry File provides an avenue for searching all of them. Over 1.8 million of the compounds in the Registry File and a similar number in the Beilstein File are stereosearchable. Stereoisomers can now be retrieved from the Registry and Beilstein files for absolute, relative, and geometric isomers. In drawing stereochemical depictions, the Bond option allows you to change flat bonds to stereobonds or to draw the stereobonds directly. On the Macintosh, a "command click" with the cursor on a bond changes the direction of a stereobond. Stereochemistry options include relative or absolute stereochemistry under the QueryDef menu as well as the specification of geometric bonds. When a structure search cannot run to completion, the Query box now has the option to "Refine Structure Query" by adding further screens to the search. It is now possible to set a preference from the File menu on the Macintosh under "STN Prefer-

ences" that permits "Modifiable Queries". Thus, structures uploaded with STN Express can be changed online.

The generation and editing of Derwent fragmentation codes offline is a feature that is undoubtedly better appreciated in industry than in academic searching situations, where relatively little patent searching tends to be done. The Query menu in Structure building offers the option "Generate WPI Strategy".

The use of STN Express for the Macintosh on the Internet requires the Macintosh Communications Toolbox and an appropriate communications tool. One such tool is from Synergy Software (VersaTerm, Versaterm PRO, or Versa-Tilities). We use VersaTerm PRO on one Macintosh Quadra 800, and on a second Quadra 800, we use a shareware product, TGE TCP, written by Tim Endres (time@ice.com). TGE TCP is free to academic users. It can be obtained by anonymous FTP at ftp.msen.com and change directory to /pub/vendor/ice. The filename is TGETool-2.5.hqx.

Over the last few years, there have been numerous exchanges on CHMINF-L, the Chemical Information Sources Discussion List, about problems users have encountered with Internet access via STN Express. Slow downloading of results over the Internet seemed to plague Windows users more than it did Mac users. One academic Internet user reported on January 24, 1995 that she had been doing searching on a daily basis for the past year, both structure and bibliographic searches, and had never experienced a problem with the Macintosh version of STN Express. However, an industrial Internet user of the Mac version 3.2 reported that it is "...still not as fast as our direct connection can allow. I put up with it because it's the best thing for structure searching, and it can export to Word". John Anderson, project leader for STN Express development at CAS, responded on CHMINF-L with the following very helpful information:

1. Problems sometimes occur from the network not being able to recover from a request to retransmit a piece of data.

2. Setting Long Packets to 4000 will improve downloading speed when using Kermit, e.g., downloading WPI or CJACS TIFF images from STN, but does not affect normal data capture (texts and structure graphics).

3. The network environment is much more stable in the Mac world than in the PC world, and version 3.21 of STN Express (Mac) is much better than version 3.12 of STN Express (Mac) in this area.

4. Version 3.21 of STN Express has made major adjustments to improve the speed of displays.

5. Version 3.21 has a fix for a problem that occurred when connecting to the Karlsrule node of STN Express.

6. The installation program for network installations has been improved in version 3.21.

The ability to display graphics is becoming more and more important as the move toward electronic journals gains momentum. With STN Express, a search in the WPI file

can be limited to those answers which have graphic images by combining a search result with the GI field availability designator, e.g.,

$$\rightarrow \text{S L\# AND GI/FA}$$

The display option that includes graphics must then have appended to it the letter "G" to capture the graphic images, e.g.,

$$\rightarrow \text{D L\# ALLG}$$

Images are downloaded into a TIFF file, where they can be viewed from the File menu with the "View Tiff Image" selection. Drawings from WPI may be viewed in isolation or in context with the rest of the answer. About 1.5 million patent records have images on STN, among them, chemical patents from 1992 to the present.

An approach that some have asked me about is the use of ftp (file transfer protocol) to transfer results of an online search. This is possible with National Library of Medicine searches using the VTAM (Virtual Telecommunications Access Method) command $DSFILE for ELHILL searches.[2] The results are stored on the NLM computer and downloaded over the Internet via ftp. To my knowledge, there is no corresponding ftp option on the STN International system.

Perhaps the next version of STN Express will include another option for viewing images—the public domain Adobe Acrobat reader (available via ftp at ftp.adobe.com in the directory /pub/adobe/Applications/Acrobat). ACS has announced that page image files from the supplementary material of ACS journals will be converted to Adobe's PDF format in 1995. The switch will make it possible to store and deliver multiple pages in a single PDF file.

With the introduction of CJACS Plus Images on STN, full page images, including graphics, in 23 ACS journals are available from 1992 to the present.[3] (Prior to 1992, only textual portions of the articles are in the database.) As with the WPI file, the GI field indicates the presence of graphics in an article. One of the options to receive the journal pages is to display them with STN Express version 3.21. In the Preferences menu under "Graphic Scaling," the setting for "Tiff image" must be Full. The STN Preferences under "File Transfer" must include "Long Packets" and a value of 4000. Each page is downloaded into a separate TIFF file. Even with Internet connection speeds, an average page of approximately 100K in compressed Group 4 FAX format is likely to require up to 3 min per page. Nevertheless, it is clear that the process of moving the journal user from the print subscription to an online electronic alternative has been given a tremendous boost by the image-handling capabilities of STN Express.[4]

With the revised pricing of STN Express introduced in 1994, the product should now be accessible to far more people than before. Pricing of STN Express is as follows:

New order for single-user license	$ 248
Upgrade from a previous version to single-user	$ 49
New order for shared-use license:	
1−5 users	$ 498
1−10 users	$ 996
Upgrade from single-user to shared-use:	
1−5 users	$ 250

REFERENCES AND NOTES

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