

Power Tools II, utilities to enhance Applesoft

By John V. Lombardi

Fortunate are the programmers in Applesoft, for theirs is a richness of tools. Everywhere we look in the magazines and the computer catalogs, there are new utilities designed to make Applesoft work the way we all wish it would work.

These utilities fall into two general categories. The first are collections of routines written in Applesoft that you can incorporate into your program to solve special input, output or screen-formatting problems.

The second are machine-language routines that add special versions of Applesoft commands or entirely new

has no easy way to get input that might contain special characters unless you do lots of tedious programming that usually results in making the program slow. Power Tools II's input-anything routine is flexible and advanced. It offers a wide range of formats and error-checking abilities. Moreover, this elegant routine also allows programmers to design immediate exits on receipt of any specially designated input. The routine handles numbers, strings and dates.

You also get a related Line Input command that takes a simple string from a disk file—or any input device—and stores it for inspection. The line is

defined as all characters up to the carriage return. This, too, is the kind of command that many BASICs other than Applesoft usually include.

Another pair of routines allows you to pack and unpack integer numbers up to nine digits in order to reduce the storage required on disk.

Every utility collection worth looking at includes a sort routine. These vary in flexibility and speed. The sort routine included in Power Tools II is quite good. It handles ascending and descending sorts of single-dimension string arrays with up to four fields.

In addition, the routine allows you to create an integer array with values

that remain constant during the sort. This array keeps track of the original order of the array's elements, a useful feature for random-access file manipulation.

Many programs need to search strings, a task both tedious and slow when you have Applesoft. Power Tools has a routine that searches single-dimension string arrays for the occurrence of a specified string. If it finds a match, it returns the number of the array element where the first match occurred. It also provides you with a way to find all occurrences of a string.

Finally, Power Tools II has an inter-

See Power Tools, page 64

InfoWorld

Software Report Card

Power Tools II

	Poor	Fair	Good	Excellent
Performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ease of Use	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Error Handling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

System Requirements

- Apple II or II Plus with Applesoft
- DOS 3.3
- 48K RAM
- One Disk II

Price: \$59.95

CE Software

801 73rd Street
Des Moines, IA 50312
(515) 224-1995

commands to this BASIC's vocabulary. The Programmer's Power Tools II belongs to this latter category.

FEATURES: As is the case with many similar collections, Power Tools II is an ampersand utility. That means that its special features can be invoked from within an Applesoft program through use of the ampersand vector.

Scattered throughout the magazines devoted to Apple users are numerous ampersand utilities, many of them designed to accomplish the same things as this one. The virtue of having the Power Tools II instead of many of the others, however, is that it has been thoroughly tested and is an integrated package.

Power Tools II has routines to allow you to print numbers and dates easily in formats that include decimals, plus (+) or minus (-) signs, commas and other pretty print features. In a more advanced BASIC, you would accomplish this with the Print Using command. In Applesoft you need something like Power Tools II to get this convenience.

Then there is an input-anything routine. Long the bane of Applesoft programmers, Applesoft BASIC dialect

DON'T BUY SOFTWARE. NOT YET.

Here's inexpensive information that prevents costly mistakes.

A 30,000 program database!

SOFSEARCH™

The world's largest and most comprehensive directory of software utilities.

Call your nearest SofSearch office
213 689-5226 • 714 682-6671
In California 1-800-534-3121
Outside California 1-800-334-2722

SOFSEARCH of California
2973 E. Colorado, Anaheim, CA 92806

Please send me further information regarding your service.

Name _____
Street _____
City _____ State _____ Zip _____
Phone (home) _____ (office) _____

VEDIT, text editor for CP/M operating systems

By Tim Danelluk

VEDIT is a general-purpose text editor that is available in a wide variety of media and formats. It is available for CP/M-80 and -86, MP/M and Seattle Computer Products 86-DOS, as well as the IBM Personal Computer. For this review I used VEDIT with a Lobo Max-80 running under CP/M-80 2.2.

FEATURES: A good text editor is an indispensable part of a microcomputer system. VEDIT is a flexible text editor and serves as a day-to-day text processing tool.

VEDIT calls upon two principal modes. First is the Visual mode, in which the program works much like

any screen-oriented text editor. You can key in text, insert, delete and edit characters, and you can move the cursor around within the text as a whole.

What you see on the display is exactly what the document contains. This makes it easy to compose letters, forms and the like because you can save a document just as you see it.

Though VEDIT is not a true word processor, it does have several features in the Visual mode that allow you to use it for limited word-processing functions. For example, unlike most editors, VEDIT allows you to print text on the line printer.

When using this feature, however,

you must specify the beginning and ending positions within the text file you want printed. This is an especially convenient feature when you are using VEDIT to enter programs. You can just print a small portion of the entire program instead of the whole thing.

Another word-processing feature allows you to adjust both the left and right margins of your text. VEDIT also has a word-wrap ability. Anytime you exceed the right margin, VEDIT starts a new physical line automatically and appends a carriage return to the end of the previous line.

Finally, VEDIT gives you the ability for some limited paragraph format-

ting. While the feature is not as sophisticated as the formatting and proportional-spacing abilities found in a true word processor, it does allow you to set left and right margins and force a paragraph to fit within them.

VEDIT allows you to customize the keyboard layout that you use in the Visual mode. This means that you can
See VEDIT, page 66

Power Tools

continued from preceding page
esting garbage-collection routine that refines the Frel(x) command from Applesoft to do a more efficient collection and to allow you to check whether or not you really need to clear out your string space.

PERFORMANCE: These routines work very much as described in the manual. They operate on a par with most of the other ampersand utilities I have tried over the years. Their virtue, of course, is that they are quite flexible and versatile and form a reasonably coherent package.

EASE OF USE: No package of this kind can be said to be easy to use. Unless you are a reasonably proficient Applesoft programmer, you'll have trouble making this package do its stuff.

In part, these difficulties occur because the routines expect to find data in a certain form, say integer numbers, even though the final output might be in decimal form. Likewise, the routines might want strings when you had thought to use numbers.

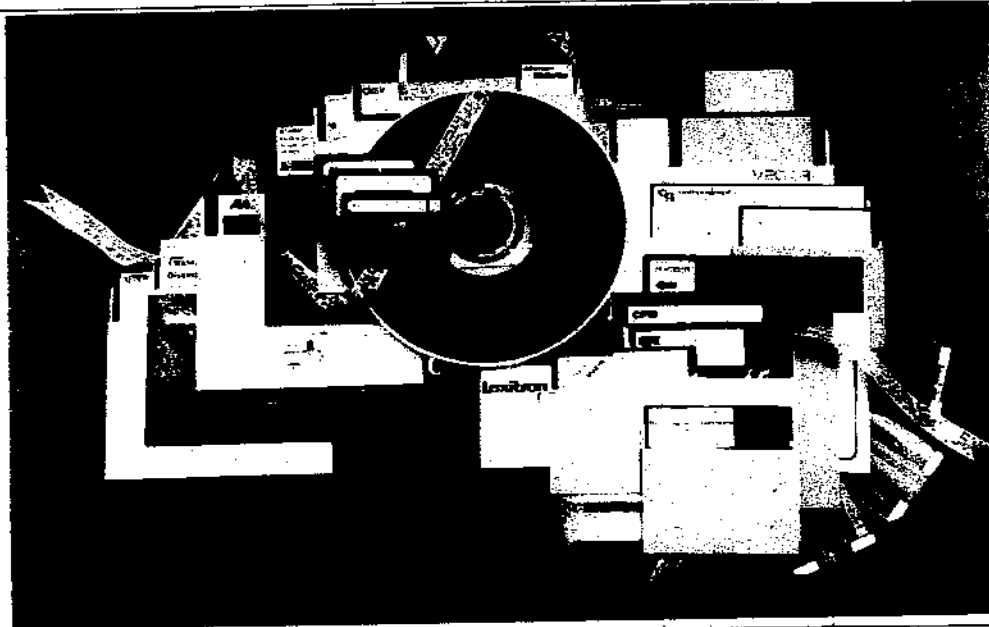
None of these really detracts from the usefulness of the routines, but, in total, they point to your need to know how to get the right data in the right place at the right time.

The machine-language routines must reside, in memory, on the same disk as the Applesoft program, which calls them. CE Software provides lots of information about how to manage possible memory conflicts. You must get permission from the company, however, if you expect to incorporate these routines into any programs you make for more than five users.

ERROR HANDLING: In part, of course, the program cannot handle any errors you make when setting up these routines. What is especially nice about these routines, however, is that they allow you to create programs that will handle errors well.

DOCUMENTATION: The manual that comes with Power Tools II is excellent. It is clear, concise and full of examples. It also is clear about limitations, peculiarities and problems that you might encounter when you use these routines. The disk has a number of demonstration programs that are helpful and enable you to see how the routines can best be used.

SUMMARY: If you do lots of Applesoft programming and don't already have these utilities or something very much like them, you are wasting a lot of time. Power Tools II is easy to use, covers most of the most important features missing from Applesoft and makes your programming tasks much easier. All in all, I think this is a good, solid package. ■



ELECTRONIC MEDIA CONVERSION SERVICES

DATASCAN can convert single disks or entire libraries to or from any of these systems or 9-track computer tape:

Altos	IBM Displaywriter	Lextron Cassette	TRS-80 Model II
Apple	IBM Mag Cards	Lextron Diskette	Toshiba
CP/M 8 inch	IBM Personal Computer	Micom	Vydec
CPT	IBM System 6	NBI	Wang
CompuCorp	IBM 3741	NCR	Wordstream
CompuGraphic	IBM 5520	9-Track Computer Tape	Xerox Mag Card
DEC	IBM 8100	Osborne	Xerox 820
Dictaphone	InterSystems	Paper Tapa	Xerox 850
Exxon	Lanier	Punched Cards	Xerox 860

Additional systems are added regularly and special conversions are also available.

With the incredible growth of word and data processing systems, companies such as yours are increasingly faced with the challenge of converting data from one system to another. DATASCAN offers a secure, reliable and cost effective media conversion service that transfers data stored in virtually any electronic media to the system of your choice. If you are changing word processing systems, upgrading from memory typewriters to word processing, transferring word processing to photo-typesetting, interfacing with companies or divisions that employ a different system, or transferring data to and from mainframe computers, this service eliminates the need for costly manual re-entering of data. Converting the data electronically means significant savings in both turnaround time and cost. 1000 pages of text can be converted by DATASCAN in 3 to 5 days, with 100 % accuracy guaranteed, and at a fraction of the cost of re-keyboarding or optical scanning. Your equipment and personnel are not involved in the time-consuming task of manually re-entering and proofreading data. Confidentiality of sensitive information is strictly secured.

Other DATASCAN services include optical scanning (typewritten, typeset or printed materials), software publishing and diskette duplication.

DATASCAN's comprehensive information processing facilities serve the Fortune 500 companies, financial institutions, government agencies, public utilities, the publishing industry, and the legal, accounting, medical, and engineering professions, both domestically and internationally.

Accuracy guaranteed, confidential, and cost-effective.

DATASCAN™

Innovative solutions for the information age.

2716 Ocean Park Blvd., Santa Monica, CA 90405 213/452-9114