Microcomputer Newsletter

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Discount Program News

Ordering IBM equipment

The University's agreement with IBM requires the University to place large orders (minimum orders of 100 or 500 machines). IBM does not provide the University with any price protection for inventory on hand, in the event of price reductions.This subjects the University to a significant financial risk. Consider this: 500 machines that cost an average of $2000 is a $1,000,000 inventory. If IBM reduces prices by 10%, then the University loses $100,000 on inventory. Since we have seen two price reductions from IBM in the last year, we are reluctant to carry very many IBM machines in inventory.

The current IBM agreement will expire June 30, and we hope to negotiate a better agreement at that time. Those of you who are considering purchase of IBM equipment should know that we will make one more order from IBM during the current agreement.We will place the order at the end of May. If you want to assure yourself of timely delivery of IBM equipment, you should place *your* order before the end of May.

Other discount program news

We are in the process of negotiating an agreement with AT&T that will cover the AT&T 6300 (an IBM-PC compatible) and the 7300 (AT&T's new UNIX machine). Because the agreement has not been finalized, we do not know what the prices will be.

We have a 6300 in the Micro HelpLine, which you are welcome to come and try. The 7300 put in a brief (2-day) appearance at the Micro HelpLine. (Apparently AT&T only has one demo 7300 in Minneapolis.) Based on our *very* limited exposure to the 7300 we can tell you that it runs Multiplan and dBase III, and has a very Macintosh-like shell running over the UNIX operating system. The shell supports multiple windows, uses a mouse, and in general insulates you from the less-than-friendly UNIX operating system. Hackers should not despair, though. If you want, you can open a UNIX window and circumvent the mouse and windows for the heady pleasures of commands like *cat, pwd,* and *ls.*

(*Discount News* continued on page 2)

Review: MacLion

Flexible but complex data base software for the Macintosh

MacLion (by Computer Software Design, Inc) is a relational data base management program for the Macintosh. What differentiates MacLion from the Macintosh data base packages we reviewed last month is MacLion's flexibility. It is relatively easy to generate input screens and reports for output. If you don't like the standard input screens and reports generated by MacLion, you can write your own input and ouput routines using MacLion's programming language (which is called Leo). In this respect MacLion is similar in spirit to dBASE III for the IBM-PC; if you need capabilities not available in the standard routines you can program your own.

To use MacLion, you design data input templates, called *screens*, by selecting the appropriate options from pull-down menus. You retrieve information through *reports*. Report templates are also designed by choosing options from pull-down menus. One notable feature of MacLion screens is that you specify the type of data that can be entered into a field. For example, if you are maintaining a data base with a zip-code field, you don't want to allow zip-codes that contain letters. When you design the screen, you can specify that the zip-code field can only contain numbers and protect against entry of bad zip-codes. Since everyone makes typing errors, this type of input filter is useful for maintaining the integrity of the information in your data base.

Screens and reports are really programs in the Leo programming language. When you design a screen or report template you are using a program generator that creates a Leo language program. If you have programming skills you can modify these Leo programs (or design your own from scratch). The Leo language is an extensible, stack-oriented programming language similar to Forth. If you are familiar with a mainstream programming language such as Pascal, BASIC, or FORTRAN, you will probably be put off by Leo's syntax. Mainstream programming languages use infix notation, so to add two numbers you say: "3 + 4". Instead of using infix notation, Leo uses postfix notation. The Leo syntax for adding two numbers is "3 4 +".

MacLion's major disadvantage is that it doesn't follow the Macintosh user interface consistently. The program has *modes*. In most parts of the program you use the mouse and pull-down menus, but you can find yourself in a mode where the mouse no longer functions (until you leave the mode). The desk accessories (calculator, alarm, scrapbook, etc.) are never available. Two disk drives are required to use the program because the combination of MacLion and the Macintosh operating system doesn't leave enough room on a 3.5" disk to create a data base.

The manual is fairly well written, but takes some study due to the volume of information covered. To take full advantage of MacLion, you really need to learn the Leo language and this contributes to the program's complexity. MacLion's major advantage is its flexibility and adaptability, which may be valuable for larger-scale operations in which the templates must be customized and frequently changed. In that sense it is probably one of the better programs in its class.

If you think that MacLion might meet your requirements for data base management, we encourage you to visit the Microcomputer HelpLine (room 125 Shepherd Labs) for a demonstration. MacLion is available at the Electronics desk in the Williamson Hall Bookcenter for $235.

(*Discount News* continued from page 1)

Apple LaserWriter arrives

We received (at long last) an Apple LaserWriter and AppleTalk cables for the Micro HelpLine. If you are interested in seeing a demonstration, stop by during HelpLine hours.

New Software at the BookCenter

Here are the new software packages available at the Williamson Hall Bookcenter:

For the Apple Macintosh:

• MacLion	$ 235.00
• TK Solver	$ 155.00
• MacSpell	$ 30.00
• 1st Base	$ 122.00

For the IBM-PC:

• Turbo Pascal	$ 36.00
• Sidekick	$ 50.00
• IBM Professional FORTRAN	$440.00

Review: Symphony

An impressive program that takes an impressive amount of effort to learn

Symphony, by Lotus Development, is an integrated software package that includes word processing, spreadsheet, data base, graphics, and communications capabilities. These functions cover most people's software needs, and you can easily move data between different parts of the program. For example, you can capture data from a remote computer using Symphony's communications program, move the data into a spreadsheet for analysis, write a report with the word processor and accompany it with a printed graph. Symphony's capabilities are impressive, but we found learning how to use them took an impressive amount of time and effort.

Requirements

Symphony will run on the IBM PC, XT, AT, and most compatibles (including the Zenith Z-150 series). It requires a minimum of 320K RAM memory, but we found satisfactory performance requires at least 512K. Symphony worksheets reside in RAM. The program occupies so much of the RAM itself, there is little room left for your worksheet.

While Symphony will run on a system with two floppy disk drives, we recommend running Symphony on a hard disk system. The hard disk speeds up access time and you avoid having to swap between 3 floppy disks when using different parts of Symphony. Some of the advantage of the hard disk is diminished by Symphony's copy protection scheme, which requires one of the distribution disks to be in the floppy drive to start the program. After the program has read the serial number from the distribution disk, the disk can be removed and you can use the hard disk exclusively. We found a minor problem when we installed Symphony on our AT. Symphony was unable to read the serial number of the floppy disk in the AT's high-density drive. We solved this problem by listing the directory of the disk in the high-density drive before running Symphony.

You can use most features of Symphony with a monochrome monitor. You can even create graphs and print them, but you cannot preview them on the monochrome display if your machine has IBM's monochrome display adapter. To view graphics on a screen, you must have a graphics monitor and graphics board (such as the IBM color/graphics card or the Hercules graphics card). Printing graphics requires a suitable printer, and over 50 printers are listed on Symphony's installation menu.

Installation

Installing Symphony is relatively easy and on-line help is available. However, it is important to choose the correct monitor configuration. If you choose the wrong monitor configuration, the result is a blank screen with no indication of what is wrong. If you make a mistake during installation, there is no graceful way to stop the installation. It is necessary to complete the procedure and then start over.

Description and Features

Symphony is essentially a huge worksheet, 256 columns by 8,192 rows. All of its functions (except graphics) take place within the worksheet. This means that word processing, spreadsheets, communications, and data base management take place in different locations on the same worksheet. Graphs use information from a spreadsheet, but do not take up space on the worksheet.

Each function (word processing, spreadsheet, etc.) takes place in a separate window. One section of the worksheet can be viewed from more than one type of window. Changing the window type changes the type of function you can perform. You can use the word processor to edit a spreadsheet by changing the spreadsheet window to a word processing window. The number of windows is limited by the RAM memory in the computer and the amount of RAM consumed by the worksheet. Moving from one window to another requires only a single keystroke. Window size and location can also be easily adjusted.

Spreadsheet

The spreadsheet is Symphony's best function. It is large and contains many impressive features that are easy to learn and use. Lotus 1-2-3 users will find many similarities to 1-2-3 and some pleasant additions.

One new feature is Symphony's ability to LEARN a macro as you type it in. Symphony remembers the commands entered while LEARN mode is on.

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(*Symphony* continued from page 3)

After a macro has been LEARNed, it can be revised. Symphony can also read Lotus 1-2-3 files.

Word Processing

Symphony's word processor contains the usual features available in word processing packages. A major limitation is the size of documents that Symphony can handle. With 320K RAM, documents are limited to about 10 pages, with little room left for anything else. In spite of the document size limitations, the word processor is quite adequate for memos and short documents.

To print a file, you select several options, one of which allows you to enter escape sequences (This is useful for taking advantage of special printer features.) The print options can be saved for future use.

Data Base Management

Symphony's data base management functions include sorting, selection based on various criteria, reports, and mailing lists. Lotus 1-2-3 users will note substantial improvement here. Creating a simple data base, entering several records and printing them out is not difficult. Sorting by up to three fields is also relatively easy. Using more complicated features, such as redesigning an entry form or setting up multiple criteria for selecting records, can be a little complicated.

A data base is created by generating a data base structure on a portion of the worksheet. This results in a simple data entry form. You can revise this format in the word processing mode. Unfortunately, when we changed data entry forms, part of the data base structure was also changed and the data base functions stopped working. Neither the error message nor the documentation explained exactly how this problem might be resolved.

Symphony allows selection of specific records by adding criterion records to the data base. The individual fields for each of these records specify which records in the data base will be selected. The number of criterion records is limited to four (by default), which means that only four basic selection criteria are available at a time. The reference manual claims it is possible to create more criterion records, but we were not successful in doing so.

Using a data base to create form letters is also possible. But the diagram in the documentation that demonstrated how to do this was missing, so we were unable to try it.

Data base records are stored directly on the worksheet. Each column accounts for a field and each row for a record. Adding more records uses more rows. This means that the theoretical limit on the number of records is around 8,000. In practice, memory (even with 512K) will be filled long before 8,000 records are entered.

Communications

The communication section of Symphony offers a full featured communications package. You can specify communications parameters such as baud rate, parity, data bits, and stop bits. Text files downloaded from another system can easily be transferred to the word processing or spreadsheet window, making access to data from other computers convenient. We successfully downloaded a file from the MERITSS system.

Graphics

The graphics section of Symphony is similar to the graphics section of 1-2-3. From a graphics window you specify the sections of the spreadsheet to be displayed on the graph . If you have a graphics monitor, you can change the spreadsheet in the spreadsheet window and watch the graph change in the graphics window. Unfortunately, it is not possible to insert a graph into a spreadsheet or word processing document. To print a graph you must first save it to a file and then print it out through the PrintGraph section of Symphony. PrintGraph has several options including rotating the graph and changing the font used for labels.

Integration

Symphony integrates its functions largely through the use of windows. Exchanging data among different parts of the worksheet is quite easy, you simply mark a section of data and move it to the desired location. Accessing data from other worksheets is also easy.

Conclusion

Symphony's features are quite impressive. However, learning how to use them is another matter. There are over 400 commands embedded in several layers of menus. We did not have time to explore all of them, nor were we able to fully understand all of those that we did explore.

(*Symphony* continued on page 5)

News: Macintosh Application Seminar

The UCC Microcomputer Systems Group is sponsoring a Macintosh applications seminar on the afternoon of May 16 (12:00 - 5:00) and all day May 17 (9:00-5:00) at Coffman Union Great Hall. Representatives of major Macintosh software and hardware vendors will be on hand to discuss their products. Apple, Microsoft (File, Word, Chart), Lotus Development (Jazz), and many others will be present.

The Mac Applications Seminar will provide you with an excellent opportunity to talk with vendors, as well as see and try new Macintosh applications. We are looking forward to seeing you there.

(*Symphony* continued from page 4)

The tutorial is inadequate. It consists of a very structured guided tour that allows only correct responses. The manuals are extensive but not particularly helpful. Most features (such as working with a spreadsheet) are explained well, but how all the functions fit together is not covered in enough depth. The large number of commands make it easy to become confused.

Because four of the five functions are all on the same worksheet, it is important to avoid accidentally writing a spreadsheet over a document or creating a data base over something else. Symphony provides a way to restrict each window to a specific area of the worksheet. However, this is not always done automatically. Some of the error messages are rather cryptic. Lotus offers phone assistance, but a toll call is required. We called Lotus once with good results.

We can offer only a qualified recommendation for Symphony to those who are already happy with Lotus 1-2-3 or who already have a data base or word processing package. A newcomer to microcomputers should be very cautious because the program is difficult to learn and to use. For someone who requires the high level of integration provided by Symphony and who is willing to take the time and effort to learn the various features, the program may be useful. But for the majority of microcomputer users, simpler and more capable single applications packages are probably a better choice.

News: EDUCOM

EDUCOM sponsors academic computing seminars

EDUCOM, a non-profit consortium of 500 colleges and universities concerned with introducing, using, and managing information technology in higher education, will be sponsoring several seminars and workshops this summer.

The seminars, "Strategies for Integrating Computing Throughout the Curriculum," and workshops, "Academic Software--Implementation within the Curriculum" are scheduled to be held at Stanford University July 11-13 and at Dartmouth College July 17-19. Both schools are members of the Apple University Consortium (AUC), and partial funding for these events has been provided by Apple.

The one-day seminars are for administrators and others responsible for planning computer-based education and research. Seminar topics include:

- *Student and Faculty access to computers*
- *Faculty development*
- *Academic software*
- *User support services*

The two-day workshops that follow each seminar will guide faculty members from various disciplines in the effective use of academic software in teaching, learning, and research. *The workshops will emphasize software developed for the Macintosh at AUC schools and by commercial developers.*

The workshops will include demonstration and use of software in the sciences (including engineering and computer science), the humanities, the social sciences, and business.

EDUCOM is offering reduced registration rates to groups and individuals registering for both the seminar and the workshop. For additional information, contact Kathy Schaible at:

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Macintosh Applications Seminar

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