Review: Visi On Applications Manager

BY JOHN LOMBARDI
Contributor

Only the most inattentive reader of the Wall Street Journal or any of the popular publications could have failed to notice major advertisements for Visi On, the window manager and integrated-software system for the IBM-PC and PC-compatible machines.

This package from VisiCorp, the company that publishes the successful VisiCalc program, offers a completely integrated environment for various applications -- including word-processing, spreadsheet, data-base and graphics packages. Although each application program is self-contained, they all share the same information, style and method of operation. Visi On is one of the first of the new generation of programs that combine window management with the integration of tasks.

The advantages of this approach are obvious. You don't need to learn four different sets of complex commands or widely differing program structures in order to accomplish word-processing, graphics, spreadsheet or data-base-management tasks. For example, you can instantly insert data-base information into a written report, convert it to a graph or transfer it to a spreadsheet for further analysis. You need only learn one set of conventions to operate these programs, which reduces training time.

This review primarily covers the Visi On Applications Manager (the Visi On operating environment). In order to test the Applications Manager, we also used Visi On Calc (a spreadsheet) and Visi On Graph (graphics). VisiCorp is preparing two additional applications, Visi On Word (word processing) and Visi On Query (a data-base-management system). VisiCorp is also actively courting software developers to make their applications run under the Applications Manager.

The idea of a product such as Visi On is grounded in the exchange of information between various applications. Since we had only two applications to test, we couldn't explore the product as much as we would have liked.

Visi On is intended for business or professional users, and it demands a substantial investment in equipment. You'll need an IBM PC, Compaq or Honeywell Series 7900 computer with 512K of memory.

(Don't be confused by the manual, which states that 256K RAM is all that is necessary. The system requirements listed on the Visi On box specify 512K, and you will need it.)

You'll also need a color graphics board, the appropriate graphics monitor, an RS-232 serial port, a disk drive containing at least 5 megabytes of memory, a double-sided double-density floppy-disk drive, PC-DOS or MS-DOS 2.0 and the VisiCorp Mouse. When all is said and done, this is not a cheap hardware setup. We tested Visi On on an IBM-PC XT.

Visi On requires a special optical mouse, a two-button animal that moves around on a reflective grid measuring 9 x 11 inches. The mouse connects through the computer's RS-232 port and has an umbilical cord that runs to a wall-plug transformer that supplies power to the mouse even when the computer is turned off. As long as you don't unplug it, you don't need to recalibrate the mouse, although recalibrating it is a simple task.

Visi On's user interface -- its presentation of objects and information on the screen -- is very different from most products now on the market. Its developers have decided to present the program in such a way as to eliminate, as much as possible, typical computer conventions.

Like the software on Apple's Lisa and Macintosh, Visi On's basic presentation or analogy (metaphor is preferred in computer jargon) is that of a desktop containing papers. By picking up a paper and placing it on the top of the desk, you activate that file -- a document, spreadsheet or other piece of work. Visi On stores its files in folders -- a continuation of the office-desk analogy.

Unlike Apple's desktop, however, Visi On does not use icons, or pictures, that symbolize files or programs. Instead, Visi On displays menu bars at the top right corner of the screen, each containing the name of one folder. The bottom lines of the screen are devoted to another menu bar, containing a series of options that never varies. They are intuitive selections, such as Open or Close. As you rest the cursor on each option, a fuller definition of the command appears above it.

You move between applications by opening and closing windows, the active area of the screen in which you are performing some task. You can define the size of each window and keep more than one visible on your desktop at one time. Each window also displays its own menu bar at the bottom, and you can cause optional menus to appear at the appropriate times by selecting one of the commands in a menu bar.

Because it doesn't use pictorial representations, though, the analogy of the desktop is not totally apparent; folders don't actually look like folders. Much of the reason why Visi On does not use icons is due to the lack of resolution and process-
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a programming tour de force.

Everything works in Visi On — it handles folders, files, windows and applications. After installing the manager onto your hard disk — it takes up 1.5 megabytes of memory space — you install application programs so they will work in conjunction with it.

The manager is a fascinating product. Its windows represent a programming tour de force; they are managed in a simple and easy-to-understand fashion. You can create and destroy, expand and shrink, store and retrieve windows with wild abandon.

The manager depends on the mouse for its instructions. The mouse cursor appears on the screen in three forms: a pointed arrow, an hourglass shape and a scrolling pointer. When you see the mouse's arrow, the manager accepts instructions; when you see the mouse's hourglass, you must wait until the arrow reappears to issue commands. The scrolling pointer comes into play when a window is active.

The manager issues instructions when you put the arrow on a command and click the Select button. Each window can have several command lines.

The manager's performance in this domain is nothing less than superb. The windows are easy to use, fun to play with and capable of a lot of "housekeeping" work with little effort.

The manager's file system is like DOS's file system, except that the manager calls subdirectories "folders" and allows filenames to be 12 characters long.

The manager has a visual filing system — you can easily see the names of folders and files, point with the mouse, click the button and carry out your housekeeping without having to worry about typing the filename correctly.

VisiCorp seems to have little interest in helping you handle data that exists outside its own system, though. According to the manual, an Import function will, in theory, bring DOS files into the Visi On system, but only if you use a special program and DOS to convert these files. Such a program is not available from VisiCorp and can't be reproduced.

The manual does not supply information to help you prepare such a program. The manual does state, however, that third-party vendors will be providing such programs in the future.

Visi On can set up any floppy disks it considers a considerable amount of pointing and selecting with the mouse.

The mouse's pointer moves smoothly and accurately, although you will need some practice to consistently get the pointer where it belongs. If you point and select in quick succession, the mouse cannot always remember your actions because it has no buffer or special area of memory devoted to it. You must wait for the program to complete one operation before you point and select the next. And, of course, you must have a 9 x 11-inch clear space on your desk for the mouse pad.

We were impressed by Visi On's ingenious method of scrolling. You perform all scrolling with the mouse, whether you are scanning menus or data, by using the Scroll button. You point to what you want to scroll, such as data in a window, press and hold the Scroll button and move the mouse's scroll pointer in the direction you want things on the screen to move. If you move the mouse's scroll pointer an inch or so, you scroll as fast as possible; if you move less, you scroll more slowly; if you change direction, the scrolling changes direction; if you release the button, the scrolling stops.

Playing with windows is one thing; actually doing work with them is another, so we installed the two VisiCorp-supplied applications. Visi On Calc has just about every feature available in other spreadsheet programs. It has functions and options, it can copy and move, and it sorts and changes display formats with as much variety as anyone could want. In comparison to the spreadsheet functions of 1-2-3, Visi On Calc is more powerful, with its many built-in functions, but we recommend you check to see if what you need is there. Calc is especially strong in financial functions and options.

You can use the mouse for almost everything except data entry and command selection in Visi On Calc. VisiCorp does not expect you to be interested in using the keyboard much. It is even possible, although not very practical, to use the mouse to enter numbers, one digit at a time. That's right: point at 1; select 1; point at 2; select 2; point at 3; select 3; point at 4; select 4; press Enter; select Enter; see the entry: 150.

Because of this reliance on the mouse, Visi On Calc is harder to use than VisiCalc, but it does more than the old spreadsheet. Calc's worksheet is 511 rows by 128 columns in size. This is a large spreadsheet, though not close to 1-2-3's maximum workspace. Calc manages its workspace by paging the spreadsheet and out of memory from the hard disk as needed.

To test the raw speed of this Calc, we created a spreadsheet by entering only the
following numbers: 10, 15, 20, 25, 30, 35, 40, 45, 50 and 55. We replicated this series to create a 511 by 40 worksheet. In row 511, at the bottom of each column, we used the Sum function to total each column.

Recalculating this worksheet took the program about 20 minutes. The same operation on the same worksheet using Lotus 1-2-3 took 30 seconds. Visi On Calc in this situation is, obviously, slow.

In addition to operating speed, a spreadsheet needs to let you move quickly through it, especially if the workspace is larger than the window. The mouse scrolled very, very slowly through our test worksheet, although the Goto command moved the mouse's pointer rapidly to the selected spot. Of course, with Goto you must enter coordinates from the keyboard and remember them. You can, as is true of all good spreadsheets, define cells by name and then go to the name. This may be the only way to navigate efficiently around a large Visi On Calc spreadsheet.

Although this review is not intended to be a thorough test of the product, a short evaluation of Visi On Calc is in order. It is powerful and effective on small spreadsheets but unacceptably slow in almost every category with large spreadsheets.

Why is it so slow? The Visi On manuals contain no technical information about Visi On products. The manager and windows, however, take up a tremendous amount of memory and processing power, leaving not much left over for Visi On Calc. Because it uses the virtual-memory approach of the whole Visi On system, Calc is always reading and writing pieces of large spreadsheets to the hard disk. The 20-minute spreadsheet recalculations described above kept the hard-disk light flickering nonstop.

For its part, VisiCorp contends that people have been creating large spreadsheets mostly because they haven't had the ability to link smaller ones together easily. They expect that, given Visi On's ability to transport data from window to window, you will develop much smaller spreadsheets than with other products.

On the other hand, Visi On Graph does a superior job of taking data from Calc or entering directly into its own tables and turning them into outstanding graphic images. This graphing program, combined with the window and mouse operation, is superior in flexibility and ease of operation to 1-2-3. It has a wide variety of graph types and excellent labeling features. The mouse makes moving and placing labels a quick and easy process. The combination is excellent.

Visi On supports a range of printers and plotters, but it is only satisfactory if your printer is among those chosen for support by VisiCorp. Although Diablo is not represented at all, lots of Epsons and some other common printers are supported, as are two plotters. We hope Visi On will support other printers and plotters in future versions.

Visi On's documentation is good. The tutorials are helpful, the explanations are clear and the manuals readable. Help screens in the programs themselves are useful but are not as good as those in 1-2-3. The manuals need better indexes and a technical-details section with information about file formats and transfer requirements for those owners who have files to convert.

VisiCorp provides a helpful telephone hot line. We called when we had some trouble installing the mouse, and the answers we received were useful, friendly and correct.

VisiCorp's copy-protection scheme has a good side and a bad side. The company has devised two types of copy protection, only one of which is now in use. The unavailable scheme, which VisiCorp is still considering for use, relies on providing the mouse with a unique serial number for each system; Visi On's manager compares the mouse's serial number to that of the software. If you have the serial-number mouse, you can copy all the disks for backup since the protection is in the mouse. You can only install this mouse on one system at a time, and if the mouse dies, you're out of luck until VisiCorp can get you a new one. You can move the Visi On system as long as you move the mouse.

The currently available scheme is software-based; you have a copy-protect-
ed system disk. This disk must be in drive A whenever you start Visi On and whenever you start a new application from within Visi On. When you begin, Visi On checks the disk. When you start a Calc sheet, Visi On checks the disk; when you begin Graph, Visi On checks the disk. If the disk isn't there, the program doesn't run.

The manual warns you repeatedly during the installation instructions to be sure you have the right kind of software for your mouse; if you install incompatible software and mouse, you could end up with a trashed diskette and have to send it back to the factory. With the copy-protected system disk, you can move the system as long as you move the application manager disk. You cannot copy this disk, and you get only one system disk. VisiCorp will sell you a backup for $50 after you've returned your registration card. You can copy all the other disks. You can consider backup for the system as a $50 accessory — all prudent users should buy the backup disks.

The parts of Visi On we evaluated — the Applications Manager, Calc and Graph — have superior visual design, good ease of use, excellent formatting capabilities and strong spreadsheet capabilities. The manager is a strong product, and we think it could easily become a great success in the marketplace. But it is a large product, and its design makes the use of large spreadsheets impractical. We think the lack of available "import" routines is a serious defect against the product. Still, in our evaluation of Visi On's manager as an environment in which to work, we are pleased and impressed.