

DIGITAL
RESEARCH™
ISV FORUM

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A quarterly newsletter for Independent Software Vendors

May 1983

DRI announces technical support for ISVs

"Digital Research now offers a technical support program for ISVs that will allow them to improve on current and future products by staying fully aware of all the latest information on our software and help them solve any problems they encounter with our software or documentation," said Nancy Hug, manager of the Technical Support Department at DRI.

"We have been planning this program for a long time and we think now we have just what ISVs want. By July 15, they will be able to receive fast response telephone support, access to THE SOURCESM, a regular technical newsletter, and other kinds of assistance that will help them do a better job of writing applications using DRI products," Hug continued.

For a base subscription fee of \$250, ISVs will be given the ability to use THE SOURCE, a national elec-

tronic bulletin board service, providing helpful Digital Research addresses and phone numbers, DRI product overviews, retail price lists, a description of the overall technical support program, a referral list for

"We have been planning this program for a long time and we think now we have just what ISVs want."

answers to possible later questions and the contents of the Technical Newsletter.

Technical newsletter planned

Included in the same \$250 fee is a subscription to the printed version of the Technical Newsletter, which will include discussion of technical problems and solutions, patches, applica-

tion notes, programming tips, known bugs and workarounds, plus other technical information.

In addition, a toll-free 800 number will be available on an "unlimited, but reasonable" basis, according to Hug. Additional phone lines will be dedicated to the exclusive use of ISVs. These phones, open to ISVs from 7 a.m. to 5 p.m. PST, will be manned by software specialists with a high degree of knowledge and experience with all DRI products. A staff of nine technical specialists, all experienced software engineers, are ready to respond to queries from ISVs.

Support is crucial

"We realize that our ISV customers depend on our software for their livelihoods," Hug said, "and we feel an obligation to provide them with the highest quality service. Support is crucial when your application pro-

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CP/M®'83 will stage repeat performance—with enhancements—in Boston Sept. 29 - Oct. 1 . . . page 6.

Third edition of CP/M Compatible Software Directory will be aid to ISVs and end users page 5.

More microcomputer manufacturers are added to list of OEMs supporting Concurrent CP/M page 7.

Graphic products available for 8- and 16-bit worlds are reviewed page 2.

Four recent DRI products will help ISVs speed development of application programs page 3.



DRI announces support of hard disks with CP/M-86® and Concurrent CP/M™ for IBM PC/XT. . . . page 5.



ISV FORUM looks at products that allow your terminal to communicate with remote computer systems page 4.

Seminars for ISVs hit the road in United States; first European session attracts 500 ISVs page 8.

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Graphics products offered for 8- and 16-bit worlds

Hardware OEMs sign contracts for software

Digital Research's graphics products, still relatively new additions to the company's product line, have already attracted strong attention from a growing number of hardware manufacturers. The list of signed contracts with hardware OEMs continues to grow.

"We are pleased with the acceptance of our GSX™ graphics extensions to the CP/M operating system family, and with the acceptance of KERNEL™, a library of graphics commands for drawing lines, polygons and text; PLOT™, a library for creating bar graphics, pie charts, histograms and scatter plots; and ACCESS 10™, which allows microcomputers to emulate the Tektronix 4010™ terminal family," said Russ Weeks, graphics marketing manager.

OEM agreements listed

Presently signed up for the use of Digital Research's graphics products, in various combinations of 8-bit and 16-bit products, are Texas Instruments, NEC, Televideo, Advanced Logic Systems (CP/M Card for Apple II and Apple II Plus), Xerox, Otrona, Eagle, NCR, Vector Graphics, Corona Data Systems, Olympia, DEC, Toshiba, Fujitsu, Sharp and Phoenix Computer Graphics. A number of other major contracts are presently being negotiated.

Graphics Extensions for PC

Writing applications programs for the IBM PC? Want to incorporate graphics features into your package? Don't forget that the new low-cost version of CP/M-86 for the IBM PC includes (at no extra cost) the GSX graphics extensions to the CP/M operating system family and a library of device drivers for a wide range of graphics peripherals. See the story on page 3 for more details.

DRI GRAPHICS SOFTWARE PRODUCTS

The following checklist of graphics software products for use with the CP/M family of operating systems should be of interest to ISVs who wish to add graphics capabilities to applications already written or planned for the future.

In the 8-bit world, DRI now offers:

- GSX-80:** a set of graphics extensions to 8-bit operating systems.
- KERNEL:** a library of commands for drawing lines, polygons and text.
- PLOT:** a library of commands for creating bar and pie charts, histograms and scatter plots.
- ACCESS 10:** software which allows

microcomputers to emulate the Tektronix 4010 terminal family, providing access to mainframe and mini-computer graphics applications.

In the 16-bit world, DRI offers the same wide range of graphics products, including GSX-86 and GSX-86 for the IBM PC, as well as KERNEL, PLOT and ACCESS 10 which will be available in June.

The subroutine library packages can be linked with 8-bit and 16-bit versions of Digital Research's languages, including the CBASIC® Compiler™, Pascal/MT+™, PL/I and C.

Workshop helps manufacturers speed up development of drivers

Digital Research's graphics group sponsored a special display device driver acceleration workshop for microcomputer manufacturers, March 14 - 18, at the Monterey Holiday Inn near DRI's corporate headquarters.

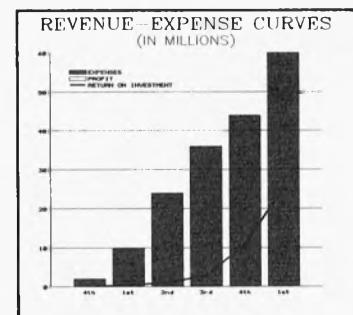
The five-day session was designed to help hardware manufacturers "accelerate the development of device drivers for hardware supported by our GSX operating system extensions," according to Russ Weeks, graphics marketing manager. "The program was a part of our overall support effort for graphics; to us, it makes sense to help manufacturers speed up the development of drivers for their machines."

"These sessions not only benefit DRI and the hardware manufacturers," Weeks pointed out, "but are of much interest to ISVs who are writing application software for specific machines. We will be announcing other such programs for specific audiences in the near future."

The session was well attended, Weeks said, with nine hardware manufacturers and one graphics consulting firm represented. Among the group were Control Data Corporation,

Tektronix, Commodore, Phoenix Computer Graphics, Vector Graphics, Fujitsu, Tab Products, Visual Technology, CPT and Pixellite.

"The workshop was a complete success," Weeks said. "Everyone who attended left with a running device driver as a result of the instruction and consulting help we gave them."



The meeting, which combined lecture/discussion sessions with hands-on implementation, allowed manufacturers' representatives time for intense developmental work using equipment they brought to the workshop. The lecture sessions covered such topics as the VDI protocol and its implementation, color graphics options and a number of other technical issues.

New DRI products speed program development

A series of recently announced Digital Research operating system and language products are now available from DRI's authorized distributors. ISVs will find that these products will help speed the development of application programs.

CP/M-86

An enhanced low-cost version of CP/M-86 for the IBM PC has been released by Digital Research, according to Kevin Wandryk, product marketing manager for operating systems. "This 16-bit version of the CP/M operating system will cost only \$60," Wandryk said. Enhancements to the product include the GSX graphics extensions and a library of graphic device drivers.

"We recognized that IBM's price of \$250 was severely limiting our share of market," Wandryk added. "Our new product is such a value, though, we expect to sell it in huge volume."

The GSX extensions allow users to access and use graphics programs under CP/M; in addition, software authors can write graphics programs directly to the GDOS, similar to the BDOS in CP/M, providing the same portability in the graphics mode as CP/M provides in the operating system mode.

The device drive library supports



**Product Marketing Manager
Kevin Wandryk**

many popular graphics peripherals, including color plotters from Hewlett-Packard, and printers from Epson, Okidata, Printronics, IDS and other manufacturers. Another important enhancement to the new CP/M-86 product is a print spooler, giving the PC the ability to print in the background while other programs are exercised in the foreground.

C compiler

"Software authors can now use our new C compiler to write applications compatible with both CP/M and UNIX™," stated product manager Ed Rifkin. The new C compiler was designed by Michael Lehman, DRI's director of Research and Development, and the author of Pascal/MT+. The compiler is for use with 8086 and 8088 based machines and compatible with Bell Labs' UNIX Version 7. It is a complete implementation of C, including single and double precision floating point with 8087 math co-processor support.

Added Rifkin: "Our C compiler package is a complete development system for the professional ISV, with added features such as enhanced diagnostics and sophisticated debugging. The package contains the C compiler itself, a run-time library, RASM-86™, LIB-86™ and LINK-86™.

The C compiler is available from Digital Research in 5¼" disk format for the IBM PC. "In conjunction with DRI's Concurrent operating system, or our new enhanced CP/M-86 for the IBM PC, DRI C provides an unrivaled applications development environment for the IBM market," Rifkin says. Due to updates in DRI's CP/M-86 that are not provided by IBM in their proprietary version, C will not run under IBM's CP/M-86.

"We encourage ISVs who want a single user operating system to obtain our expanded low-priced version. We've provided IBM the necessary updates to their CP/M-86, but because it's a proprietary product, we have to refer ISVs to the OEM to resolve this kind of situation," said Rifkin.



**Product Marketing Manager
Lowell Wolf**

PL/I-86™

A 16-bit version of Digital Research's native code compiler language, called PL/I-86, is now available, said Lowell Wolf, product marketing manager.

PL/I-86 joins 16-bit versions of other popular languages available from DRI, including C, CBASIC, the CBASIC Compiler, Pascal/MT+, CIS COBOL™ and Level II COBOL™.

Both 8-bit and 16-bit versions of the PL/I languages from DRI are based on PL/I Subset G, the ANSI standard for minicomputers. "This means PL/I-86 and PL/I-80 will run on minicomputers," Wolf said. "Conversely, thousands of Subset G programs can now be tailored for use on 8-bit and 16-bit microcomputers."

Programs written in 8-bit PL/I-80 now can be recompiled and executed for 16-bit microcomputers running under any DRI 16-bit operating system, including CP/M-86, Concurrent CP/M-86 and MP/M-86™. PL/I-86 is a block structured, procedure oriented language especially well-suited for commercial, scientific and research application programming.

"The PL/I compiler generates the best code of all DRI high level languages and, in addition, is the 'industrial strength' language for writing large subsystems," says Project Manager Craig Franklin. "C, on the other hand," explains Franklin, "is a

see products, page 6

ISV Product Highlights

Beginning with this issue, ISV Forum will highlight a group of similar products, by reviewing several packages that are in the same application category. In this way, we hope to give readers a sampling of what is available in a specific area.

Each new ISV product outlined here pro-

vides communications between computers whether they be micros, minis or mainframes. Each package allows your computer to act as a terminal that can communicate with remote computer systems over hardwired lines or phone lines, and make possible error-free file transfer between computers using a number of different communication protocols.

File transfer for 10 systems

Polygon Associates, Inc., Maryland Heights, Mo., offers a set of communication programs that provide file transfer for operation under 10 different operating systems. Asynchronous file transfer software is supplied by Polygon for exchange of ASCII and binary files, error free, for both microcomputers and minicomputers.

Microcomputer software is offered for DEC VT180, Rainbow 100, Professional, and DECmate II with CP/M; for the IBM PC with CP/M-86 and MSDOS; for TeleVideo systems with CP/M; for the TRS-80 Model II with CP/M; for generic CP/M systems; for the Xerox 820; for the Apple II CP/M CARD and Apple II DOS; for the Intel ISIS II; and Motorola systems. Larger multiuser systems supported by Polygon include a number of DEC systems, including VMS, RSX, RTU and TOPS-10 and TOPS-20, and IBM VM/CMS and TSO systems.

Synchronous communication software for DEC and IBM PC systems also are available from Polygon.

Polygon software packages include poly-XFR, for file transfer between small and large computers; poly-TRM to convert a personal computer to a terminal; and poly-RJE for software emulation of IBM remote job entry workstations.

For more information contact:

Polygon Associates, Inc.
9 American Industrial Drive
Maryland Heights, MO 63043
(314) 576-7709

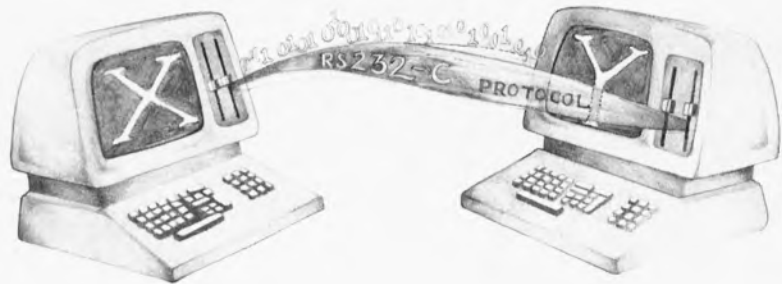
SEND and GET with MOVE-IT

Woolf Software Systems, Canoga Park, Calif., offers MOVE-IT, a program which allows the user to SEND files to or GET files from any other computer system running the MOVE-

IT program.

As do most products in this category, MOVE-IT allows your computer to communicate with micro, mini and mainframe computers and with dial-up bulletin board systems and information utilities. Files can be transferred regardless of the particular hardware environment in use in either of the two systems -- for instance, between systems using 8" or 5 1/4" disks, between hard disk and floppy disk systems, and between systems running different operating systems, such as CP/M and MSDOS.

When talking to non-MOVE-IT equipped computers, MOVE-IT supports full control over duplex and parity, transfers under five generalized protocols, traps incoming data, and has printer and auto-line feed control.



When both machines have MOVE-IT, the user can transfer files using a packet format, with an extremely low error rate. Support for auto dial modems, an on-line HELP facility, unattended operation, display of both local and remote directories, message-sending to the remote console and display of the number of retries during transfers are all features of MOVE-IT.

Woolf Software Systems

23842 Archwood Street
Canoga Park, CA 91307
(213) 703-8112

MODEM-86 communicates

Simple terminal emulation and file

transfer between CP/M and MS-DOS, are supported by MODEM-86, a program from Compuview Products, Inc., Ann Arbor, Mich.

MODEM-86 gives personal computers the ability to communicate with most dial-up computer systems by simple terminal emulation; entire conversations can be saved on disk for later reference. Text files can be transferred to your computer.

Two protocols for transferring files between two microcomputers are available: both use error checking and retransmission when necessary. ASCII as well as binary object files can be transferred reliably over long distances. One protocol is intended for single file transfers. The second allows multiple file transfers.

MODEM-86 can be run in batch

mode without user interaction, or in an interactive mode. Interactive mode gives the user the option to have a displayed command menu, if desired. The HELP command gives an overview of command syntax and sub-options.

The program is available for both CP/M and MSDOS and presently supports the IBM PC, the IBM Displaywriter and many S100 boards. MODEM-86 requires no programming modification for typical installations, Compuview reports.

For more information contact:

Compuview Products, Inc.
1955 Pauline
Suite 200
Ann Arbor, MI 48103
(313) 996-1299

Support for hard disk drive by CP/M and Concurrent is on the way from DRI

“With the recent announcement by IBM of their new IBM PC/XT, which has an integral 5¼" Winchester hard disk drive, we've had a number of people ask when DRI's operating systems will support the use of hard disks," said Kevin Wandryk, product marketing manager for operating systems.

The answer to those questions, according to Wandryk, is that hard disk drive support from Digital Research is under development. "We're working hard on the problem and support is on the way," he said. "Certainly we will support hard disks with both CP/M-86 and Concurrent CP/M."

An application note is now available from DRI's technical support group, detailing the addition of device driver software to Concurrent CP/M and CP/M-86 for IBM PC users who wish to add hard disk subsystems. Mike Bailey, DRI technical support specialist, explained the general problem and its solution.

"Right now the operating systems have no code to talk to anything but a 5¼" floppy," he said. "But we've built in a 'hook' so that when a user references a disk that doesn't exist, the operating system will do a software interrupt. Control will be transferred through a location in memory which may point to the FIDDS -- Field Installable Device Driver Software -- which will either create a "virtual" disk drive of 64K bytes in system memory or get you to the hard disk you have in your system."

Bailey urges ISVs to request the FIDDS application note by mail from the Customer Service Department of Digital Research, and the supporting diskette with sample programs that detail the creation of the virtual RAMDISK option. The programs provide code to drive a popular Winchester subsystem from Western Digital and Xebec. Bailey also is ready to supply advice on alteration of the



**Technical Support Specialist
Mike Bailey**

sample driver programs for use with other hardware.

Wandryk adds that a number of hard disk manufacturers now supply hard disk drives for the IBM PC that are supported by Concurrent CP/M. A number of others can assist users in integrating hard disks with CP/M operating systems.

Third edition of software directory announced

Digital Research's comprehensive directory of 8- and 16-bit applications software based on CP/M products -- highly popular with end users and a primary vehicle for ISV marketing -- will be available in the summer of 1983.

"This third edition of the CP/M-based applications directory will have a number of new features that will make it even more useful," said ISV Marketing Manager Caren Kelman. "It will be comprehensive, with nearly two thousand software packages listed; it will be well-organized by application categories; the descriptions are clear and factual; and for the first time, we're including editorial material."

Topics to be discussed by experts include explanations of the basics of a microcomputer system -- the hardware, system software, languages and applications -- as well as specific information from how to store disks, to the difference between a compiler and interpreter, to the evaluation of

resources available to end users, as well as a discussion of future trends in microcomputer software.

"Our basic concern has been to make the Software Directory easy to use and informative," said Editor Nan Bomberger. "We think we've provided descriptions of all applications that are very precise, exact, factual and meaty. Users will be able to make the application selection that's right for them."

For ISVs, the Software Directory offers a unique opportunity to present their products to a wide audience. The new edition of the Directory will be distributed by Que Corporation, a publisher and distributor of computer-related books. It will be available through bookstores, retail computer and software outlets, and directly from Digital Research. The 1983 Software Directory is priced at \$14.95.

All ISVs who receive the ISV Forum will be sent an application form next fall for inclusion in the 1984 edition of the Software Directory.



Dick Dixon has been appointed director of marketing for Digital Research's new Commercial Systems Division. "We're aiming toward positioning of DRI products to meet customer demands," Dixon said, "which means we have to carefully analyze market segments. We have to be sensitive to the mix of product offerings, packaging and pricing in each target market group." Dixon also will participate in company-wide strategic planning, competitive analysis and product development.



DRI personnel will be available to assist attendees when CP/M'83 moves East to Hynes Auditorium in Boston, Mass. next fall.

CP/M'83 East scheduled for Boston Sept. 29 - Oct. 1; some changes planned

Following in the footsteps of the highly successful CP/M'83 San Francisco show in January, Digital Research and Northeast Expositions will stage a full-scale repeat performance -- with some enhancements added -- in Boston, Sept. 29 through Oct. 1.

Hard act to follow

CP/M'83 East, as the fall show will be called, promises to be as large and impressive as the San Francisco show, the producers predict. CP/M'83 San Francisco was the largest event organized around a single product in the history of all products. In addition, it was larger than any first or second year technology event ever presented anywhere, with more than 50,000 attendees and 400 exhibitors. Most companies who exhibited at CP/M'83 San Francisco also rated it as a most successful sales event.

CP/M'83 East will be in Boston's Hynes Auditorium, New England's largest and most modern convention facility, centrally located in a newly redeveloped district of historic Boston. The auditorium is part of the Prudential Center complex, adjacent to the 1400 room Sheraton Boston Hotel, near Boston's best restaurants, clubs, theaters and stores. Parking is available for 7100 cars. The Hynes Auditorium has 150,000 square feet

of modern, well-illuminated exhibit space.

While CP/M'83 San Francisco attracted participants from the Western U.S., South America and the Orient, CP/M'83 East will draw from these areas as well as the Eastern seaboard, the Midwest, Canada and Europe. Most of the companies that participated in the San Francisco event will exhibit in the Boston show. In addition, more than 100 other companies are expected to be in Boston.

The show and conference days have been changed from Friday through Sunday (San Francisco) to Thursday through Saturday (Boston). The conference portion of the event -- workshops, seminars, panels, software demonstrations -- will be expanded and, since the Hynes Auditorium seminar rooms are larger, more attendees can be accommodated.

Plan now for CP/M'83 East

Because exhibition space is limited, companies interested in CP/M'83 East and individuals who wish to attend this major computer industry event are urged to call or write Northeast Expositions as soon as possible for complete details. Northeast Expositions can be reached at 824 Boylston Street, Chestnut Hill, MA 02167, phone 617-739-2000. Plan now for CP/M'83 East!

products

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portable assembly language for system programmers. And Pascal is an academic-oriented language for writing well-structured programs."

CP/M-68K

CP/M-68K, designed for the Motorola MC68000 microprocessor, also is now available from Digital Research. "Significantly, this is the first in a series of operating system products to include a C compiler and a C run-time library," said Product Manager Steve Williams.

Using the C language, which DRI has identified as the vehicle for portability in the 1980s, ISVs are able to write programs that can be ported across different operating systems in the CP/M family. Using C also provides a bridge from CP/M-86 to UNIX.

The new CP/M-68K product is a high performance, single user, single tasking operating system which is easy to use and learn, and especially suited for business applications.

A number of software tools are included in the CP/M-68K package: the C compiler and C run-time library; an assembler that supports the MC68000 assembly language; a linker; an object module librarian; a relocation utility and a number of other tools.

Bill Tyler, CP/M-68K project manager, pointed out that the new operating system gives the ISV complete access to the advanced features of the MC68000.

support

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duct, based on our products, is on the market."

In the future, Hug added, the Technical Support group will be exploring new possibilities for getting timely, accurate information to all ISVs, and to DRI product users in general. For now, Technical Support has put in operation a set of support services designed specifically to assist ISVs. Software authors are encouraged to call or write DRI Customer Service, Post Office Box 579, Pacific Grove, CA 93950; (408)649-5500

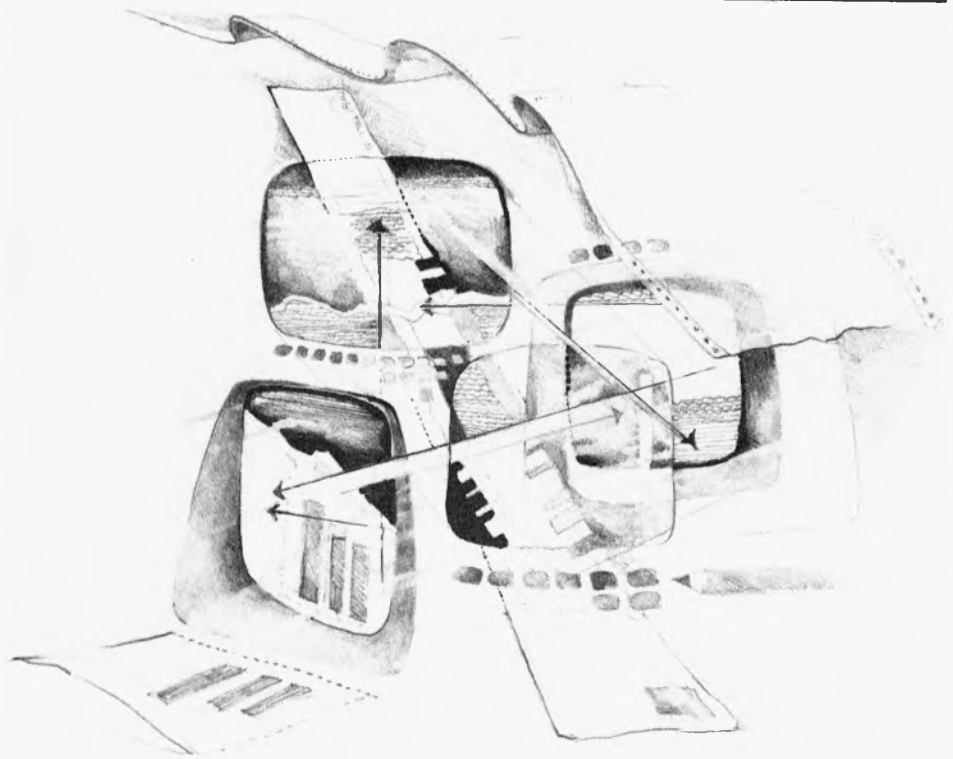
ISVs can do 4 tasks at once with Concurrent

Additional hardware OEMs now offer Concurrent CP/M to users of their microcomputers, according to Kevin Wandryk, DRI product marketing manager for operating systems. "Although we have previously announced that a number of major OEMs have chosen to provide Concurrent CP/M," Wandryk said, "we can now add even more microcomputer manufacturers to the list. And as more manufacturers choose to support Concurrent CP/M, more opportunities become available to software authors."

While DRI first offered Concurrent CP/M in a version for the IBM PC, the "generic" Concurrent product is now provided to OEMs in the form of a basic 8" disk and supporting documentation, which is then customized by the hardware manufacturer. Wandryk listed Fujitsu, Texas Instruments, Vector Graphic, MAD Computers, NCR, Corona Data Systems and Eagle Computer as among the more than 20 OEMs supporting Concurrent CP/M.

"A sizeable group of hardware manufacturers stand behind this product," Wandryk added, "which means that there are good opportunities for ISVs to write more powerful software and find markets for it. ISVs can take advantage of the multitasking and other extended features of Concurrent CP/M to produce sophisticated programs."

Concurrent CP/M, compatible with



CP/M-86 and MP/M-86, allows users to do up to four tasks at a time -- edit a document, print another document; jump a graphic to a plotter and receive electronic mail, for instance -- thereby making better use of the power of a 16-bit microcomputer.

"An operating system that uses concurrency," explains Gordon E. Eubanks Jr., director of DRI's Commercial Systems Division, "will permit programs to synchronize with

each other and to exchange data in memory. An example would be an accounting system in which orders entered would reflect in the accounts receivable as well as the inventory records. The program could be monitoring for low inventory levels and provide warning to the user, while another maintained current status on sales volume, etc."

For programmers, Concurrent CP/M features queues that allow processors running on separate virtual consoles to communicate with each other, leading toward integrated programs. "We'll be happy to help ISVs make use of the capabilities of Concurrent CP/M," Wandryk said, "and will keep ISVs up to date through the Forum on the growing number of OEMs who will be granting design wins to the product."

Use of interrupt vectors explained

As always, Digital Research has provided complete portability between single user CP/M-86 and Concurrent CP/M for applications relying solely on BDOS calls. However, ISVs who use the IBM ROM BIOS in development under CP/M-86 will need to consider how Concurrent differs in using interrupt vectors.

Because Concurrent initializes all of the 256 interrupt vectors in low memory to point to routines in its XIOS, ISVs who intend to use software interrupts to execute ROM routines must first address the vectors to the ROM entry points, then restore

them to the original values after use of the ROM code.

But be forewarned! Indiscriminate use of printer or disk routines in ROM can destroy disk contents or printer listings because these routines bypass operating system multitasking safeguards.

For a further discussion of this along with a program listing that demonstrates the use of the ROM routines in the new IBM PC from Concurrent CP/M-86 V1.0 (IBM PC), contact DRI Technical Support to obtain the Application Note entitled "Using the IBM PC ROM BIOS under CCP/M-86."

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Digital Research's seminars for ISVs hit the road; others are planned

"The seminar greatly strengthened my confidence in trusting Digital Research to provide the source for my operating system and language tools into the foreseeable future."

ISVs learned where the opportunities for writing applications exist and how they can use Digital Research products to write those needed packages in a series of regional seminars presented by DRI in March.

At one-day sessions in Atlanta, Newark and Boston, ISVs heard market advice; saw demonstrations of Concurrent CP/M, GSX, Access Manager and Display Manager; and received information on other products for their use.

Keynote speaker was Gordon Eubanks Jr., director of DRI's Commercial Systems Division. Eubanks told seminar participants there were many areas for developing applica-

"... well organized and professional ..."

"... enjoyed the graphics presentations especially ..."

tions for the vertical market, but ISVs should be sure to know the specific industry well. He advised them to consider the fast-developing 16-bit market as well as the new graphics

applications which they could add to enhance their own packages or use to develop new business applications.

DRI staff has scheduled additional seminars for ISVs this summer in Boston and Chicago. ISVs who

"... well worth the time and expense ..."

"... an excellent dollar value ..."

receive the Forum will be mailed an invitation in the near future. Responding to comments from ISVs who attended the March sessions, the next series will be longer and more intensely technical, will feature an intense marketing and technical focus on the utilization of Concurrent, graphics, Access Manager and Display Manager in end user applications.

"These seminars around the country are a way we can keep in touch with ISVs," said Eubanks. "It's two-way communication in which, together, we can define the problems and then find the solutions. In addition, the sessions are an opportunity to update ISVs on our product strategy and market direction."

European seminar attracts 500 ISVs

On April 21, the first of a planned series of ISV seminars for European software authors was presented at the Cafe Royal, a major seminar center in the heart of London. According to Howard Kornstein, manager of European technical support for Digital Research, the seminar was "the first of its type ever offered in Europe," and was intended to provide an overview of some of the key issues in microcomputing as well as a closer look at some of DRI's new products.

More than 500 ISVs, largely from the United Kingdom, attended this first overseas DRI seminar. Kornstein was pleased at the interest shown by European software authors, and promised that more European ISV seminars would follow, both in the United Kingdom and on the continent. "Right now we are planning to present a June ISV seminar in Germany," he said. "Although these seminars provide us with exposure for our products, their more important intent is to educate and inform, to support independent software vendors in any way we can. That's always been Digital Research's policy -- a policy we're now extending to European software writers."

Sponsor of the London ISV seminar was the European headquarters of DRI, located in Newbury, England, now serving DRI customers directly in Northern, Central and Southern Europe. A branch office for Central Europe is in Munich and a Southern Europe office is planned.

 **DIGITAL RESEARCH™**

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