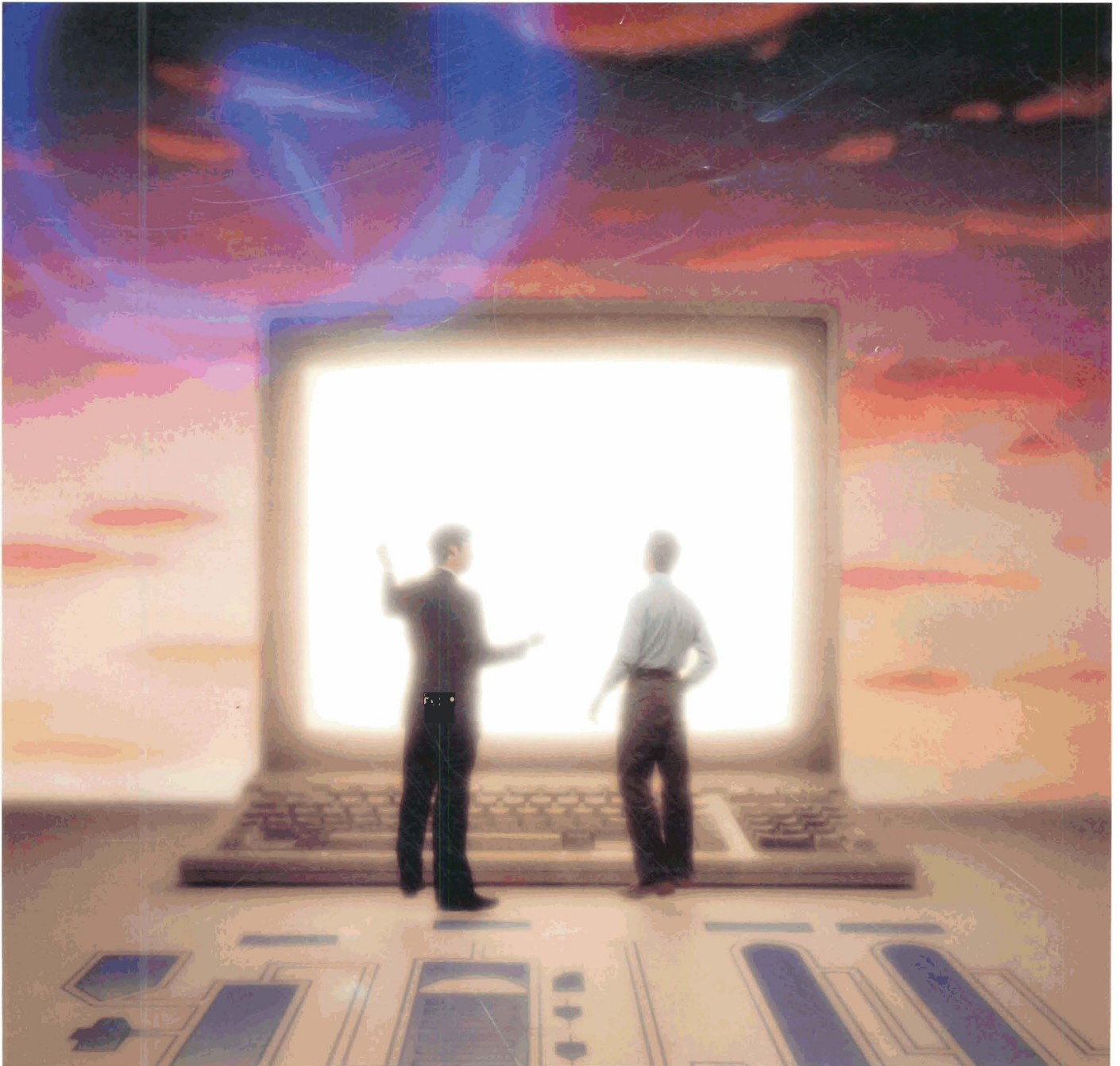


HEWLETT - PACKARD

# UPDATE

COMPUTER SYSTEMS FROM HP

OCTOBER / NOVEMBER 1990



**COVER STORY ON PAGE 7:**

The goal of HP's **OpenCIM** strategy is to integrate information **enterprise-wide**—from product development through production, distribution, sales, and delivery. HP's **OpenCIM** strategy is our implementation for **manufacturers** of HP **NewWave** Computing.

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## Increase office productivity with the HP LaserJet IIIID printer

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High paper capacity, low cost per page, high duty cycle (20,000 pages/month), fast graphics, more fonts, more RAM, one year on-site warranty, and a variety of sharing options make the HP LaserJet IIIID printer a great productivity tool for your office. You can print up to eight pages per minute, reducing wait time. And with two 200-sheet paper trays for added paper handling flexibility and increased input capacity, the HP LaserJet IIIID printer is ideal for a shared environment.

### Two-sided printing is cost efficient

Two-sided printing gives you more professional looking documents, uses paper more efficiently, reduces the thickness of documents, and saves filing space and postage fees. An optional envelope feeder provides convenient and easy envelope printing, without interfering with one of the other input trays.

### Sharp text and graphics for your documents

Resolution Enhancement technology provides highly readable text and graphics by removing jagged edges typically found in 300-dpi printing. Your memos, letters, and proposals have maximum impact because they look crisp, sharp, and professional.



**Scalable typefaces are built in**

The HP LaserJet IIID printer features internal CG Times and Univers scalable typeface families. Treatments include medium, bold, italic, and bold italic. Typefaces are scalable from .25 point to 999.75 points in .25-point increments. And because the scalable typefaces are built in, they do not consume as much PC memory or PC disk space, are easier to use, cost less, and require less printer memory. The HP LaserJet IIID printer scalable typefaces are compatible with those in the HP LaserJet III printer. Existing font cartridges, soft fonts, and scalable typefaces work with the HP LaserJet IIID printer.

The PCL 5 printer language adds power while maintaining HP LaserJet printer compatibility. You can use existing software or update drivers and applications to take advantage of PCL 5 printer language power, such as multiple print directions per page,

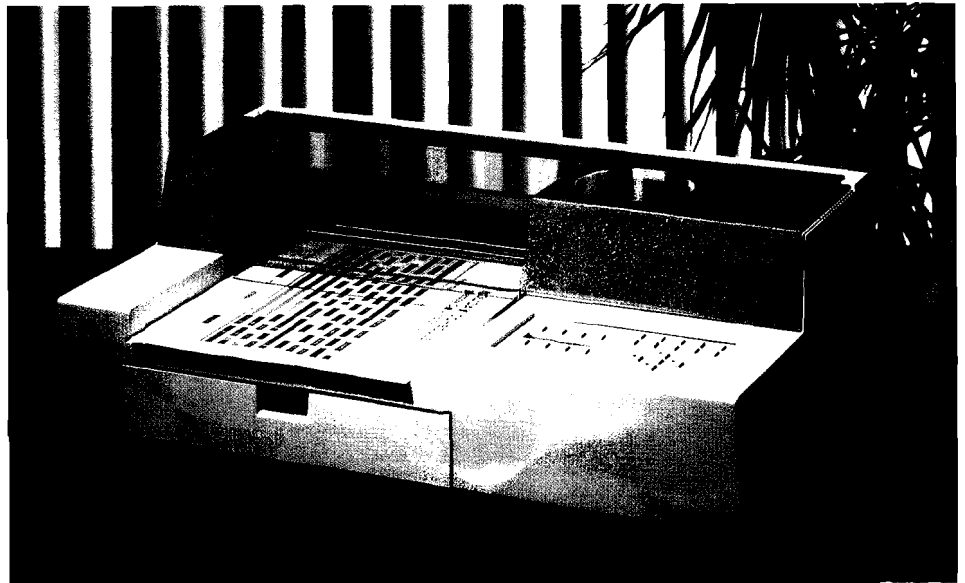
white-on-black printing, HP-GL/2 vector graphics, arbitrary rotation of text and graphics, patterned fonts, and mirrored text.

With two memory slots, 1, 2, 3, or 4 Mbytes of memory can be added to the 1-Mbyte built-in memory.

*For more information, check **A** on the HP Reply Card.*



*Resolution Enhancement, scalable typefaces, high paper capacity, duplex printing, and PCL 5 printer language with HP-GL/2 graphics are some of the features of the HP LaserJet IIID printer.*



*Create quality color output faster with the HP 7550 Plus plotter.*

**HP 7550 Plus plotter is fast and convenient**

The HP 7550 Plus, HP's new top of the line desktop graphics plotter is a fast and cost-effective color plotter for business and technical environments. In addition to the smooth lines, solid fills, and brilliant overhead-transparency colors you expect with an HP plotter, the HP 7550 Plus plotter's throughput improvements and memory board options significantly reduce plotting time. For high-volume individual use, or work done in a shared environment, the increased speed and improved automatic sheet-feed feature of the HP 7550 Plus plotter can improve your productivity.

**HP-GL/2 provides faster plotting through data compaction**

Built-in intelligence features include pen-sorting and pen-grouping algorithms, and a curved-line generator for smoother circles, arcs, and freehand curves. HP-GL/2, HP's new graphics standard that includes compressed files, an extended instruction set, and compatibility with the large-format family, is fully implemented. The HP 7550 Plus plotter also maintains full software compatibility with the HP 7550A (HP-GL) through emulation.

**Eavesdrop feature for workstations**

The HP 7550 Plus plotter is available in Centronics and HP-IB versions with serial compatibility. The HP-IB configuration includes an eavesdrop function that allows workstation users to use a plotter that is connected between their terminal and the mainframe or minicomputer.

*For more information about the HP color desktop plotter family, check **B** on the HP Reply Card.*

**HP Computer Museum**  
**[www.hpmuseum.net](http://www.hpmuseum.net)**

**For research and education purposes only.**

## HP DeskJet 500 printer—affordable, quality printing

With the HP DeskJet 500 printer, HP improves the print quality, adds internal fonts, new font cartridges, and implements scalable fonts at an affordable price. And a three-year limited warranty covers the HP DeskJet 500 printer, the longest warranty in the industry. The HP DeskJet 500 printer also offers kerning capability, which improves the spacing of the printer's proportionally spaced typeface.

### More built-in fonts

The new built-in fonts allow you to create professional-looking documents. These fonts include: kerned CG Times 6- and 12-point, Letter Gothic 6-, 12-, and 24-pitch, and the original portrait and landscape Courier fonts. Four new optional portrait font cartridges have kerned type and are affordably priced.

### Compatibility with software and hardware

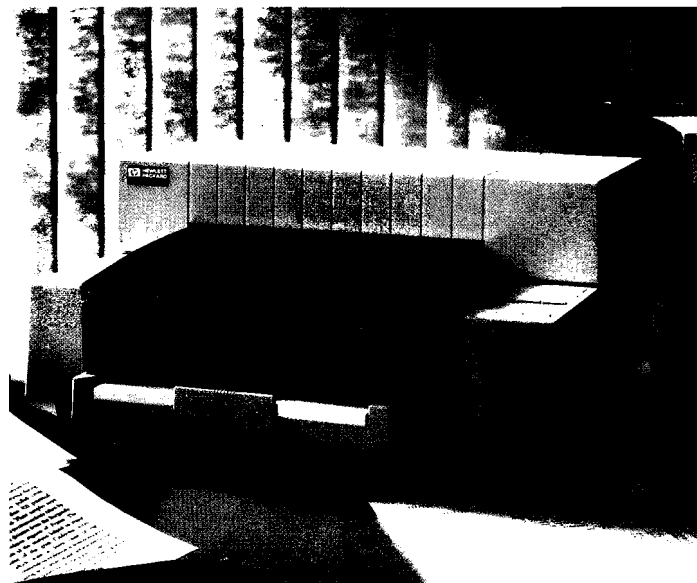
The HP DeskJet 500 printer is 100% compatible with both the HP DeskJet and DeskJet PLUS printers so it already works with all popular software. More than 600 software applications include drivers for the HP DeskJet printer family. You need new drivers only when using new font cartridges so your font investments are protected. All the HP DeskJet family printer font cartridges and soft fonts are compatible, including the HP 22707F Epson FX-80 and HP 22707P IBM Proprinter III emulation cartridges.

New water-resistant ink gives documents superior print quality that lasts through handling. Print resists smearing from highlighting, wet hands, and water droplets.

With a new printer driver developed for the HP DeskJet 500 printer, you have scalable font capability, true WYSIWYG (what you see is what you get), and real landscape with Microsoft® Windows 3.0.

*For more information, check C on the HP Reply Card.*

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*HP's most affordable 300 dpi printer is the new HP DeskJet 500 printer.*

## Notables

### New utility analyzes LAN traffic

- A new utility is now included with the HP 18221A TCP/IP protocol interpreter for the HP 4972A LAN protocol analyzer. The new utility analyzes traffic on the LAN and automatically identifies duplicate Internet addresses, so network managers can diagnose and correct this common problem before serious addressing conflicts occur. Check **D**.

### New release of MPE XL has enhancements to node manager

- Release 2.2 of the MPE XL operating system contains several enhancements to the node management configuration manager (NMMGR), the software tool used to configure MPE XL networking products. The time and complexity necessary for MPE XL link configuration has been reduced, and configuration reliability has been improved. There is a new backup facility, and a reduction in the number of screens used to create a working configuration. Other enhancements include an increased number of default values, and an improved help function.

### Uniplex business software now available from HP

- Uniplex Business Software is HP's preferred host-based, UNIX Integrated Office System solution. It compliments the client/server-based HP NewWave Office by providing comparable terminal/host-based functionality and capabilities. HP OpenMail provides a common communications service between these terminal/host and client/server environments and offers you a migration path from terminal/host to client/server configurations. Uniplex provides you with a migration path from your existing terminal/host configurations to client/server configurations, and has word processing, spreadsheet, database management, and graphics capabilities in addition to OpenMail electronic mail. Check **E**.

*(continued on page 8)*

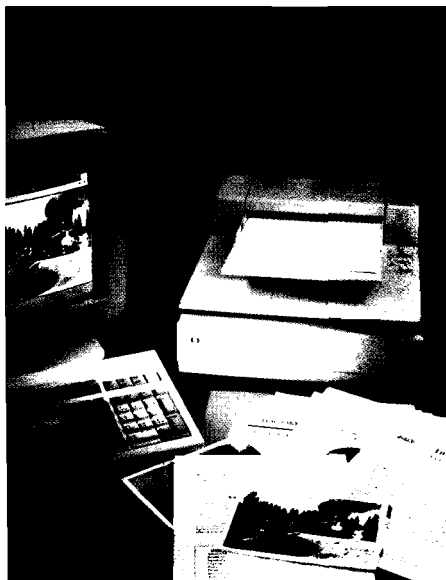
## Enhancements for the HP ScanJet Plus scanner

The HP ScanJet Plus desktop scanner gives office professionals a more effective and efficient way to do their work. This 8-bit scanner with 256 levels of gray provides high-quality image capabilities. Enhanced functionality simplifies the incorporation of images into documents.

For AT-compatible and MicroChannel (MCA) PCs, the new imaging capabilities are offered in HP Scanning Gallery Plus 5.0, the latest version of the image-scanning software that comes with the HP ScanJet Plus interface kit. Similar capabilities are offered for the Apple Macintosh in HP Desk Gallery Plus software included in the Macintosh interface kit.

### Added control and ease of use

Automatic Exposure, the key image-scanning addition to the software, ensures easy capture of high-quality images by allowing automatic selection of the optimum exposure for an image (similar to a point-and-shoot camera).



*Add impact to your documents through the power of images with the HP ScanJet Plus scanner.*

Live Preview allows you to view changes made to scanned images. You select portions of a picture to scan, change the halftone pattern, set the exposure, and see the changes on your computer screen immediately.

Samples Print, an HP Scanning Gallery Plus 5.0 feature for AT-compatible and MicroChannel PCs, provides added control of the image-capture process by enabling you to obtain a halftone proof sheet so you can select the best graphic setting for your printer. And the Grayscale Image Editor gives you the ability to edit grayscale images.

*For more information, check **F** on the HP Reply Card.*

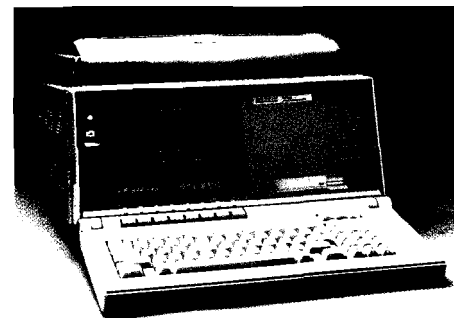
## Expedite troubleshooting on Ethernet networks

By decoding the protocol headers used by Novell's NetWare network operating system, the HP 18227A NetWare protocol interpreter, an application for the HP 4972A LAN protocol analyzer, makes conversations easy to follow and helps identify problems. Errored fields are highlighted by the application, and reply frames are matched with the requests.

The HP 4972A, a protocol analyzer for Ethernet, IEEE 802.3 and StarLAN networks, has features that help to resolve networking problems and optimize system configurations. Protocol interpreters enhance the analysis capabilities of the HP 4972A by presenting protocol header information in a full-text, easily understood format.

The HP 18227A interprets the NetWare Core Protocol (NCP), and network and transport layer protocols, such as interpacket exchange (IPX), sequenced packet exchange (SPX), echo, error, and routing information protocol (RIP).

*For more information, check **G** on the HP Reply Card.*



*Protocol interpreter applications for TCP/IP, DECnet, NFS, XNS, ISO, and now Novell's NetWare make the HP 4972A a vital testing tool for network managers of large multivendor Ethernet LANs.*

## Multivendor connectivity expands for 900 Series HP 3000 systems

HP is further enhancing capabilities for multivendor connectivity on the 900 Series HP 3000 by providing industry-standard ARPA services, and by providing SNA distribution services for electronic mail integration with IBM. These enhancements increase resource availability throughout your entire organization, and ensure investment protection for your HP 3000 system.

HP ARPA Services/XL (ARPAIXL), are products that provide multivendor connectivity on the 900 Series HP 3000 over both local area networks (LAN) and X.25 wide area networks (WAN). The HP ARPA File Transfer Protocol (FTP) provides an easy method for transferring files between vendors' systems. This service requires the ThinLAN 3000/XL Network Link or DTCIX.25 XL Network Link products. The ThinLAN/XL product has been enhanced to support Ethernet. The ARPA Telnet service facilitates logging on remotely between the 900 Series HP 3000 and other HP and non-HP computers

### Electronic mail integration with IBM

You can improve your corporate communications with HP SNA Distribution Services/XL (SNADSIXL). With HPSNADSIXL, users on HP 3000 systems can exchange electronic messages between HP DeskManager and IBM OfficeVision/MVS (DISOSS).

HP ARPA FTP, Ethernet connectivity, and HPSNADSIXL are available on Release 2.2 of MPE XL. HP ARPA Telnet service will be available next year.

## HP Sockets—a new level of software application integration

Imagine what your company could achieve if all of your employees at every level of your business had immediate access to the most current information required to do their jobs. Your production department would have immediate access to the latest product designs, and your design engineers would have up-to-date production information.

With HP Sockets, your existing software applications can be linked together to automatically exchange data, with minimal or no modifications to the applications.

### Data manipulation without degrading interface performance

HP Sockets gives you an incremental, supportable method of building integrated systems out of new and existing software applications. With HP Sockets, no application is forced to encode any specific information about any other application, so a change to one application does not necessitate changes to the applications that it communicates with. The integration environment adapts to the applications without degrading interface performance.

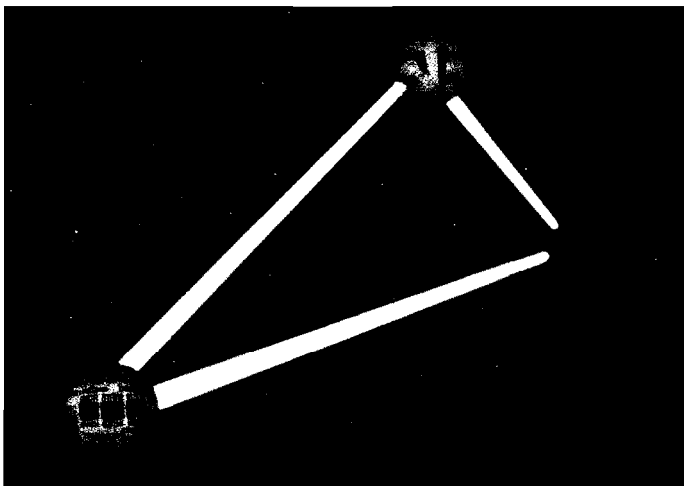
### The right data in the right format—automatically

HP Sockets includes both comprehensive data communications capabilities and process control. These provide for reliable, high-speed, automatic exchanging of data so you get the right data in the right format, to the right place—automatically—and on time.

HP Sockets provides administration across the network. You can start up or shut down communications across the network from one command issued at an administration node. Startup and shutdown can be total or partial, and done so that there are no lost messages. Administration is protected with password control and can be moved to predefined alternate nodes to prevent a single failure point.

HP Sockets is in use at sites inside Hewlett-Packard, and is accepted by a number of HP's software solution providers. It is the foundation technology for HP's OpenCLI strategy (see article on facing page). HP Sockets runs today on HP-UX computers and subsequent releases will support the HP MPE XL operating system. HP Sockets is available in a number of configurations based on the number of software processes being integrated, ranging from 4 to 96.

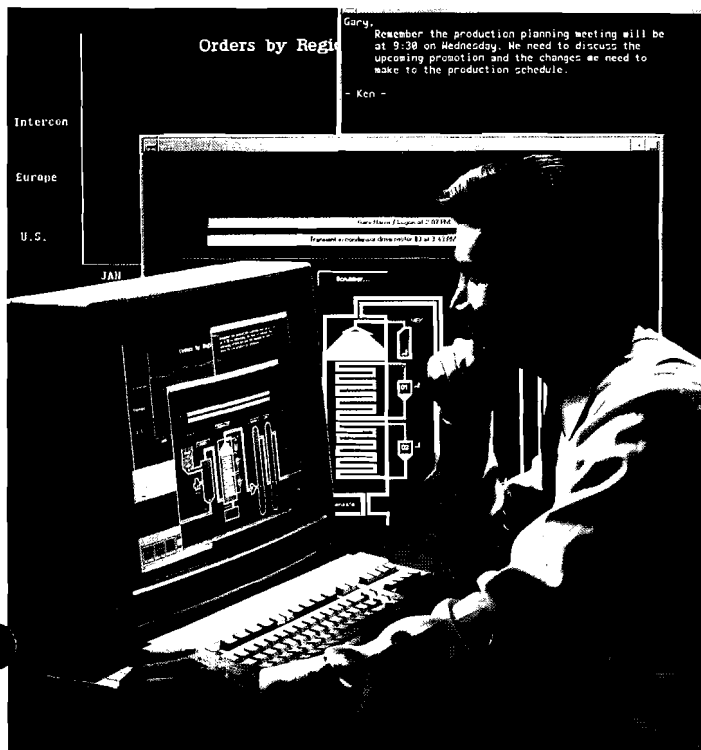
*For more information, check H on the HP Reply Card.*



*With HP Sockets, software applications from various vendors can exchange data between software applications from other vendors without requiring the alteration of either the data structures or logic of the specific application.*



# HP's OpenCIM strategy for manufacturers



*HP has successfully implemented CIM systems for manufacturers worldwide, tailoring CIM solutions to meet specific manufacturing needs.*

## Move into an open, standards-based CIM environment by building on your existing applications

At HP, we approach CIM differently from our competitors. We believe CIM must build on the manufacturing management foundation that your company has already established, so you don't have to start over. You can move into an open, standards-based CIM environment by building on and adding to your existing applications, whether or not they were originally designed to work together. Our strategy protects the investments you've already made—and those you'll make in the future. Our new product, HP Sockets, was developed to integrate existing CIM solutions you have already installed (see article on facing page).

## We focus on you at each step

We know that no two manufacturers are alike, so the same solution won't be right for everyone. That's why we thoroughly analyze your operations and information flow, identify opportunities for improvement, and quantify the benefits CIM can offer you. Then we bring together the best solutions to meet your needs, keeping your development costs and implementation time to a minimum. Our approach to CIM is open, modular, scalable, and practical.

## HP support makes it work for you

Delivery, implementation, and support are critical elements in HP's OpenCIM strategy. Our global support network, our industry-specific centers of expertise, and our alliances with value-added businesses, consultants, and systems integrators guarantee the service and support you need to make your CIM solutions work for you.

*For more information about HP's OpenCIM strategy, check 1 on the HP Reply Card.*

## Integration across the enterprise

Time is the essence of manufacturing competitiveness. The key to manufacturing leadership and success is the recognition that time requirements must be reduced to produce a real competitive advantage. That is why the goal of HP's OpenCIM strategy is to integrate information enterprisewide—from product development through production, distribution, sales, and delivery.

HP's goal is to help you balance cost, quality, features, and availability, while shortening development, manufacturing, and delivery cycles. You make better, faster decisions because you have access to integrated information.

You have heard the promise of computer-integrated manufacturing (CIM): great strides in product and process design, dramatic improvements in productivity on the manufacturing floor, unprecedented efficiency in marketing, sales support, and other business functions. CIM promises to slash the time it takes to bring your customers the products they demand. In reality, however, CIM rarely extends beyond the factory floor, and the major promise, providing you with major, quantifiable improvements in time-based competitiveness, looms beyond the horizon.

In our own operations, and in manufacturing companies worldwide, Hewlett-Packard is bringing the promise of CIM within reach. In HP's OpenCIM strategy, CIM solutions are designed to meet the specific needs of companies like yours. HP's OpenCIM strategy is the implementation for manufacturers of HP NewWave Computing, which is leading the industry trend toward open, cooperative computing.





HEAD skis are designed by craftsmen who use HP workstations.

## HEAD stays in front with HP workstations

HEAD, one of the largest European manufacturers of sports equipment, stays ahead of the competition for skis, tennis rackets, and athletic shoes with Hewlett-Packard workstations and Pytha and VICAM Atom software. Located near Bregenz, Austria, HEAD manufactures 700,000 pairs of skis and a million pairs of athletic shoes annually, plus 5,000 tennis rackets a day. Founder Howard Head, an aviation engineer, developed the first "sandwiched" light alloy ski in 1947, when skis were built only of wood.

Today, HEAD skis are built with wood laminates, reinforced with graphite fiber resins and aluminum alloy, and designed by HEAD designers and craftsmen who use Hewlett-Packard workstations

While it once was acceptable to develop an idea in a year or more, a new tennis racket today must evolve from an idea to a finished product within three-to-four months. "The time-to-market variable exerts enormous pressure on manufacturers of sports equipment," says Peter Stangl, managing director of HEAD. That's why HEAD chose HP workstations and CAD software for its ski, tennis, and athletic shoe divisions.

Eight HEAD designers design tennis rackets and skis with HP 9000 Series 300 CAD workstations, CAD software, HP plotters (A3), and HP ME 10 design packages. Pytha 3D software running on HP workstations can change structures and colors before HEAD products are manufactured. Designers view designs on their workstation screens from all angles and perspectives and assess colors, saving design and production time. Sports shoe designers use VICAM Atom software with HP workstations to help craftsmen operate cutting plotters.

HEAD craftsmen use HP workstations to control systems that mill heatable steel molds to make tennis rackets, drill holes, and shape wooden cores for skis. They use HP 9000 Series 800 workstations for production planning and marketing analysis, and HP Vectra PCs for office automation.

(continued from page 4)

### HP OpenMail updated

- Release 1.1 of HP OpenMail/UX will be shipping before the end of the year. New features include: integration with HP NewWave Mail, enabling OpenMail to be used in the HP NewWave environment; a gateway to HP OfficeFax—allowing you to quickly, easily, and cost-effectively communicate with anyone in the facsimile network without leaving your desks; and integration with KEYpak, the document conversion product from Keyword that enables you to convert and browse files from over 23 applications. Check J.

### HP DTC Device Access/ARPA software for HP 9000 systems

- HP DTC Device Access/ARPA software (PIN D2355A Options AAO and AA1) runs on HP 9000 systems and provides two major improvements for the usage of network resources: a transparent interface to HP-UX spooler that allows multiple, networked HP 9000 systems to share a printer attached to a DTC48/9000 on the same LAN segment; and the capability of writing customized applications to access DTC48/9000 devices, through the availability of a library of function calls. Benefits include additional security, supportability, and reliability features, as well as the cost-effectiveness and efficiency of resource sharing.

Hewlett-Packard Company

UPDATE

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