# HP CHANNELS

**HP unveils new electrostatic plotters**
**HP 7600 Series, Models 240D and 240E**

HEWLETT
PACKARD

# HP CHANNELS

*HP Channels* is published monthly for Hewlett-Packard's value-added businesses to provide you with information about HP's products and services to help you be more successful.

For further information on any of the products and services discussed in *HP Channels,* please contact your HP sales rep.

**See back cover for subscription information.**

*Note: Not all HP computer products are sold and supported in all countries. Please check with your local HP sales office.*

*On the cover*

# HP CHANNELS

The HP family of drafting plotters now includes two new members – the HP 7600 Series plotters, Models 240D and 240E. These new plotters are targeted at high-volume CAD users generating 25 or more plots per day, or any user in an application requiring complex images or large amounts of area fill. See articles beginning on page 26.

# Table of Contents

# HP Computer Museum
[www.hpmuseum.net](www.hpmuseum.net)

**For research and education purposes only.**

# HP's tools and utilities suppliers supported through factory Foundation Software Program

Effective May 1, 1988, qualified "tools and utility" software suppliers will be supported through factory Foundation Software Programs. In early November, all HP value-added channel sales reps received information on how to turn these accounts over to the factory for support. Over 30 accounts have now been qualified for this new program. The goal of the Foundation Software Program is to improve the support of vendors who supply key tool and/or utility software to HP's end-user customers.

**Foundation Software Program – which accounts qualify?**

Foundation Software is a new term that replaces "tools and utilities." As such, Foundation Software collectively refers to all software other than vertical market applications, including: information management software, application development tools, system management software, and other software that is used by customers in all industries.

Accounts that qualify for this program must be Referenced HP Plus Software Suppliers whose main focus is on the sale of foundation software.

**Factory support means. . .**

All accounts that are accepted by the factory will be assigned to an account manager. Benefits of this to the account include improved direction from a central source to help accounts plan their future and position existing products. In addition. the factory account manager will be responsible for promoting the HP Plus Program features (listing in Solutions Catalogs, demo development system discounts, etc.).

**How to join the program**

If you are a Referenced HP Plus Software Supplier for the above software products, and have *not* received information on this program, please contact the appropriate HP person listed to the right.

**HP 3000 Foundation Software Suppliers Contact**

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**HP 9000/HP 1000 Foundation Software Suppliers Contact**

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# Enhanced HP policy announced for referencing value-added reseller's and software supplier's solutions

In an ongoing effort to recognize high-quality value-added resellers (VARs) and software suppliers, Hewlett-Packard has made changes in its Referenced Software Program. The following is an overview of these important changes.

**Obtaining referenced status for VARs and software suppliers**

Value-added resellers are now included with software suppliers in the Referenced Software Program. To become referenced. products must receive high ratings from six end-user references. Evaluation criteria includes questions regarding technical attributes and vendor support.

Products that receive referenced status are eligible for additional marketing program benefits. Some of the benefits are bundled financing, participation in the trade show loaner program, application note production, and many more. In order to ensure continued participation in these programs, VARs must reference their products before August 1, 1988.

**Extended referenced status**

VARs and software suppliers who successfully reference two software products will now have the referenced status extended to all of their products.

**Referenced software program changes**

The only exceptions to this rule are software products licensed from another vendor. Each licensed product must go through the complete referencing process.

**Maintaining referenced status**

To maintain the high quality of the program, VARs and software suppliers will rereference their products every two years. HP will notify companies and their HP sales rep in advance when product rereferencing is required. Re-referencing forms will automatically be sent to companies to start the process.

Rereferencing will involve two of the company's products, which will be selected by HP. The products to be re-referenced will consist of a previously referenced product, and if applicable, a new product. Three end-user evaluations will be submitted per product. If VARs or software suppliers have only one product, six references will be submitted to rereference that product.

Commercial VARs and software suppliers should have received a letter from HP in May regarding the changes in the Referenced Software program. Technical VARs and software suppliers will soon be receiving a letter from HP discussing the program. We're looking forward to granting referenced status to many more high-quality products. For more information on the new referencing procedures. call your HP sales rep.

**Correction**
The Partners with HP article in the April issue of HP Channels entitled, "VAB migration to HP Precision Architecture – a success," incorrectly referenced the vendor of The SPLash! Compiler with the company name of SPLASH. The actual name of this company is Software Research Northwest. Inc.

We apologize for any confusion this may have caused.

## Customer Support

*General*

# New HP OSI products at ENE'88i

On June 6-8 at the Enterprise Networking Event '88 International (ENE'88i) in Baltimore, Maryland. HP will demonstrate and display its newest products for its industry-standard Open Systems Interconnection (OSI) program. Responding to the need of Fortune 1000 companies to connect multivendor computer systems and devices throughout the business enterprise, HP is unveiling seven new OSI networking products and capabilities based on the X.400 electronic message-handling standard and the Manufacturing Automation Protocol (MAP) 3.0 standard for factory communications.

ENE'88i, as the event is known, will involve more than 40 computer vendors, many of which will join in a huge, combined multivendor demonstration showing applications of OSI-based products for global communications in the business office, manufacturing, and engineering environments. HP's presence at ENE'88i will be impressive. John Young will give the keynote address and HP will present numerous technical and management papers. HP will participate in the TRW booth, the COS (Corporation for Open Systems) booth, as well as in an HP booth.

Using HP's new X.400 software. visitors at ENE'88i will be able to interface to HP DeskManager, exchanging electronic mail with users of DEC, IBM, and other multivendor electronic-mail systems supporting the X.400 standard. Business people and executives will see first-hand how they can effectively communicate across the globe with international standard networking.

Visitors to the event will also see HP 9000 Series 800 systems communicating using another international standard, MAP 3.0. With MAP 3.0, HP 9000 Series 800 systems communicate with factory floor devices which also support the MAP 3.0 standard – from PLCs, to robots. to vision systems. MAP 3.0 also provides for file transfer and remote file access among HP 9000 Series 800 systems and other vendors' computer systems that support MAP 3.0. With MAP 3.0, users can create networks of computers and shop floor devices from many vendors with an ease previously found only with single-vendor solutions.

HP welcomes you to a new era of multivendor interoperability through OSI products.

*Training*

# New Customer Service Training registration channel

Effective May 1, 1988, U.S. and Canadian users interested in attending HP hardware service training can register for courses by calling the Hewlett-Packard Central Registration Center (CRC) via the toll-free 800-247-3382 (800-2HP-EDUC) number. International users should continue to register for courses via their HP sales rep or through the training registrar located in the nearest HP sales office.

*Training*

# HP offers systems and standalone peripheral service training

Hewlett-Packard Customer Service Training (CST) provides service (maintenance) training on a host of HP systems and standalone peripherals. Maintenance training for the HP 7906, 7907. 7908. 7936/37, and 7957/58 disc drives and the HP 7970B, 7978A mag tape units are just a few of the current CST offerings.

For a complete list of systems and standalone peripheral service training curriculum, course descriptions, and prices, please contact HP Customer Service Training at 415-691-5300/5905.

*Training*

# HP LaserJet printer service training schedule update

Hewlett-Packard Customer Service Training is making available the following HP LaserJet printer service (maintenance) training schedule for the remainder of 1988.

**Ordering information**

| Course number | Description | Length (days) |
|---|---|---|
| 50042A | Enhanced HP LaserJet Printers Service Training | |
| Opt. 001 | HP 2686A/D/500 Plus LaserJet printer | 5 |
| Opt 002 | HP 33440A LaserJet printer | 4 |
| Opt 003 | HP 2686A/D/500 Plus and HP 33440A LaserJet printers | 7 |

**Locations**

*Mt. View, California*
– July 6
– August 8
– September 12
– October 24
– November 7
– December 5

*Dallas, Texas*
– August 1
– October 17

■ *Rockville, Maryland*
– August 15
– October 3
– December 5

To register for the course, please contact HP Central Registration Center at 800-247-3382. For additional course information, please contact Customer Service Training at 415-691-5300/5905.

## Business Computers

### General
# More peripherals supported on MPE XL 1.0

Effective immediately, 14 more peripherals are supported on MPE XL version 1.O. Hewlett-Packard announces support for the cached versions of the HP 7933 and HP 7935 disc drives. serial versions of the HP 256X family, the HP LaserJet printer family, the HP Rugged-Writer 480 printer, and two of the HP 700 Series display terminals. Also supported are members of the HP Vectra PC family – the HP Portable Vectra CS, Vectra CS, ES, and ES/12 PCs.

With these recent additions. MPE XL 1.0 now supports 35 peripherals. Current MPE XL release 1.0 peripheral support is summarized below.

| Product | Product number |
|---|---|
| Disc drives | HP 7933H, 7935H, 7937H, 7933XP, 7935XP |
| Tape drives | HP 7974A, 7978A/B |
| HP-IB printers | HP 2565A, 2566A/B, 2680A, 2688A, 2563B, 2564B, 2567B |
| Serial printers | HP 2934A, 2686A/D, 2563B, 2564B, 2684A/D/P, 33440A, 2235A/B/C/D |
| Terminals | HP 2392A, 2393A, 2394A, 2397A, 2622A, 2624B, 2627A, 700192, 700/94, HP 150. HP Vectra PC. HP Vectra CS PC. HP Vectra ES and ES/12 PCs, HP Portable PLUS. HP Portable Vectra CS PC |

*Note:* HP 2627A with ROM 1818-3487 or later
HP 26248 with ROM 3139 or Later
HP 2622A with ROM 3199 or later
HP Vectra PC with AdvanceLink
HP Portable PLUS with Reflection

### Small Business Computing
# New HP 260 communication channels in place

If you as an HP 260 value-added reseller or software supplier always wanted to know more about: I) how to get the most out of the HP 260 – enhancements. features, tips. and tricks, 2) marketing programs that help to increase business, and 3) available services from our JOIN/3000 Migration Center, then we have the answer.

- The *HP* 260 *VAR* Newsletter

   The *HP* 260 Technical Newsletter

The *HP* 260 *VAR* Newsletter (formerly the Communicator) contains relevant information about the HP 260; from new features and products, to Application Engineering, Marketing Programs. Market Information, VAR Comer, and will end with "The Future." The *HP* 260 *VAR Newsletter* will be published approximately twice a year. The first edition is currently being distributed.

The *HP* 260 Technical Newsletter will deal with important technical information in areas such as:

- How to connect, use, and demonstrate HP 260-supported hardware and software

   Programming for maximum performance – tips and tricks

   Operating System and Software Status

The *HP* 260 Technical Newsletter is targeted towards technical specialists. It will be published four times a year. The first edition will be included in the *HP* 260 *VAR Newsletter.*

Contact your HP 260 sales rep if you have not yet received the first edition of the *HP* 260 *VAR* Newsletter.

### HP 3000
# Announcing ALLBASE/4GL: a powerful new 4GL for the HP 3000

Hewlett-Packard is introducing a powerful new Fourth-Generation Language (4GL) for the HP 3000: ALLBASE/4GL. First announcement of this high-quality application development environment was made at the Interex Conference in Sweden this month.

Optimized for high productivity in the HP SQL environment, ALLBASE/4GL will be available on 900 Series HP 3000 systems this fall. It will support Turbo-IMAGE through the future dual access enhancement to the ALLBASE database management system.

ALLBASE/4GL, under the name HP TODAY. is an established product on the HP 9000 family. The name has been changed to better reflect its integration with the ALLBASE DBMS. On HP-UX systems, the name will also change later this year (see article entitled. "New Release A.02 of HP TODAY" on page 6).

ALLBASE/4GL is especially suited to developing data- or transaction-based applications, typical of business information management needs. It provides a highly productive, completely integrated environment. By completing screen forms, developers specify what an application is to do, rather than writing reams of source code specifying how to do it.

Maintenance of application elements is also greatly simplified. ALLBASE/4GL's excellent prototyping capabilities significantly reduce application maintenance and end-user revisions. You can have the exterior design of your application approved by users before you invest in logic development.

The powerful external interface makes it possible for ALLBASE/4GL to provide an elegant user-interface to any kind of software, and allows you to leverage your present software investment.

Literature about ALLBASE/4GL is available now. Please contact your HP sales rep for more details. Inquire about the following part numbers:

- HP 30601A — ALLBASE/4GL Developer Pack
- HP 30602A — ALLBASE/4GL Run-Time Environment

*HP 3000*

## HP 3000 MPE V/E systems support new HP 7959/63 disc drives

Hewlett-Packard announces support for the HP 7959B and 7963B midrange disc drives on HP 3000 MPE V/E systems. Incorporating the new HP-designed 5%-inch Winchester disc mechanism, these discs offer better performance over existing midrange discs. Combined with high capacity and reliability along with an attractive price. these new discs become the cost-effective solution for entry-level systems, as well as some of the midrange HP 3000 systems.

The HP 7959B is HP's lowest cost single-disc solution in the 300-Mbyte range. The HP 7963B offers users a low-cost single-disc solution today in a package that will hold two additional discs when needed. Complete positioning information on the HP 7963B relative to the HP 7936 and HP 7937 may be found in the April issue of *HP Channels.*

The HP 7959B and HP 7963B disc drives are supported on MPE V/E V-Delta-1 and later versions as system discs, foreign discs, and private discs. The following table lists the maximum configuration of HP 7959B and HP 7963B disc drives on HP 3000 MPE systems.

| HP 3000 system | Maximum number of discs per system* |
|---|---|
| MICRO 3000 | 4 |
| MICRO 3000LX | 1 internal |
| MICRO 3000GX | 2 internal. 4 total |
| Series 37. 37XE | 4 |
| MICRO 3000XE, Series 39, 4X, 5X | 8 |
| Series 64, 68, 70 | 8 |

* *Total number of 5%-inch mechanisms*

*HP 3000*

## SNA Server Access/XL obsolescence

Effective June 1, 1988, the SNA Server/Access/XL (P/N 30256A/R) was obsoleted and removed from the HP Price List. This product has been replaced by the SNA Server Access product. P/N 30255A/R.

### Ordering information

| Product No. | Description |
|---|---|
| 30255A/R | SNA Server Access |
| Opt. 310 | For Series 37 and MICROs |
| Opt. 320 | For Series 39-58 and 925 |
| Opt. 330 | For Series 64-70 and 935 |
| Opt. 340 | For Series 930, 950, and 955 |
| Opt. OCD | Upgrade credit for Opt. 310 |
| Opt. OCE | Upgrade credit for Opt. 320 |
| Opt. OCF | Upgrade credit for Opt. 330 |

*HP 3000*

## HP BRW/XL performance improvement – 4.6 times faster

HP Business Report Writer/V (BRW) was already one of the best performing report writers on MPE/V-based HP 3000 systems. So there was a great deal of interest to see how the Native Mode HP BRW/XL performs on MPE/XL-based systems. Well, the answer is, "it flies!"

The BRW lab, along with staff from HP's European Performance Center in Boblingen, West Germany, ran a series of benchmarks comparing a suite of 10 reports run on an HP 3000 Series 950 to the same suite running on a Series 70. The performance improvement was an average of 4.6 times with some reports even running 6 times faster.

The test suite of 10 reports were part of the HP Financial Accounting application and a live customer database was used in the tests. The full benchmark results, with detailed breakdown and analysis, appear in the May issue of the HP publication *PN Squured.* Your HP sales rep will be happy to supply you with a copy of the article.

Now there is even more reason to consider integrating HP BRW into your applications, particularly as you plan MPE/XL migrations. As a reminder. here are some other arguments for HP BRW:

- BRW runtime programs are free as part of the Fundamental Operating System
- A free loaner copy of HP BRW is available as part of the "VAB Software Loaner Agreement" Program.

We have received several comments concerning the fact that Dictionary/V or System Dictionary has to be sold with HP BRW. Note that this is usually *not* required for value-added business sales. The typical scenario is that a VAB uses HP BRW to set up "canned reports" to deliver to the customer. As mentioned above, these reports run on any HP 3000 system without license.

If the VAB wishes to sell HP BRW to the customer as a report customization tool, it is only necessary to supply the "RDIC" file, BRW's compiled dictionary (this RDIC file is used when specifying or modifying BRW reports). Neither Dictionary/V nor System Dictionary have to be sold in this case.

Contact your HP sales rep for more information.

## Also in this issue

**Technical Computers**

*General*
## Reach new markets with HP TODAY

Now develop with one package for HP 9000 and HP 3000 systems.

HP TODAY, Hewlett-Packard's advanced Fourth-Generation Language (4GL), has always provided you with easily scalable solutions. Applications developed on any HP 9000 computer can be simply unloaded, and reloaded into an HP TODAY system on any other HP 9000.

But soon, HP TODAY applications will be just as easily migrated to 900 Series HP 3000 computers. This is made possible by the release of ALLBASE/4GL for MPE XL svstems (see article on page 4). The name of HP TODAY for HP-UX systems will also be changed to ALLBASE/4GL later this year.

Given the 100 percent compatibility between ALLBASE/4GL on MPE XL systems and HP TODAY on HP-UX systems, those of you with HP-UX systems can start developing now for both platforms. Now you can market your solutions across HP platforms and significantly increase your market opportunities.

Why not contact your HP sales rep to discuss this opportunity?

*General*
## New Release A.02 of HP TODAY

A new release of the HP TODAY fourth-generation language for HP-UX systems, Release A.02, will begin distribution next month. The release will provide fixes for a small number of field-reported defects, together with several enhancements.

For instance, Release A.02 of HP TODAY will provide generic terminal support. The range of supported terminals has been increased to include HP's low-cost Series 700 terminals. This means that HP TODAY now supports ANSI-compatible terminals (such as DEC VT-100).

Your application, with the HP TODAY Run-Time Environment driving Series 700 terminals, can offer a low-cost solution for customers requiring new hardware. And now, suspects with a large investment in non-HP peripherals also become prospects for an HP TODAY proposal. Generic terminal support means you can sell your applications, with a quality user interface, without requiring premature scrapping of existing peripherals.

HP TODAY loses nothing of its quality user interface on generic terminals. Even HP-style function labels are reproduced across the bottom of the screen.

Other enhancements to Release A.02 of HP TODAY include additional most-requested logic commands, such as the ability to dynamically switch screen-field types and highlighting, or dynamically reassign function-key sets.

Logon screen bypass is a particularly useful enhancement for batch applications, or those running over modems; while customizable logon screens allow you to reinforce your product image or flatter individual clients.

With Release A.02 of HP TODAY, you've got even better reasons to move up to 4GL productivity.

# HP BASIC language processor software revision history

Have you ever wondered if you are running the latest revision of the HP BASIC language processor software'?

Do you have questions about upgrades and their costs'?

Are you wondering if you are running BASIC 5.0 or 5.1'?

With the expanding interest in the HP BASIC language processor, the several revisions. and the substantial installed base. confusion is probably inevitable. Here is an attempt to straighten things out.

The following table shows the revisions that have occurred so far. and what those changes were. The disc labels and emulator boot message help confirm what you have.

| Product Number | Description | Disc label | Emulator boot message* | Code release date |
|---|---|---|---|---|
| 82301A | HP BASIC language processor 1.0 (original release) | A.00.00 | A.0 | 5/87 |

*\* Upon booting the BASIC emulator by typing "hpbasic" or "boot," the first displayed line will show this software release number.*

Designed for original HP Vectra PCs (i.e.. Vectra A and A+). Does not support HP Vectra CS. ES, RS. or any non-HP PCs. The BASIC language processor card, P/N 82321A, was introduced along with this software.

| Product Number | Description | Disc label | Emulator boot message | Code release date |
|---|---|---|---|---|
| 82301A | HP BASIC language processor 1.0 (first revision) | A.00.01 | A.0 | 6/87 |

This revision added a font file. and supports the same HP Vectra PC systems as the original 1.0 release.

This and all later versions require HP Vectra PC BIOS Version A.01.03, or newer, for operation. It will not work with BIOS Versions A.O1.O1 and A.01.02.

| Product Number | Description | Disc label | Emulator boot message** | Code release date |
|---|---|---|---|---|
| 82301B | HP BASIC. language processor 1.5 | A.01.00 | A.h | 1/88 |

*\*\* Emulator boot message A.6 appears anomalous but is correct for 1.5.*

This is the first major revision of the software. We also introduced a new version of the HP BASIC language processor card (82321B) at this time. The new 82321B hardware is required for the HP Vectra CS PC. It supports the HP Vectra CS PC, ES, IBM PC-AT and 100-percent compatibles. but will not physically fit the IBM PC-XT chassis.

*Note:* The new software still works on the older (82321A) card, which will operate in all supported computers except the HP Vectra CS PC. The software contains a bug that may prevent operation on the HP Vectra RS PC (or other 80386-based PC) in "background" mode. It does not support European language mapping on Enhanced HP Vectra PC (AT2) DIN keyboards.

PC-3051308 bundles installation (i.e., "Magic") disc. Release A.OO.OO, was introduced with this release.

| Product Number | Description | Disc label | Emulator boot message | Code release date |
|---|---|---|---|---|
| 82301B | HP BASIC language processor 1.5.1 (latest roll) | A.02.00 | A.02 | 4/88 |

This is the latest revision and began shipping in all orders, as of May 16, 1988. It provides BASIC 5.1, fixes 1.5 bugs. and includes some enhancements. The HP Vectra RS PC (and certain other 80386 based PCs) and European languages are supported.

In addition. PC-305/308 bundles installation disc was rolled to Release A.OO.O1 to maintain compatibility.

All current HP Vectra PCs, as well as IBM AT Model 339, Compaq Deskpro 286, and Zenith Model 248 are supported. Again. the 82321B card does not fit the IBM PC-XT chassis.

## ROM versus RAM revisions

The next table shows the compatibility between HP BASIC language processor RAM and ROM systems and HP BASIC. It also shows the planned revisions through August, 1988.

| | May 1987 | Jan. 1988 | May 1988 | Aug. 1988 |
|---|---|---|---|---|
| ROM Revision | | 1.0 | | |
| ROM P/N | N/A | 82304B ——————→ | | |
| BASIC Version | 5.0 ———————————————→ | | | |
| RAM Revision | 1.0 | 1.50 | 1.5.1 | 1.5.1 |
| RAM Release | A.00 | A.01 | A.02 ————→ | |
| BASIC Version | 5.0 | | BASIC 5.1 —→ | |
| | | | HFS S/W avail. ——→ | |

## Software upgrades

The upgrade for all earlier versions of HP BASIC language processor software is 1.5.1 (Release A.02.00). This release is entirely compatible with all earlier versions of HP BASIC language processor software and hardware. It is available now through July 31. 1988. at a special upgrade price.

Users who received free single emulator discs. (Disc 1 of Release A.02.00) and/or "Magic" installation discs (Release A.00.01), from support entities between April 19 and May 16 did not receive a complete HP BASIC language processor 1.5.1 Release A.02.00 upgrade. These free support discs were distributed to fix HP Vectra RS PC (80386) "background" and/or European language keyboard problems *only*. In order to obtain the complete upgrade. the user must order new 82301B software at the special upgrade price.

Since new products and further upgrades will become available as time goes on. please check with your HP sales rep for the latest information.

*General*

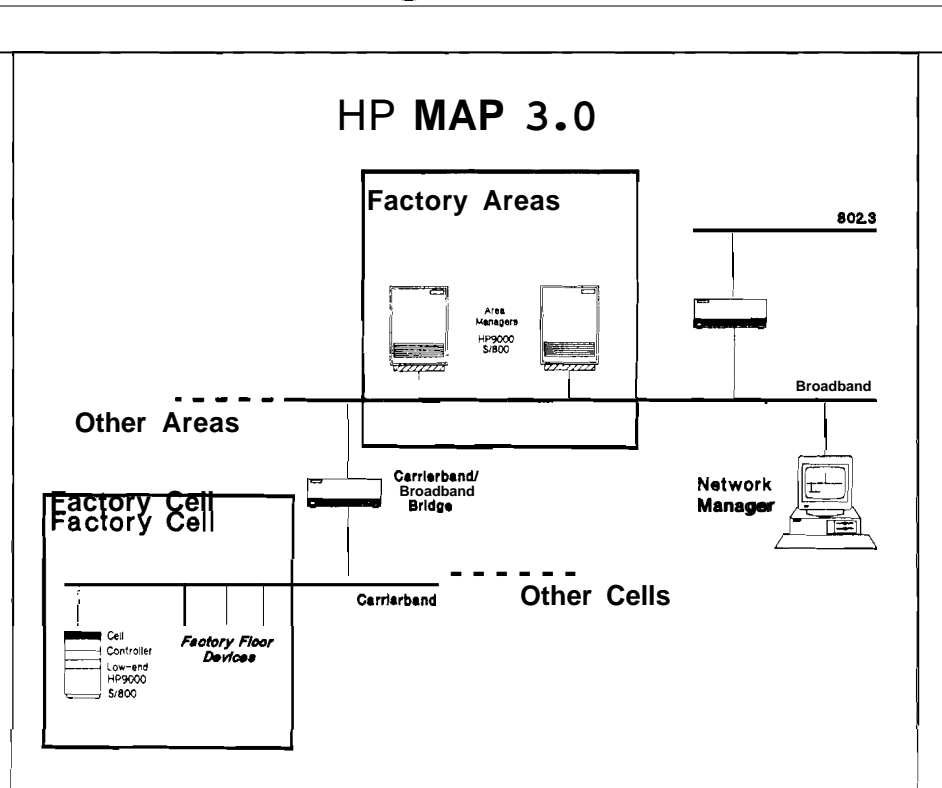# Hierarchical File System for HP language processors

The HP 82313A Hierarchical File System (HFS) is now available for users of HP 82300 BASIC or HP 82310 Pascal language processors (which allow users to run HP BASIC or Pascal on HP Vectra PCs or other MS®-DOS personal computers). The Hierarchical File System allows users to create and use a hierarchical or "nested" file system, such as that used by HP-UX, instead of the "flat" LIF file system commonly used with these languages. It provides the capability to access HFS on external disc drives connected via HP-IB. on a separate partition of the built-in hard disc, or on individual floppy discs.

HFS provides users the opportunity to run HP BASIC 5.0/5.1 or HP Pascal 3.2 programs written for workstation products. A prime example of this is HP's FTM/PC (Functional Test Manager), which specifically makes use of the 82313A when it is run on the HP 82300 BASIC language processor. (HP FTM/PC is a general test software package that makes writing and using test software quick and easy.)

The HP language processor products do not contain the HP 82313A Hierarchical File System as part of the language processor software. Instead, the user may purchase it separately. The 82313A is recommended for sale only to those users who 'desire to use it with FTM/ PC, or who have a clear reason for its use. It is not required for ordinary language processor operation. The 82313A is now on the HP Price List and available for shipment. The product contains both 5¼- and 3½-inch media.

*HP 9000*

# New HP MAP 3.0 products



HP **MAP 3.0**

HP has announced three new MAP 3.0 products for the HP 9000 Series 800 computer family. These new MAP 3.0 products are designed to facilitate factory communications among multi-vendor computer systems and devices with an ease previously found only with single-vendor solutions. HP's MAP 3.0 products are based on the seven-layer Open Systems Interconnection (OSI) model – international standards developed to provide a common framework for networking computer systems and devices from multiple vendors.

The new MAP 3.0 products include:

- HP MMS (Manufacturing Message Service) 3.0 software – a powerful new software subsystem allowing HP 9000 Series 800 computers to communicate with any MAP 3.0-compatible factory floor device.

HP FTAM (File Transfer, Access, and Management) 3.0 software – provides HP 9000 Series 800 computers with the ability to transfer and access remote files among multivendor computer systems on the factory floor.

- HP OSI Express MAP 3.0 – in conjunction with HP's FTAM and MMS software. connects HP 9000 Series 800 computers directly to either carrierband or broadband factory networks. HP OSI Express MAP 3.0 uses the new HP OSI Express intelligent network interface card to offload processing of complex OSI protocols from the host processor, freeing it for more productive application processing.

In a related announcement, HP has announced HP Device Interface System (DIS), a software toolset for multi-vendor factory communications between HP 9000 computers and non-MAP devices. Application programs interface to devices through a specialized. high-level language defined by the user. Please see the article about Device Interface System on the next page for more details.

In addition to these announced products, HP has also committed to additional MAP 3.0-related products to be made available during the next two years:

- MAP 3.0 Private Communications Interface (PCI) – allows users to develop customized network applications.
- MAP 3.0 Network Management for control and monitoring of network operations. Includes a network management agent, a network manager, nodal manager utilities, and the HP MAP 3.0 protocol analyzer.
- A carrierband-to-broadband bridge will provide a cost-effective, transparent connection between nodes on both carrierband and broadband media.

### Ordering information and availability

Initial availability for the MAP 3.0 products will be on an HP 9000 Series 800 computer optimized for cell-control applications with the same industry-leading price performance of the HP Precision Architecture family.

The products are orderable September 1, 1988. Limited shipments of HP's MAP 3.0 MMS software and HP OSI Express MAP 3.0 will begin at the end of calendar year 1988. HP FTAM 3.0 will be available in the first half of calendar year 1989. Watch for more information about HP's MAP 3.0 products in the coming months.

*HP 9000*

# New HP MAP 3.0 services

HP MAP 3.0 is on the way. MAP (Manufacturing Automation Protocol) is the OSI (Open Systems Interconnection) based protocol stack for networking within world-class manufacturing operations. Knowledgeable users requiring multivendor connectivity see MAP as the solution to the long-term problem of too many custom and proprietary links. This article is a brief overview of two new software products implementing HP MAP 3.0 services.

HP MAP 3.0 MMS/800 is a layer-seven service for the HP 9000 Series 800 MAP 3.0 stack. MMS (Manufacturing Message Specification) is the communications language that MAP-connected cell controllers use to direct the activities of factory-floor devices (i.e. robots, PLCs, numerical control machines. vision systems, etc.). MMS/800, in combination with the HP OSI Express MAP 3.0 link, allows HP 9000 Series 800 SPUs to connect to either broadband or carrierband MAP 3.0 networks.

HP MAP 3.0 MMS/800 contains tools for:

- Comprehensive, direct control of factory-floor devices

  Basic computer-to-computer communications

  – Binary file transfer

  – Program-to-program messaging

HP MAP 3.0 MMS/800 will be orderable as of September 1, 1988. Limited shipments of MMS/800 and the HP OSI Express MAP 3.0 link will begin in late 1988. (For additional information on the OSI Express link, see following article.)

HP MAP 3.0 FTAM/800 is also a layer-seven service for the HP 9000 Series 800 MAP 3.0 stack. FTAM (File Transfer, Access and Management) provides the basic distributed file system functionality for OSI networks (GOSIP, TOP, and OSINET, as well as MAP). As with MMS/800, FTAM/800 requires the HP OSI Express MAP 3.0 link to complete the connection of HP 9000 Series 800 Precision Bus SPU(s) to MAP 3.0 networks.

FTAM/800 provides the following capabilities:

- Text and binary file transfer
- Remote file access (i.e. record level read, write, and delete)
- Remote file management (i.e. create/delete file and read/change attributes)

HP MAP 3.0 FTAM/800 will be orderable September 1, 1988. First shipments are planned for the first half of 1989.

*HP 9000*

# HP announces OSI Express MAP 3.0

HP's new OSI Express MAP 3.0 is a high-performance interface card that links HP 9000 Series 800 computers directly to either carrierband or broadband networks. The combination of the newly developed OSI Express with HP MAP 3.0 MMS/800 or HP MAP 3.0 FTAM/800 services provides a formidable solution for factory-floor multivendor interconnectivity problems.

OSI Express MAP 3.0 implements OSI MAP 3.0 specifications from the physical layer up through and including ACSE. By offloading the host of the task of processing complex protocols, the OSI Express allows the host to focus on more productive applications processing activities.

Using an advanced Motorola 68020 microprocessor, two HP custom controller chips, and 1 Mbyte of RAM, OSI Express can support up to 100 simultaneous connections from multiple, simultaneous host applications.

Furthermore, OSI Express' network and nodal management capabilities include tracing. event logging. and initialization. Nodes can be configured and diagnostics can be easily accessed through the host interface.

Finally, HP's highly rated and widely respected support services will provide on-site interoperability testing and fault isolation in a multivendor network environment as an integral part of the product offering.

OSI Express limited shipments begin at the end of calendar year 1988.

*HP 9000*

# Device Interface System: new software tool for plant floor communications on HP 9000 Series 800 computers

HP's new Device Interface System connects HP 9000 Series 800-based applications to any proprietary RS-232 factory floor device or subnetwork.

Device Interface System is a software development tool for programmers to link factory floor devices and subnetworks to HP's HP 9000 Series 800 computers. Device Interface System is provided for such industrial automation solution creators as:

- System integrators
- Independent software vendors (ISV)
- Original Equipment Manufacturers (OEM)

  Major accounts with internal software development groups

Together with MAP 3.0, Device Interface System provides a complete communications solution today and a migration path to Open Systems Interconnect (OSI) standards as device vendors evolve to support MAP 3.0.

User benefits

As a solution creator's communications tool, Device Interface System will dramatically reduce the costs of developing and maintaining communications software. For example. we estimate that Device Interface System can save as many as 8 engineer-months in developing and maintaining a sophisticated software link to an Allen-Bradley PLC5. This productivity gain would shrink the total development and maintenance effort for the link from 14 engineer-months to 6 engineer-months over a three-year period.

Additionally. Device Interface System provides developers with the capability to:

- Implement software links to any RS-232 supported device
- Eliminate much of the tedious coding and testing typically involved in implementing communications software

  Improve reliability of a communications link through automated testing

Manufacturing end users of HP 9000 Series 800 computers will benefit from the lower overall cost of automation solutions based on Device Interface System

**Key** product features

Device Interface System consists of the following four facilities:

  Communications implementation facility – allows a developer to implement a communications link without writing a single line of conventional code such as C or FORTRAN

- Comprehensive testing facility – automates the testing of a communications link
- Documentations facility – automatically generates link documentation for the developer
- Programmatic access facility – allows user programs to access communications link at run-time from C or FORTRAN

Availability

Device Interface System will be available in the Fall of 1988. Contact your HP sales rep for more information.

# HP StarLAN 10 supported on HP 9000 HP-UX computers

The new HP StarLAN 10 products are supported on the HP 9000 Series 300, Series 500, and Series 800 HP-UX computers. This offers HP 9000 users the capability to use their installed unshielded, twisted-pair telephone wiring for high-speed 10 Mbps local-area networking.

This new cabling scheme will save users the incremental installation and maintenance costs that are incurred by using coax cable for data communications. HP StarLAN 10 is supported on these HP 9000 computers running current and previous versions of the networking software and is planned to be supported on future versions as well.

Users can choose from three cabling schemes: ThinLAN, ThickLAN, and StarLAN 10, and can use the standard HP-UX networking including ARPA, Berkeley, NS, NFS, SNA, and discless (Series 300 only). See the "HP SiteWire, An Introduction" (P/N 5959-2266) document for a comparison of the three cable offerings.

In addition, users of systems on the new HP StarLAN 10 can communicate transparently to systems on the IEEE 802.3 ThinLAN or ThickLAN coax cable through the HP StarLAN 10 hub. HP StarLAN 10 is in the process of being approved as an IEEE 802.3 LAN standard.

## Unsupported products

The HP StarLAN 10 MAU connects the twisted-pair cable to a ThickLAN 15-pin AUI connector on the computer system. Therefore, the Series 300 Models 318 and 319 that have only a ThinLAN tap cannot directly connect to StarLAN 10. Also, users must purchase a 98643A LAN/300 link interface card if they have a Series 300 Model 330 or 350 with only a ThinLAN tap. The Series 200 HP-UX systems are not supported on StarLAN 10.

## Ordering information

The standard networking software used for ThinLAN and ThickLAN is required in addition to the LAN interfaces specified here. See the respective system price guides. Also, the HP 28663A StarLAN 10 hub is required to link together multiple systems. See the "HP StarLAN 10 Cabling and Specification Note" (P/N 5958-9013) for configuration information.

*For new Series 300 Models 330, 350, and above, order:*

- Opt. 015 on the system, 15-pin ThickLAN AUI connector

  P/N 28664A, twisted-pair MAU

*For Series 300 Models 330 and 350 with a ThinLAN tap, order:*

- P/N 98643A, LAN/300 link interface
- Opt. 241, deletes ThinMAU
- P/N 28664A, twisted-pair MAU

*For Series 300 Models 310 and 320, order:*

- P/N 98643A, LAN/300 link interface (if needed)
- Opt. 241, deletes ThinMAU
- P/N 28664A, twisted-pair MAU

*For Series 500, order:*

- P/N 27125B, LAN/500 link interface (if needed)
- Opt. 241, deletes ThinMAU
- P/N 28664A, twisted-pair MAU

*For Series 800 workstations, order:*

  P/N 28664A, twisted-pair MAU

*For Series 800 multi-user systems, order:*

- Model 825/835 – P/N 91786A, LAN/825 with Opt. 841 (deletes ThinMAU)
- Model 840 – P/N 98194A, LAN/840 with Opt. 841 (deletes ThinMAU)
- Model 850 – P/N 91788A, LAN/850 with Opt. 841 (deletes ThinMAU), P/N 28664A, twisted-pair MAU

# HP 9000 LAN interface flexibility improved

The HP 9000 Models 330 and 350 now offer the choice of two LAN interfaces. As of June I, 1988, all Model 330 and 350 bundles offer the following Must Order options:

  015 – AUI LAN interface

  017 – ThinLAN interface with built-in ThinMAU

The AUI LAN interface is HP's most flexible connection for communication over LANs. It permits access to ThickLAN, ThinLAN and when available, HP StarLAN 10, via external MAUs.

In the past, the ThinLAN interface with built-in ThinMAU has been standard on all Model 330 and 350 workstations.

Contact your HP sales rep for more information.

*HP 9000*

# HP-UX 6.2: what's new for the HP 9000 Series 300

The next release of HP-UX for the HP 9000 Series 300 is expected to ship in July. One of the main features of this release is support for new hardware products. These include the 68030 products and board upgrades, and TurboSRX, the new high-resolution 3D graphics display. Also supported will be a new floating-point accelerator for the 68030 products. a new family of 9-track tape drives, the HP 7979 and 7980, and the new HP 9145/Excalibur ¼-inch tape drive. Additional systems will also be qualified as discless servers. These will be the HP 319C+, the 330. and the 68030 products.

## HP-UX 6.2 enhancements

- Long file names – increase the maximum length from 14 to 255 characters and provide easier porting from Berkeley UNIX® operating systems.

- Remote spooling (AT&T System V compatible) – ability to send printer output via LAN to a printer that is attached to a remote system

   AT&T System V UUCP (Honey-DanBer) will replace the current uucp. It is more reliable and simpler to use.

## Language enhancements

- Tuning done in the C compiler has resulted in a considerable increase in the Dhrystone benchmarks. For example, on the 350, the Dhrystones were 5437 on 6.0 and will be 6451 on 6.2.

- A friendlier interface for the debugger

- Flint – this new utility aids in both porting and development of FORTRAN programs by detecting defective, wasteful. or nonportable constructs. Particular attention is paid to mismatches between formal and actual parameters, COMMON block differences, and potentially uninitialized variables.

## Networking

- StarLAN 10 – HP 9000 computers with an AUI port connected through the HP 28664A twisted-pair MAU across an unshielded twisted-pair network to an HP 28663A HP StarLAN 10 hub can communicate to each other via NS. ARPA, Discless. or NFS. In addition. HP 9000s can communicate with HP 3000s and PCs across a StarLAN network.

- Performance – NFS users will have the ability to specify the "asynch" option on the server. This option gives client systems from three to five times the write performance they are now getting. The data throughput rates of NS. ARPA. and NFS will increase in this release.

- Virtual Home Environment (VHE) – Users may configure a group of NFS nodes such that users can login at any node and be put into their home working environment. The VHE creates a mirror image of the user's environment accessible from a variety of systems

- Network Services (NS) (probe/proxy) routing – NS nodes can communicate with remote NS nodes through a gateway. HP's probe/proxy facility allows for address resolution or translating a node name into an IP address sent from a probe/proxy server.

- Network Interprocess Communications (NetIPC) – NetIPC provides a library of C routines for network application programmers to create distributed programs. This is useful for real-time applications. HP will support NetIPC between HP 9000 Series 300s, 800s, HP 3000 MPE and XL, and HP 1000 computers.

Network File System (NFS) will support the use of long file names and NS. ARPA. and NFS will operate on the new 360 and 370 systems.

## Other features

- X Windows Version 11 will be available shortly after the 6.2 release starts shipping. The plans are to make this version of X part of the HP-UX software bundle (98594A) when it becomes available. At a later date. Version 11 will also be sold as a separate product.

- The SCSI drivers have been updated to fix some miscellaneous bugs in the 6.0 version. Also, a new "Ioctl" feature has been added. This will allow a user to pass a specified SCSI device command directly to a device. Functionality, via new commands, can be added to the driver without the necessity of rewriting it. More information on this feature will be provided through a revised SCSI data sheet. and a revised SCSI technical reference manual. Finally, synchronous operation will not be supported in 6.2.

This release will also maintain object-code compatibility with the previous releases. There will be no changes to the product structure or pricing.

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## Also in this issue

*Desktop*
# New HP Vectra PC models

There will be new HP Vectra PC models available June 1 with the new HP video graphics adapter preinstalled. These models can be configured with either the HP video graphics color display or the HP monochrome video graphics display. This will help simplify ordering and configuring systems because either a monochrome or EGA display adapter will no longer need to be specified. A new HP Vectra RS/20 PC power-user system will also be available on June 1, and will include the new HP video graphics adapter with 512-Kbyte video RAM and HP video graphics color display.

**Order the new HP Vectra PC models**

The current PC models with mono-chrome and EGA video adapters pre-installed will be discontinued on August 1. Since VGA is the emerging PC video standard and offers improved perfor-mance over EGA and HP Multimode, orders placed after June 1 should be for the new VGA PC models.

In addition, VGA PC systems with the new HP video graphics color display will be less than current EGA PC sys-terns with the enhanced graphics dis-play. VGA PC systems with the new HP monochrome video graphics dis-play will be the same price as current HP Multimode PC systems with the 12-inch monochrome monitor.

**Availability of new PC models**

The following table summarizes the new preassembled HP Vectra PC mod-els. The high-volume, strategic models will be available off the shelf, starting June 1. Due to the large number of con-figurations across the HP Vectra PC product line, eight models, noted with an asterisk in the table, will be available only on a build-to-order basis. The availability of build-to-order models will be four to six weeks. HP Vectra CS, ES, and ES/12 PC models with a 3%-inch flexible disc will be orderable in July.

**Preassembled HP Vectra PC models**

| PC | Model number | Flexible disc | Hard disc | Video adapter | Product number | Notes |
|---|---|---|---|---|---|---|
| CS | 10 | 5¼-inch | | | D1110A | |
| | 15 | 3½-inch | | | D1115A | Orderable July, 1988 |
| | 16* | 5%-inch | | VGA | D1116A | 2 flexible discs |
| | 20 | 5¼-inch | 20-Mbyte | | D1120A | |
| | 26 | 5¼-inch | 20-Mbyte | VGA | D1126A | |
| | 27 | 3½-inch | 20-Mbyte | VGA | D1127A | Orderable July. 1988 |
| ES | 10" | 5¼-inch | | | D1210A | |
| | 15* | 3½-inch | | | D1215A | Orderable July, 1988 |
| | 20* | 5¼-inch | 20-Mbyte | | D1220A | |
| | 26 | 5¼-inch | 20-Mbyte | VGA | D1226A | |
| | 27 | 3½-inch | 20-Mbyte | VGA | D1227A | Orderable July, 1988 |
| ES/12 | 10 | 5¼-inch | | | D1310A | |
| | 15 | 3½-inch | | | D1315A | Orderable July, 1988 |
| | 20* | 5¼-inch | 20-Mbyte | | D1320A | |
| | 26 | 5¼-inch | 20-Mbyte | VGA | D1326A | |
| | 27 | 3½-inch | 20-Mbyte | VGA | D1327A | Orderable July, 1988 |
| | 40* | 5%-inch | 40-Mbyte | | D1340A | |
| | 46 | 5%-inch | 40-Mbyte | VGA | D1346A | |
| | 47 | 3½-inch | 40-Mbyte | VGA | D1347A | Orderable July, 1988 |
| RS/16 | 40 | 5%-inch | 40-Mbyte | | D1500A | 1 Mbyte RAM |
| | 100* | 5%-inch | 103-Mbyte | | D1502A | 2 Mbyte RAM |
| | 106* | 5%-inch | 103-Mbyte | VGA | D1501A | 2 Mbyte RAM |
| RS/20 | 40 | 5s-inch | 40-Mbyte | | D1600A | 1 Mbyte RAM |
| | 100 | 5¼-inch | 103-Mbyte | | D1602A | 2 Mbyte RAM |
| | 106 | 5¼-inch | 103-Mbyte | VGA | D1601A | 2 Mbyte RAM |
| | 150 | 5¼-inch | 155-Mbyte | | D1603A | 2 Mbyte RAM |
| | 300 | 5¼-inch | 310-Mbyte | | D1604A | 2 Mbyte RAM |
| | Power User | 5¼- and 3½-inch | 103-Mbyte | VGA (512 Kbyte RAM) | D1606B | 4 Mbyte RAM, VGA color display, coprocessor, software |

\* *Build-to-order*

*Desktop*

# Announcing OS/2 from HP

The next generation operating system for 80286 and 80386 personal computers will soon be here. HP announces that Microsoft® Operating System/2™ 1.0 Version A for the HP Vectra PC will be on the June 1 HP Price List.

## Ordering information

| Product No. | Description |
|---|---|
| D1302A | Microsoft OS/2 1.0 Version A |

*Must order country option:*

Opt. ABA   U.S.

*Must order media option:*

Opt. AA9   5¼-inch 1.2 Mbyte discs
Opt. AAD   3½-inch 1.44 Mbyre discs

OS/2 1.0 Version A is the first release of OS/2 from HP and is supported only on the HP Vectra ES and RS Series PCs. It is intended for users eager to explore the new operating system and the first new applications to take advantage of its features. OS/2 1.1 with Presentation Manager™ will 'be the best version for most OS/2 users. Therefore, we recommend that users wait for OS/2 1.1 unless they require OS/2 immediately.

## What is OS/2?

OS/2 is a new single-user. multitasking operating system for personal computers that use the Intel 80286 and 80386 microprocessors. It has exciting potential to increase the productivity of HP Vectra PC users with its support for powerful new applications.

## OS/2 features

New OS/2 applications will be able to access up to 16 Mbytes of physical memory and run simultaneously with several other OS/2 applications. This gives users the ability to access very large programs and data files. Also, users will be able to have their computers perform several tasks at the same time, such as recalculating a spreadsheet while sorting a database while printing a memo. Another benefit is that

users will be able to switch between often-used applications with only a few keystrokes (sometimes referred to as a "hot-key" feature).

Users will not need to abandon their investments in MS®-DOS applications. OS/2 has a compatibility mode that can run most MS-DOS applications. The user can hot key between several OS/2 applications and one MS-DOS application at a time.

The compatibility mode is subject to some limitations. The compatibility mode can only access 640 Kbytes of memory, just like MS-DOS. Because OS/2 is larger than MS-DOS, an application running in the compatibility mode will actually have about 82 Kbytes less memory and may run slower than when run on MS-DOS. Also, some MS-DOS applications may not run on OS/2.

But HP OS/2 users will have the benefits of both OS/2 and MS-DOS. Users who have MS-DOS on their HP Vectra PCs will be able to add OS/2 as well. Each time they start their HP Vectra PCs, they may choose which operating system they want to use during that session. This is especially important for OS/2 1.0 users since it will take time for the variety of OS/2 applications to approach that of MS-DOS applications.

While OS/2 will run superbly on 80386 machines, it does not take additional advantage of the unique features of the 80386, such as concurrent virtual 8086 machines or access to 4 Gbytes of physical memory. OS/2 on an 80386 machine will operate as if it were on a fast 80286 machine.

OS/2 1.0 Version A has a character-based interface, like MS-DOS, and can display one application on the screen at a time.

## HP systems supported

OS/2 1.0 Version A is supported only on the HP Vectra ES and RS Series PCs. Also supported are:

- HP Mouse
- HP Vectra ES PC expanded memory card
- HP extended memory cards (Vectra ES and ES/12 PCs only)
- Memory upgrade modules for the HP Vectra RS Series PCs
- HP EGA display system
- HP Multimode Monochrome display system
- HP Monochrome Plus display system
- Up to two serial ports at up to 9600 baud
- Up to two parallel ports

Note: Some peripherals and accessories may not run with OS/2, but will run when the computer is started with MS-DOS.

## System requirements

- 640 Kbytes base memory
- 1 Mbyte extended memory (we recommend 2 Mbytes to run MS-DOS applications. 4 Mbytes to run multiple OS/2 applications at once)
- A hard disc drive with at least 5 Mbytes of storage capacity available
- At least one high-capacity flexible disc drive

## HP's OS/2 plans

HP plans further releases of OS/2. OS/2 1.0 Version B will have the attributes of Version A plus support for pre-ES HP Vectra PCs and certain HP accessories. It will be available in the second half of 1988. OS/2 1.1 will include features of OS/2 1.0 Version B plus Presentation Manager. Presentation Manager will give the user a consistent. graphical, windowing interface to OS/2 Presentation Manager applications. allowing several of the new applications to be viewed simultaneously. It will

have the same appearance as Microsoft Windows® 2.0. OS/2 1.1 will be available in the first half of 1989.

## Upgrade to OS/2 1.1

Users who purchase OS/2 1.0 Version A or Version B will be eligible for an upgrade to OS/2 I.1 in the first half of 1989. The upgrade price has not yet been determined. Ordering instructions will be published when the upgrade kits are available.

## Data sheet

The OS/2 1.0 Version A data sheet (P/N 5951-0698) is available through your HP sales rep.

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*Desktop*
# OS/2 myths

There are a number of myths and misconceptions about Microsoft® Operating System/2™. Three of the most common are:

- OS/2 requires an IBM PS/2 machine to run.
- Users will not need Microsoft MS-DOS® because the OS/2 compatibility mode will run all MS-DOS applications.
- MS-DOS is obsolete.

We mean to dispel these myths with the following information.

*Myth – OS/2 requires uti IBM PS/2 machine to run.*

*Fuct – OS/2 does not require an IBM PS/2 to run.*

OS/2 will run on most computers based on the Intel 80286 and 80386 microprocessors. Microsoft has licensing agreements with many personal computer manufacturers (including HP, Compaq. Tandy. Unisys, Wyse. Zenith, and others). PC manufacturers will modify the OS/2 code to run best on their particular machines and accessories, and will support OS/2 applications. Three items emphasize our point:

- PS/2 machines are *not* required for OS/2. Microsoft's first OS/2 release to OEMs was developed on non-IBM machines. It did not even work with PS/2 machines.
- There are PS/2 machines that will *never* run OS/2. PS/2 Models 25 and 30. and any Intel 8086- or 8088-based PC. will be unable to run OS/2, since OS/2 is designed to run on a machine with an 80286 or 80386 processor.

  IBM will support OS/2 on non-PS/2 machines. IBM will provide OS/2 for its large installed base of PC/AT and PC/XT 286 customers.

*Myth – Users will nor need MS-DOS because the OS/2 compatibility mode will run all MS-DOS applications.*

*Fuct – Nor all users will want to (or be able to) give up MS-DOS.*

- Not all MS-DOS applications will run under OS/2. MS-DOS applications that write directly to hardware or are timing sensitive, such as communications or network software, may not run.
- MS-DOS applications may not run as well under OS/2. Most MS-DOS programs will run in the OS/2 compatibility mode, but will be subject to limitations. The compatibility mode is limited to 640 Kbytes, just like under MS-DOS. But, since OS/2 is larger than MS-DOS, applications actually have about 82 Kbytes less memory, and may run more slowly than they do under MS-DOS.

- The cost to switch to OS/2 is significant. Users of 80286 and 80386 PCs will need new OS/2 kits, new OS/2 applications, and additional memory to use OS/2.

*Myth – MS-DOS is obsolete.*

*Fact – OS/2 will not be the best operating system for everyone.*

- There arc very few OS/2 applications. It will take time before the diversity of OS/2 applications matches the breadth of the thousands of MS-DOS applications already in use.
- Many users will be unable to use OS/2. Users with 8086 or 8088 machines or compatibles (such as the HP Vectra CS PC, or IBM PC/XT) will not be able to use OS/2.
- Many users do not need OS/2. There are many people with 8086/8088 machines and even 80286 machines (such as the HP Vectra PCs and IBM PC/AT compatibles) who are doing very well with the capabilities of their machines now.

  Microsoft will continue to improve MS-DOS. Microsoft's installed base of over 11 million MS-DOS customers is a huge potential market for new versions of MS-DOS. Microsoft has announced enhancements for MS-DOS, such as improved user interface and support for higher capacity disc drives, which will be seen in future releases.

OS/2 will be a fine product – but not the be-all and end-all that some of the publicity and trade-press comment would lead one to believe. Contact your HP sales rep for more information.

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*Desktop*

# New and improved HP Vectra RS/20 Power User PC bundle

On June 1, a new HP Vectra RS/20 Power User PC bundle (D1606B) was introduced that incorporates the new high-performance, medium-resolution HP VGA display subsystem. This bundle replaces the original Power User bundle (D1606A) that was never built due to development problems with the tape backup. Please convert your orders for the D1606A to a new HP Vectra RS/20 Power User PC configuration (D1606B) available June 1 or to a collection of components.

The new HP Vectra RS/20 Power User PC bundle differs from the original configuration as follows:

- The 40-Mbyte tape backup has been deleted

  The flexible disc expander has been deleted

- The EGA card and monitor have been replaced with VGA card and VGA color monitor

- A tilt/swivel base for the monitor was added

- The price was reduced to reflect the change in components.

The tape backup was removed because development efforts to solve an electrostatic discharge susceptibility problem have delayed release of the tape backup. By separating the tape backup from the rest of the bundle, we can ship the bundle without waiting for resolution of the tape backup problems. The tape backup remains a highly recommended accessory and is expected to be available this summer.

The flexible disc expander was removed because it is not required in the absence of the tape drive.

The video subsystem was rolled from EGA to VGA to provide the state-of-the-art in high-performance, medium-resolution color display subsystems. Note that the version of the VGA adapter included in this bundle has 512 Kbytes of display memory to support 256 colors in 640 × 480 resolution mode. A tilt/swivel base for the monitor was added for improved ergonomics with the floor-mounted HP Vectra RS PC.

In addition, the version of DOS included in this bundle is now specified as the "latest version of DOS 3.X." This will enable us to roll to DOS 3.3 as it becomes available without changing the product number of the bundle.

The new HP Vectra RS/20 Power User PC bundle consists of:

  20-MHz 80386 microprocessor

- 20-MHz 80387 numeric coprocessor

- 4 Mbytes of system memory

- 103-Mbyte ESDI hard disc

- 1.2-Mbyte 5¼-inch flexible disc drive

- 1.44-Mbyte 3½-inch flexible disc drive

- Three serial ports, one parallel port and HP-HIL port

- VGA video adapter (with extra video RAM option)

- VGA color monitor

- Tilt/swivel base for the monitor

- HP Mouse

- HP Vectra DOS 3.X

  Microsoft Windows/386 Presentation Manager

  Enhanced HP Vectra PC Keyboard

- PC Kit (includes HP Expanded Memory Manager/386, HP disc cache software, HP Volume Expansion Utility, HP Terminal program, and system documentation)

The HP Vectra RS/20 Power User PC bundle is an excellent choice for end users who want:

- An office power user system

  A fully assembled system

- To be assured of receiving scarce accessories (e.g., extra system memory)

It is ideal for many consignment or dealer demo applications because it:

  Is a fully assembled system

- Has all the most popular accessories

- Shows off all the HP Vectra RS PC strengths

If you want convenience, flexibility, and power, buy the easy-to-order HP Vectra RS/20 Power User PC bundle (D1606B with appropriate language option) – it has it all.
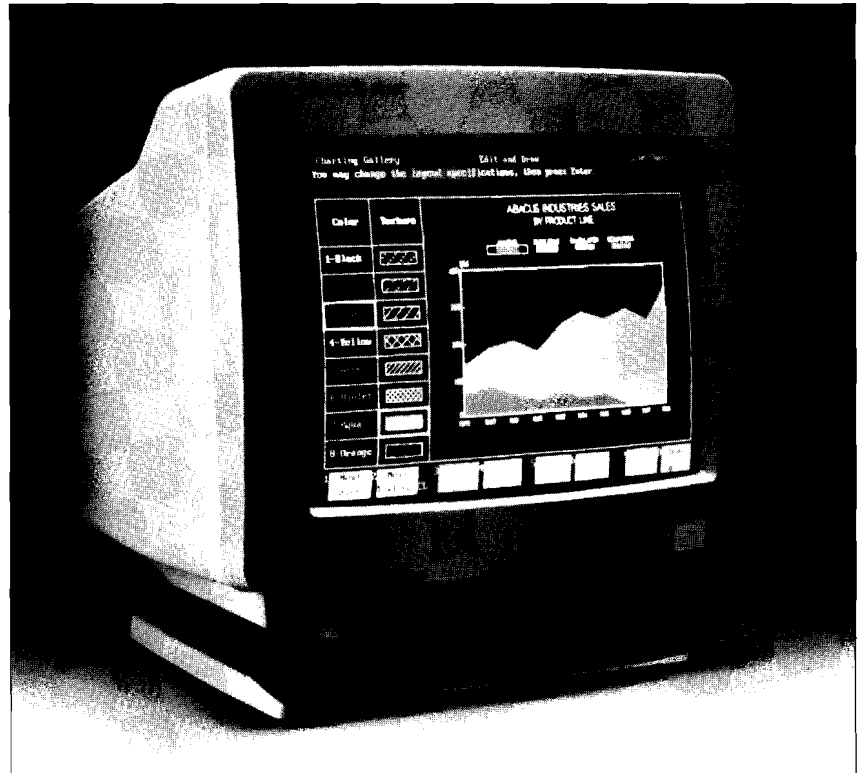
## HP ARPA Services/Vectra PC announces support of HP StarLAN 10

Hewlett-Packard announces the support of StarLAN 10 with the HP ARPA Services/Vectra PC. This new capability is expected to be available on the July 1988 HP Price List. This new capability enhances our PC connections by providing the de facto industry standard ARPA protocols over an emerging standard of IEEE 802.3 or Ethernet LANS operating over an unshielded twisted-pair wire at 10 Mbps.

The support of StarLAN 10 with ARPA Services/Vectra PC provides the user with a choice of three cabling schemes: ThinLAN, ThickLAN, or StarLAN 10. This choice allows the user to take advantage of the current cabling installed at their site, saving incremental installation and maintenance costs. Since the StarLAN 10 complies with IEEE 802.3 or Ethernet. users can still communicate with computers connected to a ThickLAN or ThinLAN coax cabling scheme through the StarLAN 10 hub.

## Announcing video graphics subsystem products



Hewlett-Packard announces the introduction of the HP video graphics subsystem, a state-of-the-art family of video products for use with the entire line of HP Vectra PCs. These new products enhance HP's video offering. bringing higher resolution, faster video processing, and a touch solution for our mainstream video products. These products will be on the HP Price List June 1. with immediate availability worldwide.

VGA is important not only because it is the "latest and greatest" video standard. but also because it offers important feature benefits over HP's previous color solution, EGA. and offers both improved features and compatibility over HP's previous monochrome solution. Multimode.

The increased resolution (480 lines for VGA versus 350 lines for EGA) represents a 37 percent improvement, which is immediately noticeable in graphics mode. It also provides a noticeably better text cell. The larger number of displayable colors and larger selection of available colors (larger color palette) give the user (or application) many more color choices with which to work. This makes a significant difference in representation of pictures, and helps in the presentation of data as well. These performance benefits will vary from application to application. HP's VGA card will perform from 40 to 400 percent faster than HP's EGA card. depending upon the application.

## HP video graphics adapter

The HP video graphics adapter (D1180A) is the driving component for HP's video graphics subsystem. This IBM VGA register-compatible video card features software compatibility with MDA, Hercules, CGA, EGA, and VGA video standards.

The HP video graphics adapter (HP VGA) offers a number of modes beyond the IBM VGA definition. These modes include: $800 \times 600$ graphics resolution, and 132-column text. The enhanced version of the adapter (Opt. 1A7) offers an additional 256 Kbytes of RAM, for a total of 512 Kbytes. This version offers $640 \times 480$ graphics resolution with 256 colors. The additional RAM may also be used by future applications.

## Major features and benefits

| Feature | Benefit |
|---|---|
| VGA register and BIOS compatibility | Highest level of compatibility |
| MDA Hercules. CGA, and EGA compatibility | Software investment protection |
| 512-Kbyte RAM (Opt. 1A7) | $640 \times 480$ in 256 colors |
| High performance | Faster system throughput |
| 8/16 bit card | Performance matched with 8 and 16 bit SPUs |

## HP color video graphics display

The HP D1182 color video graphics display is a 14-inch medium-resolution color display. It is designed for use by business professionals or by low-end CAD users. The high quality of the screen and the fine resolution of the display tube (.28 dot pitch tube) are exceptionally well suited for environments requiring a high daily system utilization. This combination provides excellent graphics (in resolutions up to 640 x 480).

The color video graphics display is fully compatible with industry-standard VGA displays. It accepts the standard 31.5 KHz horizontal input, and can accept vertical input from 60-70 Hz. This allows it to display a variety of resolutions, including $320 \times 200$, $640 \times 350$, and $640 \times 480$. With the appropriate video card, it can display software written for the MDA, Hercules. CGA, or EGA standards, as well as for the VGA standard. The display automatically adjusts the viewing area to accommodate these various resolutions.

An optional tilt/swivel stand is available for the color video graphics display. It is the same tilt/swivel (82959S) that is being used with the EGA display.

## HP monochrome video graphics display

The HP D1181 monochrome video graphics display is a 14-inch medium resolution monochrome display. It is fully compatible with the industry standard VGA monochrome display. The analog interface of the display allows the user a choice of up to 64 shades of gray. When used with the HP video graphics adapter, it can display a variety of resolutions, including $320 \times 200$, $640 \times 350$, and $640 \times 480$, and can display software written for MDA, CGA, EGA. Hercules, and VGA standards.

The monochrome video graphics display has a built-in tilt/swivel to allow the user to adjust the viewing angle. It is available in a choice of green, amber, or soft-white phosphors.

## HP Touchscreen Plus

The HP D1183A Touchscreen Plus is a touchscreen interface designed for use with the HP D1182A color video graphics display. It transforms the display into an interactive touchscreen. It provides an easy and natural way to communicate with your computer.

The Touchscreen Plus, like its predecessor, the HP Touchscreen (35723A), uses optical technology – a user's finger interrupts crossing beams of infrared light. It is backward compatible with the 35723A, and software written for the product will run unmodified on the HP Touchscreen Plus. The Touchscreen Plus snaps onto the front of the color display. It is specifically designed for use with this display, and will not fit on other monitors. It has built-in HP-HIL, and also has pass-through for other HIL devices.

## Ordering information

| Product Number | Description |
|---|---|
| D1180A | HP video graphics adapter |
| D1180A | With Opt. 1A7 (512 Kbyte RAM) |
| D1181A | HP monochrome video graphics display (amber) |
| D1181G | HP monochrome video graphics display (green) |
| D1181W | HP monochrome video graphics display (white) |
| D1182A | HP color video graphics display (U.S. version) |
| D1182B | HP color video graphics display (International) |
| D1183A | HP Touchscreen Plus |
| 82959S | Tilt/swivel base for color video graphics display |

*Desktop*

# Obsolescence of previous HP PC video products

The newly introduced HP VGA subsystem is intended to replace HP's previous video products in all PC applications. The HP VGA subsystem products offer enhanced functionality and improved price/performance compared to our previous video products. The previous PC bundles that include the existing video (EGA, Multimode) will be discontinued on the August 1 HP Price List. The individual products will still be orderable, however, it is HP's intention to obsolete those products. The following products will be removed from the HP Price List no later than February 1, 1989.

| Product Number | Description |
|---|---|
| 35731D/DB | Monochrome plus video display |
| 35732A | Monochrome plus adapter |
| 35743A/B | Enhanced graphics display |
| 45981A | Multimode video adapter |
| 45984A | Multimode buddy board |
| 45983A | Enhanced graphics adapter |

The HP color display (35741A/B), the HP monochrome display (35731A/B), and the HP Touchscreen (35723A) will remain on the price list due to use on non-PC products. However. the PC video cards that are used to drive those products will be obsoleted. effectively ending their usage on PCs.

It is to the user's advantage to migrate to the increased feature set and better price/performance of HP's new VGA video products. With the coming obsolescence of the older products. it is very important that users know that HP is moving away from them, and that they should be changing their purchases in favor of the new products.

One product that will continue to be sold is the tilt/swivel stand, 82959S. This stand, which has been sold with the enhanced graphics display (35743A/B), will continue to be used with the video graphics color display (D1182A/B). This will also ensure those users who have already purchased a 35743 a continued supply of tilt/swivels for later purchase.

## Also in this issue

*Mass Storage*

# HP 7978B and 7974A obsolescence plans

In June, 1987, HP announced the HP 7980A 6250/1600 cpi ½-inch tape drive and the HP 7979A 1600 cpi tape drive. These drives provide autoload, a smaller form factor, lower cost of ownership, and a faster tape speed than their predecessors, the HP 7978B and 7974A. Sales of the HP 7980A have been outstanding, and feedback has been very positive.

Host support of the HP 7980A and 7979A is now in place for the following systems:

- HP 3000 – MPE V, UB-Delta-3 and later, June 1987
- HP 1000 – A-Series, RTE-A 5.0, September 1987
- HP 9000 – Series 800, HP-UX 1.2, December 1987

Support is planned this summer for the following systems:

- HP 3000 – MPE XL, Release 1.1
- HP 9000 – Series 300, HP-UX 6.2

Now that these newer drives are available and system support is scheduled, discontinuance of the HP 7978B and 7974A continues to be planned for September 1, 1988.

## HP 7678B obsolescence

The HP 7978B will be removed from the HP Price List as of September 1, 1988, with a 10-year service support life. After September 1, orders will be accepted on an ovemde basis as supply allows. Service will continue on a "best effort" basis after September, 1998.

## HP 7974A obsolescence

There are two primary segments still buying the HP 7974A today: government-related users requiring 800 bpi capability (Option 800), and users requiring data interchange with older HP 1000 E-Series systems. Work is progressing toward adding 800 bpi capability to our current products, the HP 7979A and 7980A, with host support planned on the HP 9000 family and the HP 1000 A-Series. (We do not expect to add 800 bpi to the new HP 7980XC announced in the May issue of HP *Channels.*) When this solution becomes available, remaining sales of the HP 7974A will most likely decline further. For this reason, we are currently planning to remove the HP 7974A from the HP Price List on September 1, 1988. As with the HP 7978B, orders will be accepted after that date based on availability. Service support life is committed for five years.

## Special notice for HP 1000 E-Series buyers

Discontinuance of the HP 7974A and 7978B has special implications for users still buying the HP 1000 E-Series. There are no plans to support the newer HP 7979A/7980A on the E-Series. Therefore, when the HP 7974A and 7978B are removed from the HP Price List, these users will need to consider lifetime buy requirements for ½-inch tape drives.

## HP 7978BR and 7974AR remarketed drives available

Even after discontinuance of these drives, keep in mind that both drives are available as remarketed products.

Contact your HP sales rep for more information.

*Networks*

# HP StarLAN 10: a new LAN link for the OfficeShare family of networking software

HP StarLAN 10, the newest link for the OfficeShare family of networking software for PCs, enhances HP's unshielded twisted-pair LAN capabilities by allowing IEEE 802.3 local-area-network protocols to operate at 10 Mbps over unshielded twisted-pair wires.

StarLAN 10 complements the current OfficeShare StarLAN product by providing a solution for environments where additional bandwidth is required such as those with a large number of nodes. extreme network traffic, or use of high-performance workstations. We have provided an upgrade path for our current StarLAN users so they can migrate to StarLAN 10 if required.

HP StarLAN 10 has placed HP in a leadership position as the first major computer vendor to announce a 10 Mbps solution over unshielded twisted-pair wire. In addition, HP has been successfully leading the effort to put an IEEE standard in place for this leading-edge technology.

StarLAN 10, when combined with the HP OfficeShare family of networking software, provides PC users in business-office environments with a complete high-speed networking solution. PC users of Office Share software may use StarLAN 10 to integrate into a network that provides transparent access to HP's

distributed-data-processing applications and office-productivity services on HP 3000 computer systems. HP Office-Share software provides disc and file sharing and printer and plotter sharing with spooling on PC or HP 3000 servers, as well as file transfer and terminal access to HP 3000s, HP 1000s, and HP 9000s. StarLAN 10 will be supported on the full range of HP 3000 machines (both MPE V and XL) running NS/3000 release 1.1. StarLAN is also available for the HP Touchscreen PC (North America only).

## Product description

HP StarLAN 10 is a network link that interconnects PCs and HP 3000s. HP Vectra PCs and IBM PCs connect to the unshielded twisted-pair wire via a Star-LAN 10 interface card. Other systems (including the HP Touchscreen) use a LANIC interface with a standard AUI connection that connects to an HP twisted-pair MAU. These systems are all interconnected with a concentrating device called a hub.

Each StarLAN 10 hub can accommodate 12 twisted-pair connections and one AUI connection. HP StarLAN 10 hubs can be cascaded to accommodate larger networks. We recommend that you cascade StarLAN 10 hubs a maximum of two levels, and connect these two level subnetworks to a backbone cable. This will allow for future growth.

StarLAN 10 connections to a backbone cable (Thin or Thick) are made via a MAU and tap. The AUI connector from the MAU plugs into the AUI port on the StarLAN 10 hub. No bridge is required to connect a StarLAN 10 subnet to a backbone. A 10 Mbps-10 Mbps LAN bridge (P/N 28648A) may be used, however, if traffic isolation is desired.

If you would like further information, the following documents may be helpful.

| Lit No. | Description |
|---------|-------------|
| 5956-4141 | HP OfficeShare Network for Personal Computers data sheet |
| 5959-2264 | HP 28663A StarLAN 10 hub data sheet |
| 5959-2265 | HP 28664A twisted-pair MAU data sheet |
| 5956-4142 | HP OfficeShare Network configuration and ordering guide |
| 5958-9013 | HP StarLAN 10 cabling specification note |
| 5959-2208 | HP SiteWire twisted-pair cabling installation guide |
| 5959-2266 | HP SiteWire, an introduction |
| 5959-2267 | HP IEEE 802.3 LAN link configuration rules |

*Contact your HP sales rep to order this literature.*

## Ordering information

You may place orders for StarLAN 10 *today.* For more complete configuration and ordering information, refer to the HP OfficeShare Network configuration and ordering guide, lit. no. 5956-4142.

| Product No. | Description |
|-------------|-------------|
| *Products for connecting HP Vectra and ISM PCs (IBM PC /XT /AT and PS /2 Model 30)* | |
| Link | |
| D1802A | HP StarLAN 10/Vectra PC link Includes StarLAN 10 interface card and software |
| Services | |
| 50923F | NS-User Services/Vectra PC |
| Opt. OA9 | 10-user license |
| Opt. OAA | 50-user license |
| 50924F | NetIPC/RPM development package |
| 50925F | PC Server Software |
| 50929F | LAN PC user conhguration and diagnostics |
| Opt. OA9 | 10-user license |
| Opt. OAA | 50-user license |
| *Products for connecting the HP Touchscreen PC* | |
| Links and services | |
| D1803A | HP StarLAN 10 user link kit Includes ThinLAN interface card, unshielded twisted-pair MAU, and user software |
| D1804A | HP StarLAN 10 server kit Includes ThinLAN interface card, unshielded twisted-pair MAU, and server software |
| 50929A | ThinLAN/StarLAN 10 PC user configuration and diagnostics |
| Opt. OA9 | 10-user license |
| Opt OAA | 50-user license |

| Product No. | Description |
|-------------|-------------|
| *StarLAN 10 accessories* | |
| 28663A | StarLAN 10 hub Includes ThickMAU and integrated 5-meter AUI cable |
| Opt. 001 | Adds 12-port modular adapter |
| Opt. 241 | Deletes ThickMAU |
| Opt. 242 | Deletes ThickMAU, add ThinMAU |
| Opt. 900 | U.K. power cord |
| Opt. 901 | Australian power cord |
| Opt. 902 | European power cord |
| Opt. 903 | U.S./Canadian 125V power cord |
| Opt. 904 | U.S./Canadian 250V power cord |
| Opt. 906 | Swiss power cord |
| Opt. 912 | Danish power cord |
| Opt. 918 | Japanese power cord |
| 28664A | HP twisted-pair MAU |
| Opt. 001 | Adds loopback connector |
| *Precut unshielded twisted-pair cable* | |
| 92268A | 4 meters |
| 922688 | 8 meters |
| 92268C | 16 meters |
| 92268D | 32 meters |
| *Products for connecting the HP 3000* | |
| 30240A | HP ThinLAN 3000/V link |
| Opt. 100 | For Series 37. MICRO 3000 |
| Opt. 300 | For Series 39. 40, 42, 52 |
| Opt. 400 | For Series 44. 48, 58 |
| Opt. 500 | For Series 64. 68, 70 |
| Opt. 242 | Substitutes ThickLAN product |
| Opt. 142* | Substitutes unshielded twisted-pair MAU for use with StarLAN 10 |
| 36923A | ThinLAN 3000/XL link |
| Opt. 242 | Replace ThinMAU with ThickMAU |
| Opt. 142 | Replace ThinMAU with unshielded twisted-pair MAU |
| Opt. 300 | For Series 930 |
| Opt. 400 | For Series 950 |

*\* Option 142 will be available on the June 1, 1988. HP Price List.*

## Upgrades

HP users may upgrade their HP StarLAN network to an HP StarLAN 10 network. StarLAN 10 requires version B.XX.XX or later of the OfficeShare software (OfficeShare III). Users who do not have this version may upgrade their software to that version with the following products. To upgrade from StarLAN to StarLAN 10, order both the StarLAN 10 product *and* the upgrade on the same order. The StarLAN 10 product will be shipped directly to the user. When the user returns the old StarLAN product, a credit will be issued to the user's account. The StarLAN to Star-LAN 10 link and hub upgrade credits (D1802AN and 28663AN) will be available from May 1, 1988, through February 1, 1989.

| Product No. | Description |
|---|---|
| *Link* | |
| D1802AN | StarLAN to StarLAN 10 link upgrade credit |
| *Accessories* | |
| 28663AN | StarLAN to StarLAN 10 hub upgrade credit |
| *Services* | |
| 50923F | |
| Opt. 0CJ | Network Services-User Services StarLAN user upgrade kit |
| Opt. 0CK | Network Services-User Services ThinLAN/StarLAN 10 user upgrade kit |
| 50925F | |
| Opt. 0CJ | PC Server Software/Vectra PC upgrade kit |
| Opt 0CK | ThinLAN/StarLAN 10 upgrade |
| 50929F | |
| Opt. 0CN | ThinLAN/StarLAN/StarLAN10 configuration upgrade kit for HP Vectra PC and IBM PCs |

# HP StarLAN 10 overview

HP StarLAN 10 is HP's newest local-area network (LAN) that transmits data at 10 Mbps over unshielded twisted-pair wire. HP StarLAN 10 networks strengthen HP AdvanceNet's offering of scalable, flexible networking solutions by now allowing IEEE 802.3 and Ethernet local area networks to operate over unshielded twisted-pair wire.

## Key features

- Provides 12 twisted-pair connections with 10 Mbps link speed

- Supports 100 meters of twisted-pair wire between StarLAN 10 hub and end user

  Transparent link to network nodes and software

- PC to HP 3000 connectivity with HP OfficeShare services

- Support on HP 9000 HP-UX computers

- Supports both IEEE 802.3 and Ethernet Version 1.0 and 2.0 protocols

- HP StarLAN 10 hub has an AUI for direct connection to existing site backbone

- Coexistence with voice and data in same cable bundle

- Support of existing wiring through HP WireTest service

- Twisted-pair MAU has eight-pin modular jack for simple installation and an integrated one-meter AUI cable for connection to LAN cards with industry-standard AUI connectors

- HP StarLAN 10 hub provides auto-segmentation to automatically prevent a failed StarLAN 10 segment from bringing down the network

- Full repeater capabilities supports greater distances, allowing the expandability necessary to meet future growth requirements

An HP StarLAN 10 network (see Figure I.) has the following components: the HP 28663A StarLAN 10 hub, the HP 28664A twisted-pair MAU, and for HP Vectra PCs and IBM PC/XT/ATs, the HP D1802A StarLAN 10/Vectra PC link.

- The *HP 28663A StarLAN* 10 hub is a full 10 Mbps multiport repeater designed for IEEE 802.3 and Ethernet local-area networks operating over unshielded twisted-pair wire. Conformance to these industry standards provides a broad range of connectivity required in the multivendor environments of today. The HP StarLAN 10 hub supports distances of 100 meters between hub and the end user, provides 12 twisted-pair connections, and connects directly to a coaxial backbone via an HP 28641A or HP 30241A MAU.

  The StarLAN 10 hub is a full repeater, which means that limits set by IEEE 802.3 should be used. The maximum supported topology is four HP StarLAN 10 hubs in the path between two nodes. While three levels of cascaded hubs are supported, we recommend that only two levels of hubs connect to

a backbone. This will allow for future growth since multiple HP StarLAN 10 subnets having two levels of hubs can be connected to a backbone. For further information on supported configurations, refer to the following literature: "HP IEEE 802.3 LAN Link Configuration Rules" (P/N 5959-2267), and "The HP Office-Share Network Configuration and Ordering Guide" (P/N 5956-4142).

- The *HP 28664A twisted-pair* MAU provides the connection between the LAN interface card and the twisted-pair wiring. Using the de facto standard eight-pin modular jack as the twisted-pair interface, installations are quick and easy. It includes an integrated one-meter attachment unit interface (AUI) cable for connection to the AUI port of a computer's LAN interface controller card. For information on connecting the twisted-pair MAU to HP 3000s and HP 9000s, refer to the articles in this issue entitled, "HP StarLAN 10: A new LAN link for the OfficeShare family of networking software," and "HP StarLAN 10 supported on HP 9000 HP-UX computers." The HP 28663A twisted-pair MAU is designed to provide an AUI connection to twisted-pair wire for controllers that are compatible with IEEE 802.3 or Ethernet Version 1.0 or Version 2.0.

- The *HP StarLAN 10/Vectra PC* link, designed for HP Vectra PCs and IBM PC/XT/ATs, eliminates the need for the twisted-pair MAU. Packaged with HP OfficeShare software, this integrated PC LAN card provides a direct connection to the twisted-pair wire via an eight-pin modular jack. This allows users to realize substantial cost savings over other twisted-pair products on the market today that require both an external MAU and a LAN card for their PC. For more information on this product, see the article "HP StarLAN 10: a new LAN link for the Office-Share family of services" in this issue.
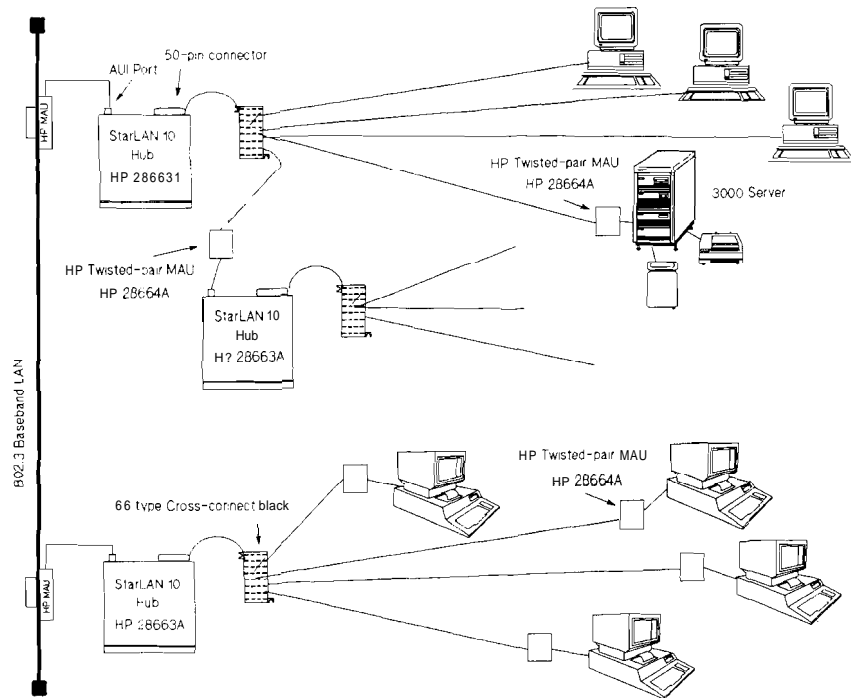
*Figure 1*

## Wiring specifications

HP StarLAN 10 local area networks use unshielded twisted-pair wire. Wiring specifications will conform to the IEEE 802.3 Type IOBASE-T specifications for a 10 Mbps over twisted-pair LAN. The 10BASE-T specifications are currently under development. Two pairs of 22, 24, or 26 AWG unshielded twisted-pair cable are required for each connection. Refer to the "HP StarLAN 10 Cabling Specification Note" P/N 5958-9013, for information on cabling specifications. The HP WireTest Service will be available to qualify existing wiring for a StarLAN 10 network. Availability and details will be forthcoming.

## Extensive press coverage

HP has received rave reviews and extensive coverage during our early product announcements and throughout our

activity in the IEEE 802.3 standards meeting. Overall, the press received to date supports HP as an industry leader in networking:

> "Let's give three more cheers for Hewlett-Packard Co. Last week HP introduced a 10 mbps, CSMA/CD, twisted-pair wire LAN, thus formalizing its proposal to that committee (IEEE) and assuming a leadership position." – *Computer Systems News*

> "As the first major computer vendor to bring 10 M bit/sec. twisted-pair networking to the marketplace, HP has a definite advantage." – Craig Symons. Vice-President Small Computer Systems Group, Gartner Group, Inc.

## What can standards and twisted-pair do for you?

HP's commitment and leadership role in the development of a standard for transmission of data at 10 Mbps over unshielded twisted-pair wire protects

users' investment by ensuring multivendor compatibility. Not only is the user's investment in computer products protected. their wiring system is leveraged to the fullest. By making full use of the wiring system, the user can take advantage of the many benefits of twisted-pair wiring: improved cable management, reduced cabling costs, nondisruptive and inexpensive adds, moves, and changes to their LAN, and coexistence of voice and data.

## Ordering information

| Product No. | Description |
| --- | --- |
| 28663A | StarLAN 10 hub (Includes ThickMAU and five-meter AUI cable) |
| 28664A | Twisted-pair MAU |
| 28663AN | Return credit for StarLAN hub |
| D1802A | StarLAN 10/Vectra PC link |

## Literature

| Lit. No. | Description |
| --- | --- |
| 5958-9013 | **HP StarLAN** 10 cabling specification note |
| 5959-2208* | **HP SiteWire** twisted-pair cabling installation guide |
| 5959-2267 | **HP** IEEE 802.3 LAN link configuration rules |
| 5956-4141 | **HP OfficeShare** Network for personal computers data sheet |
| 5959-2264 | **HP 28663A StarLAN 10** hub data sheet |
| 5959-2265 | **HP 28664A** twisted-pair MAU data sheet |
| 5956-4142 | **HP OfficeShare** Network configuration and ordering guide |
| 5959-2266 | **HP SiteWire**, An Introduction |
| 5956-4144 | **HP AdvanceNet** specification guide for information on LAN/9000 Series 800 Link, NS-ARPA Services/300 |

*\* Can be ordered from HP Direct. See ordering phone numbers on page **33**.*

Contact your HP sales rep to order literature and/or for more information on HP StarLAN 10.
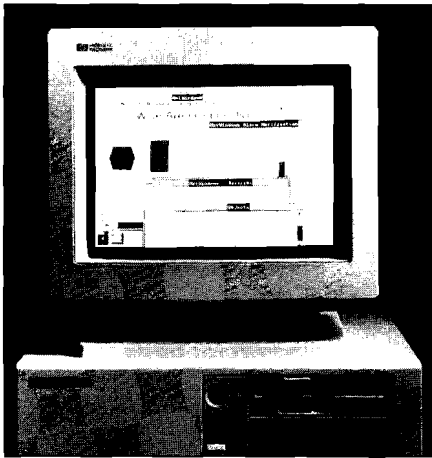
# OpenView: HP's network-management solution

On March 21, 1988, HP announced its new family of OpenView Network Management products. Since then the response has far exceeded HP's original expectations. OpenView is HP's family of network management products for managing wide- and local-area networks. The OpenView architecture conforms to OSI network management standards as they are defined today, and provides the capacity for managing multivendor networks. Below is a bit of background which should help in familiarizing you with the basics of OpenView and the first products announced in the OpenView product line.

## OpenView Windows



At the heart of the new offering is OpenView Windows, a graphical user interface running on the HP Vectra PC. OpenView Windows, based on Microsoft Windows®, simplifies the operation of networks by integrating network-management tools into a single look and feel.

One of the key features of OpenView Windows is a graphical network map. Clicking on a symbol in the map automatically provides access to all the applications specific to managing the selected system or device. This capability provides seamless integration between management applications.

Applications can be loaded onto the OpenView network-management workstation in any combination. OpenView thereby allows the user to distribute network-management tasks in whichever fashion makes the most sense for that particular network. This flexibility is a major differentiator over NetView, which demands a rigid hierarchical structure and only allows management of IBM-defined SNA devices.

OpenView Windows will ship by the end of 1988.

## HP OpenView NS Diagnostic Monitor

OpenView NS Diagnostic Monitor monitors the status of HP 3000s anywhere on the network. Status is indicated by colors on the OpenView Windows topology map. This tool allows the network manager to execute diagnostics such as echo tests, to read parameters of the various links, and to establish test connections between pairs of nodes. With the OpenView NS Diagnostic Monitor, one can poll remote nodes for configuration information, hardware and software types and version numbers. view a log of network alarms and events, and reset device parameters.

OpenView NS diagnostic monitor will be available to users by the end of 1988.

## HP OpenView NS Performance Monitor

With the OpenView NS Performance Monitor, one can collect statistical information on TCP and various links at each HP 3000 in the network. The information is helpful in planning network growth or in optimizing current configurations. This information includes such items as local and remote addresses.

source user and account, number of bytes sent/received, number of user packets sent/received, number of retransmissions, number of errors, and number of collisions.

OpenView NS Performance Monitor will be available to users by the end of 1988.

## HP OpenView Network Command Interpreter (NetCI)

NetCI is a command shell that allows easy execution of commands on networked HP 3000s. The user can set up node lists and command scripts to do remote command execution. While NetCI is not specifically a tool for troubleshooting the network, it allows the user to reduce troubleshooting time and effort by helping to quickly isolate certain network problems from one terminal. A fairly powerful yet easy tool, NetCI is shipping free of charge with NS versions on V-Delta-2 MIT or later.

## HP OpenView Data Line Monitor (ITIMS Manager)

OpenView Data Line Monitor facilitates remote operation of the powerful HP 4948A in-service transmission impairment measurement set, a test and measurement set for managing analog lines. OpenView Data Line Monitor integrates multiple ITIMSs under the OpenView Windows user interface. This allows centralized monitoring of up to 60 voice-frequency lines per OpenView Workstation, each having the ability to measure the following: attenuation and delay, signal-to-noise ratio, phase and amplitude jitter and modulation, phase and gain hits. etc. These measurements can be performed while the circuit is still in service – HP is the only vendor to provide such a tool.

The HP 4948A ITIMS itself is available now. OpenView Data Line Monitor will be available by the end of 1988.

## HP OpenView Bridge Manager

OpenView Bridge Manager allows a network manager to centrally operate and control HP intelligent bridges. With OpenView Bridge Manager, one can

monitor and control bandwidth utilization, safeguard network security, collect error analysis statistics, and segment the network for troubleshooting and fault isolation. This tool collects event alarms, address tables, packets forwarded/filtered/discarded/damaged, collisions, and errors. It permits one to set parameters, passwords, access restrictions, filter/forward addresses, and to execute self tests on the bridges.

OpenView Bridge Manager will be available by the end of 1988.

### HP OpenView Windows Developer's Kit

The OpenView Windows Developer's Kit is a package of tools currently available to third-party vendors and HP users interested in developing OpenView integrated network-management tools. It consists of software libraries and templates for programming, documentation, and guidelines for integrating. Training and support contracts are also available. The development kit greatly simplifies the creation of integrated applications and consistent user interface – so much so, in fact, that one of the first developers to receive the kit is planning to design, build, test and ship a completed product by the end of July, only four months after receiving the kit.

The OpenView Windows Developers' Kit is shipping on a limited basis currently. Later this year, the OpenView Windows Developers' Kit will be available for unlimited user shipments.

### Positive reaction

In the days until the OSI network-management standards become fully defined, the only way to support true multivendor networks is to bring those vendors together in some common, cooperative environment. HP is hoping that OpenView may serve as one such environment. Reactions so far seem to be in line with HP's optimistic goals: currently, several vendors are in negotiations with HP.

Contact your HP sales rep for more information.

# New distributed application development package: NetIPC/RPM for PCs

Distributed applications are extremely important today. Applications that transparently run on two or more computers and communicate over a network can make the most efficient use of distributed systems and provide timely information when and where it's needed. HP AdvanceNet for the business office provides a full range of networking products for distributed systems and for the development of distributed applications. This offering is strengthened with the ability to use PCs with these applications. Application developers may now integrate the most widely distributed, and often untapped, level of computing power across an enterprise-wide network.

The recently introduced NetIPC/RPM development package for PCs allows developers to write applications using standard HP AdvanceNet software to integrate PCs distributed across a network. The package is a set of Network InterProcess Communication (NetIPC) and Remote Process Management (RPM) program libraries that are the foundation for the development of distributed processing applications between a PC and the HP 3000. These libraries provide standard communication between concurrent processes on PCs and HP 3000s, and the ability for PCs to start and manage processes on HP 3000s. HP's distributed applications such as AdvanceMail, Information Access, and Cooperative Services use NetIPC for LAN communications.

The NetIPC/RPM development package for PCs contains program libraries for use in Microsoft C and Lattice C programs. Other languages, such as Pascal, can call C routines, providing flexibility in the programming languages developers may use. The libraries are linked by the programmer to the PC application being developed, and called by the application to provide the network communications required. On the HP 3000, concurrent processes are

developed using NetIPC/3000 and RPM/3000. NetIPC/3000 is provided with the HP 3000 network link product, such as the ThinLAN/3000 LAN link, and RPM/3000 is part of NS/3000.

To use the distributed application, users need only purchase the appropriate HP OfficeShare PC link (StarLAN 10, StarLAN, ThinLAN, or SERIAL Network), and the user configuration and network diagnostics product. They need not purchase the OfficeShare NS-User Services/HP Vectra PC product. Applications using the NetIPC/RPM libraries may, however, be run concurrently with NS-User Services/HP Vectra PC, allowing users to take advantage of both the application and network services such as HP Vectra PC and HP 3000 servers.

NetIPC/RPM is the ideal foundation upon which to develop advanced distributed applications. Application developers can now provide their users with the integration of PC processes using a standard HP AdvanceNet product.

### Ordering information

| Product No. | Description |
|---|---|
| *Each development PC requires one development package:* | |
| 50924F | NetIPC/RPM development package for PCs |
| *Each development and application user PC requires one of the following network links:* | |
| D1802A | HP StarLAN 10/Vectra PC link |
| 50926F | HP StarLAN/Vectra PC link |
| 50927F | HP ThinLAN/Vectra PC link |
| 50928F | HP SERIAL Network/Vectra PC link software |
| *Each development and application user PC also requires one of the following user configuration and network diagnostic packages:* | |
| 50929F | LAN PC user configuration and diagnostics package |
| Opt. 0A9 | 10-user license |
| Opt. 0AA | 50-user license |
| 50930F | SERIAL user configuration and diagnostics package |
| Opt. 0A9 | 10-user license |
| Opt. 0AA | 50-user license |

*Networks*

# Old versions of OfficeShare products to be obsoleted

The following OfficeShare PC networking products were removed from the HP Price List and obsoleted on June 1, 1988. All products have been replaced by new products that offer the same functionality plus new features (refer to March issue of HP Channels).

## Obsoleted products

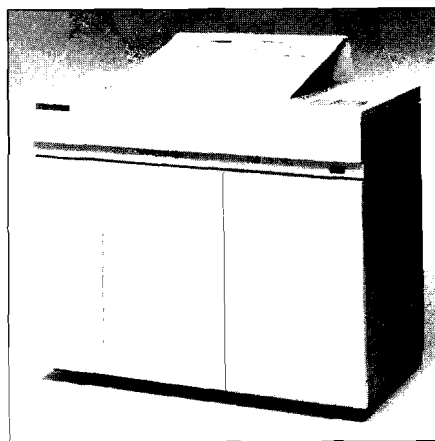| Product No. | Description |
|---|---|
| 50904F | StarLAN/HP Vectra PC server kit |
| 50905F | StarLAN/HP Vectra PC user link kit |
| 50906A | StarLAN configuration and diagnostics for a PC server |
| 50907F | ThinLAN/HP Vectra PC server kit |
| 50908F | ThinLAN/HP Vectra PC user kit |
| 50909A | ThinLAN configuration and diagnostics for a PC server |
| 50912A | StarLAN/ThinLAN configuration and diagnostics for an HP 3000 server |
| Opt. 001 | StarLAN/ThinLAN configuration and diagnostics for an HP 3000 server (Series 3X or MICRO) |
| Opt. 002 | StarLAN/ThinLAN configuration and diagnostics for an HP 3000 server (Series 3X or greater) |
| Opt. 003 | StarLAN/ThinLAN configuration and diagnostics for HP 3000 servers (upgrade from Opt. 001 to Opt. 002) |
| 50912R | StarLAN/ThinLAN configuration and diagnostics (Right to Copy 50912A) |
| Opt. MI | StarLAN/ThinLAN configuration and diagnostics (Right to Copy 50912A opt. 001) |
| Opt. 002 | StarLAN/ThinLAN configuration and diagnostics (Right to Copy 50912A Opt. 002) |
| Opt. 003 | StarLAN/ThinLAN configuration and diagnostics (upgrade from Opt. 001 to Opt. 002) |
| 50915F | ThinLAN/HP Vectra PC server upgrade |
| 50916F | ThinLAN/HP Vectra PC user upgrade |

The following table shows which new products should be ordered in place of the obsoleted products:

| If you ordered | Now order |
|---|---|
| 50904F | 50926F and 50925F |
| 50905F | 50926F and 50923F |
| 50906A | 50929F (for HP Vectra or IBM PCs) |
| 50907F | 50927F and 50925F |
| 50908F | 50927F and 50923F |
| 50909A | 50929F (for HP Vectra or IBM PCs) or 50929A (for HP Touchscreen PCs) |
| 50912A or 50912R (including Opt. 001, 002, and 003) | 50929A (for Touchscreen) or 50929F (for HP Vectra and IBM PCs) |
| 50915F | 50925F and 50925F Opt. 0CK |
| 50916F | 50923F and 50923F Opt. 0CK |

You are urged to change any existing orders you have for old products since the new products offer all of the same functionality at equivalent or lower prices. If you have any questions on ordering OfficeShare, please contact your HP sales rep.

*Plotters*

# HP unveils new electrostatic plotters



On June 1, Hewlett-Packard added two monochrome electrostatic plotters to the high end of the drafting plotter family – the HP 7600 Series electrostatic plotters, Models 240D and 240E. Now users can have pen-plotter-quality output in a fraction of the time.

The HP 7600 Series, Model 240D accepts media 609 mm (24 inches) wide, and the Model 240E uses media 914 mm (36 inches) wide. Both have a powerful, built-in VRC with a 40-Mbyte hard disc drive.

## Pen plotter quality

With a resolution of 406 dots per inch (160 dots per cm), the HP 7600 Series plotters produce well-defined lines, smooth curves, and crisp characters – the same kind of professional-quality output pen plotter users have come to expect from HP.

## Fast plotting time

The HP 7600 Series electrostatic plotters have a fast print speed. Actual plotting time for a typical full-size drawing is one minute, including the vector-to-raster conversion time.

## Designed for department use

One HP 7600 plotter can easily serve the needs of an entire workgroup. It has a high-volume setup and requires minimal operator supervision.

A single roll of paper can produce as many as 150 A1/D-size plots on the Model 240D or 125 A0/E-size drawings on the Model 240E. The control panel has a series of LEDs, so it only takes a quick glance to check on the paper supply.

A simple, straight-forward control panel minimizes the need for user/plotter interaction. Even in a shared workgroup, the HP 7600 Series plotter will be properly configured and ready to go.

## HP 7586B emulation plus HP-GL/2

The HP 7600 Series plotters have two modes – HP-GL/2 and HP 7586B emulation. Because of this emulation mode, the HP 7600 Series electrostatic plotters are ready to use on hundreds of CAD software packages.

For most plots, the HP 7586B driver will yield excellent results. But differences in the two technologies (pen plotter versus electrostatic) do result in minor differences in output. A detailed description of these differences is outlined in the Product Note, "Using HP 7586B Emulation Mode" (P/N 5957-3781), and in the User's Guide (P/N C1600-90002).

HP-GL/2 is the next generation in the HP-GL command language. It is HP's standard language for raster devices accepting vector input. HP-GL/2 offers higher throughput and greater overall performance, plus compatibility for the future.

### Hardware compatibility

HP 7600 Series electrostatic plotters connect easily to almost any computer system – personal computers, workstations, and large systems. Every HP 7600 plotter comes with three standard interfaces – RS-232-C/CCITT V.24, Centronics Parallel, and HP-IB (IEEE 488-1978). The HP 7600 Series also has RS-422-A capability for long-distance communication.

### Output for every application

In addition to standard ISO A1 and A0 and ANSI D and E sizes, the HP 7600 Series plotters can accommodate architectural D- and E-size drawing. With the built-in 40-Mbyte hard disc, they can also produce long-axis plots up to 15.3 m (50 ft) in length. The media set for the HP 7600 Series includes report grade paper, premium grade paper, and vellum, so users have media for all their plotting needs: working copy, final output, or archival drawings. Translucent paper will be available in Fall 1988.

### Target users and markets

The prospective HP 7600 Series user is probably an experienced CAD user. He may currently use a pen plotter and may even have access to an electrostatic plotter. Typically, the user will work in a department that outputs a high volume of plots per day (25 or more), and the manager is looking for one plotter that can fill department-wide needs.

Primary markets for the HP 7600 Series plotters are mechanical engineering and A/E/C (architecture, engineering, and construction). These applications tend to require line drawings, generally black and white. Electrical engineering is a secondary market for the HP 7600 Series plotters since color is often a requirement for final plots, although these plotters are useful for preliminary drawings or even final drawings for many users.

### Ordering information

| Product No. | Description |
| --- | --- |
| C1600A | HP 7600 Series Model 240D A1/D-size plotter |
| C1601A | HP 7600 Series Model 240E A0/E-size plotter |

*Plotters*

# HP 7600 Series extends drafting plotter line



With the addition of the HP 7600 Series electrostatic plotters to the high end of the drafting plotter line, users now have a more complete solution. The HP 7600 Series plotters are the perfect complement to HP's current pen plotter line.

### Comparing the DraftMaster plotter and the HP 7600 Series

An HP DraftMaster pen plotter and an HP 7600 Series electrostatic plotter have some commonalities. but they also have some important differences. Both the HP DraftMaster pen plotters and the HP 7600 electrostatic plotters produce top-quality plots. HP DraftMaster pen plotters may produce rounder arcs or smoother lines, particularly when using liquid-ink pens on polyester film; while HP 7600 Series electrostatic plotters, using raster technology, have the output advantage for small lettering. area fill, and sharp comers. Since most CAD drawings are a composite of all these elements, plots from an HP DraftMaster plotter and an HP 7600 Series plotter will be comparable in quality. But HP 7600 Series electrostatic plotters and HP DraftMaster pen plotters have some important differences, particularly throughput and color capability.

Plotting time for an HP DraftMaster pen plotter is heavily dependent on the number of vectors in the drawing. But the HP 7600 Series electrostatic plotters have a constant print speed – plot complexity affects only transmission time. So, once all the data has been transmitted to the plotter, plot time for a full-size drawing is less than one minute.

Even for simple drawings, the HP 7600 Series plotters hold a distinct throughput advantage over the DraftMaster plotters. For more complex drawings, the difference in plotting time becomes even more significant.

The other important difference is that the HP DraftMaster plotters can produce color ouput, while the HP 7600 Series plotters produce black-and-white only.

*continued on next page*

## Recommending a plotter

Which plotter we recommend to the user depends on how many drawings are to be made, how complex the drawings are, how much money is available, how many users must be supported, and whether color is needed.

We recommend an HP 7600 Series electrostatic plotter for users producing many plots per day (25 or more), departments sharing a plotter among several users, users generating complex drawings, and applications requiring large amounts of area fill. An HP DraftMaster pen plotter is recommended for users who produce relatively simple plots in moderate quantities (fewer than 25 plots per day), users who produce a few plots per week, users who regularly need A4/A-, A3/B-, or A2/C-size output, users who must have color, and users on a tight budget.

## Not an either/or decision

Quite often, the best solution for a department is a combination of pen plotters and electrostatics: an HP DraftMaster plotter for simple drawings and final color plots, plus an HP 7600 Series Model 240D or 240E for the bulk of the working drawings and final output for the more complex images.

*Plotters*

# New line of supplies for HP electrostatic plotters

Because supplies are a critical part of the electrostatic process, an entire line of media, toner, and support products have been developed for the new HP 7600 Series electrostatic plotters. Not all electrostatic plotters use the same writing system, so off-the-shelf electrostatic plotter supplies may yield poor results or even no results. Worse yet, the wrong supplies can damage the plotter.

## HP-certified supplies

All the HP-certified supplies for the HP 7600 Series have been chosen and designed to make sure users get the best possible output. Years have been invested in the research, development, and testing of these supplies, and they all meet the same strict standards for quality and reliability as the HP 7600 Series electrostatic plotter itself.

## Media set

The media set for the HP 7600 Series plotters allows users to use these plotters for all their plotting needs – working copy, final output, or archival drawings.

- Report-grade paper is an economical. opaque paper perfect for everyday use.

- Premium grade paper is a high-quality, high-contrast media suited to preliminary and final drawings requiring superior line quality or area fill in low humidity environments.

- Translucent paper is excellent for general purpose plotting, and the translucency and handling characteristics make it suitable for diazo reproductions and overlays. (Available Fall 1988)

- Vellum is 100 percent cotton rag based and is ideal for final drawings, overlays. and diazo reproductions.

*Note:* Pen plotter media cannot be used in the HP 7600 plotters. Electrostatic plotters use specially coated media, composed of layers which hold the electrostatic charges and attract the toner particles. Pen plotter media does not have these coatings and will not work in the HP 7600 Series plotters.

## Toner products

The liquid toner is designed to produce sharp, smudge-resistant plots and is compatible with all HP 7600 Series media. The clear dispersant is used to periodically flush the toner system to keep it running clean and trouble free.
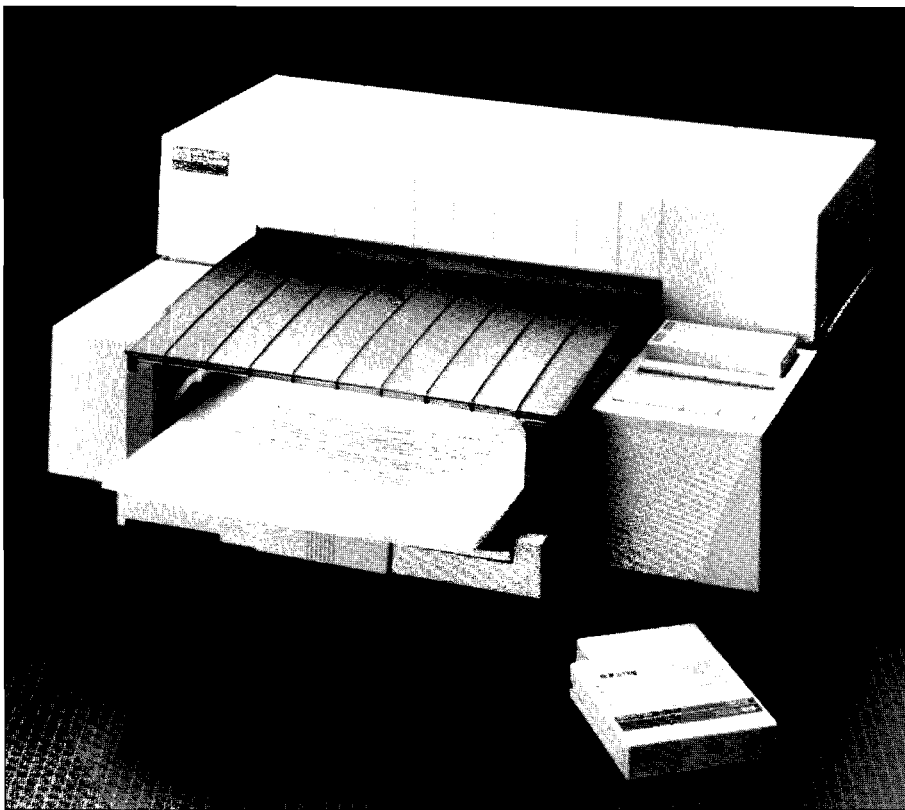
## Support products

The maintenance supplies – the writing head cleaner and the writing head polish – help keep the writing head free of dust and toner particles and protect it from corrosion.

## Supplies Catalog

For more information on supplies, refer to the HP 7600 Series Supplies Guide (P/N 5954-8760D for U.S., 5954-8811 for non-U.S.). The catalog has complete product descriptions, compatibility and usage guides, and ordering information.

# Announcing the H.P DeskJet printer



HP announces the HP DeskJet printer (P/N 2276A) – a personal-convenience printer that produces laser-quality output. This product features 300 dots-per-inch resolution, merged text and graphics, multiple fonts, two slots for font or personality cartridges, 120 cps letter-quality speed, built-in cut-sheet feeder for common office paper, desktop design, and quiet operation.

The HP DeskJet printer provides four main benefits:

- Sophisticated output and excellent print quality
- Desktop design for personal printing

  Ease of use
- Breakthrough price/performance

The HP DeskJet printer is the perfect upgrade for current dot-matrix printer owners who desire laser-quality output but could not afford a laser printer.

The prime prospect for the HP DeskJet printer is a current PC user working in an office or executive environment. This person is most often producing letters, memos, and reports with some spreadsheet and business graphics. They will respond to the true letter quality, ease of use, small size, and low cost of the HP DeskJet printer.

With excellent print quality and a break-through price, the HP DeskJet printer makes an excellent complementary business partner to the already success-ful HP LaserJet Series II printer. Those users who print short documents and want personal printing at their desks will be attracted to the HP DeskJet printer. The HP LaserJet Series II printer will attract users who need faster speed, higher print volumes, printer-sharing capabilities, or sophisticated merged text and graphics.

The HP DeskJet printer is configured with a Centronics parallel and a serial RS-232-C interface as standard equipment (no HP-IB is offered). It is supported on the HP Vectra PC line, HP portable PCs, HP terminals, HP Touch-screen PCs, Apple II series, IBM PC XT and AT, IBM PS/2, and compatibles. The HP DeskJet printer is also supported on the HP 3000, HP 1000 A-Series. HP 9000, and HP 260 systems.

The HP DeskJet printer currently offers a choice of 12 font cartridges. Each font cartridge offers up to four different type-faces with such features as bold, italics, underline, and others.

These cartridges are not the same as the ones offered for the HP LaserJet Series II printer. but provide performance equivalent to fonts offered on the HP LaserJet Series II printer for similar results.

The HP DeskJet printer has immediate software support through many of the popular PC software packages such as Lotus 1-2-3 and MS®-Word. For other packages, the HP LaserJet Series II printer driver will work well because the HP DeskJet printer uses the PCL Level III command set. In addition, an Epson FX-80 driver will also work if used with the optional HP Epson Desk-Jet personality cartridge. The Epson personality cartridge fits in one of the HP DeskJet printer's cartridge slots.

Contact your HP sales rep for more information.

*MS®-Word is a U.S. registered trademark of Microsoft Corporation.*

*Printers*

# AdvanceWrite Plus and the new HP DeskJet printer

The HP DeskJet printer is HP's exciting new individual printer for desktop office printing. The HP DeskJet printer and AdvanceWrite Plus, HP's sophisticated word processor, are a perfect pair for letter-quality, personal printing needs.

You can even print graphics integrated with AdvanceWrite Plus text, although side-by-side text and graphics (and landscape printing) are not supported by this printer.

For more information on AdvanceWrite Plus, please contact your HP sales rep.

*Printers*

# HP DeskJet Printer software support update

The HP DeskJet printer promises to be a very successful product, and software support is a key element. Following are some suggestions on how to get started and also the answers to several questions regarding support.

**Getting started**

To get software packages working with the printer, follow these basic steps:

1. Check the software package for an HP DeskJet printer driver. If an HP DeskJet driver is not included, then check the disc included with the HP DeskJet printer Owner's Manual.

2. If you can't find an HP DeskJet printer driver, then try using the HP LaserJet printer driver in your software application *until you can obtain* an HP DeskJet printer driver. HP DeskJet printer drivers are available from most of the software vendors listed in the HP DeskJet printer Software Reference Guide, P/N 5954-9945. Don't forget that Chapter Three of the HP DeskJet printer Owner's Manual contains application notes for 33 software packages.

*Where can I get a copy of the software package DESKCONTROL?*

This product was listed in error in the HP DeskJet Printer Owner's Manual as a solution for Displaywrite support. It is not currently offered as a product from the manufacturer (Insight Development) or HP.

*Is there a Displaywrite driver for the HP DeskJet printer and where is it available?*

Yes, there is a Displaywrite utility available for the HP DeskJet printer. A copy began shipping with HP DeskJet printers after March 14, 1988, and is now available from the HP DeskJet printer HelpLine.

*Which driver is used with Microsoft Windows 386?*

The current HP DeskJet printer driver developed for MS-Windows versions 1.0-2.0 will work with both versions of Microsoft Windows. The HP DeskJet printer driver is available from Microsoft and will be bundled with future printer shipments.

*Do uny HP software packages support the HP DeskJet printer?*

Yes. The following Hewlett-Packard software packages support the HP DeskJet printer, giving users a one-vendor solution.

- AdvanceWrite Plus

- The Graphics Gallery

The HP DeskJet printer will be supported in the next release of HP word PC.

*Are there any drivers for the HP 150 personal computer?*

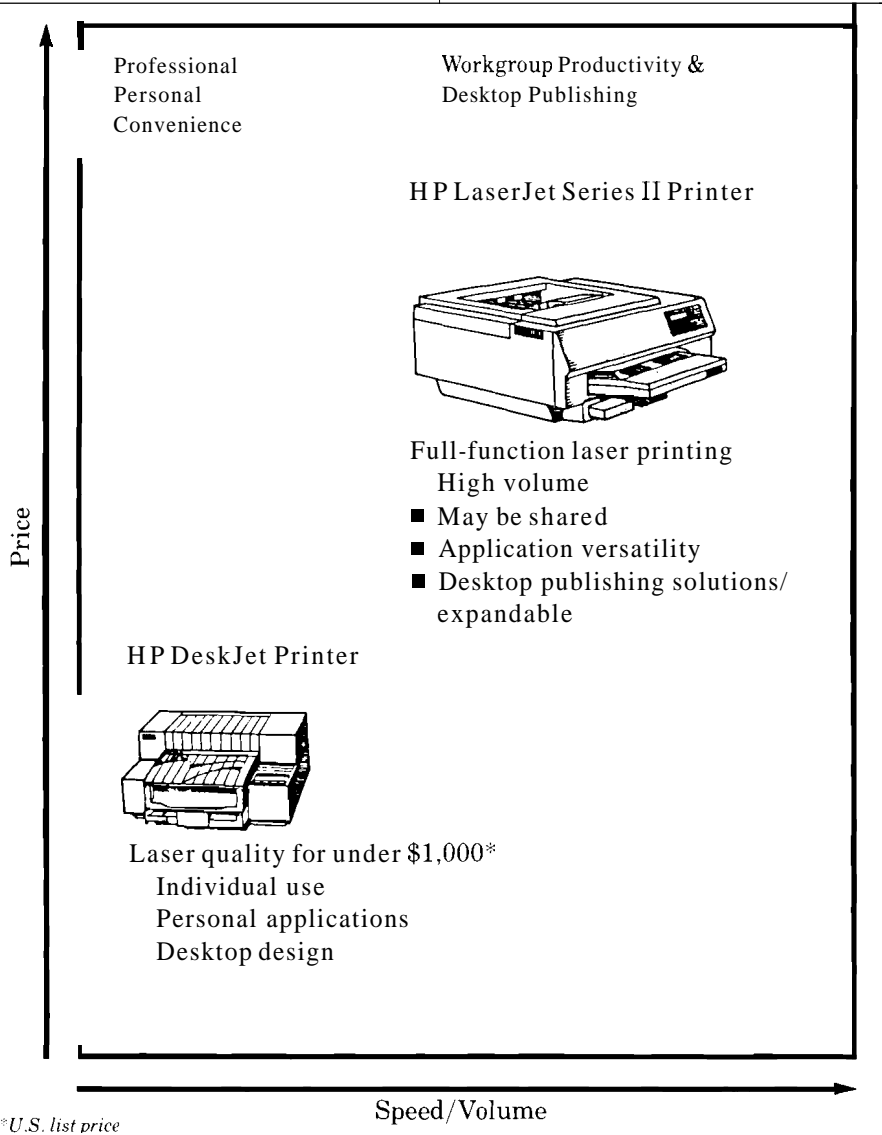Yes. there are four drivers available for the HP 150.

- Lotus 1-2-3 1.1

  Lotus Symphony 1.1

  Microsoft Word 1.1

- MultiMate Advantage 3.29

Contact your HP sales rep for information on how to obtain a copy.

# Positioning the HP DeskJet printer with the HP LaserJet Series II printer

The new HP DeskJet printer is a perfect complementary partner to the HP Laser-Jet Series II printer. The following figure shows the differences between the positioning of the two printers.

printer – often because of price. Until the advent of the HP DeskJet printer, these buyers would likely purchase a 24-wire dot matrix printer for improved print quality. The HP LaserJet Series II

**Professional Personal Convenience**

**Workgroup Productivity & Desktop Publishing**

**H P LaserJet Series II Printer**

Full-function laser printing
High volume
■ May be shared
■ Application versatility
■ Desktop publishing solutions/ expandable

**H P DeskJet Printer**

Laser quality for under $1,000*
Individual use
Personal applications
Desktop design

*Price*

*Speed/Volume*

*\*U.S. list price*

The HP DeskJet printer is for individual desktop use. It appeals to current owners of low-end 9-wire dot matrix printers who want the benefits of laser printing but have not purchased a laser

printer is for high-volume. shared, or network use. It is versatile in that it can be expanded, and is clearly the desktop publishing (DTP) printer of choice.

## Printer comparison

| Features | HP DeskJet printer | HP LaserJet II printer |
|---|---|---|
| Speed | 120 cps LQ (≐ 2 ppm) 240 cps draft | 8 ppm No draft |
| Landscape | No | Yes |
| Expected usage | 50 pages/day | 250 pages/day |
| Forms handling | | |
| Standard cut sheet | Yes | Yes |
| Legal cut sheet | Yes – no tray change | Change tray |
| Labels | No | Use LJII label stock |
| Envelopes | Hand-feed | Envelope tray |
| Correct order output | No | Yes |
| Maximum font size | 18 point | 48 point |
| Print technology | Plain paper thermal Inkjet | Laser |
| U.S. list price | $995 | $2,595 |

The previous chart shows some of the specific differences between the two printers. Notice that the HP DeskJet printer provides breakthrough price/performance for individual use. The HP LaserJet Series II printer provides excellent price/performance for complex applications for high-volume shared or networking use. Regardless of user needs, the HP DeskJet and HP LaserJet printers offer the best print quality that money can buy.

# Correction to HP DeskJet printer Software Reference Guide

The phone number listed for Microsoft® Windows support under "Special Applications" is incorrect in all versions of the HP *DeskJet printer Software Reference Guide* (P/N 5954-9945) printed prior to April, 1988. The correct Microsoft support number is 206-882-8089. This error will be corrected in future versions of the document.

# 220V/240V HP LaserJet 500 PLUS printer to be discontinued

On June 1, 1988, the 220V/240V HP LaserJet 500 PLUS printer (HP 2686DA, DB, DQ, DU, DY) was discontinued and removed from the HP Price List. (The 115V HP LaserJet 500 PLUS printer [HP 2686D] was discontinued effective April 1, 1988.) Due to a surge in sales, the 220V/240V HP LaserJet 500 PLUS printer will be out of stock by June 1. We apologize for any inconveniences created by this sudden stock-out.

A replacement for the HP LaserJet 500 PLUS printer will be introduced in the fourth quarter of 1988. The replacement printer will use two input paper trays and will be based on a print engine that is similar to the HP LaserJet Series II printer engine. More details will be available at introduction.

# Price increase on HP LaserJet Series II printer

On May 1, 1988, a price increase went into effect on the HP LaserJet Series II 115V printer (P/N 33440A).

As of this writing, all accessories and supplies such as toner (EP) cartridge, fonts, memory boards, paper trays, etc., are to remain at current prices. If you need clarification, please contact HP's Direct Marketing Division (DMK).

The HP LaserJet Series II printer price increase is a direct result of the recent fluctuations in the dollar-to-yen monetary situation. Our goal was to implement minimal increases on the HP

LaserJet Series II printer to keep it competitively priced in the marketplace.

Contact your HP sales rep for more information.

# International OCR software now available

ReadRight™ Optical Character Recognition (OCR) software (P/N 88401A) for the HP ScanJet scanner is now available in an international version, ReadRight International™.

OCR software provides text input capability for the HP ScanJet scanner. It allows users to enter typed text into their computers without rekeying. Documents that only exist on paper can be stored or edited without having to be retyped.

ReadRight International recognizes a variety of typefaces in sizes ranging from 6 to 12 points. It recognizes monospaced text from 10 to 15 pitch as well as some proportionally spaced fonts. It will recognize different fonts within the same page, paragraph, or sentence without the user having to tell the system which font is being read.

**Currently supported typefaces**

| Monospaced | Proportionally spaced |
|---|---|
| Courier | Bold |
| Pica | Cubic |
| Elite | Roman/Madeleine |
| Prestige Pica | Title |
| Prestige Elite | Modern |
| Letter Gothic | Thesis |
| OCR-B | Theme |
| Bookface Academic | Arcadia |
| Prestige Renown/Style | Gothic/Victory |
| | Majestic |

As with most low-end OCR systems available today, ReadRight International does not read typeset documents (books, magazines, brochures, etc.), loose dot-matrix print, or poor-quality photocopies.

The ReadRight International software package contains both 5¼- and 3⅜-inch media, allowing it to be used on both IBM XT/AT and compatibles and IBM PS/2 models 30, 50, 60, and 80.

ReadRight International software is localized for the European market with a self-contained manual translated in English, French. and German.

*ReadRight* International™is *a trademark of* OCR Systems, Inc.

# Arabic now available with HP 700/92 and 700/94 terminals

Arabic is now available with the HP 700/92 and HP 700/94 terminals. The Arabic option is an English/Arabic bilingual, bidirectional terminal. It is modeled after the HP 2622A Option G06 and the Arabic HP 150.

**Option features**

- Full use of all the standard HP 700/92 and 700/94 features.

- Bilingual keyboard that allows users to mix both English and Arabic text.

- Contextual analysis of Arabic data displays the characters' proper shape.

- English mode of operation that functions much like the standard HP 700/92 and 700/94 terminals, and also includes the added capability of entering Arabic characters intermixed with English text.

  Arabic mode of operation that functions with a right-to-left orientation and also allows English characters to be intermixed with Arabic text.

- Character mode, block-line mode. and block-page mode of operation in both English and Arabic.

- Complete USASCII character set, along with the complete HP Arabic-8 character set.

- Line-drawing character set.

- Full editing capabilities in both English and Arabic modes.

- Margins and tab stops with directional orientation based on the terminal being in English or Arabic mode.

- Programmatic cursor positioning consistent with the directional orientation of either English or Arabic mode.

- Monolingual fields. where any field can be defined as a single language for that field.

- User softkeys can be defined with English and Arabic text.

The Arabic option can be ordered as an option with the HP 700/92 and 700/94, or as a standalone keyboard kit.

*Note:* Only terminals with serial number prefix 2749 or later can be upgraded with the Arabic option.

With the terminal, order Option ABV with the HP 700/92 (C1001A/G/W) or the HP 700/94 (C1002A/G/W). The standalone kit to upgrade a terminal can be ordered as C1020A Opt. ABV.

If you have any further questions regarding the features of this new option, contact your HP sales rep.

*Terminals*

# New barcode reader for HP 700 terminal family

A new barcode wedge reader for the HP 700 terminal family, P/N 92917A, is available from HP.

This reader adds another option to the already highly competitive HP 700 family. It is supported on HP 700/92, HP 700/94 (with firmware revision code 2733 or later). HP 700/22, and HP 700/43 terminals.

The HP 92917A reader is connected between the terminal and the keyboard and emulates keyboard input. A terminal does not differentiate between a barcode reader input and a keyboard input.

The HP 92917A is 100 percent application transparent. This new reader not only provides all of the features of the HP 92915A, but also contains additional improvements. To ensure compatibility between products, the same barcode symbologies, wand resolution, and programming have been retained.

The HP 92917A has been on the HP Price List since April 1. It is listed on Exhibits A1, A5, and A9.

## Ordering information

| Product No. | Description |
|---|---|
| 92917A | Barcode reader for HP 700 terminal family |
| | Supported on HP 700/92. 700/94, 700/22, and 700/43 terminals |
| Opt. 030 | Delete wand option |

For more information, see the data sheet, P/N 5956-4286, or contact your HP sales rep.

# Also in this issue

# Software Packages Available and Wanted

If you have a software package available for cross-licensing. or are looking for a package to cross license. this section will help you. Your cntry will appear for two months; the most recent additions are shaded. To list your company in the Cross-Licensing Classifieds (at no charge), see the address at the end of this section.

## Software Packages Available

**Industry:** *Cross Industry*

**Abstract:** VCL is an emulation of VMS that implements over 60 of the commands in the Digital Command Language (DCL). VCL is available on the HP 9000 Series 300 and 800 running HP-UX. Hewlett-Packard's version of AT&T's UNIX® operating system V. Like VMS, VCL's command set is extensive and features commands such as ASSIGN, COPY, DELETE. DIFFERENCES, MAIL, SET DIRECTORY, and SPAWN. Other features of VCL are lexical functions. flow control within command files, line editing. command history, and a customizable HELP facility. VCL's lexical functions allow users access to system variables, conversion of data types, and character string manipulation. With the command files in VCL, users can create batch processes that run after hours and provide results the next day.

VCL eliminates extensive UNIX operating system training for VMS users. VMS users can convert to HP systems without having to learn UNIX commands. However, the VCL TEACH command will help users learn UNIX by displaying the equivalent UNIX command of the VMS command entered. In addition, VCL offers a PASSTHRU mode which lets users access all of the UNIX commands and utilities available, along with the VMS commands.

**Abstract:** EDT + is an cmulation of Digital's text editor, VAX EDT, and is available for the HP 9000 Series 300 and 800 running HP-UX. EDT + implements all of the features in VAX EDT, including GOLD keys, keypad, nokeypad. and line mode, extended ASCII character set, user-defined keys, customizable HELP, multiple buffers, disaster recovery, macros, and file transfer capabilities. The file transfer facility allows users to upload/download files to/from the VAX while editing.

Boston Business Computing. Ltd., is a Lawrence, Massachusetts-based company that designs. sells, and supports DEC-compatible software on a wide range of MS-DOS and UNIX operating systems. Products include EDT +, VCL, and DESK EXECUTIVE, an office automation package that works with Digital's ALL-IN-1 software.

**Company Name:** Boston Business Computing, Ltd

**Address:** Riverwalk Center
360 Merrimack Street
Lawrence, MA 01843
U.S.A.

**Phone;** 617-683-7920

**Contact Person:** Edward J. Gaudet

**Tvpe of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

**Industry:** *Manufacturing Control*

**Abstract:** Hoskyns UniSoft Manufacturing Control System (MCS) is one in a series of Hoskyns Modular Application Software (MAS) applications that UniSoft has migrated from the IBM mainframe environment to run under the UNIX" operating system.

MAS-MCS is a closed loop MRP II (Manufacturing Resource Planning) system with net change. bucketless operation, designed to provide manufacturing management with all the information necessary to control the complctc production cycle. MAS-MCS is modular in structure to allow implementation in line with any requirements.

The system can either be implemented as stand alone or combined with the proven Hoskyns Financial Control (FCS) and Sales Order Processing (SOP) to form UniSoft's powerful and flcxiblc Integrated Business System (IBS).

**Industry:** *Cross Industry – decision support, financial modeling*

**Abstract:** UniSoft's Integrated Business System (IBS) has been developed to meet the needs of a wide range of diverse industries, combining tried and tested application software with the latest in fourth-generation techniques. This allows once-off modifications or customer-specific add-ons to be developed quickly, easily, and cost effectively. Its modular structure enables a selection of only those elements relevant to the requirements.

The core of IBS is the well-established MAS from Hoskyns (the U.K. subsidiary of Martin Marietta), already installed in over 500 sites worldwide, which UniSoft transferred from the IBM mainframe environment to run under a UNIX operating system with no loss of functionality. The MAS suite covers Financial Control (FCS) and Manufacturing Control (MCS) with which UniSoft has integrated Sales Order Processing (SOP). Payroll. and PRO-IV, fourth-generation language and applications generator.

**Industry:** *Financinl Analysis*

**Abstract:** The Financial Control System (FCS) is one in a series of Hoskyns MAS that UniSoft has migrated to run under the UNIX operating system.

Built by special teams of accountants and technical staff, FCS was originally designed for the larger company for use on IBM mainframes but is now available with all the advantages of a UNIX operating system and with no compromises on functionality, to companies distributing systems onto smaller machines or for the smaller company on a lower budget.

MAS-MCS is both multicompany and multicurrency offering Sales, Purchase, and General Ledgers which enables both divisional and project reporting.

**Company Name:** UniSoft Ltd (formerly ROOT Computers Ltd)

**Address:** Saunderson House
Hayne Street
LONDON
EC1A 9HH

**Phone:** (+44) 1 606 7799

**Contact Person:** Joy Nunn, Manager Marketing Opcrations

**Type of Distributor Wanted:** Dealership

**Geographic Coverage:** Worldwide

**Industry:** *Community banking, individual banks, und small bank-holding companies*

*Abstract:* First Total Systems. Inc., a Denver, Colorado-based corporation, has developed and marketed The Total Bank System™, a fully integrated commercial banking package with all standard banking applications. Major marketing activity has been in Colorado. The current installed customer base of 10 includes 7 in Colorado with l each in Detroit, Michigan. New York, and London, England.

Operating on the HP 3000 line, written in ANSl COBOL. and interfacing MCBA General Ledger, The Total Bank System is aimed at community banks from $10 million to $300 million in total assets or branch banking organizations of up to 25 branches.

The company has interest in exploring cross-licensing potential with an established HP value-added business. An active, well-staffed marketing program with bank knowledge and/or a current product offered to the banking community would be a good starting place.

**Compuny Name:** First Total Systems. Inc

**Address:** 1325 South Colorado Blvd. #24
　　　　　Denver, Colorado 80222
　　　　　U.S.A.

**Phone:** 303-753-0295

*Contact* **Person:** Jim Grimsley

*Type of Distributor* **Wunred:** Open

**Geographic Covrruge:** Worldwide

**Industry:** *Cross Industry*

**Abstract:** KPG Incorporated has just announced the introduction of a low-cost, add-on graphics controller for workstation dot-matrix serial or laser printers.

The new printer controller, named the PANDA. gives the user the ability to generate complex labels incorporating forms. graphics, and bar codes. Unlike software solutions, the PANDA frees the computer for other work while the printer is producing labels. It can automatically repeat print both horizontally and vertically. Jobs may be queued in its input buffer. These features were previously only available to users of large line printers.

The PANDA printer controller adds programmable features to most popular PC-compatible printers such as the HP LaserJet, IBM Proprinter, or any other printer with HP LaserJet, Okidata, or Epson printer emulations.

The PANDA makes use of the printer's maximum speed and resolution. overlapping dots to print at the density requested. Labels and forms may be designed by a user with very little computer experience.

A printer enhanced with a PANDA will print most widely used bar codes (UPC, EAN. Telepen, Interleaved 2 of 5, Code 3 of 9, and Codabar). all with or without human readable interpretation. It also prints upper and lower case letters in varying densities and 250 sizes, black on white or reversed. Its line drawing enables most form outlines to be created easily. All of these elements may be scaled and positioned independently and may be rotated through 90, 180. and 270 degrees.

Now, companies with small or occasional barcode labeling requirements can generate labels in-house using their own personal computer and printer. The PANDA printer controller brings the efficiencies of barcode labeling to the reach of even the smallest company.

The PANDA comes with KPG's own LabelGenie applications software to further enhance its flexibility and ease of use.

*Abstract:* New View LabelGenie uses the power of Microsoft Windows to enable users to design barcode labels, see the design, and create graphics images at the same time.

View LabelGenie is the third generation of KPG's successful LabelGenie label design and production software. It makes it possible to create almost any label or format that a user's printer can print. Labels may include fixed, variable, and duplicate data fields printed as expanded characters in a wide range of sizes and styles, bar codes, pictures, and forms.

With View LabelGenie. the designer can see an accurately scaled representation of the label on the screen as it is being designed. With a simple command, the operator can switch from designing the label. to seeing the label on the screen in proportion to the way it will look when printed, and back again.

View LabelGenie actually shows the user exactly what the various fields will look like including realistic and scannable barcodes. By scaling the label to use as much of the screen as possible, even the smallest type becomes readable. View Label-Genie makes designing labels simple to learn, saves time in refining designs. and allows this work to continue while other labels are being printed.

The Windows environment offers the users of View LabelGenie many advantages. The growing number of programs being written under Windows can easily be integrated with View Label-Genie. For example. the user may select any of the CAD, graphics, or painting programs that support Windows and use it to create a logo or illustration on the screen. Once the image has been transferred to the Windows Clipboard, View Label-Genie can capture it and write it to disk. It is then available for incorporation into any label design.

View LabelGenie is compatible with the HP Vectra PC and IBM PC compatibles.

**Company Name:** KPG Incorporated

**Address:** Cosmopolitan Center, Suite 204
　　　　　6075 Barfield Road
　　　　　Atlanta, Georgia 30328
　　　　　U.S.A.

**Phone:** (404) 252-7366

**Facsimilr:** (404) 252-3561

*Contact* **Person:** Arthur Clevenger

*Type of Distributor* **Wunred:** VAR, Systems Integrator

*Geographic* **Coveruge:** Worldwide

# CROSS-LICENSING CLASSIFIEDS

**Induslry:** *3-D Surface Modelling, Animation, und Motion Simulation*

**Abstract:** Creative Visual Software, Inc. (CVS), is dedicated to producing high-performance engineering graphics software designed to take advantage of the state-of-the-art hardware features of today's workstations.

This is especially true of our software running on the SRX series. We have optimized our products to take full advantage of the superior hardware features of the SRX including hardware shading, z-buffering and multiple light source implementation. For our REPLIMOVIE and VOYAGER applications, we have customized our menus to tie directly to these SRX features.

Our software is extremely powerful, yet reasonably priced and affords even the casual user the ability to create complex 3-D models and then produce wireframe or shaded animations and simulations in a very short period of time. Modelling is extremely efficient using our straight-forward menus and data archiving system.

Once the models have been created with REPLICORE. they can be moved to REPLIMOVIE and VOYAGER. Animations and simulations can then be produced using our intuitive menus and replay features. This includes rotating reference frames, hinge-points, and multiple camera control features. For example, a complete animation of high complexity including modelling, can be produced in two to three hours. The playback illustrates the beautiful shading and lighting effects produced by the SRX series.

**Company Name:** Creative Visual Software, Inc.

**Address:** P.O. Box 20638
San Jose. CA 95160
U.S.A.

**Phone:** (408) 997-1621

**Contact Person:** Larry Cooper

**Type of Distributor Wanted:** VARs, Distributors, OEMs

**Geographic Coverage:** Worldwide

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**Industry:** *Software Development*

**Abstract:** UniPress Emacs is a powerful multiwindow, full-screen text editor. It is an entire programming application development environment that is used by programmers, technical writers. and other professionals who require both power and flexibility. UniPress Emacs includes multiple windows, 'shell' windows for executing UNIX operating system commands, and uses many windowing environments, including X-Windows. UniPress Emacs can be extended through command macros and the built-in MLisp programming language. MLisp provides looping, flow control. math and logical operations, and much more. UniPress Emacs provides programming assistance for C. Pascal, and MLisp. It checks for balanced parentheses and braces, and automatically indents and reformats code as needed. In addition, Emacs offers hundreds of other editing facilities. UniPress Emacs will run on the HP 9000 Series 300, 500, and 800. Emacs supports UNIX operating system. VMS. and OS/2.

**Company Name:** UniPress Software, Inc.

**Address:** 2025 Lincoln Highway
Edison NJ 08817
U.S.A.

**Phone:** 201-985-8000

**Contact Person:** Marilyn R. Kilinski

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

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**Industry:** *Architecture, Topography, Town Planning*

**Abstract:** STAR ARCHITECTURE UX is a 3-D conception software for architectural projects and substructures. made up of a basic module (3-D and 2-D conception of a project and plan production) and four options for the moment: solid modelling, bill of materials. topography, and management.

STAR ARCHITECTURE UX is designed to solve the integration of graphics and technical computers in architectural offices.

The main characteristics of the software are bound to the UNIX operating system, allowing the simultaneous running of different programs, as well as the graphical and technical work on different windows on the screen. Other features include: graphical 3-D and 2-D commands are available simultaneously; the user has the possibility to work directly in real perspective: the utilization of explicit pop-up menus gives all the office staff the opportunity to access the system; the concept of constructive components catalog make the automatic production of all plans and bill of quantities easier.

STAR ARCHITECTURE UX runs under the UNIX operating system on the HP 9000 Series 300 computers.

**Company Name:** STAR INFORMATIC SA

**Address:** Parc Industriel de Sart-Tilman
Avenue de Pre Aily, 24
4900 ANGLEUR – LIEGE
BELGIUM

**Phone:** + 32 41 67 53 13

**Contact Parson:** Jean-Paul CORNIL

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

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**Induslry:** *Cross-Industry – Office Automation*

**Abstract:** Decathlon GOLDMEDAL is the seamlessly integrated office automation package that is easily customized for vertical application requirements. GOLDMEDAL includes powerful word processing, spreadsheet, relational database, communications, and business graphics. The natural language interfaces and intelligent learning functions permit the user to make enhancements and create special modules without knowledge of computer programming.

GOLDMEDAL's applications are integrated through a special interface shell that permits multitasking even with the HP Vectra PC environment. As GOLDMEDAL is available on everything from the HP Vectra PC to the HP 9000 Model 850, users of small and large HP computers can transparently share information from functionally identical office automation software. Other special features include very low memory overhead, unlimited windowing, background processing/communications. and localized integrational language support.

**Company Name:** Decathlon Data Systems, Inc.

**Address:** 1650 38th Street
Boulder, CO 80301
U.S.A.

**Phone:** 303-440-9000

**Contact Person:** Dr. G. Robert Williams
Kenneyth B. Griffin

**Type of Distributor Wanted:** Open

**Geographic Coreragr:** Worldwide

**HP Computer Support:** HP Vectra PC (all Model DOS and 386 UNIX)
HP 9000 Series 300, 500, 800

**Other HP Equipment:** HP LaserJet and HP ThinkJet printers.
HP Plotters

**Industry:** *Mechanical Engineering*

**Abstract:** DIS/ADLPIPE is an integrated group of piping design, engineering analysis, and drafting software programs used by the power, petrochemical, and process industries.

The basic DIS program includes an interface program that receives 3D information from graphic CAD systems (Program CADIN). Also included is an interactive preparation of piping designs from a database of standard components (Programs CATALOG, ISOMOD. SYSTEM, REPORT, EDIT. and FORM), and an interface to the program ADLPIPE (Program ADLP).

ADLPIPE is an industry-wide accepted software program that performs stress analysis calculations in accordance with ANSI and ASME codes.

The software programs described above currently run on the HP 9000 and are tested in accordance with the ADLPIPE, Incorporated Quality Assurance Procedures.

**Company Name:** ADLPIPE, Incorporated

**Address:** Two Tyler Court
Cambridge, MA 02140
U.S.A.

**Phone:** 617-492-1991

**Contact Person:** Mr. Bill Dingwell

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

**Industry:** *Cross-Industry – HP 260 users*

**Abstract:** IMAGER 260 combines in a single product all the tools required to keep IMAGE 260 databases secure, tuned, and available for more access time.

IMAGER 260 will help decrease the operation costs and maintain database performance by replacing DBUNLD, DBPURGE, DBMODS, DBCREATE, DBLOAD, and executing 10 to 100 times faster.

**IMAGER 260 Functions**
- DCAP – Capacity change for master, detail and automatic data sets.

  DVOL – Moves data sets over multiple disc drives to optimize the disc I/O.
- PASS – Changes the maintenance and read/write passwords.
- ACCESS – Changes the read/write list in a dataset.

  RENAME – renames the entire data base.
- DBINFO – Displays or prints useful statistics such as capacity loading and disc utilization.

IMAGER 260 is extremely easy to use, and is designed for the end user to maximize the 'up time' of the computer.

**Company Name:** Informatica I s.p.a.

**Address:** Blocco 2A, Gall.B 131 - Centergross
40050 Funo di Argelato (Bologna)
ITALY

**Phone:** (39) (51) 862400    **Telex:** 226450 INF I

**Contact Person:** Lucio Belloi

or

**Company Name:** IRIS Computer Planning Ltd.

**Address:** 117 Disco Road
Rexdale (Toronto), Ontario
MYW IM3 CANADA

**Phone:** (1) (416) 674-0034    **Fax:** (1) (416) 674-7006

**Telex:** 06-984708

**Contact Person:** Paul Illing

**Type of Distributor Wanted:** HP 260 VAR

**Geographic Coverage:** Worldwide

## Software Packages Wanted

**Industry:** *Open*

**Abstract:** Tres Associates is interested in finding HP software packages to cross license and/or distribute. They are open to any application.

**Company Name:** Tres Associates

**Address:** P.O. Box 9802-231
Austin, TX 78766
U.S.A.

**Phone:** 512-346-0904

**Contact Person:** Lisa Davis-Cravens

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Open

**Industry:** *Test and Measurement Automation/Technical Computer Users*

**Abstract:** Test Quality Company (TQC) develops, markets, sells, and supports software for traditional HP instrumentation customers using the HP 9000 Series 200/300 computers in BASIC. Pascal, and HP-UX. Specialization includes HP-IB systems using HP's RF and microwave instruments, data acquisition systems, and database management and analysis for ATE and engineering applications.

**Software Packages Wanted:** TQC is interested in marketing, selling and/or supporting any available software packages and systems that will complement our current offering and expertise. TQC's custom software development services are available to handle special requirements. Applicable hardware is also of interest.

**Company Name:** Test Quality Company

**Address:** 2316 Walsh Avenue
Santa Clara, California 95051
U.S.A.

**Phone:** 408-986-8880

**FAX:** 408-986-1479

**Contact Person:** Jim Jenkins

**Type of Distributor Wanted:** Test and Measurement/Technical/
Engineering

**Geographic Coverage:** U.S. and Canada

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You can list your company in the **Cross-Licensing Classifieds** (either Software Packages Available or Software Packages Wanted) by sending the information in the format used here to:

Hewlett-Packard Company
Value-Added Channels Development
Attn: Marilyn Rauchle
19091 Pruneridge Ave.
Building 46UV
Cupertino, CA 95014
U.S.A.

Entries will run for two months. The most recent additions are shaded. Be sure to send the information in at least one month before you wish it to appear.

**How to get your name added to the distribution for HP Channels**

If you work for a company that is a value-added business for Hewlett-Packard and want to receive your own copy of *HP Channels,* call Hewlett-Packard and have your sales rep send your name and the information requested below to Tracy Wester.

**HP sales reps only:** To add new U.S. or Canadian accounts to the distribution for *HP Channels,* please send Tracy Wester the following information (on HP Desk 0000153 or to the address listed below): company name address, phone number, contacts' name/title, and HP sales rep name, COMSYS number, and engineer code. For accounts outside of the U.S. or Canada, contact Tracy Wester to get the name of the person who handles the distribution of *HP Channels* in your country.

Please address editorial correspondence to Tracy Wester at address listed below.

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# HP CHANNELS

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**HEWLETT PACKARD**