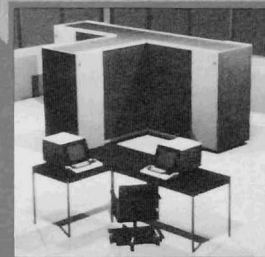# HP Information Access

Bringing people and information together

Mainframe

Minicomputer

Workstation

ANNOUNCING
Cullinet Link
- Upload
- Batch Access
- X.25 Support

HEWLETT PACKARD

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

On the cover
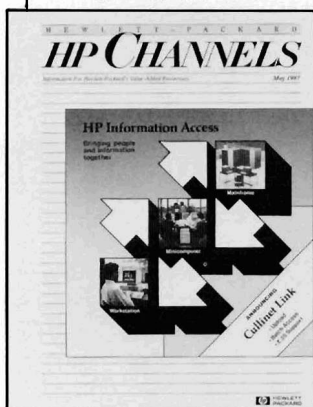
HP lnformation Access includes many new features: upload, batch access, X.25 and multiplexer support, and ISO-7 support. See articles beginning

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HP Computer Museum
www.hpmuseum.net

The Hewlett-Packard Field Organization

bv John Bieske, Intercontinental Value-Added Channels Marketing and Sales Manager

A key success factor is your ability to understand and work effectively with the Hewlett-Packard field organization. The HP sales rep assigned to your account should be your primary contact with HP. This article will help you better understand the organization that is in place to support you and your HP sales rep. It will give you an idea of the organizational structure and the key individuals within it who can play a role in your success. The organization charts are typical, but you should keep in mind that the actual structure may vary slightly from area to area within the U.S. and from country to country around the world.

The Hewlett-Packard field organization is divided into three major operation units: the U.S., Europe, and Intercontinental.

These operations are comprised of multiple sales regions as shown below:

U.S.

- Eastern
- Southern
- Midwest
- Neely

Europe

- United Kingdom
- France
- Germany
- Italy
- South Europe
- North Europe

Intercontinental

- Japan
- Far East
- Australasia
- Latin America
- Canada

All of the U.S. regions – along with some of the larger, single-country regions, such as the U.K. and Japan – are divided into sales areas. The chart below shows a typical U.S. sales region. The Region Sales Managers report to Sales Managers in the operations headquarters. The Market Development function reports to the

Region Marketing Manager and the Marketing Manager for the respective group. Multicountry regions, such as the Far East, typically do not have areas, but instead have country organizations that tie into the region headquarters and play a role much like an area.

Region Sales Manager

| Area General Manager | Area General Manager | Region Marketing Manager | Region Personal Computer Manager | Region Value-Added Manager | Region Major Accounts Manager |

Market Development Managers

- Electronic Instruments Group
- Manufacturing Systems Group
- Information Systems Group
- Personal Computer Group
- Microwave/Communications Group
- Design Systems Group

The area or country, as the case may be, is the basic tactical unit of the sales organization. Each area or country is "self contained" in that Training and

Administrative function like Contracts and Personnel. Below is an organization chart for a typical area or country.

Area/Country General Manager

| Area/Country Sales Manager | Area/Country Sales Manager | Area/Country Application Engrg Manager | Area/Country Customer Engrg Manager | Field Marketing Manager | Field Development Manager | Area/Country Personal Computer Manager |

–DSM	–DSM
–DSM	–DSM
–DSM	–DSM
–DSM	–DSM
–DSM	D S M
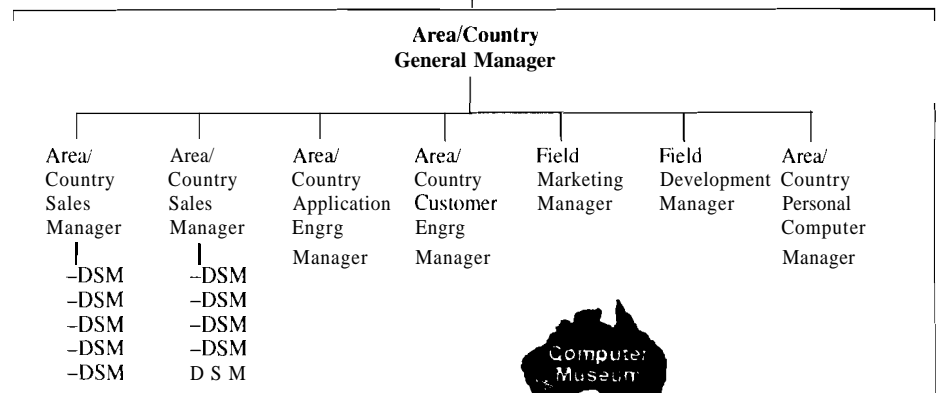
■ Systems Engineer (SE) – reports to the District Application Engineering Manager (DAEM) and is assigned a product support specialty in much the same manner as the SR. Some examples are EE, ME, HP 3000, workstations, and networking.

■ District Sales Manager (DSM) – reports to the Area or Country Sales Manager and has responsibility for either assigned accounts or a specified geography. Each DSM will have 6 to 10 sales reps reporting to himlher. The makeup of each district will be based on local needs. Some examples are value-added channels, commercial, manufacturing, general, and instrument districts.

■ District Application Engineering Manager (DAEM) – reports to the Area or Country AE Manager and has responsibility for support at the district level. Support districts are aligned with sales districts where practical to provide a close coupling between sales and support resources.

■ *Area/Country* Sales Munager *(ASM/* CSM) – overall sales responsibility and reports directly to the Area/Country GM. The ASM/CSM has 4 to 10 district managers reporting directly to him/ her. There are two ASMs in each area in the U.S., one for major accounts, and one for geographic accounts.

■ *Area/Country* Application Engineering Manager (AAEMICAEM) – responsible for pre- and post-sales technical support, customer training, and consulting. AAEMICAEM reports to the Area/Country GM.

■ Field Marketing Manager (FMM) – reports to the Area/Country GM and has responsibility for marketing programs. This includes customer seminars, direct mail. trade shows, and local advertising.

■ Field Development Manager (FDM) – reports to the Area/Country GM and has responsibility for training programs for the SRs. This includes on-going product training as well as sales and development training for new SRs.

■ *Area/Country* Personal Cornputer Manager APCMICPCM) – responsible for the dealer sales force and support programs.

■ *Area/Country* General Manager (AGMICGM) – overall sales, marketing, and support responsibility for computer and instrument business in the area or country.

In summary, the SR is your primary contact for lead follow up and customer demos. To participate in local promotions such as customer seminars, the Field Marketing Manager or the Market Development Manager would be the primary contacts. When in doubt, call the SR assigned to your account.

UPDATE

The article entitled "International Market Access" that appeared in this section of the April issue of HP Channels listed John Bieske as the technical contact. This information has been updated; the new contact is Steve Haslett. He is at the same address as listed for Shamik Mehta, the commercial contact. Steve's phone number is 408-447-1564.

INTRODUCTION TO DATA COMMUNICATIONS: A REVISED CUSTOMER COURSE

HP has revised the Introduction to Data Communications classroom course for customers. Introduction to Data Communications (order number 35051B) is designed to provide students with basic concepts and components of data communications. This course on data communications fundamentals focuses on data communications equipment, standards, interfaces, protocols, networks, network architecture, and test equipment.

The target audience for this course is operations support staff, operations supervisors. MIS managers, applications programmers, and technical support staff.

The key features of Introduction to Data Communications training are:

- Understanding of basic data communications components

  Practical experience with RS-232-C interface standard

- Basic network design

  Understanding of Bisync and HDLC protocols

- Overview of wide-area and local-area networks

- Identification of test equipment

  Basic understanding of X.25 standards

Over 30 percent of this course is dedicated to student activities to reinforce the concepts. The activities include valuable group discussions that use real-world examples.

This course is intended for those who have data processing experience, and it is expected that students have read *"Touring Datacom: A Data Communications Primer"* (PIN 5957-4462).

For more information. contact your HP sales rep.

SPECIAL CUSTOMER SERVICE TRAINING CLASS FOR THE HP 7974A MAG TAPE

HP's Customer Service Training in Mountain View, California, is offering a special HP 7974A maintenance training class August 24-27, 1987.

This four-day course covers all the necessary technical knowledge and skills to operate, maintain, and troubleshoot the HP 7974A mag tape unit. A service course or working knowledge of the HP 7970E is a prerequisite.

For more information, contact Kathy Martin at 415-691-5300, or toll-free at 800-523-0696 (in the U.S.), 800-882-9595 (in California).

NEW TRAINING VIDEO FOR HP DRAFTMASTER DRAFTING PLOTTER

Training videos for the new HP DraftMaster drafting plotters are now available. This video has four sections:

- *Sales* – Key sales points on product features and benefits.

- *Technical* – Information on operating. interfacing, and demonstrating the plotter.

  Customer – A short version of the sales section designed for customer viewing in a seminar or office setting.

- *Promotional* – A brief section designed for use at trade shows or seminars.

Ordering information

Part No.	Description	Format
5954-9424	HP DraftMaster plotter video	VHS
5954-9425	HP DraftMaster plotter video	U-Matic
5954-9426	HP DraftPro plotter video	VHS

For more information, contact your HP sales rep.

HP LASERJET PRINTER ENHANCED SERVICE TRAINING AVAILABLE

HP's Customer Service Training currently offers a new course for the HP LaserJet printer family.

Course 50042A provides the student with the detailed knowledge and skills to maintain and troubleshoot the HP 2686A/D laser printer, the 33440A laser printer, or the combination of both in an office environment. PC-laser printer configuration for each product is addressed.

Students registering for the course must choose one of the following options:

Product No.	Description	Length (days)
50042A	**HP** LaserJet printer enhanced service training	
Opt. 001	2686A/D laser printer	5
Opt. 002	33440A laser printer	4
Opt. 003	2686 and 33440 printers	7

For course schedule and location information, please contact Customer Service Training at 415-691-53001 5905. 800-523-0696 (in the U.S.), or 800-882-9595 (in California).

Business Computers

HP 3000

RUN-TIME HP BUSINESS REPORT WRITER IN FOS

HP Business Report Writer (BRW) is the standard report writer for MPE/V and MPE/XL HP 3000 systems. VARS are particularly excited about BRW because the Run-Time programs are supplied as part of the Fundamental Operating System (FOS). Gavin Scott of American Data Industries, an HP 3000 VAR for the past 10 years, recently stated in the HP *Chronicle,* "What's amazing is that the entire run-time support system for reports created with BRW, including the report compiler, executer, and so on. is being included as part of FOS. I must applaud HP marketing for this great leap forward, enabling users to execute BRW reports on any system, assuming they are running current MPE."

This means that VARs can offer reporting solutions to their customers by simply supplying the compiled BRW report file. Customers can then run the reports without needing to purchase BRW or a Dictionary (as long as they are on a MIT equivalent to or later than the VAR's development system). To initially develop the reports, the VARs will need to use Dictionary/V or System Dictionary to set up the file and database descriptors. BRW then sets up a special file called RDIC, which it reads instead of the dictionary. This RDIC file can then be supplied to customers as part of the compiled application. Customers can then immediately use HP BRW to define their own reports on the application databases.

As the HP 3000 standard report writer, BRW provides many other attractive capabilities. BRW can report from MPE, KSAM, IMAGE, and TurboIMAGE files. A unique feature – multipass reporting – allows the output file of a report to be used as an information 'source' for subsequent BRW reports. These subsequent reports typically analyze and summarize the information source data to meet the needs of different audiences. Using this information source has the advantage of freeing up the database to perform other activities. For example, large corporations can run the first report at night, create an information source table, and then run the subsequent reports the next day without impacting the operations of the database.

When considering HP Business Report Writer, don't forget the benefits of Run-Time BRW in FOS, access to multiple file types, and multipass reporting. In addition, BRW will be enhanced around the middle of this year to allow applications to call Report Request routines and start reports. This release will also allow conversion of Inform/V or Report/V reports to HP BRW specifications.

HP 3000

HP INFORMATION ACCESS ENHANCEMENTS ARE HERE

HP Information Access (PIN 32596A/R) has been enhanced to include many of the features users have requested:

▪ Upload – move information from the PC to the HP 3000. Or with the addition of the Cullinet™ Link, move PC or HP 3000 information to the mainframe. The user can consolidate information at the appropriate levels in their company.

- *Batch access* – Users can now initiate a batch access in lieu of an interactive retrieval. For time-consuming retrievals, the user can be freed to make other retrievals or use other PC products. MIS departments can schedule routine accesses to have results waiting for the user when they enter HP Information Access.

- *X.25 and multiplexer support* – HP Information Access now supports the HP 2334A. Users may connect PCs to an HP 3000 (RS-2321422) using either stat MUX or cluster controller modes.

- *ISO-7 support* – HP Information Access now supports the specific ISO-7 language character set the user selects.

HP Information Access, with these enhancements, will be on the June 1, 1987, HP Price List. Availability is the same as the UB-Delta-3 MIT. Users on SMS (or better) subscriptionlsupport services will receive these enhancements through normal software update. For pricing and more details. contact your HP sales rep.

HP 3000

HP INFORMATION ACCESS CULLINET LINK: MAINFRAME INFORMATION AT YOUR FINGERTIPS

HP Information Access Cullinet™ Link (PIN 32598A) is available. Now, users can tie together information sources on PCs, HP 3000s, and IBM mainframes. HP Information Access with the Cullinet Link can be used to solve critical business problems where ad hoc access, personal reporting, information distribution, or information consolidation is required. Information Access Cullinet Link offers a bridge to mainframe information.

Improving Business Decisions Through Better Access to Information
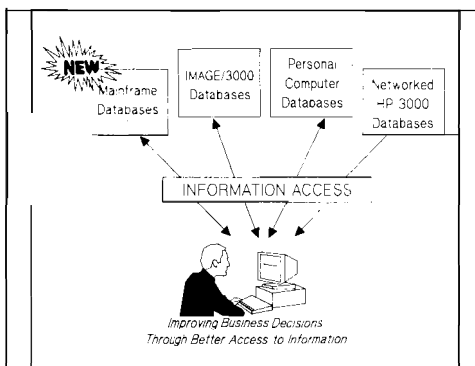
Information Access Cullinet Link will be available on the June 1, 1987, HP Price List. Information Access Cullinet Link is an add-on product to Information Access (PIN 32596A/R). Users are also required to have IMF/3000 or SNA/IMF (PIN 30247, 30250). Contact your HP sales rep for more information.

Cullinet™, **Information Center Management System'", and** *C/ICMS™* **are** *trademarks* **d** *Cullinet Software, Inc.*

HP 3000

SITE PREP ON THE HP MICRO 3000

There has been some confusion regarding the necessity of site prep on the HP MICRO 3000 systems. It is the intent of this article to clarify the current site prep requirements and describe the current process in place to meet those requirements.

In general, all HP 3000s require some form of site prep. Depending on the system model, these specific requirements can range from simply ensuring proper airflow, to providing elaborate line conditioning. Depending upon the peripherals ordered, the HP MICRO 3000 system usually requires minimum site preparation work. Typically, a proper 115V connection and reasonable clearance for equipment is all that is required.

On the 32535A, the standalone HP MICRO 3000, HP site prep (specifically a site planning visit) is *included* in the list price. This configuration is primarily ordered with larger peripherals that, as a system, require special electrical grounding. The exact reason is twofold: HP-IB peripherals must share a common ground to ensure proper noise immunity, and the factory requires HP site prep to avoid problems at the user site.

On the 32535E and 32535F, the integrated systems, the factory does not require, nor include, HP site prep. Frequently, there are no external (to the system cabinet) HP-IB devices, so the site prep requirements are reasonably straightforward and can be resolved by relatively nontechnical users. By not bundling this service. we can offer the lowest possible price on these preconfigured systems. However, simple site prep is still required, and is the responsibility of the user. If the user is interested in HP providing this service, it will be done for a fee.

Users of these 325358 and 32535F systems should be aware of the necessity of site prep for proper operation. The proper procedure is for HP to make sure users have a copy of the MICRO 3000 Site Prep manual at the time of order. This document describes the environmental characteristics that must be met in order to operate the system. The manual (PIN 30534-90002) should be available through your HP sales rep and may also be ordered through HP Direct (see ordering numbers on page 20).

HP site prep is *required* for those factory-integrated systems that have external HP-IB devices.

In general, most HP MICRO 3000s will not need HP site prep to operate satisfactorily. Make sure you are aware of these simple environmental requirements by getting a copy of the HP MICRO 3000 Site Prep manual at the time of order.

HP 3000

UPDATE TO HP MICRO 3000 PRINTER SUPPORT MAXIMUMS

Thanks to feedback from sales reps, we've found some places where the HP MICRO 3000 and MICRO 3000XE are not totally consistent in the number of printers supported. Maximum support for serial printers is based on performance implications. Since the HP MICRO 3000 and MICRO 3000XE provide the same level of performance, these maxima should also be the same. Please note that the following changes became effective April 1, 1987.

These changes have been incorporated into the latest edition of the HP 3000 Configuration Guide. This configuration guide supersedes any prior documentation (e.g. sales guide, other articles) and should become the main reference for questions on supportability and configurability.

HP 3000

HP MICRO 3000XE UPGRADE PROMOTION EXTENDED

Orders for the HP 3000 "Series 37 Performance Booster" have exceeded forecasts since introduction of the new HP MICRO 3000 products in November. Most of the sales have occurred through the VAR and end-user channels. Feedback indicates that we can't get to all the users by April 30. To give users more time, we are extending the "Series 37 Performance Booster" promotion end date to August 31. 1987. Shipments must occur by October 31, 1987.

All current terms and conditions of the promotion still apply. To achieve optimal performance, many users will want to purchase additional memory with substantial discounts for the 2-Mbyte board and the 4-Mbyte board. Return credits apply for returned Series 37 memory boards. For additional connectivity, Series 37A users will want the I/O extender, also with a discount. As you can see, users can save thousands of dollars by buying during the promotion. Contact your HP sales rep for pricing information.

HP 3000

HP 3000 SERIES 40 AND 44 DISCONTINUED

Not effective in Europe

Effective May 1. 1987, the HP 3000 Series 40 (P/N 32445A) and Series 44 (PIN 32440A and 32440B) are officially discontinued. HP will continue to support these products for five years following this date.

These products are being discontinued because they have been replaced in terms of price and performance by the similar HP 3000 Series 42 and 48, and by the recently introduced HP MICRO 3000XE.

Also in this issue

HP 1000

MEMORY CARD DISCONTINUANCE

Due to very low sales volume, the following memory cards will be removed from the HP Price List effective November 1, 1987:

- 12103A – 128-Kbyte parity memory
- 12103B – 256-Kbyte parity memory

If you have any questions, please contact your HP sales rep.

HP 9000

ALLBASE/HP-UX NOW SHIPPING

The wait is over – ALLBASE is now shipping to HP 9000 Model 840 users. We expect this to be the beginning of a long, successful era for HP's Precision Architecture information management products. Users who have ordered the 92442A bundle with HPtoday will receive ALLBASE now and HPtoday around the first of June. Due to the integration of these two products, it was necessary for ALLBASE to complete all functional testing prior to final testing for HPtoday.

The task of developing a dual-interface database has been challenging. Although not available with this first release, the capability to access HP IMAGE data through an HPSQL interface is a key element of the underlying design of the product. In upcoming releases of ALLBASE, users will benefit from dual-access, remote database access, and other important enhancements.

The next release of ALLBASE, scheduled to occur within one year of first shipments, will include dramatic improvements to the following three areas:

Performance – current measurements comparing ALLBASE to IMAGE/1000 on an HP 1000 A900 show a two to three times improvement in performance. Although acceptable for initial release of the product, we want to strive for performance improvements that are more commensurate with the processing capabilities of HP Precision Architecture. We will strive to double current HP 9000 Model 840 ALLBASE performance upon second release.

- *Datu Expansion* – when migrating an IMAGE/1000 database to the HP 9000 Model 840, data will expand to accommodate the different data structures within ALLBASE. This expansion tends to be more dramatic for small databases than large ones. Although hard to generalize, a typical database may experience expansion on the order of three times. In some extreme cases, very small datasets may grow dramatically because the minimum size allocated by ALLBASE is eight sectors. As a top priority for the lab, current projections are that this expansion will be limited on second release to less than 50 percent of current expansion factors.

- *Deadlock* – the automatic locking capability provided with HP IMAGE may result in an unacceptable incidence of deadlocking in situations of high concurrency. Deadlocking in HP IMAGE may be virtually eliminated through the use of dataset locking.

Dataset locking is the same locking capability currently employed by IMAGE11000 users to eliminate deadlock. Dataset locking is also the method used in the IMAGE11000 emulation software. Enhancements already planned for the next release of ALLBASE will substantially mitigate deadlocking.

To benefit from the planned second release performance improvements and to decrease database disc storage allocations, it will be necessary for ALLBASE users to unload/reload their HPSQL and HP IMAGE databases. HP IMAGE users will also need to recompile their applications to benefit from the improved deadlocking features. This recompile should not require changes to source code unless the user wishes to benefit from new features. Users should purchase support contracts on ALLBASE so that they can benefit from these future enhancements.

Support for the first release of ALLBASE will continue well beyond the second release of ALLBASE so that users may delay their conversion to the second release. This conversion effort will be similar to that which Oracle customers have recently experienced in moving from Version 4.0 to 5.0. These enhancements planned for second release will also assure that ALLBASE/HP-UX will remain compatible with changes currently being implemented in ALLBASE/XL. Compatibility between HP-UX and MPE is a high priority.

ALLBASE offers a unique database solution for purchasers of the HP 9000 Model 840. IMAGE/1000 users have a migration path to a higher performing HP IMAGE database that offers many features that have been requested but were unavailable on IMAGE/1000. In addition, ALLBASE provides HP's first SQL-compatible database for HP-UX.

HP 9000

BASIC 5.0

COMPILER TO BE LICENSED

Hewlett-Packard has reached an agreement with IEM. a value-added channel located in Fort Collins, Colorado, to license their BASIC 5.0 compiler product.

The HP 9000 Series 200 and Series 300 BASIC 5.0 compiler (P/N HP 98618A) will be listed on the May 1 HP Price List. This product enables BASIC programs. once they are compiled, to execute faster than the original interpreted versions.

There will be no Right-to-Copy or Right-to-Use products available. Details will follow on an upgrade kit from HP for those users who have a previous version of the IEM BASIC compiler.

HP 9000

HP 9000 SERIES 2001300 RAM

PRODUCTS TO BE OBSOLETED

Due to low user demand for some of our earlier releases of HP 9000 Series 2001300 BASIC and Pascal workstation products, HP is planning to take a number of these RAM products off the HP Price List as of August 1, 1987. This is in keeping with HP's policy of supporting two revisions of the operating system software: the current version and one version back.

The products that will be entering support life on August 1 are listed below:

Product No.	Description
98611A	RAM-based BASIC 2.0
98613A	RAM-based BASIC 3.0
98615B	RAM-based Pascal 3.0

The scheduled dates for support life for these products are:

Support process	Date
Removal from HP Price List	August 1, 1987
Final U.S. orders accepted	August 31, 1987
Final international orders accepted	September 30. 1987
Final shipments	January IS, 1988
Support life	through January 15. 1992

If you encounter any problems because of this obsolescence, please contact your HP sales rep.

HP 9000

HP 9000 AND HP 1000 MEDIUM-RESOLUTION VIDEO PRODUCTS TO BE OBSOLETED

The 13279B and 97063A will be taken off the HP Price List August 1, 1987. The product numbers and descriptions are listed below:

Product No.	Description
13279B	19-inch color monitor for use with the 97062A* (Series 500), 98727A* (Series 200 and 300), and the 12065A* (HP 1000)
97063A	Tilt and swivel for the 13279B

Note: The 97062A, 98627A, and 12065A RGB cards will nor be taken off the HP Price List at this time.

There are no direct replacements for these products.

If you have questions or concerns, please contact your HP sales rep.

HP 9000

HP 9000 SERIES 200 HP-UX PRODUCTS TO BE REMOVED FROM HP PRICE LIST

With the maturity of the HP 9000 Series 300 products, sales of HP-UX on the HP 9000 Series 200 have continued to decline. The last release of HP 9000 Series 200 HP-UX offered an upgrade for those users who wanted to move to the HP 9000 Series 300. The decision has now been made to remove the Series 200 stand-alone HP-UX products and the Series 200 bundles containing HP-UX from the HP Price List. The products being removed are listed below:

Product No.	Description
98670B	Single-user HP-UX operating system
98680B	Multiuser HP-UX operating system
9836T	HP 9000 Model 236 HP-UX computer
9836CT	HP 9000 Model 236 HP-UX color computer
9920T	Model 220 HP-UX modular computer
98143T	HP-UX upgrade package

These products will be obsoleted on Noveniber 1, 1987.

The 9836CU, 9836U, and 9920U will remain on the price list. These products have the memory management necessary to run HP-UX, but do not have the operating system included in the bundle. There are BASIC and Pascal users purchasing these systems because of better performance.

If you have any concerns or questions regarding these plans, please contact your HP sales rep.

Also in this issue

Portable

1-MBYTE RAM MEMORY DRAWER FOR THE HP PORTABLE PLUS

Responding to user requests for additional memory capacity for the HP Portable PLUS portable computer, a new I-Mbyte RAM memory drawer is now available from HP. The new memory drawer, when installed in an HP Portable PLUS with an internal memory of 512 Kbytes. provides over 1½ Mbytes of CMOS static RAM memory which can be used as an electronic disc. Addition of a second 1-Mbyte RAM drawer brings the maximum HP Portable PLUS memory configuration to over 2% Mbytes.

The new memory drawer. 82992A, is compatible with all previous and current versions of the HP Portable PLUS and requires no modification to the portable computer, and has virtually no impact on battery life, HP Portable PLUS size and weight, or durability.

For HP Portable PLUS users with large memory needs, the I-Mbyte RAM memory drawer provides the least expensive memory expansion option per 1 Kbyte of RAM memory. For users with lower expansion memory requirements, the 128-Kbyte RAM drawer (82981A) and 128 Kbyte RAM card (82984A) remain available.

There will be no *trade-in* program for the existing 128-Kbyte RAM drawer.

Memory expansion options for the Portable PLUS now include:

Product No.	Description
82981A (82981J)*	128-Kbyte RAM Drawer
82984A (82984J)	128-Kbyte RAM Card**
82992A (82992J)*	I-Mbyte RAM Drawer

"J" suffix products are factory installed for HP Portable PLUS orders of 25 or more.
**Requires 82981A or 82981J 128-Kbyte RAM Drawer.*

Portable

MICROCOM NETWORKING PROTOCOL AVAILABLE FOR THE HP PORTABLE PLUS

Error-free data communications between computers is not always possible. At times there is just too much noise on the telephone lines for transmission of information to occur. While a few errors during text transfer can be annoying at best, errors in the transmission of a spreadsheet or program cannot be tolerated. The Microcom Networking Protocol (MNP) has been designed to virtually eliminate these transmission errors when the protocol is used on both ends of the transmission. MNP can either be built into software on each computer or be part of an error-correcting modem. By installing the MNP driver. the HP Portable PLUS is able to provide error-free transmission utilizing the built-in modem in the HP Portable PLUS. When MNP is used, the transmission rate is reduced by 18 percent, but in those circumstances when the line noise is severe, this is a small penalty to pay for clear transmission of data.

MNP is available on a 3%-inch disc. To get your copy of MNP (PIN MNP, for the HP Portable PLUS only. $55 U.S. list) send payment in U.S. funds to Hewlett-Packard Company, Users' Library, Dept. 39UL, 1000 NE Circle Blvd., Corvallis, OR 97330; or call 503-750-3003 (please reference Visa or MasterCard credit cards). International orders will need to include an additional 10 percent to cover shipping and handling.

Desktop

NAME CHANGE AND REPOSITIONING FOR HP MODEL 315M/C BASIC CONTROLLERS

In reference to an announcement article that appeared on page 9 in the April issue of HP *Channels,* the name of the HP Model 315M/C BASIC controllers has been changed *effective immediately* to the HP Model PC-308M/C BASIC controllers. This change was necessary in order to reflect a repositioning of the controllers below the HP Model 310 BASIC controller.

Desktop

LOCALIZED VERSION OF HP MODEL PC-308 BASIC CONTROLLER NOW AVAILABLE

Hewlett-Packard is pleased to announce a Euro/English (US ASCII) version of the preassembled HP Vectra PC systems featuring the new HP BASIC Language Processor.

These bundled systems will allow purchase of a complete monochrome or color system with just one HP part number. In addition, the preassembled bundles will reduce the number of product boxes a user receives, thus saving the user set-up time. The HP BASIC Language Processor board, hard disc, video card, and interface card are installed at the factory. All the user has to do is connect the power cord and display, format the hard disc, install DOS and BASIC, and the system is ready to go.

The HP Model PC-308 HP BASIC Controller (monochrome) bundle consists of the following components:

- 640-Kbyte HP Vectra PC SPU
- 1.2-Mbyte flexible disc drive
- 20-Mbyte hard disc and controller
- Language Processor board (512 Kbytes, HP-IB, DIO)
- 512-Kbyte RAM Expansion Kit (expands BASIC RAM to 1 Mbyte)
- HP BASIC 5.0 software and manuals
- Dual-Serial RS-2321422 Interface
- Monochrome Plus video display and adapter with parallel interface
- HP Vectra PC DOS/PAM
- Keyboard

The HP Model PC-308 HP BASIC Controller (color) bundle consists of the following items:

- 640-Kbyte HP Vectra PC SPU
- 1.2-Mbyte floppy drive
- 20-Mbyte hard disc and controller
- Language Processor board (512 Kbytes, HP-IB, DIO)
- 512-Kbyte RAM Expansion Kit (expands BASIC RAM to 1 Mbyte)
- HP BASIC 5.0 software and manuals
- Serial/Parallel Interface
- Enhanced Graphics Display and Adapter
- Tilt/Swivel base
- HP Vectra PC DOS/PAM
- Keyboard

Additional localization efforts continue to be evaluated based on demand. Bundles scheduled for the May 1 HP Price List are listed below.

Product No.	Description
82314AB	HP 9000 Model PC-308M HP BASIC Controller (monochrome) – Euro/English
82315AB	HP 9000 Model PC-308C HP BASIC Controller (color) – Euro/English

82314A Model PC-308M HP BASIC Controller with monochrome display.

82315A Model PC-308C HP BASIC Controller with EGA color display.

HP VECTRA PC AND HP BASIC: TECHNICAL AND PC APPLICATIONS IN ONE

Hewlett-Packard is introducing a new product: The BASIC Language Processor – a 68000-based single-board computer that runs HP BASIC (and Workstation Pascal) in an HP Vectra PC.

Why use two computers in one box? Is it worth the expense'? Yes. The HP Vectra PC Language Processor combination is a contribution that gives cost-effective solutions where the user needs both technical and PC applications.

HP BASIC language workstations (based on the Motorola 68000 microprocessor) have an installed base of roughly 350,000 computers. IBM PCs and clones, including the HP Vectra PC, (all based on Intel microprocessors) have an installed base of almost 10 million computers.

HP sells both workstations and PCs; it was a natural idea to combine the technologies to get the best of both worlds.

The wide variety of available PC software gives them a great advantage. PC hardware is so common that PC clones are priced as commodities. Prices are driven lower and lower as PCs ride the 'power curve' of mass production that drives software availability. Many corporations and nations are adopting computer purchasing standards that demand PC compatibility.

On the other hand, our HP BASIC and Pascal workstations offer high performance and powerful languages that make sophisticated instrument control easy.

HP sought a product that would allow users of our BASIC workstations to move to PCs – and keep the advantages of our highly-refined software and high-performance hardware.

The solution is the Language Processor, a 68000-based, single-board computer that plugs into the HP Vectra PC. supported by software running on the HP Vectra PC that links the Language Processor to the HP Vectra PC's resources. The Language Processor has its own CPU, memory, RAM. ROM, and HP-IB; but it uses the HP Vectra PC's discs, display. keyboard, I/O interfaces, and peripherals.

It is the best of both worlds. On one hand. the user can run HP BASIC like any other DOS application, on the other. the HP Vectra PC/Language Processor system acts as an HP 9000 Series 2001300 computer, using the resources of the HP Vectra PC.

Roughly half the cost of most computer systems is software. A major goal of computer manufacturers is to preserve customers' software investment. The remaining half of the cost of a computer system is hardware: SPU boxes. keyboard, display, disc drives, printers, plotters, I/O interfaces, power supplies, RAM, ROM, and other components. Most of the hardware dollars are in the peripherals: disc drives, keyboard, display, printers, and so on.

Basing an HP BASIC workstation on the HP Vectra PC not only allows compatibility with DOS software, but allows such a workstation to use the most inexpensive peripherals available. HP Vectra PC peripherals will almost always be less expensive than the same peripherals for an HP BASIC workstation – since the peripherals for the HP Vectra PC (and other clones) are produced in the greatest volume and, therefore, have lower manufacturing costs.

The Language Processor duplicates only the core elements of an HP 9000 Series 2001300 computer – the CPU, RAM, ROM, and certain I/O interfaces. These components are actually a small part of the cost of a computer system: the two-computer approach does add cost, but not a great deal compared to the cost of the overall system.

The existing HP BASIC user base is very large. Preserving the users' software investment is critical in the design of new computers because of the user's investment in it. Because there's so much software designed specifically for HP BASIC. and because HP BASIC itself is the product of ten years of refinement, only the greatest possible compatibility is acceptable.

The HP BASIC software base includes compiled subroutines – CSUBs – which must run without change; the solution must be able to run 68000 object code. The CSUBs link into the RMB interpreter, so the interpreter must also run unchanged.

Our goal was to run HP BASIC applications on the HP Vectra PC with the least change, the lowest cost, and the best performance possible. The HP Vectra PC must appear to the software as both a PC and a 68000-based HP 9000 Series 2001300 workstation, using. as much as practical, the HP Vectra PC's hardware resources.

The HP Vectra PClLanguage Processor combination provides the best answer. It runs the same BASIC 5.0 object code as HP 9000 Series 200 or Series 300 BASIC workstations on the HP Vectra PC – a feat that could not be otherwise accomplished.

A radical deal provides an elegant solution. And that solution is the HP Vectra PClLanguage Processor advantage that gives users the greatest possible compatibility with their existing HP BASIC software – *and* access to a galaxy of DOS applications – all in one box.

Desktop

HP SERIES 200/300 WORKSTATION PASCAL NOW AVAILABLE FOR HP VECTRA PC

HP is pleased to announce HP's popular workstation Pascal language for the HP Vectra PC. The HP Pascal Language Processor consists of an HP Vectra PC plug-in card, HP Pascal 3.2 language software, and documentation. This is the same Pascal that runs on HP 9000 Series 200300 computers, supplied on 5%-inch, flexible discs.

When installed in an HP Vectra PC, the new subsystem delivers the best of both worlds: HP's powerful Pascal workstation environment *and* access to a wealth of PC-DOS application software. Now users who desire (or are required to use) personal computers, do not need to forego the power, performance, and time-saving advantages of HP Pascal or rewrite their HP 9000 Series 200300 Pascal programs. The Pascal Language Processor is object-code compatible with HP 9000 Series 200300 Pascal workstations. Since code written for the language processor will also run on high-performance HP workstations, a natural migration path is established. Other benefits include:

■ Low entry price (512-Kbyte card with Pascal)

■ Compute and I/O performance similar to HP 9816

■ Access to industry-standard LAN (SRM and IEEE 802.3 available)

■ Foreground/background operation

HP's Pascal 3.2 facilitates program development through a rich set of language and library extensions, file operations, string manipulations, graphics routines, and I/O operations.

Its very large memory address capability makes handling of large arrays and data structures possible. High performance is assured by the 68000-based architecture. The Pascal ware tools: Editor. Filer, Compiler, Assembler, and Debugger.

The language processor board. which includes a Motorola 68000 CPU and up to 4 Mbytes of RAM, emulates an HP 9000 Series 200 workstation. It includes a built-in HP-IB and standard HP 9000 Series 200300 DIO interface. Pascal is invoked like any other PC-DOS application and can take advantage of DOS discs, peripherals, and other PC resources. At the same time, compatibility with programs, data, and peripherals used by other HP Pascal workstations has been maintained.

With optional hardware, the processor operates on HP networks such as SRM and OfficeShare, and can pass files to ARPA (IEEE 802.3) networks as well. This networking flexibility makes an HP Vectra PC/HP Pascal system an excellent gateway between SRM and industry-standard LANs.

The HP Pascal language processor includes:

■ MC 68000 processor card

– 512 Kbytes of RAM (expandable to 4 Mbytes)

– Built-in HP-IB interface

– DIO connectors (for SRM, GPIO options)

– Connectors for ROM expansion board

■ HP Pascal 3.2 software

■ PC emulator software

■ Manuals and keyboard overlays

Related accessory products include:

■ RAM expansion board and 512 Kbyte expansion kits

■ GPIO interface

■ Shared Resource Manager (SRM) interface

Ordering information

Product No.	Product/description
82310A	HP Pascal Language Processor – Plug-in 68000 card with 512 Kbytes RAM, HP-IB – Pascal 3.2 software on 360 Kbyte, 5¼-inch discs – Manuals
82311A	HP Pascal software-only option (included with 82310A; for HP BASIC Language Processor 82300A customers) – Pascal 3.2 on 360 Kbyte. 5%-inch discs – Manuals
82303A	512-Kbyte RAM expansion kit – Set of four 1-megabit chips – Used on main board or RAM expansion board
82305A	Ram expansion board – Includes 512 Kbyte, expandable to 3 Mbytes (4 Mbyte total) – Expand in 512 Khyte increments with 82303A kit – Attaches to processor card; doesn't require slot
50963A	Shared Resource Manager (SRM) interface – Uses full performance DIO connection – Takes one HP Vectra PC expansion slot
82306A	GPIO interface – Uses full performance DIO connection – Takes one HP Vectra PC expansion slot

Desktop

THE HP VECTRA 3000 PC: NEW ENHANCEMENTS

The HP Vectra 3000 PC Monochrome (72458A) and the HP Vectra 3000 PC EGA (72459A), our pre-assembled HP Vectra PCs with AdvanceLink software, now include the new AdvanceLink package (with graphics).

More software: new AdvanceLink

The new AdvanceLink not only adds graphics-terminal.emulation with monochrome and color, but it also has significant improvements over the previous product like PC backup to the HP 3000 and faster file transfer/terminal emulation. These enhanced capabilities translate into superior HP Vectra 3000 PC performance.

More value: price decrease

Besides convenience, ease of installation. and simple ordering, the HP Vectra 3000 PC will be even more attractive to users as they will benefit from additional dollar savings.

Desktop

THE NEW HP VECTRA 3000 PC: KEY INFORMATION FOR USERS

All Monochrome and EGA HP Vectra 3000 PC shipments starting May 1 will include the new Advance-Link software. The HP Vectra 3000 PC

Monochrome will also have the Monochrome Plus video subsystem. Since HP will not be changing the product numbers of the HP Vectra 3000 PC. users should be aware of these May 1 product changes, and set their expectations accordingly.

We anticipate that most users will prefer the Monochrome Plus video solution but it is still very important they know of these changes immediately. If you have any questions or if you have any special requirements, please contact your HP sales rep.

Ordering information

Product No.	Description
72458A	HP Vectra 3000 PC Monochrome Model 58
72459A	HP Vectra 3000 PC EGA Model 59
72458A & 68300F	HP Vectra Office Professional Monochrome
72459A & 68300F	HP Vectra Office Professional EGA
72458A & 68301F	HP Vectra Office Assistant Monochrome
72459A & 68301F	HP Vectra Office Assistant EGA

Desktop

LOCALIZED HP VECTRA PC OS PRICE INCREASE

Effective May 1, 1987, the factory base prices (FBPs) of the Localized HP Vectra PC Operating System (OS) kits will be increased to match the FBP of the U.S. OS Kit.

Products affected by this change are listed below.

Product No.	Description
HP 45951AD	German
HP 45951AE	European Spanish
HP 45951AF	French
HP 45951AH	Dutch
HP 45951AM	Latin American Spanish
HP 45951AN	Norwegian
HP 45951AP	Swiss-German
HP 45951AQ	Swiss-French
HP 45951AS	Swedish
HP 45951AU	United Kingdom
HP 45951AV	Arabic
HP 45951AW	Flemish
HP 45951AX	Finnish
HP 45951AY	Danish
HP 45951AZ	Italian

Contact your HP sales rep for pricing information.

Desktop

ANNOUNCING OBSOLESCENCE OF HP 82964M VECTRA PC INSTRUMENT CONTROL SYSTEM

With the May 1 introduction of the new HP Model PC-308 BASIC controllers, the HP 82964M Vectra PC Instrument Control System bundle has been obsoleted and taken off the HP Price List as of April 1. The product that consisted of an HP 82990A HP-IB interface and command library as well as HP Vectra BASIC will no longer be available as a bundle. The HP 82990A HP-IB interface and command library will continue to be sold as an individual product.

Contact your HP sales rep for more information.

Mass Storage

HP 791X, 7941/45 DISCONTINUANCE – SECOND NOTICE

In case you have not heard, the HP 791X, 7941145 product discontinuance dates have been announced. The chart below lists the dates that you may want to keep in mind:

Product No.	Off the HP Price List	Support life (years)
HP 7914CT	September 1, 1987	10
HP 7914ST	September 1, 1987	10
HP 7941A	September 1, 1987	10
HP 7945A	September 1, 1987	10
HP 7911P,R	March 1, 1988	10
HP 7912P,R	March 1, 1988	10
HP 7914P,R	March 1, 1988	10

Note: After the end of the ten-year support life, the products will enter obsolescence status. In this phase, HP support is on a best-effort basis.

Keep watching for future notices. If you have additional questions or need more information, please contact your HP sales rep.

Networks

WHAT IS HP STARLAN?

OfficeShare Family

The HP OfficeShare Networking Family for PCs is comprised of HP ThinLAN for PCs, HP StarLAN, and HP SERIAL Network products. These products allow PC users in a local area network environment to access HP's distributed processing and Personal Productivity Center services. While HP SERIAL Network provides these network services to a remote PC user over an asynchronous connection, HP ThinLAN for PCs is a coaxial cable LAN that provides these services as an excellent solution for HP Touchscreen, HP Vectra, and IBM PC users desiring these services.

HP StarLAN

HP StarLAN is Hewlett-Packard's unshielded twisted-pair cable LAN that provides these services as an excellent solution for HP Vectra and IBM PCs with exceptional differentiation from our competitors. HP StarLAN is a low-cost and scalable LAN for the business office that differentiates HP from IBM and DEC. and provides superior integration and flexibility.

Users in newer buildings can often use their existing telephone wire and even if a user cannot, the initial wiring and installation costs are lower than for coaxial cable. Additions and changes to an existing HP StarLAN network are much lower in cost than those to a coaxial based network, and the PC interface costs are lower. HP StarLAN is very scalable, providing services to meet the productivity needs of individual PC users and entire departments using an HP 3000 server with Resource Sharing.

From a more technical view, HP StarLAN is a 1 Mbit/second CSMA/CD local area network using unshielded twisted-pair wiring to connect HP Vectra PCs, IBM PC/XT/AT personal computers, the HP MICRO 3000 family, and HP 3000 Series 37s in a star configuration. It is based on industry standards; the IEEE 802.3 Type1BASE5, and the MS™-NET application interface de facto standard developed by MicroSoft, Inc. For specific performance information. please see the article in this issue, "HP StarLAN Performance."

Components

An HP StarLAN network can be made up of several components. The HP StarLAN Hub (PIN 27212A) can be thought of as the central node or nodes of the network. The hub has 11 ports with which to connect users, servers, or other hubs. One level of hubs can be connected below the central or "upper" hub. The HP StarLAN User Link Kit for HP Vectra/IBM PCs (PIN 50905F) contains a PC interface card and the user software necessary to connect an HP Vectra or IBM PC/XT/AT to the network as a user node. The HP StarLAN/3000 Link for MICRO 3000s and Series 37s (PIN 30265A) is the link that connects these computers to the network as hosts. or servers using Resource Sharing. The HP StarLAN/ThinLAN PC Configuration and Diagnostics Software and License for HP 3000s (PIN 50912A/R) is the PC user configuration software and the network diagnostics software licensed for use to an HP 3000 server or host. The HP StarLAN Server Kit for HP Vectra PCs (PIN 50904F) is the PC interface card and server software needed to connect the HP Vectra PC to the network as a server. The HP StarLAN Configuration and Diagnostics Software and License for PCs (PIN 50906A) is the PC user configuration software and network diagnostics software licensed for use by an HP Vectra PC server on the network.

HP StarLAN cables are available for connecting PCs and server nodes to wall outlets or for directly connecting network nodes together (92268A, 4m; 92268B, 8m; 92268C, 16m; 92268D,

32m). HP AdvanceLink is needed for terminal emulation and file transfer to an HP 3000 server or host.

All of these products can be used to configure an HP StarLAN network with up to 250 meters between a PC or HP MICRO 3000 and a hub. or between two hubs, allowing for extremely flexible network configurations to meet users' needs.

These subnets can be configured with up to two levels of HP StarLAN hubs (usually located in a wiring closet). Using the HP 10-Mbit to I-Mbit bridge, an HP StarLAN subnet can then be connected to an 802.3 baseband LAN that can be used to connect multiple subnets. including HP ThinLAN subnets.

With PCs and HP 3000s as servers, the HP StarLAN PC Configuration and Diagnostics Software product is licensed for use by each server on the network, and priced according to the size of the server. This allows for a lower User Link Kit price, and to remain cost competitive for small as well as large configurations of users.

Summary

OfficeShare networking products offer ideal networks for the user in an office environment requiring information exchange, tile transfer to an HP 3000, database access, electronic mail, and sharing of system peripherals such as discs. printers, and plotters. Sharing information and peripherals will provide an efficient exchange of data and use of resources for increased productivity and lower cost. HP ThinLAN for PCs should be sold into environments where an excellent solution is required for the installed base of HP Touchscreen PCs. HP StarLAN should be sold with every new office system sale and used as a competitive advantage versus DEC and IBM.

For more information, contact your HP sales rep.

HP STARLAN
PERFORMANCE

There has been concern and skepticism about the performance of HP StarLAN as compared to HP ThinLAN due to its lower bandwidth. Although the HP StarLAN bandwidth is 10 times less. the end-user response time is very similar to HP ThinLAN because the software is the limiting factor for performance. Depending upon the configuration and the applications being used, the response times can vary. In the common office configurations and usage patterns, the response times are within 10 percent of each other; however, when traffic is high, the response times on HP StarLAN can be twice that for the same traffic on HP ThinLAN.

In general, for up to 8 users connected to a PC server, the performance on the 2 links are within 10 percent of each other. As 2 or more PC servers are used for 10 or more users, the performance on the 2 links begins to degrade and in some cases the performance can be up to 100 percent different from each other. For example. when a 20-Kbyte Lotus® file is read by 11 simultaneous users accessing 2 different PC servers, on average it will take 30 seconds to read the file across HP ThinLAN and 60 seconds to read the file across HP StarLAN. Note that this is not the typical scenario. Usually people in workgroups randomly access the servers and the above situation has a low probability of occurring. Nevertheless we present it as an example of performance in an extreme case.

For connectivity to an HP 3000, the performance of HP StarLAN will be 0 to 25 percent slower than HP ThinLAN. The differences between the 2 links will be less noticeable when connected to an HP 3000. The terminal emulation capabilities to an HP 3000 provide performance slightly less than a 9600-baud direct connect.

HP StarLAN performance will be adequate in most of your office sales situations.

For small networks, there is no difference and for large networks, it will be similar to loading on an HP 3000 with terminal cnnnections. There will be peak load periods during the day when the performance is slower than other times of the day. If you expect the network to have a constant heavy load, the network can be segmented with HP ThinLAN cable and an HP StarLAN 10-Mbps bridge (28647A) that provides traffic filtering for isolation of traffic between two networks. This will allow each work group to experience performance equivalent to that found on lower load networks.

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HP'S TOKEN RING
PUBLIC STATEMENT

Over the past year, IBM's announcements regarding their Token Ring Network (TRN) have generated a great deal of interest. Some users have asked about HP's reaction to Token Ring. particularly in light of our recent HP StarLAN announcement.

The following is HP's public statement on Token Ring.

Wiring

HP StarLAN is a LAN solution designed to work over unshielded twisted pair phone wire and is HP's strategic commercial LAN offering for the office. As our strategic LAN, we want to expand the variety of supported media over which HP StarLAN can run.

As part of the HP SiteWire service, HP plans to offer a wire test service that will verify that a user's existing twisted pair wire will work with HP StarLAN. HP StarLAN has also been tested with AT&T's PDS wire specification.

Both HP StarLAN and Token Ring use twisted pair, and as a result. can run over the same media. HP will confirm this by testing HP StarLAN over IBM Cabling System Type 3 unshielded twisted pair (one of the Token Ring supported media) and will test with other IBM Cabling System Types (such as Types 1, 2, and 9) shielded twisted pair. as demand warrants.

HP StarLAN

StarLAN is a mature draft standard that has passed initial 802.3 balloting and is expected to be brought before the IEEE Standards Board for final approval in June or September 1987. HP's StarLAN network is available today.

StarLAN has several advantages over Token Ring. First. HP StarLAN has a lower cost per connection than IBM's Token Ring. Second, since StarLAN was designed for use over unshielded twisted pair, the user can feel confident that it will work with fewer limitations and with more flexible configurations over the user's existing phone wire. HP provides the expertise needed to make sure the network will meet user needs and work well from the start.

Finally, HP StarLAN has the advantage of supporting HP's superior PC integration solution for the office, the Personal Productivity Center (PPC). PPC is supported across HP's entire commercial processor line to give consistency, simplicity and functionality to PC users on HP StarLAN.

Compared to Ethernet coaxial LANs, HP StarLAN is a superior low-cost solution for the office.

StarLAN and 802.5 coexistence

The AdvanceNet Strategy is support for international and defacto standards. As a strategic AdvanceNet product, we will protect our users' investments in HP StarLAN by providing access to other standard network protocols.

Consistent with this philosophy. HP will ensure the availability of a means for HP StarLAN and 802.5 Token Ring to coexist in a commercial office environment.

Question and Answer

What exactly will be rested over IBM Cable?

All connections currently supported by HP StarLAN will be supported over IBM Cabling Type 3 (unshielded twisted-pair).

What about shielded twisted pair IBM Cable Types 1, 2, and 9?

We expect unshielded twisted pair phone wire to be the predominant cable used. In fact, one source. Gartner Group, expects that 55 percent of LANs will be running over unshielded twisted pair by 1991.

While unshielded twisted pair (type 3) is our first priority, we are continuously evaluating the importance of shielded twisted pair (types 1, 2. and 9) support and will certify these as demand warrants.

What is the average connect cost on StarLAN versus TRN?

For a 12,500-square-foot building with 90 PCs. the cost of HP StarLAN with PDS wiring runs about $500 less per node than for Token Ring with IBM Type 3 unshielded twisted pair phone wire. This figure is based on written estimates from a wiring vendor and includes wire and LAN connect hardware and software. The cost of the workstation and software services is not included.

What are the availability dates of StarLAN and TRN?

StarLAN – Shipping now
- With HP Vectra PC and HP Micro 3000 connections
- PPC for PC integration
- Proven 802.3 protocol

- TRN (based on IBM announcements)
  - 3735 connection   1187
  - S136 connection   2Q87
  - 3174 connection   5187
  - 9370 connection   4Q87

Why does StarLAN have a higher probability of supporting installed phone wire than TRN?

StarLAN was designed for use over unshielded twisted pair while TRN was designed for use over shielded twisted pair and requires special filters and jumpers to work over unshielded phone wire. TRN's performance cannot be optimized except over shielded twisted pair.

How is StarLAN more flexible than TRN?

StarLAN supports distances of up to 250 meters between users and closets over phone wire. TRN only supports distances of up to 50 meters. This gives StarLAN more flexibility in terms of wiring schemes.

How does a 4-Mbyte TRN compare to a 1-Mbyte StarLAN in terms of performance? Also, what about future speed enhancements?

For most office applications, the software and PC itself, rather than the raw LAN data rate, will be the bottleneck so that users will see equivalent performance across a range of data rates. Reports back from early users of TRN confirm that the software is really the limiting factor in performance on the TRN (*NetworkWorld* 10186). In fact, tests comparing 1-Mbps HP StarLAN to 10-Mbps ThinLAN show comparable performance for typical applications (*Performance News Notes* 1187).

Some choice quotes from Patricia Seybold's October 86 *Network Monitor*

"The primary gating factors for throughput are the PCs themselves and network protocol processing."

". . . StarLAN maximum available bandwidth is fairly close to what a standalone PC AT user would achieve."

". . . even a 100 percent performance advantage gain, as more high-performance PC architecture servers, minicomputers, and AT-class PCs are added to the device mix, is not enough to significantly offset the 3-to-1 cost advantage StarLAN currently enjoys over Etherlink Plus (from 3Com)."

". . . it now turns out that unshielded, twisted-pair wire, if carefully installed, will handle all the bandwidth required for office workstations for at least a decade."

". . . HP is now a half-step ahead of its major competitors by virtue of patience and good timing."

Just as IBM has plans to support higher speeds on TRN, HP plans to support higher speeds over unshielded twisted pair.

Will HP supportlprovide a TRN curd on the HP Vectra PC?

The HP Vectra PC was designed to be PC AT compatible and we have knowledge of users who are using HP Vectra PCs on TRN today.

What kind of connections will HP provide for TRN to StarLAN communications?

In protecting our users' investments in StarLAN, HP will ensure the coexistence of StarLAN and TRN and will provide interfaces as necessary.

Whatever solution is chosen, it will be chosen to enhance the connectivity of StarLAN as HP's strategic office LAN solution.

Do you plan to integrate with Netview/PC?

IBM's Network Management Architecture (NMA) will be an integral part of SNA functions for our users; HP will support NMA. A distinction should be made between NMA and Netview which is an IBM product packaging and not the architecture. Specific implementation of HP support is under investigation.

HP 2334As AND PRINTERS

Since UB-Delta-1, the new termtype 26 will now be supported on ATP and ADCC with both HP 2334A Plus and 2334A MultiMUX. Therefore, it seems important to recall which termtypes are supported to connect a remote printer to an HP 3000 over two HP 2334As in a back-to-back configuration and what their main features are.

TERMTYPE 26: this new termtype has been especially set up for HP 2334A users. It provides high security and high speed for data transfers. It performs printer status checking at the beginning and end of each spoolfile. However, the use of modem signals is strongly recommended. Different timers are used to define the modem signals management.

■ *TERMTYPE 18:* this termtype can be used with printers that do not handle status checking. It provides good security and high speed. As no status checking is performed, the use of modem signals is required.

■ *TERMTYPE 22:* this termtype provides very high security but results in low throughput. It performs printer status checking at the end of each record. The use of modem signals is again strongly recommended. We do not recommend the use of this termtype over X.25 networks because of its 10 seconds time-out and also because of the overhead generated by the multiple status requests/replies.

When using SVCs, the ADL facility must be converted on the printer side and HP 40220 modem cable used with the HP 2334A (Plus or MultiMUX) on the system side. The SVC should be established before starting the spooler. The only exception to this rule happens when using the HP 2334A Plus with TT26. In this case, the ADL facility can be configured on the 2334A Plus system side and the modem cable HP 40221 is required. It allows, for example. different systems to share the same remote printer.

▪ *Upgrading from TT18 or TT22 to TT26:* The HP 2334A MultiMUX users that want to use TT26 instead of TT22 or TT18 must use the UDP profiles 77 (or 78) and 1 (or 6) defined in the HP 2334A MultiMUX Configuration Guide (PIN 02334-90011) pages 1 to 21.

Note: Using pass 3.1 firmware with the HP 2334A MultiMUX changes the modem behavior of the default profiles 1 and 71. In this case, use profiles 71 (or 78) and 1 (or 6) defined in the Configuration Guide (PIN 02334-90011) pages 1 to 21. However, it is impossible to assign a UDP profile that is identical to a BDP profile.

To take into account the support of TT26 on ATP and ADCC. the HP 2334A MultiMUX Configuration Guide (PIN 02334-90011) and the HP 2334A Plus Configuration Guide (P/N 02334-90018) will be updated. These updates should be available at HP Direct very soon.

Contact your HP sales rep for more information.

Plotters

AD CAMPAIGN FOR HP DRAFTING PLOTTERS

A six-month ad campaign is generating awareness of Hewlett-Packard's new drafting plotters, the HP DraftPro and HP DraftMaster plotters. Companion ads targeted for architects, mechanical engineers, and electronic engineers are appearing in *Machine* **Design, Design** *News,* **Architecture, Architectural** *Record,* **CAE, Design** *Graphics* **World,** *EDN,* and **Electronic Design.**

Printers

ANNOUNCING HP-IB FOR THE HP QUIETJET PLUS PRINTER

The HP 2227B is a new version of the wide-carriage HP QuietJet PLUS personal inkjet printer. It features a single HP-IB port, an 8-Kbyte input buffer, and both primary and secondary HP-IB commands modes. It is the lowest-priced, wide-carriage, HP-IB printer available from HP.

As a local printer, the HP 2227B is an excellent choice for scientists, engineers, and technical professionals using HP technical PCs, workstations. instrument controllers, and instruments.

In measurement automation applications, the wide carriage allows users to log more useful data on a single line. The adjustable pinwheels allow users to load either wide or narrow paper,

depending on test needs. And, with the easy-to-change, single-color inkjet print cartridges, different test runs can be printed in different colors such as black, red, blue. and green for more efficient data management.

In design automation applications, the wide-carriage, 8-Kbyte input buffer, 192 dpi graphics resolution, low noise level, and printing speed are well suited for local printing of working hardcopies of simple schematics and diagrams from CAD/CAE software.

The HP 2227B can be used as an output device with the HP 54000 Series of digitizing oscilloscopes and the HP 1630 Series of logic analyzers. These instruments allow users to make a hardcopy dump of what's on the displays directly to a graphics printer without the use of a controller. And of course, it's an easy fit for spreadsheets, reports, and program listings.

Features at a glance

Printing speed: 192 cps in draft, 48 cps in near-letter-quality (NLQ) mode.

Graphics resolutions: 96 x 96 dpi, 192 x 96 dpi, 192 x 192 dpi

▪ *Input buffer:* 8 Kbytes, expandable to 16 Kbytes

Interface: HP-IB, primary and secondary commands modes.

▪ *Puper handling:* Friction feed, fully adjustable pinfeed, paper advance knob, last-form tear off.

▪ *Puper widths:* 10.2 to 38.1 cm (4 to 15 inches)

▪ *Size:* 527 mm W x 118 mm H x 214 mm D (20.75 x 4.7 x 8.4 inches)

Duty cycle: Less than 40 pages per day.

The HP 2227B is supported on the HP 9000 Series 20013001500 technical computers, HP Integral PC, HP 150A/BIC, HP Series 80, and HP Vectra PC.

Operating systemsllanguage support include: HP-UX (Rev 5.141), Pascal (Rev 3.1), BASIC (Rev 4.0), SRM System (Rev 2.2). HP 64000 Development System (Rev 2.0). All releases of the HP 150 operating system support the HP 2227B as well. The HP 2227B will formally be mentioned starting with MS-DOS 3.2 configurators; for older releases, HP *ThinkJet printer* or *other* should be used.

The HP 2227B is also supported on the new HP 82300A HP BASIC language processor card for the HP Vectra PC, as well as the new HP Vectra PC Models PC-308M and PC-308C HP BASIC Controllers.

This is also HP's lowest-priced printer with HP-IB secondary commands mode. Secondary commands mode (also known as *Amigo* mode) is a more sophisticated implementation of HP-IB that allows a printer and disc drive to more easily share a bus without affecting speed. This allows the HP 2227B to be compatible with a wider range of higher performance systems.

The product is on the HP Price List as of May 1.

Scanners

NEW HP SCANJET SCANNER CONFIGURATION INFORMATION

A number of questions regarding the HP ScanJet scanner configuration have arisen from a statement published in the March 1987 issue of HP *Channels,* page 23. To clarify, Scanning Gallery software is only shipped with the HP 88290 interface kit; it is not shipped with the HP ScanJet scanner, HP

9190A. You must order an interface kit for each computer using the scanner. To ensure coordinated delivery of your HP ScanJet scanner and interface kit, P/Ns 9190A and 88290A must be ordered on the *same order section.*

We are also seeing a lot of instances where the HP ScanJet desktop scanner fails when it is shipped from one location to another. This problem stems from failing to replace the shipping retainer on the side of the scanner before shipping. This retainer holds the mirror assembly in place and keeps it from moving.

If you have lost the retainer, please do not ship your scanner without it. Contact your HP sales rep ASAP.

Terminals

HP 262X PODS, CABLES, AND ACCESSORIES DISCONTINUED

The HP 262X family of terminals is being discontinued. The following pods, cables, and accessories are used with HP 262X terminals and will be removed from the HP Price List on May 1, 1987. The last date to order these products will be May 30, 1987. These products will be supported for five years until May 30, 1992.

Product No.	Description	CPC* Part Number
13222W	262X to HP 3000 System	13222-60007
13232U	Modem Bypass cable	5061-6708
13232R	Multi Extension cable	02640-60134
13242Q	Multi Daisy chain	13242-60017
13242R	First Multi. Synchronous RC	13242-60016
13242S	First Multi Synchronous	13242-60015
13242T	First Multi. Asynchronous	13242-60014
13242Y	FMP Protect cable	40242Y
Accessories		
13220A	262X Technical Information Package	
13265A	300 Baud Rate Modem POD	
13266A	Current Loop Interface POD	
13266E	RS-422 Data Comm	
13267A	First Multi. POD	
13268A	Daisy Chain POD	
13297M	2624B 16K RAM Upgrade Kit	
40206A	Non-RFI Tilt-Swivel Kit	

*Corporate Pons Center

Also in this issue

Supplies

HP Direct order phone numbers

HP Direct Fast Phones t h e easy, direct way for you to order supplies, accessories, media, furniture. and software from HP Direct.

Location	Telephone Number
Australia	(03)895-2645
	(03)895-2615
	(03) 895-2815
	(03)895-2861
Austria	(0222) 2500-615
	(0222) 2500-616
Belgium/Luxembourg	(02) 762 32 00
Canada	
Toronto Local	416-671-8383
Ontario	1-800-387-3417
Quebec	1-800-387-3417
British Columbia	112-800-387-3154
Other Provinces	1-800-387-3154
Denmark	(02) 816640, ext. 258
Finland	(90) 887 2361
France	(1) 69 288 390
Greece	(01)6726090
Italy	(02)9236 9437
	(02)9236 9478
	(02)9236 9585
Japan	
Sagamihara	0427 59 1311
Osaka	06 304 6021
Middle East	
Athens	(01) 6828811
Norway	(02) 171180
South Africa	
Johannesburg	(011) 8025111
Cape Town	(021) 537954
Spain	(91) 6374013
	(91) 6370011
Sweden	(08) 7502400
Switzerland	(057) 31 22 53
	(057) 31 22 54
	(057) 31 22 59
The Netherlands	(020) 547 6606
United Kingdom	(0734) 697201
United States	800-538-8787
West Germany	(0130) 3322

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 entry 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: CONCER'I' is a three-in-one business package. Features include: word processing with forms generation, mail merge, etc.: database: and business planner, which will prepare forecast and reports. Automatically calculates profit and loss and balance sheets.

Industry: *Cross industry*

Abstract: ESCAD is a low-cost. computer-aided design system. ESCAD 2.5 features include pattern hatching. on-screen menus. geometric calculations, parallel curves. windows. room, auto dimensioning. block arrays, and circular array.

Company Name: Energy Soft Computer Systems Limited

Address: Whelmer House
Skelmersdale,
Lancashire.
England
WN8 6NN

Phone: +44 69.5 31473/22810/33310

Telex number: 677467

Contact Person: R. D. Thurston

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: *Cross industry – office automation/publications*

Abstract: The Professional Writer's Package is a complete document-publishing package especially designed for the needs of professionals requiring powerful features. It can create the most simple to the most complex documents. including technical manuals. lengthy reports. legal documents. etc.

Features:
- Complete MS®-DOS, UNIX® operating system, and XENIX® compatibility
- Multiple columns, automatic headers, footers, and footnotes
- Table of contents and index automatically generated
- Labeled, numbered. and nested lists
- Automatic page numbering, word wrap, and left and right justify
- Spelling checker
- Foreign language support (including Slavic and Greek)
  Large list of devices supported
- On-line, context-sensitive help
  Interaction with the operating system from within the program
- Complete customization capabilities

Industry: *Cross industry – software development tools*

Abstract: EDIX is a full-screen text editor with specialized features that are especially appealing to programmers. writers, and other professionals requiring flexibility and power.

Features:
- Multiple windows and buffers
- Subprocess execution with standard output capture
- MS®-DOS, UNIX® operating system. and XENIX® compatibility
- Adjustable screen and window sizes
- Simple and complex search patterns
- Versatile translate (replace) command
- Macro processor facility for defining your own commands
- Unlimited keyboard definition
- Cursor and buffer status displays
  Foreign language support

Company Name: Emerging Technology

Address: 4760 Walnut Street
Boulder, Colorado 80301
USA

Phone 303-447-9495 or in USA, 800-782-4896

Contact Person: Maria A. Pardee

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

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Cupertino, CA 95014
U.S.A.

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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 0000/53 or to the address listed below): company name, address, phone number, OEM contract number, contacts' name/title, HP products used, and HP sales rep name and employee number. 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.

HP CHANNELS

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