

---

---

# HP CHANNELS

---

Information For Hewlett-Packard's Value-Added Businesses

May 1988

---

---



---

Introducing three new HP 9000 Series 800 systems

---

---

---

---

# HP CHANNELS

Volume 7, No. 7

Editor  
Tracy Wester

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.

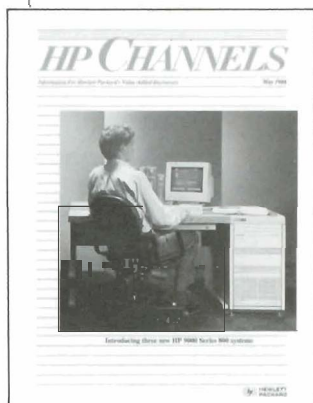
For further information on any of the products and services discussed in HP Channels, please contact your HP sales rep.

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.

Hewlett-Packard does not warrant the accuracy of the information provided in HP Channels and shall not be liable for any use made of the information contained herein. Information provided in HP Channels is subject to change without notice.

On the cover



Two new high-performance midrange systems (the HP 9000 Model 835S is shown on the cover) and a high-end extension make the HP 9000 Series 800 product line stronger than ever before. These new products demonstrate HP's commitment to become the leading vendor of UNIX systems for both the technical and business marketplace. See articles beginning on page 9.

HP CHANNELS  
May 1988

## Table of Contents

### PARTNERS WITH HP

- 2 Training**  
HP DeskManager and Information Access integration training available

### PRODUCT NEWS

#### Customer Support

- 2 General**  
HP will be at ATE&I-East

Update services for OfficeShare III  
Subscription services for HP Vectra PC software

#### Business Computers

- 3 General**  
New fiber-optic interface for 900 Senes HP 3000 systems  
ALLBASWXL is shipping  
Performance-enhanced Resource Sharing now available  
HP BRW/V and HP BRWIXL tutorials now available  
HP Manufacturing Management II on HP-PA systems
- 6 Small Business Computing**  
Introducing the HP 260 StarterPack and HP 260 PowerPack  
Correction to discontinuance of 45003A/45004A memory boards
- 7 HP 3000**  
HP-to-IBM networking products for 900 Series HP 3000  
New upgrade credits for HP-to-IBM products on 900 Senes HP 3000 systems  
The HP MICRO 3000GX: An HP 260 opportunity  
MPE VIE HP 3000 systems support  
HP Vectra CS and ES PCs

#### Technical Computers

- 9 HP 9000**  
Overview of the new HP 9000 Series 800  
Introducing two new midrange HP 9000 Series 800 systems  
HP 9000 Model 850S enhancements  
HP announces most powerful HP 9000 yet - the Model 855S  
HP 9000 Model 825S update  
Networking enhancements for HP 9000 Senes 800 Release 2.0  
New fiber-optic Interface for HP 9000 Series 800 systems  
COBOL/HP-UX: ANSI 85, new features, and high performance  
New HP BASIC 5.1 language processor software upgrade

#### General

- 17 General**  
Don't miss out on the next Information Access release  
Which version of AdvanceMail should you buy?
- 18 Desktop**  
New PageMaker software for the HP Vectra Publisher PC  
Dual hard discs now supported on the HP Vectra ES PC  
New release of HP 150 MS-DOS 3.2

#### Peripherals

- 20 Mass Storage**  
New HP-FL interface cards and disc drives  
Data compression on 1/2-inch tape drives  
Standard one-year return to HP warranty on the new HP disc drives  
New HP 9144A to HP 35401A trade-in program

#### Networks

- 22 Networks**  
New HP SiteWire documentation for twisted-pair networks  
Free upgrade to NS3000/V

#### Printers

- 23 Printers**  
Enhanced HP RuggedWriter 480 printers handle six-part forms  
HP RuggedWriter 480 and HP 293X printers - a comparison

#### Scanners

- 24 Scanners**  
IBM PS/2 Interface kit now available for the HP ScanJet scanner

#### Terminals

- 24 Terminals**  
HP 700171 keyboard selection  
Now HP terminal solutions priced even lower

#### Supplies

- 25 Supplies**  
New book helps users understand the UNIX operating system  
HP Direct Order Phone Numbers

### CROSS-LICENSING CLASSIFIEDS

- 26** Software Packages Available and Wanted

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

**For research and education purposes only.**

## *HP DeskManager and Information Access integration training available*

Sign ups are now available for enrollment into classroom training on HP DeskManager and Information Access integration capabilities. The training courses are designed to provide an opportunity for value-added businesses to learn how these HP information management products can integrate with and complement their existing solutions.

This training is available free of charge to VABs who have enlisted into the VAB Integration Program (*HP Channels*, January 1988). The VAB Integration Program gives you the opportunity to capitalize on the growing demand for Integrated Business Systems – solutions that integrate information management tools with vertical business applications – with a minimal development investment. Within the program, HP VABs are given special incentives and integration assistance from HP, providing the opportunity to turn your industry-specific applications into a fully integrated business solutions.

To assist VABs in the integration of HP information management products with their software, HP provides:

- Loaner Software for integration development
- Financial incentives for software relicensed or leveraged
- Integration training and dial-up consulting

Assistance with joint merchandising of integrated solutions

**Information Access Integration Training** – This two-day course provides detailed lectures and labs covering alternative methods of using Information Access to allow PC users to retrieve and manipulate data resident in your application – and beyond. The course topics include a product overview, PC/HP 3000 program flow, datacom issues, installation and configuration, data security, use of PC and HP 3000 command files, advanced techniques for manipulation of TurboIMAGE data, retrieving TurboIMAGE data from multiple sources, use of the ACCESS Report Writer and application performance considerations.

The course consists of 50 percent lecture and 50 percent lab. The dates of the courses now available for enrollment are:

- June 9-10, 1988
- August 11-12, 1988
- September 29-30, 1988

**HP DeskManager Integration Training** – This course provides detailed lectures and labs covering alternative methods of using HP DeskManager to extend the capabilities of your applications. The course topics include a product overview (of HP DeskManager and its bolt-on components, HP File/Library and HP Schedule), integrating electronic mail, customization features, task automation through script files, integrating the HP Desk HELP system within your application, security groups, data passing between HP Desk and other HP 3000/PC applications HP Desk's "application umbrella" and intrinsic access to HP DeskManager services.

The course is four and a half days in length. The first three days consist of 60 percent lecture and 40 percent lab. The remainder of the course concentrates on integrating your application (students are requested to bring a tape of their application to the class) with HP Desk with technical assistance provided. The dates of the courses now available for enrollment are:

- June 13-17, 1988
- August 15-19, 1988
- October 3-7, 1988

Sign up early to reserve your position in the integration classes. The training courses will be performed at selected factory locations in California, and are scheduled back to back (HP Desk and Information Access) to allow attendance at both courses with a single trip, if desired. For more information on the training courses and the VAB Integration Program, contact your HP sales rep.



## Customer Support

General

### HP will be at ATE&I-East

The ATE & Instrumentation Conference-East (ATEM-East) will be held at the World Trade Center in Boston, Massachusetts, June 7-9, 1988. The event is sponsored by *Electronics Test* and *Circuits Manufacturing* magazines.

The HP booth will be located at the exhibit entrance and exhibit hours will be:

- Tuesday, June 7, 10:00-5:00
- Wednesday, June 8, 10:00-5:00
- Thursday, June 9, 10:00-3:00

Thematically, the products displayed in the booth will be placed under the "Test Center" umbrella – a set of products and services that combine to span the spectrum of testing problems. Test instrumentation, board test systems, and HP's custom integration services will be on display. In addition, the following board test VABs will be a part of the booth: TTI Testron, OMNI, Hartman Associates, Eastern Electronics, QTS, and ATE.

For more information, contact your HP sales rep.

Support

### Update services for OfficeShare III

HP now has several update services for OfficeShare III software. Each time HP updates these products, we mail the revisions directly to the customer. These updates ensure that the network is using the most up-to-date and error-free software available.

We offer services for each of OfficeShare III's software components. Site licenses are available for both the Services and the Configuration/Diagnostics software.

Contact your HP sales rep for more information.

Support

### Subscription services for HP Vectra PC software

Now, PC users can automatically receive software updates via two new services.

#### Materials subscriptions for PC software

The first service, a Software Materials Subscription (SMS), provides software and manual updates. The second service, an Extended Software Materials Subscription (EMS), provides only the right to copy. Each time HP updates the covered software, we mail revisions directly to the user.

#### Services increase effectiveness

These updates will increase the user's effectiveness. Users will immediately enjoy the increased functionality from the revisions. They will also have the most error-free revisions available. Support staff will, therefore, spend less time trouble shooting and more time providing consulting and training.

#### Product covered

| Product               | Quantity |                    |                    |            |
|-----------------------|----------|--------------------|--------------------|------------|
|                       | 1 Master | 1 Master<br>10 RTC | 1 Master<br>50 RTC | 50 Masters |
| AdvanceLink           | 68333F   | 68333L             | 68333Q             | 68333S     |
| AdvanceMail           | 27535F   | 27535L             | 27535Q             | 27535S     |
| AdvancePrint          | 32583F   | 32583L             | 32583Q             | 32583S     |
| Executive MemoMaker   | 68330F   | 68330L             | 68330Q             | 68330S     |
| Executive CardManager | 68331F   | 68331L             | 68331Q             | 68331S     |
| AdvanceWrite Plus     | 27546F   | 27546L             | 27546Q             | 27546S     |
| Galleries Collection  | 68352F   | 68352L             | 68352Q             | 68352S     |

We offer contracts for each of the products listed above. SMS contracts are ordered with an "SOO" suffix. EMS contracts are ordered with a "WOO" suffix.

For example, to purchase the 10-user license for AdvanceLink and its SMS, order:

68333L AdvanceLink  
68333L+S00 AdvanceLink SMS

#### Materials delivered

|                       | 1 Master | 1 Master<br>10 RTC | 1 Master<br>50 RTC | 50 Masters |
|-----------------------|----------|--------------------|--------------------|------------|
| <b>SMS</b>            |          |                    |                    |            |
| Disc sets             | 1        | 1                  | 1                  | 50         |
| Right-to-copy discs   | 0        | 10                 | 50                 | 0          |
| Manual sets           | 1        | 1                  | 5                  | 5          |
| <b>EMS</b>            |          |                    |                    |            |
| Right-to-copy discs   | 1        | 10                 | 50                 | 50         |
| Right-to-copy manuals | 1        | 1                  | 5                  | 5          |

You can order these services in one of the four quantities shown in the table above. This allows you to match the quantities of both the products and their updates.

For example, if you order the 10-user license for AdvanceLink and its SMS, you would receive:

- 68333L AdvanceLink
  - One set of program discs
  - Ten labels authorizing RTC
  - One set of manuals
- 68333L+S00 AdvanceLink SMS
  - One set of program updates
  - Ten labels authorizing RTC
  - One set of manual updates

Contact your HP sales rep for more information.

## Business Computers

General

### *New fiber-optic interface for 900 Series HP 3000 systems*

HP announces HP-FL, the new fiber-optic disc interface for HP Precision Architecture (HP-PA) systems. The new interface will be supported on the HP 3000 Series 925LX, 925, 930, and 950 on release 1.1 of MPE XL. HP-FL will also be supported on the HP 3000 Series 935 and 955.

With the introduction of the new interface, HP is also announcing larger supported mass-storage configurations on HP 3000 Series 930 and 950 systems. Maximum supported configurations with MPE XL release 1.1 are listed here. The number of supported HP-FL discs will be increased again on the HP 3000 Series 930 and 950 with release 2.0 of MPE XL.

| Discs                  | HP 3000 Series |     |      |      |
|------------------------|----------------|-----|------|------|
|                        | 925LX          | 925 | 930  | 950  |
| HP 7936/37H discs      | 8              | 16  | 24   | 24   |
| Gbytes (7937)          | 4.5            | 9.1 | 13.7 | 13.7 |
| HP 7936/37FL discs     | 8              | 16  | 30   | 30   |
| Gbytes                 | 4.5            | 9.1 | 13.7 | 13.7 |
| Combined maximum discs | 8              | 16  | 30   | 30   |

Please note that release 1.1 of MPE XL is not yet available. Use HP-IB as appropriate if orders are already in backlog and/or shipment is expected in the near future.

For more details on the new interface, contact your HP sales rep.

General

### *ALLBASEIXL is shipping*

TurboIMAGE/XL has been enhanced to provide such dramatic performance improvements that we are changing our MPE XL database strategy. We have achieved this improvement by making performance enhancements that take advantage of HP Precision Architecture. TurboIMAGE will now provide the best performance on current and future high-end MPE XL systems.

#### **TurboIMAGE becomes part of ALLBASEIXL - a smoother migration**

Consequently, we no longer need to offer HP IMAGE on MPE XL systems in order to provide high performance with TurboIMAGE compatibility. Users can now have what they've been asking for - superior performance on HP Precision Architecture systems without having to move to a new database-management system. Users can continue to develop TurboIMAGE applications with confidence that they will, as always, have a very smooth path to increasing performance on the HP 3000. TurboIMAGE has replaced HP IMAGE on MPE XL systems. ALLBASEIXL, our database offering optimized for MPE XL systems, now consists of TurboIMAGE/XL and HP SQLIXL. ALLBASE/UX, our database offering optimized for HP-UX systems, consists of HP SQL/UX and HP IMAGE/UX, the migration path for IMAGE11000 users.

#### **ALLBASEIXL has a bright future**

TurboIMAGE/XL is now our strategic network model database product on MPE XL systems, and along with HP SQLIXL, will be the focus of new development in future releases. This includes adding much of the functionality announced for HP IMAGE,

such as the ability to have relational access to IMAGE data. As users add HP SQL applications to their environment, they can use a common interface to access either HP SQL or TurboIMAGE data.

The 900 Series of the HP 3000 is now stronger than ever with the offering of award-winning TurboIMAGE and a competitive HP SQL relational DBMS across the product family. ALLBASE/XL is shipping now.

Contact your HP sales rep for more information.

General

### *Performance-enhanced Resource Sharing now available*

A new version of Resource Sharing with substantial performance improvements is now ready for shipment. Resource Sharing Version A.01.00 is available on the V-Delta-2 MIT, and now, through the new Office Retrofit Program, the software can be ordered for installation on UB-Delta-4 and V-Delta-1. All shipments of Business System Plus will incorporate this new, fast Resource Sharing.

Resource Sharing is the core component of Business System Plus, providing PC users with HP 3000-based file sharing, printer sharing, and PC backup. The latest version of Resource Sharing (A.01.00), in conjunction with the latest version of OfficeShare Networking products (Version B.00.00), allows the user to take full advantage of the performance improvements.

*continued on next page*

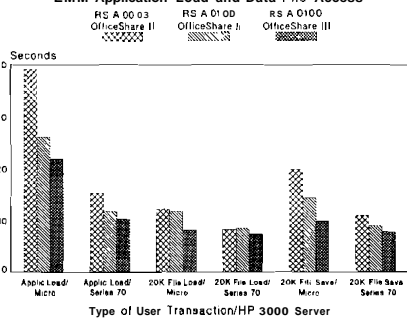


## Single networked workstation response time improved

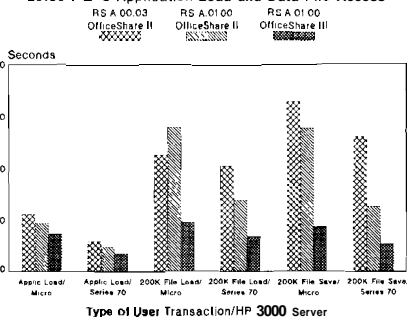
Performance gains over previous versions of Resource Sharing ranged from approximately 11 percent (Executive MemoMaker file load on a Series 70) to 71 percent (Lotus<sup>B</sup> 1-2-3<sup>®</sup> file save on a MICRO 3000). Single networked workstation response time tests have been performed for both Lotus 1-2-3 (2.01) and Executive MemoMaker (A.03.00) over a ThinLAN network. The results from these tests are included in the following two charts. These charts compare application load times, file load times, and file save times for both the MICRO and Series 70 for:

- Resource Sharing (A.00.03) and OfficeShare (A.03.00)
- Resource Sharing (A.01.00) and OfficeShare (A.03.00)
- Resource Sharing (A.01.00) and OfficeShare (B.00.00)

Single Networked Workstation Response Time  
EMM Application Load and Data File Access



Single Networked Workstation Response Time  
Lotus 1-2-3 Application Load and Data File Access

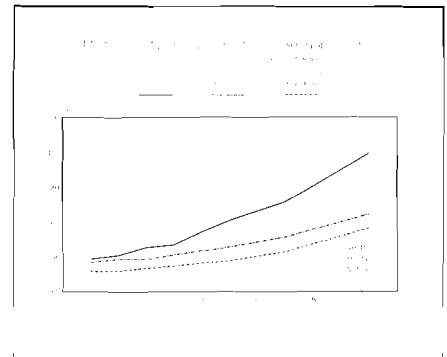


As you can see, performance gains were recognized in all of the tested single-user transactions. Previously recommended for HP 3000 Series 68 and 70 servers only, application loading is now entirely feasible from the full range of supported HP 3000s. Many users with low-end and midrange servers will now choose to use Resource Sharing for application loading. Those who require performance near that of a hard disc should still load applications from either an HP Vectra PC server, or a hard disc, using Resource Sharing for shared files, shared printing, and PC backup. Work with your HP sales rep to get the best solution for your needs.

## Multiple networked workstation response times improved

Multiple networked workstation response time tests have been provided to show the improvements in the new version of Resource Sharing with OfficeShare (B.00.00) using the Smart LAN Performance Test (Smart LPT).<sup>\*</sup> Smart LPT is a set of tests that exercises the network using a mix of spreadsheet, database, and work-processing activity. These tests use intensive batch processes to generate comparative benchmarks in a multiuser network environment. Because the processes are faster than human usage, the results do not indicate the maximum number of users a system can handle.

The following graphs are for the HP MICRO and Series 70 HP 3000 servers.



The results show substantial improvements in the performance of new versions of both Resource Sharing and OfficeShare. Resource Sharing now better accommodates the demands of a multiuser environment.

*Note:* There are some situations where response time degradation will occur, such as when as HP StarLAN bridge connects a StarLAN network to a ThinLAN backbone.

## Improved disc space utilization

In addition to performance gain, users will also notice improved disc space utilization of 35 to 40 percent over previous versions of Resource Sharing. This translates to solid cost savings.

## Streamlined new directory structure

The Resource Sharing performance enhancements are due primarily to modifications to the directory structure and new hashing algorithms used to manage the directory. Therefore, users who are on previous versions of Resource Sharing will need to convert their shared discs to the new structure. Instructions for programmatically converting shared discs are included in the update package.

## Update information

Users who have SMS for the Resource Sharing product will receive Resource Sharing Version A.01.00 when V-Delta-2 ships. Users who do not wish to upgrade to V-Delta-2 at this time can order the software for installation on UB-Delta-4 or V-Delta-1 through the Office Retrofit Program.

In order to recognize full performance benefits, users will also need to purchase OfficeShare B.00.00 upgrade kits.

## OfficeShare upgrade kit ordering information

| Product Number | Opt. | Description                                                |
|----------------|------|------------------------------------------------------------|
| 50923F         | OCJ  | StarLAN user upgrade                                       |
| 50923F         | OCK  | ThinLAN user upgrade                                       |
| 50929F         | OCN  | LAN configuration software upgrade for StarLAN and ThinLAN |

Contact your HP sales rep for more information.

**\*The Smart LAN Performance Test (Smart LPT) is included with SmartWare®.**

*SmartWare® is a registered trademark of Innovative Software, Inc.*

## General

# HP BRWIV and HP BRWIXL tutorials now available

To satisfy the many requests for learning-type documentation for HP BRWIV and HP BRW/XL, tutorials are now available. The HP BRWIV and HP BRWIXL tutorials are self-paced courses that explain HP BRW/V HP BRWIXL, and assist people to write reports using it. The tutorials are designed for those new to HP BRWIV and HP BRWIXL, but are also recommended for more experienced users. (However, the tutorials are not a substitute for the HP BRWIV and HP BRWIXL Customer Training courses).

The tutorials each consist of three lessons that guide the user through all parts of defining, compiling, and running a report. They are designed to be used in conjunction with the HP 3000; that is, a student uses HP BRWIV or HP BRWIXL to create an actual report – giving 'hands-on' experience.

The tutorials provide an overview of the whole of HP BRWIV and HP BRWIXL, explaining them in a simple and logical fashion. Among many other topics, the tutorials cover sorts, breaks, linesets, tables, calculated items, column calculations, standard items and functions, edit masks, suppressing lines, selection sets, parameters, keyed access, etc. Students are always able to check their reports against example solutions. Tests, with answers, are provided to reinforce what is learned.

The tutorials each consist of software (an example database and solution files) and documentation.

The databases and files are shipped with the subsystem tapes for HP BRWIV and HP BRWIXL. (For HP BRWIV,

starting with V-Delta-1 MIT, HP BRWIV version A.01.10. Note that to obtain the software, you will have to upgrade to V-Delta-1 MIT.) The tutorial files are contained in account ITF3000.

As with the reference manual, the documentation will be shipped to all users with support contracts. Additional copies of the documentation can be ordered from HP Direct, PIN 36070-90010 (HP BRWIV), and PIN 35360-90010 (HP BRWIXL).

Please note that we still recommend that at least one person from each site attend the HP BRWIV and HP BRWIXL Customer Training. As stated above, the tutorials are not a substitute.

## General

# HP Manufacturing Management II on HP-PA systems

HP manufacturing users are being provided the simplest possible migration path to HP Precision Architecture (HP-PA). No customer retraining or recustomization is involved. Furthermore, the complete product line will be supported on both MPE V and MPE XL environments. All of this adds up to good news as users look to migrating their installations of HP manufacturing and financial applications to the 900 Series HP 3000 systems.

## Currently at test sites

All MM II modules have completed extensive factory testing. The following modules are at customer sites, either in production or preproduction testing:

- HP Materials Management
- HP Production Management
- HP Maintenance Management
- HP Financial Accounting

*continued on next page*



Early performance results are strong and we expect even greater performance as newer releases of MPE XL are incorporated. Specific performance data will be available closer to MM II release.

## Available beginning this Summer

The four modules previously mentioned will be available for users in the Summer. General availability for the rest of HP's manufacturing modules will occur during the third calendar quarter, 1988. As users begin migration planning for these products, remember there is an HP software upgrade charge for migrating an application to a higher priced tier (e.g., migrating HP Materials Management from a Series 70 to a Series 950).

## For more information

If you wish to learn more about HP's plans or what is involved in migrating products such as MM II or HP Maintenance Management, please contact your HP sales rep.

Whether users have just bought MM II or have been running on it for several years, they can anticipate a smooth migration to HP's Precision Architecture hardware platform.

*Small Business Computing*

## Introducing the HP 260 StarterPack and HP 260 PowerPack

### For Europe only

Now, the HP 260 family provides exceptional computing power at the lowest price ever. Two outstanding offers make it possible: the HP 260 StarterPack and the HP 260 PowerPack.

### HP 260 StarterPack

The HP 260 StarterPack makes small business computing affordable as never before – a true multiuser system is now available for very low prices. The HP 260 StarterPack consists of:

- HP 260 Series 30 – with prices reduced by more than 30 percent
- Video interface included
- Asynchronous interface replaces video interface at low price
- 512-Kbyte memory at low price, when purchased with the system
- Choice of 40- or 80-Mbyte discs with backup device for about 20 percent off list price

### HP 260 PowerPack

For users requiring more processing power, the HP 260 PowerPack, based on the HP 260 Series 40, provides the ideal solution – for a very attractive price.

The HP 260 PowerPack consists of:

- HP 260 Series 40, with prices reduced by more than 10 percent
  - Video interface included
- Asynchronous interface replaces video interface at very low price
- 81- or 130-Mbyte disc with cartridge tape at reduced price

### Program description

If users order an HP 260 Series 30 (PIN 45070A) or Series 40 (PIN 45072A) and selected mass storage devices, they will receive a price adjustment depend-

ing on the configuration. On top of that, additional memory and I/O interfaces can be ordered at adjusted prices.

Other products can be added at list price to the sales order.

### HP 260 StarterPack

| Group   | Product                                      | Quantity |
|---------|----------------------------------------------|----------|
| Group A | 4507A HP 260 Series 30                       | 1        |
| Group B | 9153C 40-Mbyte disc<br>Opt. 040 and floppy   | 1        |
|         | or<br>9153C 40-Mbyte disc<br>plus 9144A tape | 1        |
|         | or<br>7957A 80-Mbyte disc<br>plus 9144A tape | 1        |
| Group C | 45127A ASI I/O                               | 1        |
|         | or<br>45128A video 110                       | 1        |
| Group D | 45008A 512-Kbyte memory                      | 1        |

### HP 260 PowerPack

| Group   | Product                                       | Quantity |
|---------|-----------------------------------------------|----------|
| Group A | 45072A HP 260 Series 40                       | 1        |
| Group B | 7957A 81-Mbyte disc<br>plus 9144A tape        | 1        |
|         | or<br>7958A 130-Mbyte disc<br>plus 9144A tape | 1        |
| Group C | 45127A ASI I/O                                | 1        |
|         | or<br>45128A video I/O                        | 1        |

### Special considerations

1. The HP 260 PowerPack may be combined with the HP 260 Power Up PLUS promotion to have upgrading users take advantage of the new price.
2. The HP 9153C disc drive is not supported with the current operating system B.08. Support will be available with the next release of the operating system B.09, scheduled for release in June, 1988. Orders that include an HP 9153C will be shipped upon availability of the O.S. version B.09.
3. Please contact your local HP sales rep for more details.

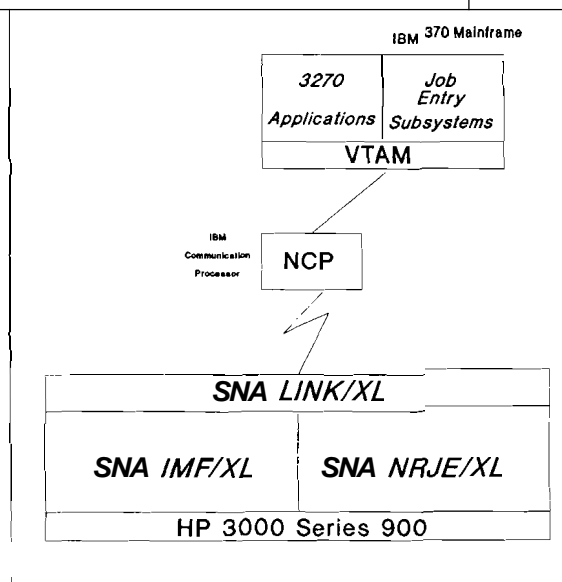
## Correction to discontinuance of 45003A/45004A memory boards

In the March issue of HP Channels, we included an article about the discontinuance of the 45003A and 45004A memory boards. You read that the 45004A has 132 or 192 Kbytes of memory. Please do not look for these additional Kbytes because the memory capacity was increased erroneously. It should read 128 Kbytes for the 45004A.

HP 3000

## HP-to-IBM networking products for 900 Series HP 3000

HP introduces native HP-to-IBM networking products for the 900 Series HP 3000. These products will provide direct interactive and batch communications between the 900 Series HP 3000 and an IBM host in an SNA environment.



## Product descriptions

SNA Link/XL consists of a communication interface card, cables, and software to provide an "SNA link" to the IBM host. The communication interface card, called a Programmable Serial Interface (PSI) card, handles the low-level line protocol, SDLC, and the cables, which vary upon the cable type that you order. You may order a cable for a synchronous modem connection, an auto-dial modem connection, or a V.35 high-speed cable connection. You also have the option of ordering SNA LinWXL so that you receive the software only in the case where you already have a PSI and cable that can be used with the SNA Link/XL software. The SNA Link/XL software consists of protocol-handling software responsible for pacing and directing the data correctly to the end user. SNA LinWXL may be used for a variety of "SNA service products" that may simultaneously use the same SNA LinWXL product for communications to the same IBM host. The SNA service products provide the distinct end-user services required. For release 1.1 of MPE XL, HP is providing two SNA service products - SNA IMFIXL for interactive 3270 communications, and SNA NRJE/XL for batch workstation communications.

SNA Interactive Mainframe Facility/XL (SNA IMF/XL) emulates the main features of a 3274 control unit, which manages 3270 communications for several devices that may be display station terminals and/or printers. When a 900 Series HP 3000 is installed with SNA IMFIXL, it allows HP terminals and/or printers to emulate IBM terminals and printers. This is necessary when communicating with 3270 applications on the host that provide database access or update and file transfer. SNA IMFIXL also provides a 3270 programming interface, which provides application writers on the HP 3000 a set of intrinsics that may be called from within user-written applications. This is useful because it allows programs to act as automated ter-

minal operators, accessing and/or updating information on remote databases on the IBM host, or transferring files between the HP 3000 and the IBM host.

SNA Network Remote Job Entry/XL (SNA NRJEIXL) emulates the main features of an 8100 DPPX/RJE batch workstation. Through this emulation, SNA NRJEIXL provides 900 Series HP 3000 users the ability to remotely submit jobs to an IBM host in an SNA environment. SNA NRJE supports the JES2, JES3, and POWER job-entry subsystems on the IBM host. In addition, jobs may be received from the IBM host for execution on the HP 3000. This capability is referred to as "reverse NRJE," and allows IBM users to access remote databases and files on the HP 3000.

## Ordering information

SNA IMFIXL, SNA NRJEIXL, and SNA Link/XL will be available on release 1.1 of MPE XL. The products appear on the May 1 HP Price List. Ordering options for these products follow.

| Product No. | Description                                  |
|-------------|----------------------------------------------|
| 30291A      | SNA Link/XL                                  |
| Opt. 310    | For Series 925, synchronous modem connection |
| Opt. 320    | For Series 925, V.35 connection              |
| Opt. 325    | For Series 925, autocal modem connection     |
| Opt. 390    | For Series 925, no hardware                  |
| Opt. 510    | For Series 950, synchronous modem connection |
| Opt. 520    | For Series 950, V.35 connection              |
| Opt. 525    | For Series 950, autocal model connection     |
| Opt. 590    | For Series 950, no hardware                  |
| 30292A/R    | SNA NRJEIXL                                  |
| Opt. 320    | For Series 925                               |
| Opt. 340    | For Series 950                               |
| Opt. OCE    | Upgrade credit for Opt. 320                  |
| 30293A/R    | SNA IMF/XL                                   |
| Opt. 320    | For Series 925                               |
| Opt. 340    | For Series 950                               |
| Opt. OCE    | Upgrade credit for Opt. 320                  |

HP 3000

***New upgrade credits for HP-to-IBM products on 900 Series HP 3000 systems***

For users wishing to upgrade their HP-to-IBM SNA products on their HP 3000 MPE V machine to the new HP-to-IBM SNA products on a new 900 Series HP 3000 processor, there are new upgrade credit options.

The user can receive an upgrade credit for the MPE V HP-to-IBM software and apply it to the purchase price of the MPE XL HP-to-IBM product. Using upgrade credits, a user can go from SNA NRJE (30245) to SNA NRJE/XL (30292) or from SNA IMF (30247) to SNA IMF/XL (30293) at a discount of 100 percent of the current purchase price of the MPE V software in the user's possession.

The upgrade credits are OCD, OCE, and OCF, and are structured into the ordering options for SNA NRJE (30245) and SNA IMF (30247). OCD is for HP 3000 Series 37 and MICRO 3000 software, OCE for HP 3000 Series 39 through 58 software, and OCF for HP 3000 Series 64 through 70 software.

Upgrading from SNA Link (30246A) to SNA Link (30291A) is also discounted. A user may simply order the 30246N return credit for the INP hardware of SNA Link. The return credit may then be applied towards the purchase of SNA Link/XL (30291A).

Specific ordering instructions for these return and upgrade credits are on the May 1 HP Price List.

HP 3000

***The HP MICRO 3000GX: An HP 260 opportunity***

*Not available in Europe*

HP 2501260 users now have two growth paths. One is to the successful HP 260 Series 40. The second alternative is to the HP MICRO 3000GX with JOIN/3000.

With the introduction of the MICRO 3000GX, HP 250/260 users can now get the full benefits of the HP 3000 family at an affordable price. Compared to the HP 250, the MICRO 3000GX offers expandability, 8 or 16 users, 152 Mbyte to 2 Gbyte disc capacity, one to two tape drives, increased performance, and more. By trading in their current HP 250 or HP 260 for the HP MICRO 3000GX, users can get over \$7,000 in return credits. HP 260 Series 40 users who want more performance and the benefits of the HP 3000 should upgrade to the HP 3000 Series 52.

To take advantage of this opportunity, users only need to order the HP 2501260 upgrade to the HP MICRO 3000GX product: 32536AH with Option 607 or 608. Users must purchase 4 Mbytes of memory when migrating to the HP 3000, and will need to purchase a system console separately (HP 700192 terminal).

**Ordering information**

| Product No. | Description                                                                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 32536AH     | MICRO 3000LX or HP 2501260 to MICRO 3000GX. Includes 2 Mbytes of memory, 152-Mbyte integrated disc drive, 67-Mbyte integrated cartridge tape drive, 8-port asynchronous controller (direct connect with 4-modem capability), and external HP-IB connection |
|             | Opt. 510 4-Mbyte memory upgrade                                                                                                                                                                                                                            |
|             | Opt. 607 Upgrade from HP 250                                                                                                                                                                                                                               |
|             | Opt. 608 Upgrade from HP 260                                                                                                                                                                                                                               |

**Note:** Users wishing to migrate to the HP 3000 should consult with their local HP system engineer

HP 3000

***MPE VIE HP 3000 systems support HP Vectra CS and ES PCs***

HP announces support for the HP Portable Vectra CS, the HP Vectra CS, and the HP Vectra ES and ES/12 PCs on MPE V/E HP 3000 systems. The latest additions to the HP Vectra PC family provide users with improvements that include enhanced performance, increased compatibility, and greater expandability. In addition, all HP Vectra desktop PCs arrive with the HP Terminal Emulation Program, making them well suited for connectivity to the HP 3000 family.

The HP Portable Vectra CS PC offers M PC/XT software compatibility and the functionality of a desktop PC in a portable package. The HP Vectra CS PC delivers strong performance and IBM PC/XT compatibility to basic office tasks at an excellent price. The HP Vectra ES PC, based on an 8 MHz Intel 80286 processor, provides IBM PCIAT compatibility and power at an economical price. The HP Vectra ES/12 PC, with its 12 MHz Intel 80286 processor, offers superior performance and IBM PCIAT compatibility to demanding business users.

The HP Portable Vectra CS, Vectra CS, ES, and ES/12 PCs are supported on MPE VIE T-Delta-6 and all later releases via ATP, ADCC, and TIC connections. HP Vectra PCs are included in workstation support maximums for each SPU as specified in the recently updated HP 3000 system configuration guide. With a wealth of choices, the HP Vectra PC family now meets a broad range of computing needs and budgets.

## Also in this issue

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| <i>HP DeskManager and Information Access integration training available</i> | 1  |
| <i>New fiber-optic interface for HP 9000 Series 800 systems</i>             | 17 |
| <i>New HP-FL interface cards and disc drives</i>                            | 21 |

## Technical Computers

HP 9000

### Overview of the new HP 9000 Series 800

On April 6, HP introduced the most significant products since the announcement of Precision Architecture. This article will provide an overview of the new HP 9000 Series 800 products.

#### Introducing the HP 9000 Models 835S and 835SE

Two new high-performance midrange systems are now available. The Model 835S is primarily targeted for computationally intensive applications with less than 30 users. The Model 835SE packs the same CPU performance as the Model 835S with increased connectivity (up to 78 terminal connections).

#### Two new Model 850S enhancements

Both business and technical users for the Model 850S have requested increased terminal connectivity. The new Terminal Expander nearly triples the number of terminals the Model 850S can support. HP is also introducing a floating-point upgrade for the Model 850S. The upgrade will more than double the system's floating-point performance. This product will be well received by users running computationally intensive applications.

#### Price reductions for the Models 825S and 8509S

In keeping with our goal to provide industry-leading price/performance with the HP Precision Architecture systems, HP has reduced the price of the Model 825S by about 18 percent. In addition, the Model 850S SPU bundle has been enhanced and the preconfigured SPU price was reduced by about 25 percent.

#### Announcing a new high-end system

At this time, we are announcing the Model 855S. This system will be the new high-end extension to the HP 9000

product line. Look for more details later in the year.

Coupled with recently introduced software functionality, such as NFS, COBOL preprocessor support for HP SQL, DEC FORTRAN extensions, and ALLBASE performance tuning, these new products significantly strengthen the HP-UX product line for 1988. They also demonstrate HP's commitment to become the leading vendor of UNIX operating-system-based solutions for both the technical and business marketplaces. Other articles in this issue of *HP Channels* describe these products in more detail.

HP 9000

### Introducing two new midrange HP 9000 Series 800 systems

Unprecedented power at industry-leading prices characterize the new HP 9000 Models 835S and 835SE. These new midrange systems offer twice the overall performance of the Model 825S. For computationally intensive applications, expect the Models 835S and 835SE to provide three times the Model 825S's floating-point performance and one and a half to two times the integer performance.

Proving the scalability of HP's Precision Architecture, these new systems offer industry-leading price/performance, high reliability, environmental tolerance, and provide lasting value for HP users. The HP 9000 Series 800 server/multiuser product line now includes the Models 825S, 835S, 835SE, 840S, and 850S – offering users a broad range of processing power and configurability.

The Models 835S and 835SE use the same packaging and I/O structure as the Model 825S. These new products consist of two new processor boards that take advantage of the same NMOS III technology as the Model 825S. The

cycle time has been increased to 66 nanoseconds.

A new floating-point chip set offering 2.02 DP Linpack Mflops, a larger cache of 128 Kbytes, and a larger 4K translation lookaside buffer (TLB) entry size have been added to increase the overall performance of the Model 835S and 835SE. As with all HP Precision Architecture processors, the instruction set is hardwired (no microcode) for extremely fast instruction execution and is implemented via a three-stage pipeline.

### Model 835S

The Model 835S is the ideal system for users who require superior computational performance and want to connect up to 30 users. It's housed in the same compack package as the 825S and can be rack-mounted or placed on a desk. The Model 835S comes standard with 8 Mbytes of error-correcting memory, expandable to 112 Mbytes in 8- or 16-Mbyte increments. A single 16-Mbytes memory board is now available for users who require larger memory capacity.

Also included in the Model 835SW are a 6-channel multiplexer, HP-IB card, 16-user HP-UX license, and an optional powerfail/battery backup.

### Model 835SE

The Model 835SE, with the same outstanding performance as the Model 835S, offers connectivity to up to 78 users. Though only the size of the Model 825S with its I/O Expander, the Model 835SE exceeds the throughput performance of the Model 840S. However, because the Model 840S offers greater connectivity (up to 128 users), it still plays an important role in the Series 800 family. Users with moderate throughput performance requirements and medium to high multiuser requirements should consider buying the Model 840S.

The Model 835SE comes standard with 24 Mbytes of memory, supporting up to

112 Mbytes in 8- or 16-Mbyte increments. A single 16-Mbyte memory board is also available for the Model 835SE. This power-packed system also comes standard with two CIO channel adapters, an I/O expander with a 6-channel multiplexer, HP-IB card, 64-user HP-UX license, and a powerfail battery back-up system.

### Who should buy these two new powerhouses

The Model 835S is positioned as a server/multiuser midrange system particularly well suited for computation-intensive environments such as computer integrated manufacturing, finite element analysis, software development, and scientific and laboratory analysis. The Model 835SE is targeted for workgroup computing in the office or on the factory floor. With its high throughput performance capabilities, the Model 835SE is an excellent choice for users who run their business on one system. These users often run a combination of traditional data-processing tasks as well as statistical analysis and/or business graphics.

### Economical field upgrades available

Users who own a Model 825S today can order an upgrade to the Model 835S or 835SE.

The Model 835SE upgrade includes the two-board processor with additional CIO adapter, I/O expander, 24-Mbyte memory, 64-user license and battery backup system. If the user's Model 825S is configured with an I/O Expander, refer to the ordering table for deletion of the additional I/O expander that comes with the Model 835SE. Users who desire immediate delivery of a system can order the Model 825S today and upgrade to the Model 835S or 835SE when the system becomes available for shipment in mid-summer. An upgrade is also available for users who want to upgrade from a Model 835S to an 835SE in the future. This upgrade package includes an additional CIO channel adapter, I/O expander, 24 Mbytes of memory, 64-user HP-UX license, and battery backup system.

### Ordering information

| Product No. | Description                                                                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1035A      | HP 9000 Model 835S bundled system - Includes system processor, floating-point coprocessor, CIO channel, 8-Mbyte ECC RAM, 6-channel MUX, HP-IB, and 16-user HP-UX license                                           |
| Opt. AAO    | HP-UX software on ¼-inch cartridge tape                                                                                                                                                                            |
| Opt. AAI    | HP-UX software on ½-inch 1600 cpi tape                                                                                                                                                                             |
| Opt. 002    | Additional 8-Mbyte RAM board                                                                                                                                                                                       |
| Opt. 516    | Additional 16-Mbyte RAM board                                                                                                                                                                                      |
| Opt. 515    | Delete standard 8-Mbyte, add 16-Mbyte board                                                                                                                                                                        |
| Opt. 531    | Delete standard 8-Mbyte, add 32-Mbyte board                                                                                                                                                                        |
| opt. 0E1    | Battery backup system                                                                                                                                                                                              |
| A1040A      | HP 9000 835SE bundled system - Includes system processor, floating-point coprocessor, 2 CIO channel adapters and expander, 24-Mbyte ECC RAM, 6-channel MUX, HP-IB battery backup system, and 64-user HP-UX license |
| Opt. AAO    | HP-UX software on ¼-inch cartridge tape                                                                                                                                                                            |
| Opt. AAI    | HP-UX software on ½-inch 1600 cpi tape                                                                                                                                                                             |
| Opt. 002    | Additional 8-Mbyte RAM board                                                                                                                                                                                       |
| Opt. 516    | Additional 16-Mbyte RAM board                                                                                                                                                                                      |
| Opt. 515    | Delete standard memory, add 32-Mbyte package                                                                                                                                                                       |
| A1036A      | HP 9000 Model 825S to 835S CPU upgrade - Includes processor board and PDH board, will not support 110 expander                                                                                                     |
| A1038A      | HP 9000 Model 825S to 835SE upgrade - includes CPU upgrade, I/O expander and additional 835 CIO channel adapter, additional 16-Mbyte ECC RAM, battery backup system. 16- to 64-user HP-UX upgrade                  |
| Opt. AAO    | HP-UX software on ¼-inch cartridge tape                                                                                                                                                                            |
| Opt. AAI    | HP-UX software on ½-inch 1600 cpi tape                                                                                                                                                                             |
| Opt. IAB    | Delete I/O Expander                                                                                                                                                                                                |
| Opt. 517    | Delete 8-Mbyte RAM                                                                                                                                                                                                 |
| Opt. 518    | Delete 16-Mbyte RAM                                                                                                                                                                                                |
| Opt. OE4    | Delete battery backup system                                                                                                                                                                                       |
| Opt. OAB    | Replace 16- to 64-user HP-UX license upgrade with 32- to 64-user license upgrade for users who already have a 32-user license                                                                                      |
| Opt.0AC     | Delete 16- to 64-user license HP-UX upgrade for users who already have a 64-user license                                                                                                                           |



| Product No. | Description                                                                                                                                                                            |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1039A      | HP 9000 Model 835S to 835SE upgrade - Includes I/O expander and additional 835 CIO channel adapter, additional 16-Mbyte ECC RAM, battery backup system, 16- to 64-user license upgrade |
| Opt. AAO    | HP-UX software on ¼-inch cartridge tape                                                                                                                                                |
| Opt. AAI    | HP-UX software on ½-inch 1600 cpi tape                                                                                                                                                 |
| Opt. 517    | Delete 8-Mbyte RAM                                                                                                                                                                     |
| Opt. 518    | Delete 16-Mbyte RAM                                                                                                                                                                    |
| Opt. OE4    | Delete battery backup system                                                                                                                                                           |
| Opt. OAB    | Replace 16- to 64-user HP-UX license upgrade with 32- to 64-user license upgrade for users who already have a 32-user license                                                          |
| Opt. OAC    | Delete 16- to 64-user HP-UX license upgrade for users who already have a 64-user license                                                                                               |
| A1015A      | Access port for Model 8251835 systems                                                                                                                                                  |
| A1014A      | Battery backup system for Model 8251835 systems                                                                                                                                        |
| A1037A      | 16-Mbyte ECC RAM board for Model 8251835 system                                                                                                                                        |
| A1010A      | 8-Mbyte ECC RAM board for Model 825/835 system                                                                                                                                         |

HP 9000

## HP 9000 Model 850S enhancements

The HP 9000 Model 850S is now more attractive than ever as a high-end super-minicomputer for users' technical and business UNIX® operating system applications. The floating-point performance of the Model 850S is more than doubled. A Terminal Expander triples the number of terminal connections from 102 to 300. And users get more for less with the new 9742A system bundle, which includes 32 Mbytes of RAM and a 64-user HP-UX license.

### Improved floating point

The floating-point performance of the Model 850S has been increased with a new floating-point coprocessor. The new coprocessor uses high-performance math chips and a new floating-point controller. This will provide over twice the current .72 Mflops Double Precision Linpacks performance, as indicated by preliminary measurements. Final benchmark results are forthcoming.

The floating-point upgrade, orderable either as an option (P/N 9742A Opt. 828) or as a standalone product (P/N A1108A), requires HP-UX Release 2.1 and includes:

- New processor board (standard processor board must be returned to HP)

PDC (Processor Dependent Code) firmware for diagnostics, system boot, and reset

The Model 850S with the floating-point upgrade takes the lead over comparable DEC machines in floating-point performance. Compared to 1.1 Mflops on the VAX 8550, 8700, and 8800, the Model 850S offers unmatched price/performance for users' computationally intensive applications.

### More terminal support

The Model 850S CIO terminal expander products allow additional CIO channels to be added, increasing the number of supported terminals from 102 to 300. The terminal expander requires Release 3.0 of the HP-UX operating system. All expander products include two CIO channel adapters, and support the 27140A MUX card only

The A1122A CIO terminal expander, A1123A expansion module kit, and A1124A add-on expander allow for modular expansion of the Model 850S. The A1122A CIO terminal expander adds a cabinet and power supply with one expansion module that provides 16 slots for an additional 96 terminals. The A1123A expansion module kit adds a second expansion module to the A1122A cabinet (field installable). for 32 slots total in the expander. The A1124A add-on expander adds a second cabinet with one expansion module for a total of 48 expander slots. If needed, the A1123A expansion module can also be added to the A1124A add-on expander cabinet for a total of 64 expander slots. Note that the maximum configuration with 64 slots can physically connect more than 300 terminals.

*continued on next page*



## PRODUCT NEWS

However, the maximum supported configuration is 300 terminals. The excess connectivity allows users to free SPU slots by connecting more or all termi-

### A high-end system for demanding needs

The HP 9000 Model 850S is even more competitive in both technical and busi-

### Ordering information

| Product No. | Description                    |
|-------------|--------------------------------|
| 9742A       | HP 9000 Model 850 SPU -Bundled |

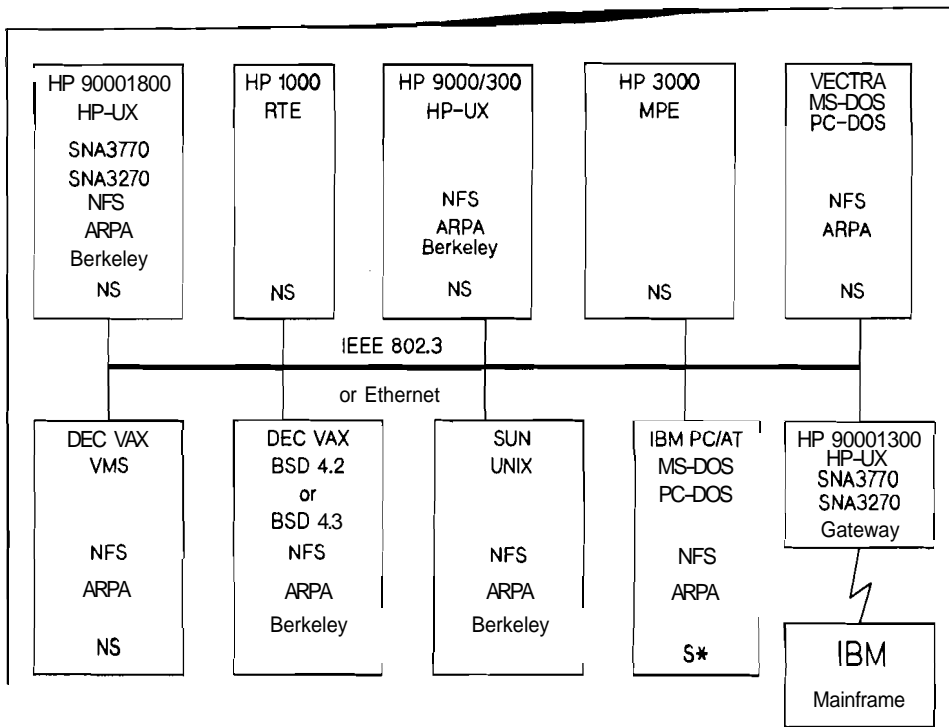


Figure 1. Series 800 in a multivendor environment

The networking services for each computer are available from HP and/or third-party vendors. For connections supported by HP, contact your HP sales rep.

#### Network File System is here

HP's introduction of NFS solidifies our commitment to support multivendor

NFS 9000 Series 800 requires the 2.0 release of LAN 9000 Series 800 for access to the LAN. For more information about NFS, please see the article entitled, "Announcing Network File System/9000," that appeared in the January issue of HP Channels on page 10.

Performance measurements are now being taken for various benchmarks. Results will be available soon. HP performance, relative to the competition, will be included.

Additional performance improvements are expected when our next generation CIO LAN is introduced in Release 3.0. Depending upon the networking service considered, preliminary results indicate that our Release 3.0 LAN product will provide performance improvements of up to 100 percent over our 2.0 LAN product.

#### NS and ARPA connectivity added

With Release 2.0, ARPA 9000 Series 800 now includes support for Telnet virtual terminal to the HP Vectra PC and HP 1000. NS 9000 Series 800 now supports Network File Transfer to the HP Vectra PC.

Telnet support means Series 800 users can login to/from remote HP 1000 systems running the RTE 5.05 operating system with NS 1000. HP Vectra PCs with NS-User Services can login to remote Series 800s and transfer files across a LAN.

The 2.0 version of LAN is required to run the 2.0 versions of NS and ARPA on the HP 9000 Series 800. For users on subscription services, free upgrades

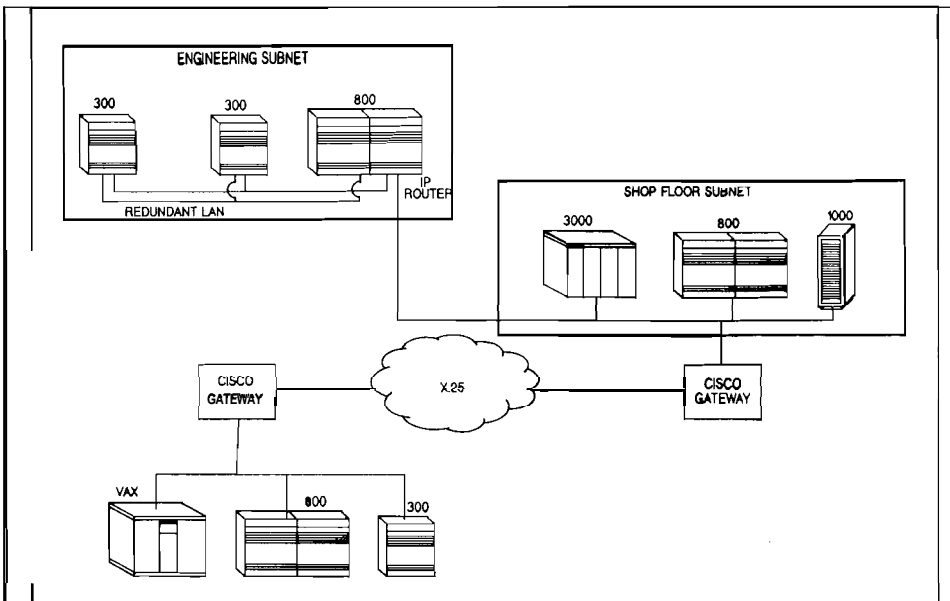


Figure 2. LAN 9000 Series 800 capabilities in Release 2.0

### LAN enhancements expand networking capabilities

With Release 2.0, a number of significant enhancements have been added to the LAN 9000 Series 800.

**Subnetting to improve network efficiency** – Subnetting can be likened to your telephone number. Routing of a telephone call is facilitated by breaking the phone number into three pieces. The same is true for LANs. By dividing a network into subnets, network congestion is reduced. Here are the analogous pieces:

- "Network" is analogous to "Area Code"
- "Subnet" is analogous to "Prefix"
- "End Node" is analogous to "Last 4 Digits"

Internet protocol addressing can be done in a manner that allows a LAN to be partitioned into subnetworks. A typical group of subnets might include an engineering work group, shop floor, and an office environment. When this network is partitioned into subnets, most information can be routed within a particular subnet. By transferring messages within a subnet, the other subnets are no longer burdened with unwanted messages. Subnetting reduces congestion, and leads to improve network efficiency.

**IP Routers for LAN-to-DW connectivity** – With Release 2.0, the HP 9000 Series 800 can be used to forward information from one LAN to another. IP Router capability allows the Series 800 to filter and forward messages to the appropriate subnet.

Although bridges are less costly than routers, they are less efficient and provide less functionality than a router. A simple bridge will forward messages to every node on the destination LAN, including nodes on all subnets. IP Routers have intelligence, and will filter messages to increase the bandwidth of adjoining subnets.

### LAN-to-LAN router connectivity

| Systems on LANs, connected via HP 9000 Series 800 (Release 2.0) acting as a router | Connectivity to/from HP 9000 Series 800 |                  |                                   |               |
|------------------------------------------------------------------------------------|-----------------------------------------|------------------|-----------------------------------|---------------|
|                                                                                    | LAN                                     | NS               | ARPA (includes Berkeley Services) | NFS           |
| HP 1000 (RTE)                                                                      | NetIPC (5.0)                            | NIT (5.0)        |                                   |               |
| HP 9000 Series 300 (HP-UX)                                                         | BSD IPC (6.0)                           |                  | All (6.0)                         | All (6.0)     |
| HP 9000 Series 800                                                                 | NetIPC (2.0)                            | NFT, RFA (2.0)   | All (2.0)                         | All (2.0)     |
| DEC VAX (VMS)                                                                      |                                         |                  | All ARPA (WIN/TCP 2.3)            |               |
| DEC VAX (BSD UNIX)                                                                 |                                         |                  | All (4.2/4.3)                     |               |
| Sun Micro-systems (Sun-31260)                                                      |                                         |                  | All (3.0/3.2)                     | All (3.0/3.2) |
| HP 3000/V                                                                          |                                         | NFT (UB-Delta-4) |                                   |               |

**IP Routers for LAN to X.25 to LAN connectivity** – With the use of a third-party gateway, and our IP Router capability in Release 2.0, information can be forwarded from a LAN, through an X.25 wide area network, to a remote LAN. The Cisco Gateway, which has been listed by HP, has been useful in closing a number of big deals involving HP 9000 Series 800 networking.

- **Multiple LAN cards are now supported** – With Release 2.0, we can support up to three LAN cards in a single HP 9000 Series 800 processor. Thus, a node configured as an IP Router can connect as many as three LANs together. In addition, nodes configured with multiple LAN cards could be used to achieve redundancy for high availability.
- **Configurable network memory reduces storage costs** – Users can now choose both the amount of system memory allocated for networking, and the allocation method. Configurable network memory gives the user memory to use for other purposes. Investment in disc storage can be minimized.

**Pricing, configuration, and ordering**

Pricing for the 2.0 versions of all HP 9000 Series 800 networking products has not been increased. The 2.0 release provides a major increase in functionality, at no incremental cost for those users who are on subscription services.

Contact your HP sales rep for configuration and ordering details.

HP 9000

**New fiber-optic interface for HP 9000 Series 800 systems**

HP announces HP-FL, the new fiber-optic disc interface for HP Precision Architecture systems (see article in Peripherals section entitled, "New HP-FL interface cards and disc drives"). The new interface will be supported on release 2.0 of HP-UX on the HP 9000 Series 825, 825SRX, 840, and 850. It will also be supported on the Series 835 and 855.

With the introduction of the new interface, HP is also announcing larger supported mass-storage configurations on all Series 800 systems. Maximum supported configurations are listed here.

|                                    | HP 9000 Series |     |      |      |
|------------------------------------|----------------|-----|------|------|
|                                    | 825            | 835 | 840  | 850  |
| HP 7936/37H discs<br>Gbytes (7937) | 12             | 12  | 12   | 12   |
|                                    | 6.8            | 6.8 | 6.8  | 6.8  |
| HP 7936/37FL discs<br>Gbytes       | 16             | 16  | 32   | 32   |
|                                    | 9.1            | 9.1 | 18.2 | 18.2 |
| Combined maximum discs             | 16             | 16  | 32   | 32   |

First shipments are expected in June, so use discretion in placing HP-FL orders. Use HP-IB as appropriate if orders are already in backlog and/or rapid shipment is expected.

For more details on the new interface, see the other related articles in this issue or contact your HP sales rep.

HP 9000

**COBOL/HP-UX: ANSI 85, new features, and high performance**

HP announces Release B.00 of COBOL/HP-UX — COBOL for the HP

9000 Series 300 and 800. This new version, compliant with ANSI 85, will ease the COBOL migration effort for any company porting an application to HP-UX. It will also provide true native-code performance for these applications. And, don't forget that ALLBASEIHP-UX now includes an SQL-preprocessor for COBOLIHP-ux (see March HP Channels, page 6). An ORACLE preprocessor for this COBOL is also now available on the Series 800.

As with the previous version, COBOL/HP-UX is a licensed product from Micro Focus, the leading COBOL supplier, and is compatible with their COBOL12 available on a PC. COBOL/HP-UX is, however, an HP product with HP-standard documentation and support.

**COBOL porting made easy**

Many companies that consider HP-UX systems already have one or more COBOL applications that they would need to port to HP-UX. COBOL/HP-UX can compile many different dialects of COBOL, thus reducing porting projects significantly. This list of dialects includes IBM and Data General compilers as well as RM/COBOL from Ryan-McFarland/Austec, another popular COBOL supplier. In fact, any application in ANSI 74 or ANSI 85 COBOL can now be ported to HP-UX with a minimum of effort.

**Native code performance**

COBOL/HP-UX now generates native code that optimizes the performance of an application on both the Series 300 and the Series 800.

Note that a runtime system must still be purchased for licensing reasons; this is the standard operating procedure for UNIX® operating system-based systems.

**ANSI 85**

The new compiler has been certified to the ANSI 85 high level by the National Bureau of Standards (NBS), which allows it to be bid on U.S. and other government proposals.

COBOLIHP-UX is orderable as a developer package and includes the compiler plus two utilities:

- ANIMATOR — an interactive visual-programming analysis and debugging tool that has been enhanced in this version
- FORMS-2 — a screen painter that generates the COBOL code to operate the screen within an application

The compiler with runtime system (from June 1988), or just the runtime system, are also orderable as standalone products. Contact your HP sales rep for more information.

HP 9000

## New HP BASIC 5.1 language processor software upgrade

An important new software upgrade for the popular HP 82300B BASIC language processor will be available May 16, 1988. The HP BASIC language processor runs on the HP Vectra PC and other IBM AT-compatible personal computers, providing the capabilities of HP Series 2001300 BASIC on PC systems. This new revision of the HP BASIC language processor software, PIN 82301B, Release A.02.00, provides a number of major enhancements over earlier versions:

- Contains a full implementation of the latest HP BASIC 5.1 release, including HP PaintJet printer support.
- Fully supports all HP Vectra PC desktop systems, including the HP Vectra RS PC. Also supports IBM AT Model 339, Compaq Deskpro 286 and portables, and Zenith Model 248 computers.
- Provides full keyboard support for the Enhanced HP Vectra PC (IBM AT2 DIN) keyboards for major European languages: French, German, Spanish, Italian, Swedish, and U.K. and U.S. English.
- Provides better HP 9836 soft-key label compatibility.
- Provides 640 x 400 graphics display support for Compaq Portables, including the Portable 386.

This new revision of HP 82301B, HP BASIC language processor software, Release A.02.00, will begin shipping May 16, 1988. Orders placed before that date can be assured of receiving the latest release by specifying shipment on or after May 16. The software will be available through July 31 at a special upgrade price to enable users who have the original Release A.00.00 or A.01.00 software to upgrade at minimal cost. Contact your HP sales rep for more information.

### Also in this issue

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| <i>New HP-FL interface cards and disc drives</i>                         | 20 |
| <i>Standard one-year return to HP warranty on the new HP disc drives</i> | 22 |

## Personal Computers

General

## Don't miss out on the next Information Access release

Did you know that only 26 percent of current Information Access users have SMS support?

With the UB-Delta-3 release of Information Access (A.02.00), HP Access and HP Access Central (which were previously available separately) were bundled together. At that same time, the support services for the products were bundled together as well. There still seems to be some confusion as to which support services should be ordered. To clarify this, following is a detailed list indicating all of the Information Access products currently available and the corresponding Software/Materials Support (SMS) for each product. Also listed is the Office Services Category that is available for both Account Management Support (AMS) and Response Center Support (RCS), which must be purchased along with the necessary SMS.

It is very important that both current and new users of Information Access get signed up for the appropriate support services to ensure that they will receive any new releases that become available. Later this year, there will be a major new release of Information Access, which will provide significant enhancements for both HP Access and HP Access Central. Be sure you don't miss out on this release by confirming you have the appropriate support contracts in place.

### Office Services Category AMS/RCS

Covers all PPC products,  
99089B + COO

- Extended Office Services Category Support. 99089B + VOO

*continued on next page*

Manual Update Service,  
99089B + Q00

| Product No | Description                                                                                                 | Support Service                         |
|------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 32596A     | Information Access for host and 1 to 10 PCs (covers Options 310, 315, 320, 321, 325, and 730)               | 32596A + S00                            |
| Opt M i    | Substitute 10 sets of HP Vectra PC discs in place of masters                                                | 32596A #443 + S00                       |
| Opt 444    | Substitute 10 sets of HP Vectra PC discs (3 1/2-inch) in place of masters                                   | 32596A #444 + S00                       |
| Opt 445    | Substitute 10 sets of HP 150 discs in place of masters                                                      | 32596A #445 + S00                       |
| 32596R     | Information Access Right to Copy for host and 1 to 10 PCs (covers Options 310, 315, 320, 321, 325, and 370) | 32596A + W00                            |
| Opt 443    | Substitute 10 sets of HP Vectra PC discs in place of masters                                                | 32596A #443 + S00                       |
| Opt 444    | Substitute 10 sets of HP Vectra PC discs (3 1/2-inch) in place of masters                                   | 32596A #444 + S00                       |
| opt 445    | Substitute 10 sets of HP 150 discs in place of masters                                                      | 32596A #445 + S00                       |
| 32596L     | Information Access license for 10 additional PCs                                                            | 32596L + S00                            |
| opt 443    | Substitute 10 sets of HP Vectra PC discs in place of masters                                                | 32596L #443 + S00                       |
| Opt 444    | Substitute 10 sets of HP Vectra PC discs (3 1/2-inch) in place of masters                                   | 32596L #444 + S00                       |
| Opt 445    | Substitute 10 sets of HP 150 discs in place of masters                                                      | 32596L #445 + S00                       |
| 32596T     | Information Access PC software documentation                                                                | Covered under 99089B + Q00 listed above |
| 36896A     | Information Access Remote IMAGE Link (covers Options 310, 315, 320, 321, 325, 330)                          | 36896A + S00                            |
| 36896R     | Information Access Remote IMAGE Link Right to Copy                                                          | 36896A + W00                            |
| 32598A     | Information Access Cullinet Link                                                                            | 32598A + S00                            |
| 32598R     | Information Access Cullinet Link Right to Copy                                                              | 32598A + W00                            |

An upcoming issue of *HP Channels* will detail the support services available for the Information Access corporate licensed products, as well as the MPE XL version of Information Access.

If you have any questions on the support services shown here, please call your HP sales rep.

General

## Which version of AdvanceMail should you buy?

AdvanceMail is available in two versions, one for the HP Vectra and IBM PC ranges, and another for the HP Portable Plus. Both versions are designed to provide electronic mail for PC users — whether they are working in the office or out on the road. Here are some differences between the feature set of the two versions, which will help you select the best product for your needs.

- Multipart messages** — With AdvanceMail for the HP Vectra and IBM PC, users can send and receive 'packages' — messages containing several different parts, such as text or a variety of PC files including spreadsheets, word processing documents, and graphics files. This feature is not available with AdvanceMail for the HP Portable Plus; instead, different files must be sent separately.
- PC filing** — On the HP Vectra and IBM PC, AdvanceMail provides PC filing in the form of a personal filing cabinet. Limited disc storage on the HP Portable Plus means that this feature is not available to AdvanceMail users.
- Urgent and private** — Users can designate messages as Urgent and/or Private on the HP Vectra or IBM PC, but not on the HP portable Plus.

HP's business computing solution is regarded as number one in PC integration. Advancemail's electronic capabilities are a key element in linking PCs into a company's computer network, not only for HP Vectra or IBM PCs, but for the HP Portable Plus, as well.

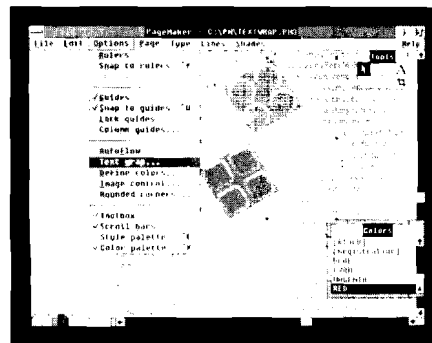
## Ordering information

| Product No. | Description                                                   |
|-------------|---------------------------------------------------------------|
| 25735F      | AdvanceMail for the HP Vectra and IBM PCs                     |
| 82870A      | AdvanceMail for the HP Portable Plus including Reflection ROM |

For more information about AdvanceMail, please contact your HP sales rep.

Desktop

## New PageMaker software for the HP Vectra Publisher PC



The new version of PageMaker® software is now available. PageMaker 3.0 includes over 35 new features. Aldus has taken the original PageMaker versions 1.0 and 1.0a and added extensions and enhancements that increase its functionality and make it a more competitive product. PageMaker, when sold as part of the HP Vectra Publisher PC bundle, provides a complete desktop publishing workstation when combined with an HP LaserJet printer and an HP ScanJet scanner.

The new PageMaker 3.0 text-handling features include automatic text flow through an entire document, user-defined style sheets, and "Place," "Replace," and "Insert" commands for quickly importing text and graphics. In addition, Aldus has incorporated a special import filter for importing AdvanceWrite files into PageMaker.

PageMaker 3.0 can also be teamed with the HP PaintJet printer since it now supports color. Other new graphics capabilities include text wraparound graphics, control of white space between the text and graphic, and the ability to adjust the contrast, brightness, and density of scanned images.

User interface enhancements include 20 predesigned templates, and on-screen palettes for easy color selection and style sheet formatting.

Another major feature of PageMaker 3.0 is that it is packaged with Fontware from Bitstream, and includes a font installation package to make soft font installation easier.

Since PageMaker 3.0 requires Windows 2.0 to run, Windows 2.0 is bundled in the HP Vectra Publisher PC.

All PageMaker upgrades are available directly from Aldus. Users who returned the reply cards included in the PageMaker package to Aldus, will receive an upgrade offer letter.

Ordering and pricing for the HP Vectra Publisher PC, P/N D1200, bundle and standalone PageMaker, P/N 45964, (PageMaker standalone is available in the direct channel only), remains the same.

*PageMaker® is a U.S. registered trademark of Aldus Corporation.*

**Desktop**

## Dual hard discs now supported on the HP Vectra ES PC

HP now offers support for dual hard-disc configurations on the HP Vectra ES PC. To accomplish this, the HP Vectra PC 20- and 40-Mbyte half-height internal hard disc products (45896M and 45897M) are being replaced by two new products (D1296A and D1297A).

The D1296A and D1297A are full supersets of the old products. They contain the following components:

- Same hard disc mechanisms as the 45896M and 45897M
- New steel mounting tray with a cutout — The cutout allows a user-installable dual-drive configuration by providing easy access to the terminator resistor on the back of the second drive
- 20-pin data cable — The data cable allows a user to connect a second hard disc to the hard disc controller
- New installation documentation

**Ordering information**

| Product No. | Description                                                    |
|-------------|----------------------------------------------------------------|
| D1296A      | HP Vectra PC 20-Mbyte internal hard disc drive plus data cable |
| D1297A      | HP Vectra PC 40-Mbyte internal hard disc drive plus data cable |

With the addition of these two new products, users can now order add-on hard discs for their HP Vectra PCs per the following two tables.

To order a first hard disc for a floppy-based HP Vectra PC (one without a hard disc), use the table shown below.

| System                  | First hard disc product | Description                                      |
|-------------------------|-------------------------|--------------------------------------------------|
| HP Vectra CS PC         | D1173A                  | 20-Mbyte mechanism plus XT-compatible controller |
| HP Vectra ES, ES/12 PCs | D1296A or D1297A        | 20-Mbyte mechanism or 40-Mbyte mechanism         |

To order a second hard disc for an HP Vectra PC that already has a hard disc, use the following table.

| System                     | Second hard disc product                 | Description                                                                             |
|----------------------------|------------------------------------------|-----------------------------------------------------------------------------------------|
| HP Vectra CS PC            | Not supported                            |                                                                                         |
| HP Vectra ES, ES/12 PCs    | D1296A or D1297A                         | 20-Mbyte mechanism or 40-Mbyte mechanism                                                |
| HP Vectra RS/16, RS/20 PCs | D1297A* or D1674A* or D1675A* or D1676A* | 40-Mbyte mechanism or 103-Mbyte mechanism or 155-Mbyte mechanism or 310-Mbyte mechanism |

*\* If the first hard disc in your HP Vectra RS PC is a 40-Mbyte disc, the second hard disc must also be a 40-Mbyte disc. You can't add a 103-Mbyte, 155-Mbyte, or 310-Mbyte hard disc because your hard disc controller uses a different interface.*

*If the first hard disc in your HP Vectra RS PC is a 103-Mbyte, 155-Mbyte, or 310-Mbyte disc, the second hard disc must be a 103-Mbyte, 155-Mbyte, or 310-Mbyte disc (any combination is valid). You can't add a 40-Mbyte hard disc because your hard disc controller uses a different interface.*

The D1296A and D1297A products will replace the 45896M and the 45897M products on the May 1, 1988, HP Price List.



Desktop

## New release of HP 150 MS-DOS 3.2

A new release (E.01.02) of HP 150 MS<sup>®</sup>-DOS 3.2 is now available. This version offers several significant improvements and enhancements:

Year correctly rolls over on January 1 and February 1 (HP Touchscreen II PC only). The year will now correctly roll over on January 1 and February 1, and will not skip February 29.

- MS-DOS now recovers from misidentified HP 9121 single-sided drives. In the past, intermittent DIR problems with single-sided drives (9121 and 9133XV) were occurring.
- The HP 9153 (A and B) is now usable as a swapdisc by Microsoft Windows.
- Multiple floppy discs can now be formatted; backward compatibility is provided with the Portable PLUS; and IBM-formatted floppies are supported on the HP 9153B, 9153C, and 9122C. Format will now format multiple floppy discs. In addition, new format options allow backward compatibility with the Portable PLUS, and IBM-formatted 720-Kbyte floppies are verified for bad sectors on the HP 9153B, 9153C, and 9122C.

Contact your HP sales rep to order the upgrades.

| Product No. | Description                                                                                                                                 |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 45849-63031 | HP Touchscreen PC operating system upgrade. Includes software only. Comes on three single-sided discs.                                      |
| 45849-63024 | HP Touchscreen PC operating system and firmware upgrade kit. Includes software and Rev I ROMs. Service-authorized dealer or CE installable. |

MS<sup>®</sup>-DOS is a U.S. registered trademark of Microsoft Corporation.

## Peripherals

Mass Storage

## New HP-FL interface cards and disc drives

HP announces HP-FL, the new fiber-optic disc interface for HP Precision Architecture (HP-PA) systems. The new HP-FL interface cards and disc drives are on the HP Price List now, so you can start placing orders. Some of the key specifications of the new interface are:

- Support on HP-PA systems (900 Series HP 3000 and HP 9000 Series 800, see articles in Business and Technical sections)
- 5-Mbytes per second burst transfer rate
- 500-meter distance between CPU and discs (maximum)
- Eight disc drives per interface supported (in eight-drive cabinet only)

### HP-FL fiber-optic link benefits

The new HP-FL interface products offer some distinct advantages to users:

- **Large disc configurations** – HP is supporting larger mass-storage configurations with HP-FL, providing a mass storage growth path on HP-PA systems.
- **Long cable lengths** – Long fiber-optic cable lengths provide flexibility in laying out a data center.
- **Future growth/enhancements** – The improved transfer rate and flexibility provides a mass-storage growth path on high-end HP-PA systems. The interface also provides a platform for future high-end mass-storage solutions.
- **Fewer environmental concerns** – The new fiber-optic cable is immune to electromagnetic interference. It provides electrical isolation of discs from the system, and does not emit radio frequency energy.

### Performance comments

Do not purchase HP-FL for immediate improvements in system-level performance. The very effective caching schemes and large amounts of memory on HP-PA systems have resulted in greatly reduced disc I/O requirements, so transfer rate is not a performance bottleneck on today's HP-PA systems. The high transfer rate of HP-FL will provide a growth path for the future, but will have little, if any, impact on today's system-level performance. Work is being done to develop actual performance benchmarks. Results will be published in the future.

### System support/maximum configurations

The HP-FL link will be supported only on HP Precision Architecture systems. It will be supported on release 1.1 of MPE XL and release 2.0 of HP-UX. The current number of H and FL discs supported on the different HP Precision Architecture systems is listed here. HP-FL will also be supported on the HP 9000 Series 835 and 855 and the HP 3000 Series 935 and 955. Please note that supported configurations will increase over time.

Consult the appropriate configuration guide for detailed configuration rules.

|                        | HP 9000 Series |      |      | HP 3000 Series |     |      |      |
|------------------------|----------------|------|------|----------------|-----|------|------|
|                        | 825            | 840  | 850  | 925SLX         | 925 | 930  | 950  |
| HP-IB discs            | 12             | 12   | 12   | 8              | 16  | 24   | 24   |
| Gbytes (7937)          | 6.8            | 6.8  | 6.8  | 4.5            | 9.1 | 13.7 | 13.7 |
| HP-FL discs            | 16             | 32   | 32   | 8              | 16  | 30   | 30   |
| Gbytes (7937)          | 9.1            | 18.2 | 18.2 | 4.5            | 9.1 | 17.1 | 17.1 |
| Combined maximum discs | 16             | 32   | 32   | 8              | 16  | 30   | 30   |

Since HP-FL products will not be shipping for several months on MPE XL systems, please use discretion in placing orders. Use HP-IB as appropriate if orders are already in backlog and/or rapid shipment is expected.

### Positioning of interfaces/controllers

**HP-FL interface** – HP-FL is the recommended interface for high-end HP Precision Architecture systems. It has the transfer rate to meet the increasing storage needs of future HP Precision Architecture processors, providing a growth path for users.

**HP-IB interface** – The HP-IB interface should be purchased on non-HP-PA systems, and on entry-level HP-PA systems where configuration cost is important to the user.

### HP-FL ordering information

| Product No.                                | Description                       |
|--------------------------------------------|-----------------------------------|
| <b>Interface products</b>                  |                                   |
| 27111A                                     | HP-FL Series 800 CIO interface    |
| 27115A                                     | HP-FL Series 900 CIO interface    |
| <b>Disc drives/mass storage subsystems</b> |                                   |
| 7936FL                                     | 307-Mbyte HP-FL disc drive        |
| 7937FL                                     | 571-Mbyte HP-FL disc drive        |
| 19521FL                                    | 1.1-Gbyte HP-FL subsystem         |
| 19522FL                                    | 2.2-Gbyte HP-FL subsystem         |
| 19524FL                                    | 4.5-Gbyte HP-FL subsystem         |
| <b>Upgrade kits and trade-in credits</b>   |                                   |
| 97522FL                                    | HP-FL disc-controller upgrade kit |
| 97520XN                                    | XP controller trade-in credit     |
| <b>Special cables</b>                      |                                   |
| 13367A                                     | Long PBus cable                   |
| HFBR-AWQxxx                                | Custom fiber-optic cable          |

A standard 30-meter cable is shipped with each HP-FL CIO interface card. Option 001 is available to delete the 30-meter cable. Custom-length fiber-optic cable is available through HP; the product number of the custom fiber-optic cable is HFBR-AWQxxx, where xxx specifies the length of cable desired. The fiber-optic cable is available in increments of 5 meters from 5 to 50 meters, increments of 25 meters from 50 to 200 meters, and increments of 50 meters from 200 to 500 meters.

Note that 13367A (long PBus cable) must be ordered to connect drives in adjacent 19511A cabinets. Six drives per interface are supported in 19511A cabinets.

Consult your HP sales rep for more detailed information on the HP-FL interface and product options.

### Mass Storage

## Data compression on 1/2-inch tape drives

Hewlett-Packard has a new addition to its family of 1/2-inch reel-to-reel tape drives. **The HP 7980XC** is the first streaming tape drive in the industry with an advanced method of data compression in the tape drive electronics. The data is compressed two to five times, allowing more information to be stored on a standard M-inch tape reel.

HP's 1/2-inch tape drives provide computer system backup and the ability to move data from one system to another. The HP 7980XC reads and writes data in industry-standard 1600 and 6250 cpi (characters per inch) densities. Both tape formats are IBM/ANSI compatible to allow data interchange between HP and non-HP systems. The non-standard compressed format is available on the 6250 cpi density only. The HP 7980XC will be supported on most HP 3000; HP 1000, and HP 9000 systems.

### New technology saves time and money

The HP 7980XC uses an advanced data compression algorithm in the VLSI electronics of the tape drive. This produces compression ratios rather than previously possible with software compression, and the process does not reduce host computer performance. This extra capacity provides several benefits for users:

- Fewer tapes need to be purchased and archived.
- With fewer tapes to handle, backup times are reduced.

System availability is increased.

- Operator errors are reduced.
- Unattended daily backup is possible for some systems.

### Reliability and upgrades protect investment

The HP 7980XC is the newest member of HP's family of compact, autoloader tape drives, which includes the HP 7979A and HP 7980A. As with its predecessors, the HP 7980XC is horizontally mounted in a one-meter high, standard 19-inch wide cabinet and enough space has been reserved in the cabinet for another tape drive or disc drive.

HP's experience designing and manufacturing three generations of tape drives has produced the most reliable 6250 cpi tape drives in the industry. The projected MTBF (mean time between failure) is 22,400 hours. These products require no scheduled periodic maintenance and no field adjustments.

This record of high reliability offers the user increased system availability and the lowest cost of ownership for a 6250 cpi tape drive in the industry. HP accomplished this high reliability through the use of VLSI and surface mount technologies, a simple tape path, and gentle tape handling.

HP is also adding an upgrade kit (PIN 88705A) to the product line, making it possible to convert the HP 7980A to an HP 7980XC. The entire line of 1/2-inch tape drives is now field upgradeable.

With the addition of the HP 7980XC, HP now provides an extended family of compact, reliable, autoloader tape drives to meet your system back-up needs.

For detailed product specifications, refer to the 1/2-inch Tape Family data sheet, HP publication number 5953-6897, available from your HP sales rep.

Marr Storage

## Standard one-year return to HP warranty on the new HP disc drives

During the past few years, the successful growth of the HP 9000 engineering workstations have made them the major host for disc drives in the 80-300 Mbyte range. Faced with this change in the marketplace, HP has modified the standard warranty on the new HP 7959B, 7963B HP-IB disc drives, and the HP 7957S, 7958S and 7959S SCSI disc drives. These new disc products will be the first to offer as standard for all orders a "one-year return to HP warranty" which matches the HP 9000 system warranty.

Those of you familiar with the HP 3000 know that it is warranted for 90-day on site, unlike the HP 9000 warranty of one-year return to HP coverage. In order to satisfy both of these warranty needs, HP has set up, at no cost, an Option W03 to convert the standard warranty to 90-day on-site warranty.

Contact your HP sales rep for more information.

Mass Storage

## New HP 9144A to HP 35401A trade-in program

As of April 30, 1988, the existing trade-up program for migration from the HP 9144A to the HP 35401A became obsolete. The new trade-up program takes effect May 1, 1988. To ensure receipt of the return credit for the HP 9144A, orders should be placed as follows:

| Trade in | Purchase HP 35401A    |
|----------|-----------------------|
| 9144A    | Order 9144AN Opt. 001 |

Networks

## New HP SiteWire documentation for twisted-pair networks

Three new SiteWire documents are now available regarding HP StarLAN and HP StarLAN 10 networks. The new documents include an updated version of the StarLAN cabling specification note, the StarLAN 10 cabling specification note, and the HP SiteWire twisted-pair cabling installation guide. Together, these manuals provide the information required up front to evaluate existing twisted-pair cable or to select new twisted-pair cable and installation guidelines to ensure a successful implementation.

The HP StarLAN cabling specification note, P/N 5958-9020, replacement for PIN 5958-9005, provides information about the twisted-pair wire required for HP StarLAN networks. This includes general wiring considerations, wire specifications, existing cable types that can be used with StarLAN, and the prequalification form for HP WireTest.

The HP StarLAN 10 cabling specification note, PIN 5958-9013, provides the twisted-pair wiring information for HP StarLAN 10 networks. This specification note includes the wiring considerations and specifications that are appropriate for StarLAN 10 networks.

The HP SiteWire twisted-pair cabling installation guide, P/N 5959-2208, explains how to install twisted-pair data-communications cable used with HP networking products. This includes the cable itself and associated accessories, such as hubs and bridges. The major topics covered are site preparation, new cable, existing cable, record keeping, adapters and connectors, cross-connect blocks, and accessories.

In general, HP recommends AT&T's Premises Distribution System (PDS) for office-wiring requirements. This manual is appropriate for small or medium-sized installations that do not plan to install PDS. The objective of this manual is to provide installation information for HP networking products. This manual is not intended to provide generic telecommunications wiring guidelines.

| Lit. No.    | Description                                 |
|-------------|---------------------------------------------|
| 5958-9020*  | HP StarLAN cabling specification note       |
| 5958-9013*  | HP StarLAN 10 cabling specification note    |
| 5959-2208** | HP SiteWire twisted-pair installation guide |

\*No charge, order through your HP sales rep.

\*\*\$37 (U.S. list), order through HP Direct

In addition to the documentation on twisted-pair cable, HP also offers HP WireTest. HP WireTest is a new service that verifies the users' existing wiring for an HP StarLAN network. Complete the prequalification forms (available in the cabling specification notes) to determine if HP WireTest is appropriate for you. For more information on HP WireTest, refer to the February 1988 issue of *HP Channels*, page 23, or contact your HP sales rep.

Networks

## Free upgrade to NS3000/V

To encourage users to migrate their DS networks to NS3000/V, DS to NS upgrades will be provided at *no cost*. This free upgrade will cover both DS Services and the DS link products. To qualify for this free upgrade, the user must have the corresponding DS product under current support contract.

DS TO NS UPGRADE PROGRAM

|                              |              |                                  |
|------------------------------|--------------|----------------------------------|
| DS SERVICES<br>(32185A/R)    | <i>FREE!</i> | NS 3000/V SERVICES<br>(32344A/R) |
| DS PT-PT, DIRECT<br>(30270A) | <i>FREE!</i> | NS PT-PT 3000/V<br>(30285A)      |
| DS PT-PT, MODEM<br>(30271A)  | <i>FREE!</i> | NS PT-PT 3000/V<br>(30285A)      |
| DS X.25<br>(32187A)          | <i>FREE!</i> | NS X.25 3000/V<br>(24405A)       |

No orders need to be placed for this free upgrade. To ensure that all users get the opportunity to easily upgrade, the NS software will be distributed via MIT tapes to users as part of the DS update process. For example, when a user receives his next MIT update of DS Point-to-Point, the NS Point-to-Point link will be distributed on the same tape.

This free upgrade will be available beginning with V-Delta-3 in order to coincide with introduction of NS X.25 3000/V Network Link. The DS to NS upgrade will be available for several MITs to ensure the broadest coverage of the installed base.

Once the user receives this MIT tape, there are two options. The users can continue to run DS. The other, preferred option is to install the NS links and services. In this case, users will need to obtain a support contract for each product running on the system.

Now that the NS3000/V product family is complete, the DS link and services products will soon be removed from the HP Price List. The products are scheduled to be discontinued as follows:

| Product No. | Description               | Discontinuance date |
|-------------|---------------------------|---------------------|
| 32185A/R    | DS 3000 Network Services  | July 1, 1988        |
| 30270A      | DS Point-to-Point, Direct | July 1, 1988        |
| 30271A      | DS Point-to-Point, Modern | July 1, 1988        |
| 32187A      | DS X.25                   | January 1, 1989     |

All of the DS products will be supported for a period of five years after the discontinuance date listed. Now is the time to start planning DS to NS migration.

A migration sales tool is currently under development and is expected to be distributed to the field in June. This sales tool includes a detailed description of the upgrade program along with a discussion of reasons to migrate to NS and an overview of the migration strategies that customers can follow.

Please contact your HP sales rep about the DS to NS upgrade program.

Printers

## Enhanced HP RuggedWriter 480 printers handle six-part forms

Six-part forms handling is now available for all models of the HP RuggedWriter 480 printer: HP 2235A, 2235B, 2235C, and 2235D. The enhanced six-part form versions of the printer replace the four-part form version at the same price.

The new HP RuggedWriter 480 printer specifications state that the printer can print on six-part forms up to .018 (4.6 mm) inches thick. A six-part form includes the original and five copies (plus carbons if used). When using thicker forms, the HP 293X printers can print on six-part forms up to .02 inches thick.

All printers currently shipping are the enhanced six-part versions and have the following serial numbers or higher.

| Model number | Serial number |
|--------------|---------------|
| 2235A        | 2812A-10156   |
| 2235B        | 2812A-01619   |
| 2235C        | 2811A-04924   |
| 2235D        | 2811A-01225   |

No upgrade kit or trade-in program is available for the original HP RuggedWriter 480 printers that print on four-part forms.

Contact your HP sales rep for more information.

Printers

## HP RuggedWriter 480 and HP 293X printers - a comparison

While most HP 293X users will be satisfied with the HP RuggedWriter 480 printer, not all will. Detailed here are some of the important differences between the HP RuggedWriter 480 printer (2235X) and the HP 293X series of printers. If, after reading this article, you still aren't sure whether the fit is good or not, contact your HP sales rep about getting an HP RuggedWriter 480 printer on a trial basis.

*continued on next page*

## Feature comparison

|                                | HP Rugged-Writer 480 printer           | HP 293X                                                                 |
|--------------------------------|----------------------------------------|-------------------------------------------------------------------------|
| Epson emulation                | Yes                                    | No                                                                      |
| Diablo 630 emulation           | No                                     | Yes                                                                     |
| PCL printer language           | Yes*                                   | Yes*                                                                    |
| Compressed pmtt size           | 16.67 cpi                              | 16.36 cpi                                                               |
| Bar codes and large characters | No                                     | Yes**                                                                   |
| Vertical forms control         | No                                     | Yes                                                                     |
| Configuration                  | Function switches on back              | Nonvolatile. set from menu                                              |
| Interfaces                     | Centronics and RS-232 HP-IB and RS-232 | Centronics RS-232 RS-422 HP-IB Multipoint Synchronous** DSN/Data Link** |
| Labels                         | Yes***                                 | Yes                                                                     |
| Pages of life                  | 125,000                                | 500,000                                                                 |
| Six-pan forms                  | Yes, .018" thick                       | Yes, .020" thick                                                        |

\*The extensions supported by each printer are different. Furthermore, the PCL functionality provided by both machines is not identical.

\*\*HP 2933 and HP 2934 only.

\*\*\*The HP 293X series printers have a straight paper path that is ideal for label-printing applications. The HP Rugged-Writer 480 printer's paper path is curved, which, under certain conditions can cause labels to peel off their backing. Therefore, we recommend the HP 293X series printers for label-intensive applications.

## Other differences

Character sets supported by the HP RuggedWriter 480 printer and HP 293X printers, both internally and via cartridges, are different.

Both the HP RuggedWriter 480 printer and HP 293X series printers support last form tear off. When using the HP RuggedWriter 480 printer, the paper must be torn at the perforation, which must be positioned at that tear bar. When using an HP 293X printer, paper may be torn at the tear bar or the perforation; the perforation does not have to be at the tear bar.

Perforation skip mode is defined differently for the HP RuggedWriter 480 printer and HP 293X series printers. The HP 3000 term type recommended for use with the HP RuggedWriter 480 printer is TTPCL22. This term type enables perforation skip at the beginning of every job. If the HP Rugged-Writer 480 printer's default one-inch perforation region is not desired, the application program must disable perforation skip mode. To do this, with headers on or off, the following escape sequence is recommended: esc E esc &10L (hard reset. perforation skip off). It should be the first data sent to the printer by the application program. Unlike in the HP RuggedWriter 480 printer, programmatic control of perforation skip mode may be disabled in HP 293X printers.

Please call your HP sales rep for more information.

## Scanners

### ZBM PS/2 interface kit now available for the HP ScanJet scanner

The HP ScanJet desktop scanner is now supported on the IBM Personal System 2. The HP ScanJet scanner PS/2 interface kit, PIN 88490A, supports PS/2 models 50, 60, and 80. The IBM PS/2 model 30 is supported by the current PC interface kit, PIN 88290A, with the addition of an accessory kit. PIN 88293A.

The new HP 88490A interface kit includes a controller board, cable, Scanning Gallery software on 3%-inch discs, and user guides. HP's Scanning Gallery software allows easy scanning, cropping, and storage of images for use with a wide range of application software. The Scanning Gallery software for the PS/2 supports Windows version 2.0.

Optical character recognition (OCR) capability is also available for the PS/2 through the ReadRight™ OCR software, PIN 88400A. This product now includes both 5¼- and 3%-inch media, allowing you to use it with both IBM XT/AT and compatibles and IB PS/2 systems.

## Ordering information

| Product No.        | Description                                        |
|--------------------|----------------------------------------------------|
| 9190A              | HP ScanJet desktop scanner                         |
| 88490A             | PSI2 interface kit for models 50160180             |
| 88290A             | PC interface kit                                   |
| 88293A             | PSI2 model 30 accessory kit for use with HP 88290A |
| <i>Accessories</i> |                                                    |
| 88190A             | Automatic document feeder                          |
| 88400A             | ReadRight OCR software                             |

The HP ScanJet scanner is already the recognized sales leader in the IBM PC market. With the introduction of the PS/2 interface kit, the HP ScanJet scanner now provides a complete product offering for the DOS PC market.

## Terminals

### HP 700171 keyboard selection

Are you interested in an IBM-compatible terminal but confused about which keyboard option to order? The following will help you choose the correct keyboard.

## Choice of four keyboards

The HP 700171 offers four keyboard layouts to meet diverse needs.

The most popular keyboard is the 122-key typewriter layout. This is the correct choice for users who want compatibility with older terminals

- The 102-key typewriter layout is the choice for users desiring a more compact keyboard with a layout similar to an IBM PC keyboard layout.
- The data entry layout is used for high-volume data entry applications. This keyboard has numeric keys embedded within the typewriter keypad.
- The ASCII layout is available for applications using the ASCII character set. This keyboard is similar to the 122-key typewriter layout but with ASCII characters included.

The following table summarizes this information.

| Option | Layout     | Keys | Description                              |
|--------|------------|------|------------------------------------------|
| 500    | Typewriter | 122  | Popular, compatible with older terminals |
| 501    | Typewriter | 102  | Compact size, PC type layout             |
| 502    | Data Entry | 1??  | Embedded numeric keys                    |
| 503    | ASCII      | 122  | Special applications                     |

Contact your HP sales rep for more information.

#### Terminals

## Now HP terminal solutions are priced even lower

As of May 1, terminals for users' systems are priced even lower when they purchase one of our datacom cables. The prices have decreased almost 30 percent for the following cables:

- 402426 – RS-232-C printer cable for the HP 700192, 700194, 700141, and 700143 terminals
- 40242M U.S./European modem cable for the HP 700192, 700194, 700141, and 700143 terminals
- 40242P – HP Direct Connect Type 422 cable for the HP 700192 and 700194 terminals

- 40242X – HP Direct Connect Type 232 cable for the HP 700192, 700194, 700141, and 700143 terminals

These cables provide RFI filtering and comply with RFI regulations when used with these terminals.

### Also in this issue

- New fiber-optic interface for 900 Series HP 3000 systems* 3
- Performance-enhanced Resource Sharing now available* 3
- Networking enhancements for HP 9000 Series 800 Release 2.0* 13
- New fiber-optic interface for HP 9000 Series 800 systems* 16
- Dual hard discs now supported on the HP Vectra ES PC* 19

### Supplies

#### Supplies

## New book helps users understand the UNIX operating system

HP Direct now offers a new book on the UNIX<sup>®</sup> operating system. Entitled, *Understanding UNIX: A Conceptual Guide*, literature number 5954-9907, this book was written for technical and nontechnical readers alike, providing a superb introduction to the UNIX operating system. Besides discussing the UNIX operating system's standing in the world of computing, it describes UNIX operating system features and

benefits, and explains the structure of the UNIX operating system. The book was written by Paul N. Weinberg and James R. Groff.

Users may order this book by calling HP Direct at one of the telephone numbers listed in this publication.

#### Supplies

### HP DIRECT order phone numbers

HP DIRECT Fast Phones – the easy, direct way for users to order supplies, accessories, media, furniture, and software from HP DIRECT.

| Location           | Telephone Number                                                                            |
|--------------------|---------------------------------------------------------------------------------------------|
| Australia          | (03) 895-2645<br>(03) 895-2615<br>(03) 895-2815<br>(03) 895-2861<br>(0222) 2500-614/615/616 |
| Austria            | (0222) 2500-614/615/616                                                                     |
| Belgium/Luxembourg | (02) 761 31 11                                                                              |
| 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            | 04 30 16 40                                                                                 |
| Finland            | (90) 887 2361                                                                               |
| France             | (1) 69 86 17 25                                                                             |
| Greece             | (01) 672 6090                                                                               |
| Italy              | (02) 9236 9702                                                                              |
| Japan              |                                                                                             |
| Sagamihara         | 0427 59 1311                                                                                |
| Osaka              | 06 304 6021                                                                                 |
| Middle East        |                                                                                             |
| Athens             | (01) 682 5811                                                                               |
| Norway             | (02) 24 60 90                                                                               |
| South Africa       |                                                                                             |
| Johannesburg       | (011) 802 5111                                                                              |
| Cape Town          | (021) 437 954                                                                               |
| Spain              | (91) 637 4013<br>(91) 637 0011                                                              |
| Sweden             | (08) 750 2400                                                                               |
| Switzerland        | (057) 31 24 90                                                                              |
| The Netherlands    | (020) 547 6606                                                                              |
| United Kingdom     | (0734) 69 72 01                                                                             |
| 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:** *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 du Sart-Tilman  
Avenue du Pré Aily, 24  
4900 ANGLEUR - LIEGE  
BELGIUM

**Phone:** + 3241 67 53 13

**Contact Person:** Jean-Paul CORNIL

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

**Industry:** *Cross-Industry - Office Auromarion*

**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

**Contract Person:** Dr. G. Robert Williams  
Kenneth B. Griffin

**Type of Distributor Wanted:** Open

**Geographic Coverage:** 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 readwrite list in a dataset
- RENAME – renames the entire data base.
- DBINFO – Displays or prints useful statistics such 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  
M9W 1M3 CANADA

**Phone:** (1) (416) 674-0034    **Far:** (1) (416) 674-7006  
**Telex:** 06-984708

**Contact Person:** Paul Illing

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

**Geographic Coverage:** Worldwide

**Industry: Chemical Fertilizer Industry**

**Abstract:** "Fertilizer SOP" is an electronic management manual that contains standard operating procedures (SOP) designed specifically to organize the internal efficiency of running any kind of Chemical Fertilizer business, large or small, multinational or domestic. These SOPs implement and simplify numerous management principles. Domestic or international contracts can easily be assembled from "Standard Contract Clauses" provided by the manual. Many office procedures are standardized for practical application. Using this sophisticated productivity tool greatly raises managerial standards and reduces executive and all employees' costly time demands. It is similar to the "Our Own SOP" manual published by the same company for any type of organization.

Any of the typical SOPs are easily adapted with any WordStar reading word processing program to suit the organization's requirements and produce a unique, customized SOP Management Manual without designing and writing one from scratch. Not copy protected; the Licensing Agreement allows copies within one organization's legal entity, additional copy discounts for the purchaser's more than 50 percent owned subsidiaries are available. An informative free descriptive leaflet is furnished on requests written on company letterhead.

Included are a hardcopy of all procedures and everything else contained in the discs, an extra set of 24 color-coded separator tabs for a customized SOP, and an audio-cassette with customizing instructions (for those who tend not to read instructions).

**Requirements necessary** – HP 150 with double-sided disc drive, HP Portable, HP Portable PLUS, or HP Vectra PC, IBM or IBM compatibles, no special memory required; a text processor program able to read or convert Wordstar by Micropro International. A good printer.

**Useful, but not essential** –To derive maximum use of "Our Own SOP." in addition to WordStar it would be very helpful to have both HP Executive CardManager (ECM) and Lotus 1-2-3 by Lotus Development Corporation, Rel.1A.

**Company Name:** Central Resources Corporation  
Computrex Division

**Address:** P.O. Box 96  
Point Lookout, NY 11569-0096  
U.S.A.

**Phone:** 516-431-2718

**Contact Person:** Leonard Linton

**Type of Distributor Wanted:** Open

**Geographic Coverage:** Worldwide

## **Industry:** *Computer Language Conversionware*

**Absrracr:** FORTRIX-C is a source language converter taking as its input a standard FORTRAN SOURCE program or program module, and outputting Kernighan & Ritchie C source language. When compiled with a standard C compiler, the output object program will be functionally similar to that of the original compiled FORTRAN program.

Because of the rich and diverse history of FORTRAN, FORTRIX-C has been designed to accommodate and automatically translate standard versions of FORTRAN plus closely related derivatives. In addition, many enhancements to standard FORTRAN developed by key manufacturers are also supported. FORTRIX-C has been ported to all HP 9000 series computers running the HP-UX operating system.

**Absrracr:** COBLIX-C is a source language translator that takes as input a standard COBOL program and generates as output a C language program that, when compiled and implemented in an appropriate operational environment, will produce functionally equivalent results.

The COBLIX-C Basic Kernal System handles ANSI Level One and Level Two features plus extensions of vendors. The COBLIX-C Enhanced Support Package translates machine-dependent, vendor-specific, and ANSI COBOL 85 extensions found in many modem COBOL programs.

If you are using extended COBOL features, Rapitech Systems' engineers can custom tailor COBLIX-C to your requirements. COBLIX-C has been ported to run on HP 9000 series computers running the HP-UX operating system.

**Company Name:** Rapitech Systems, Inc

**Address:** Montebello Corporate Park  
Suffern, NY 10901  
U.S.A.

**Phone:** 914-368-3000

**Conracr Person:** Dr. Lawrence T. Woodruff

**Type of Disrriburor Wanted:** Open

**Geographic Coverage:** Worldwide

## **Industry:** *Database/Analysis/Graphical Reporting for Technical Users*

**Abstract:** Test Quality Company (TQC) develops markets, sells, and supports software for traditional HP instrumentation customers using the HP 9000 Series 2001300 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.

- TekBase Data Management and Analysis System – A relational database and analysis product designed with technical/ATE users in mind. TekBase offers HP 9000 Series 2001300 users a tool that can be incorporated into application programs, supporting the BASIC, Pascal, FORTRAN, or HP-UX environments. Features include two- and three-dimensional graphics, capability to handle arrays of data and complex numbers, a powerful import/export capability, and an elaborate technical query language (TQL) interface.
- Converse Screen/Forms Generator for Rocky Mountain BASIC – A productivity tool for software developers who use BASIC on the HP 9000 Series 2001300. Provides error checking, hardware independence, elaborate graphics, and data management. Screen-driven creation utility for development of user screens and application library subprograms which may be included in user developed software.

**Company Name:** Test Quality Company

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

**Phone:** 408-986-8880

**FAX:** 408-986-1479

**Conracr Person:** Jim Jenkins

**Type of Disrriburor Wanted:** Software OEMs, Distributors, Technical Systems Retailers

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

## **Industry:** *Cross industry – project management scheduling and graphics*

**Absrrarr:** SofTrak Systems has project management scheduling and graphics software for a full range of Hewlett-Packard computers (HP 150, HP Vectra PC, and HP 9000 Series 200, 300, 500, and 800).

Specifically, MicroTrak is a critical path method scheduling system that allows users to plan projects, coordinate resources, track accompanying costs, evaluate "what if" scenarios, quickly generate reports, and easily print time-scaled schedules. Prices for MicroTrak start at \$595 (U.S. list). PlotTrak is a companion to the MicroTrak system that enables users to produce a plotted visual representation of their schedule that effectively communicates project time frames and priorities to others involved in the project. What is actually produced with PlotTrak is a time-scaled precedence network diagram or Gantt bar chart. Prices for PlotTrak start at \$295 (U.S. list)

In addition to MicroTrak and PlotTrak, SofTrak Systems offers CustomGantt, a stand-alone Gantt chart generation software system. Without the need of a separate project scheduling system, Custom Gantt helps users quickly and easily create presentation quality Gantt charts for proposals and presentations. Prices for CustomGantt start at \$95 (U.S. list). Both PlotTrak and CutomGantt support the full line of Hewlett-Packard pen plotters.

For nearly three years, Hewlett-Packard sold MicroTrak and PlotTrak for the HP-UX operating system on the HP 9000 Series 200, 300, and 500 computers. HP recently returned the marketing responsibilities to SofTrak Systems. Inasmuch as MicroTrak and PlotTrak have been upgraded twice since most users purchased the software from HP, current users may upgrade to the latest releases for a nominal upgrade fee.

**Company Name:** SofTrak systems, Inc

**Address:** P.O. Box 16750  
1574 West 1700 South, Suite 2C  
Salt Lake City, Utah 84116  
U.S.A.

**Phone:** 801-973-9610

**Conracr Person:** Nancy Allen

**Type of Distriburor Wanted:** Open

**Geographic Coverage:** Worldwide (non-exclusive)

## Software Package Wanted

**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 2001300 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

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' nameltitle, 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.

*HP CHANNELS*

*Hewlett-Packard Company  
Tracy Wester, Editor  
Corporate Marketing Communications  
3200 Hillview Avenue, Building 16L  
Palo Alto, CA 94304-1298 USA*