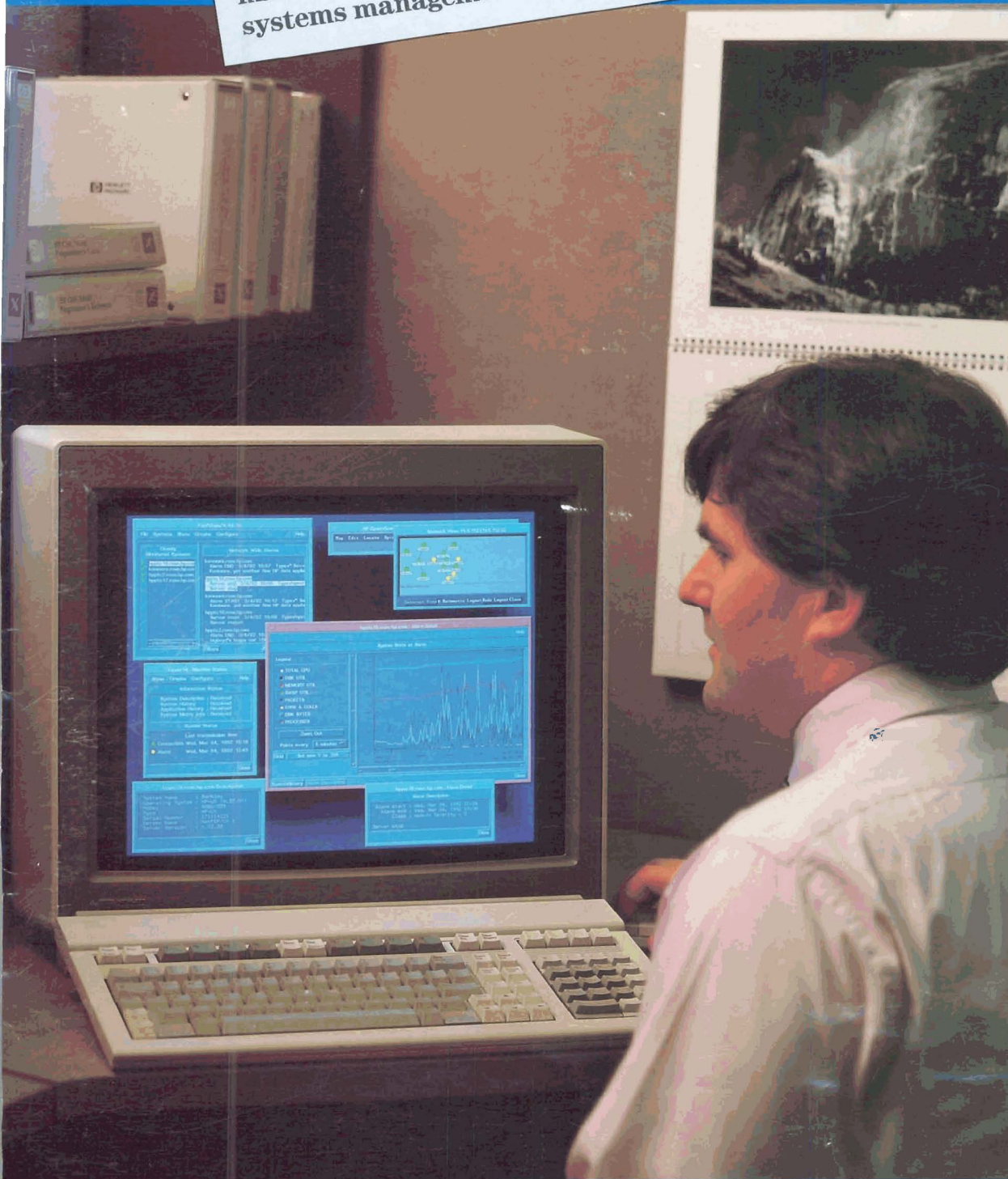


# HP Computer Update

A Publication of Hewlett-Packard

April 1992

**Introducing HP PerfView, performance management software for multivendor systems management**



**Hewlett-Packard extends Domain Network File System with introduction of Domain Network Services.**

*See page 14*

**Hewlett-Packard announces support of new SCSI disk drives for HP 1000 A-Series computers.**

*See page 18*

**HP TestBook service tools provide a portable solution for testing, diagnosis, and service in remote locations.**

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**Hewlett-Packard expands internal mass storage offerings for Apple Macintosh systems.**

*See page 27*

# HP Computer Update

Vol. 2, No. 4

April 1992

April 1992

**HP Computer Update** is a monthly publication of Hewlett-Packard Company that provides information on new Hewlett-Packard computer software and hardware products, events, and promotions.

**Managing Editor:** Michelle Lee

Address editorial correspondence and address corrections to:

*HP Computer Update*  
P.O. Box 51827  
Palo Alto, CA 94303-0724

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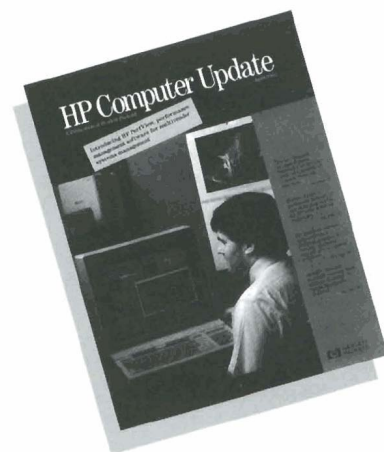
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## On the cover . . .

HP **PerfView** performance management software uses management-by-exception techniques to identify and resolve existing and potential performance issues before they arise. HP **PerfView** allows you to understand the performance health of your systems at a glance. See article on page 22 for more information.



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# Management Perspective



Hi. I'm Wim Roelandts and I'm the Vice President and General Manager of Hewlett-Packard's Networked Systems Group. I spend a lot of time talking to customers like yourselves. I do it because I believe it's absolutely critical to know and provide what you need and want. So, when our sales force told us that you need and

want more strategic information from us, I was one of the first to volunteer.

Last month Lew Platt gave you an overview of Hewlett-Packard's computer strategy for the 1990s — a strategy that is essentially built on PA-RISC. Today I'd like to give you a little more detail on that aspect of our strategy and share with you some very recent and exciting developments related to it.

HP embraced reduced instruction set computer (RISC) technology in the early eighties, believing that it would prove to be the technology of the future. Time has proven that we were right. RISC technology in general has achieved rapid market acceptance because it offers better system performance than traditional complex instruction set computer (CISC) architectures and, because it is scalable, you can expand the range of compatible systems you use while also protecting your investments in software and training. RISC also provides better price/performance and short development cycles for faster time-to-market. And HP's RISC technology, PA-RISC, leads the industry in providing these benefits to you. The January 1992 RISC Management Newsletter points out that our PA-RISC maintains a computer-industry leadership position in RISC system and related software sales. This is due in no small part to the fact that our PA-RISC systems have delivered more than 75% performance improvements each year. This explains how we have been able to provide increased price/performance over our competitors' systems. So, it's not surprising that PA-RISC continues to be the cornerstone of our strategy. And just what does that mean? Well, for one thing, it means that we are working hard to advance and broaden the use of PA-RISC technology, which brings us to the new news.

We have decided that CPU design, based on PA-RISC, is a core competency of HP, and we intend to maintain world-class performance and capabilities.

On March 24 and 25 Hewlett-Packard, along with eight other global computer technology manufacturers, announced the formation of the Precision Risc Organization (PRO). PRO will establish industry-standard hardware and software interfaces to make it easier to move software applications between different PA-RISC platforms from member companies. And just how does the formation of PRO benefit you? Very briefly, the development of PA-RISC standards will allow you to buy widely available software and operate it on many PA-RISC systems. In addition to having access to PA-RISC technology, members will have opportunities to cross-license technology from other PRO members, further expanding possibilities and benefits for you, the customer.

Further, in February Hewlett-Packard announced a next-generation PA-RISC chip called the PA-7100. This chip, based on a single-chip design, is expected to increase system performance by more than 50%. Because it is expected to achieve speeds rated at more than 120 SPECmarks, the PA-7100 can operate up to five times faster than competitive systems — more good news for you.

We're convinced that through the advancement of PA-RISC and the formation of the PRO, this technology will continue to influence the computer industry in many new ways. PA-RISC is indeed the only "ambidextrous" architecture available today. Its proven ability to address both technical and commercial applications signals a new era for the design and implementation of high-performance RISC technology for years to come. Further, and more importantly, we're convinced that the advancement and enhancement of this technology will significantly and positively benefit you. Because Hewlett-Packard's strategy is and has always been fundamentally designed to providing you with what you want and need — business success.

A handwritten signature in dark ink that reads "Wim Roelandts". The signature is written in a cursive, slightly slanted style.

Wim Roelandts  
Vice President and General Manager  
Networked Systems Group

HP News and Reviews

## HP and Point Control Co. market CAD/CAM solution for automating manufacturing

Hewlett-Packard and Point Control Co. have signed an agreement to market an integrated computer-aided design/manufacturing (CAD/CAM) solution for automating manufacturers. HP ME10 and ME30 CAD systems combined with SmartCAM from Point Control Co. offer a combination of features and functionality. A portion of product designs can be created in HP ME10 or ME30 then directly passed to SmartCAM using scripted menu selections. SmartCAM is a new CAM system that models the CNC manufacturing process.

Previous technology required users to develop tool paths using language programming techniques. SmartCAM Advanced 3D Machining Version 3 includes a full 3D database with sculptured surfacing capability combined with extensive geometry and tool path creation as well as modification functions. The system offers extensive tool path control while maintaining ease of use and user customization.

## HP Communications Lab opens in California

The Hewlett-Packard Communications Laboratory is now open at California State Polytechnic University in Pomona, California. The state-of-the-art lab combines a \$250,000 Hewlett-Packard grant with purchased HP equipment to provide students with training in networking and interoperability. The interdisciplinary facility is shared by the electrical and computer engineering, computer science, and computer information systems departments. It **will** be used by more than 2,000 students.

The facility differs from other computer labs in that students are allowed to experiment with network loading and data flows, purposely crash the system, or pull apart and reassemble the hardware.

## HP and Cincom to develop software for client/server environments

Hewlett-Packard and Cincom announced an agreement to develop and market mainframe-class software for client/server environments. Cincom will deliver a UNIX\*-based system version of CONTROL:Manufacturing (C:M) for the HP 9000 Series 800 business servers in a phased manner at the end of this year. C:M is a fully integrated business solution that supports manufacturing, distribution, and financial management applications.

*UNIX is a registered trademark of UNIX System Laboratories Inc. in the U.S.A. and other countries.*

## HP systems to handle health care in Czechoslovakia

Hewlett-Packard has been selected by the Universal Health Insurance Company (VZP) in Czechoslovakia to set up computer systems to manage health care administration throughout the republic. The contract is estimated at \$10.5 million. The HP solution includes HP 9000 Series 800 business servers, HP Vectra PCs, data terminals, and printers.

Computer systems **will** be installed at VZP headquarters in Prague as well as at 75 branch offices within the republic to handle payments to doctors, hospitals, and pharmacies. Record keeping and collection of insurance premium payments capabilities will be added early next year when VZP begins full operation.

The promotions listed in *HP Computer Update* contain brief information about HP promotions currently in effect — including new promotions, promotions with changes (underlined), and promotions that are ending.

For more details on any of the following promotions, contact your HP representative.

Special considerations may apply to some of these promotions, and discount percentages can vary by country. Note: promotional programs listed with a "Worldwide" scope may not be available in all countries. Check with your HP representative for local availability.

*Hewlett-Packard assumes no responsibility for any errors that might appear in these listings.*

### HP 3000 Systems

#### Midrange Upgrade Installed Base *NEW*

If you purchase selected XL systems, you are eligible to receive promotional discounts off selected system upgrade products.

- **Scope:** For the U.S., Europe, and intercontinental region only
- **Eligible products:** P/Ns A1707A/08A/09A/52A/58A/72A Option 709 or 710, A1771A Option 709
- **Start date:** December 1, 1991 (U.S.) and February 1, 1992 (Europe and intercontinental region)
- **End date:** April 30, 1992 (U.S.) and July 31, 1992 (Europe and intercontinental region)
- **Promotion number:** 2.601

#### HP 3000 Series 967, 977 *NEW* Program

If you purchase an HP 3000 Series 967 and/or a Series 977 during the promotional time period, you are eligible to receive a discount.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/Ns A1710A, A2300A
- **Start date:** April 1, 1992
- **End date:** June 30, 1992
- **Promotion number:** 2.622

#### HP 3000 Series 957 *NEW* Backlog Protection

If you have HP 3000 Series 957 orders in the backlog as of April 1, 1992, you can save on the price of an HP 3000 Series 967 when purchased.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/N A1710A
- **Start date:** April 1, 1992
- **End date:** June 30, 1992
- **Promotion number:** 2.623

#### HP 3000 Series 947 *NEW* Backlog Protection

If you have HP 3000 Series 947 orders in the backlog as of April 1, 1992, you can save on the price of an HP 3000 Series 957 when purchased.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/N A1709A
- **Start date:** April 1, 1992
- **End date:** June 30, 1992
- **Promotion number:** 2.624

### HP 9000 Systems

#### HP 9000 Model 8X7S *NEW* High-end Program

If you purchase HP 9000 Models 847S, 857S, 867S, or 877S during the promotional time period, you are eligible to receive a discount.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/Ns A1706A, A1766A, A1768A, A1769A
- **Start date:** April 1, 1992
- **End date:** June 30, 1992
- **Promotion number:** 2.621

### Workstations

#### DN10000 Upgrade Product Replacement Program

If you have an Apollo DN10000, you can upgrade to an HP Apollo 9000 Model 750 workstation for an approximate 40% discount or purchase an additional DN10000 system for an approximate 40% discount. Specific CPUs and memory are available at promotional discounts.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** *Check with your HP representative*
- **Start date:** June 1, 1991
- **End date:** May 31, 1992
- **Promotion number:** 2.546



### Measurement Coprocessor Software Upgrade

If you purchase an upgrade to HP BASIC 6.2 for your measurement coprocessor, you can receive a copy of HP BASIC Plus and HP BASIC 6.2 upgrade at a promotional price.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/Ns 82300U, E2160A, and either Option AA8 or AA9
- **Start date:** March 1, 1992
- **End date:** August 31, 1992
- **Promotion number:** 2.609

### HP 9000 Series 300 Trade-up

If you purchase an HP A2240A or A2251A and trade in your HP 9000 Series 300 or 200, you can receive a promotional discount per unit traded in.

- **Scope:** For North America only
- **Eligible products:** P/Ns A2240A/41A/42A/50A/51A
- **Start date:** March 1, 1992
- **End date:** September 30, 1992
- **Promotion number:** 2.613

### HP GlancePlus Trial Software Kit Discount **NEW**

If you purchase an HP GlancePlus license within 90 days of purchasing an HP GlancePlus trial software kit, you can receive a promotional discount off the price of the software license.

- **Scope:** For North America only
- **Eligible products:** P/Ns B1790A, B1791A, B1807A, B2660A, B2661A, B2804A
- **Start date:** April 1, 1992
- **End date:** December 31, 1992
- **Promotion number:** 2.626

### Personal Computers

#### HP Instrument BASIC **NEW** for Windows Introductory Offer

If you purchase HP Instrument BASIC during the promotional time period, you are eligible to receive a discount.

- **Scope:** For the U.S. only
- **Eligible products:** PIN E2200A
- **Start date:** March 1, 1992
- **End date:** August 31, 1992
- **Promotion number:** 2.614
- **Redemption:** Available only by contacting HP DIRECT at 800-452-4844

#### HP-IB for Windows **NEW** and MS-DOS Introductory Offer

If you purchase HP-IB for Windows and MS-DOS® during the promotional time period, you are eligible to receive a discount.

- **Scope:** For the U.S. only
- **Eligible products:** PIN 82335B
- **Start date:** March 1, 1992
- **End date:** August 31, 1992
- **Promotion number:** 2.615
- **Redemption:** Available only by contacting HP DIRECT at 800-452-4844

### Networks

#### System Management **NEW** Installed Base Program

If you are an HP system management installed based customer, you can receive eligible evaluation copy software at no charge.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** Check with your HP representative
- **Start date:** April 1, 1992
- **End date:** July 31, 1992

- **Promotion number:** 2.625
- **Redemption:** Available also by contacting HP DIRECT at 800-225-5290 in the U.S.; for other countries contact local HP DIRECT offices

### Peripherals

#### Line Printer Trade-in Program

If you purchase an eligible line printer, you can trade in an HP line, impact dot matrix, or a competitive line printer and receive credit.

- **Scope:** For Europe and Mexico only
- **Eligible products:** P/Ns 2562C/63C/64C/66C/67C
- **Start date:** February 1, 1992
- **End date:** July 31, 1992
- **Promotion number:** 2.608

#### HP Block Mode Terminal Trade-in **change!**

If you purchase a minimum of five HP 700196 or 700198 block mode terminals, you can trade in your old HP 3000 block mode terminals and receive a trade-in credit. One trade-in credit per eligible terminal order.

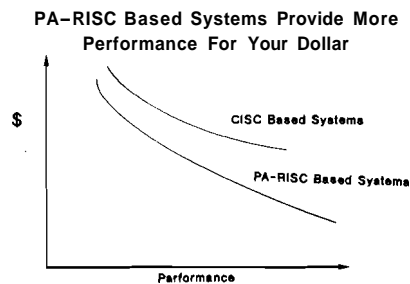
- **Scope:** Worldwide, except for Mexico (*check with your HP representative for local availability*)
- **Eligible products:** P/Ns C1064A/G/W, C1065A/G/W, C1084W, C1085W
- **Start date:** March 1, 1992
- **End date:** August 31, 1992
- **Promotion number:** 2.611
- **Redemption:** Available also by contacting HP DIRECT at 800-225-5290 in the U.S.; for other countries contact local HP DIRECT offices

MS-DOS is a U.S. registered trademark of Microsoft Corporation.

## PA-RISC the right fit for commercial computing

Computer systems based on reduced instruction set computer (RISC) technology have experienced rapid growth since their emergence in the mid-1980s. Among major systems manufacturers, Hewlett-Packard continues to lead with Precision Architecture RISC (PA-RISC).

### Superior price/performance available now



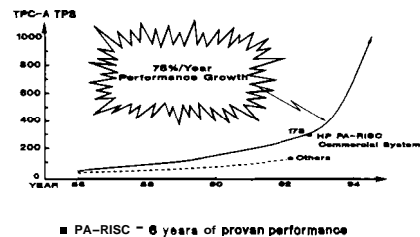
PA-RISC implements an instruction set that represents only a portion of what is found in the common complex instruction set computer (CISC) processor. PA-RISC requires less board space because it optimizes and builds the most frequently executed instructions of a typical application directly into the CPU. Since these instructions are directly executed in the hardware, PA-RISC does not require the programming overhead or support circuitry that is typically associated with more complex systems. Hewlett-Packard PA-RISC-based systems can deliver more performance power for demanding applications.

### Lower cost of operation

Hewlett-Packard provides mainframe-class performance with a single-chip CPU compared to many chips on competitive systems based on the CISC technology. As a result, Hewlett-Packard's business systems and servers are smaller, require less floor space, consume less power, and require less cooling than competitive CISC-based systems. For example, Hewlett-Packard high-end systems are 1/3 the footprint of a comparable IBM mainframe and require 1/10 the cooling and input power.

### Expansibility

#### HP - The Right RISC Architecture for Commercial Computing



Not only can HP's CPUs perform more at a lower cost, our single foundation was designed for scalability and growth as your information system needs grow. By incorporating processor design improvements and advances in semiconductor technology, PA-RISC systems should continue to outpace the performance growth of CISC and RISC CPUs offered by our competitors. You are assured

binary compatibility of your applications as you take advantage of our smooth upgrade paths.

PA-RISC delivers lower cost, superior performance, new functionality, a broad expandable product line to meet the needs of the future, and reliable systems that minimize environmental requirements. Ask your HP representative for more information about Hewlett-Packard's PA-RISC architecture.

### Features and benefits

- *Frequency up to 100 MHz* — 50% improvement in CPU performance to provide industry leading 120 SPECmark rating
- *64-bit addressing* — wide addressing to accommodate large applications
- *Instruction/data cache up to 3 Mbytes* — maximum online transaction processing performance
- *Single or multiprocessor support* — smooth performance growth path to provide investment protection

## HP 3000 PA-RISC systems meet Pilgrim Health Care, Inc. needs

With PA-RISC, HP 3000 systems currently provide performance at a compounded annual growth rate of 75%. With this growth potential Hewlett-Packard continues to meet the needs of new applications for users such as Pilgrim Health Care, Inc. (PHC), currently one of the fastest growing managed health care providers in the U.S.

PHC's previous configuration consisted of two HP 3000 Series 950 systems. One machine handled online inquiry as well as updates, and the other handled batch processing and report generation. Earlier this year, response time became an issue.

**As** a very aggressive and fast growing health maintenance organization, PHC wanted to offer another line of services to area employers. Increasing the number of services meant that PHC's current application would require additional software functionality. Since existing business was burdensome on their current configuration, new hardware also was needed. Eight vendors were identified and examined.

PHC came away convinced that Hewlett-Packard could meet their requirements and grow with them. An HP 3000 Series 980/300 was installed to handle online processing needs as well as a Series 960 to

handle batch requirements and offline reporting. Installation of Fiber drives, Netbase by Quest, and HP OpenView DTC Manager allow the HP 3000 Series 960 to act as a backup to the Series 980 system. Additionally, an HP 3000 Series 937 system was ordered as a standalone development and test machine.

## New product enhancements for HP ALLBASE/Business Report Writer

Hewlett-Packard announces a number of product enhancements for HP ALLBASE/Business Report Writer, the high-performance report writing system for data processing professionals.

### Top enhancements

- *Modification of BRW dictionaries easier* — A new utility allows you to decompile the dictionary into a script file, edit that file, and then recreate the data dictionary from the modified script file.
- *Report development streamlined* — You can test and debug a report with a limited amount of data instead of running the whole report.
- *IEEE REAL number format supported*
- *Manual for HP MPE/iX updated* — It now includes HP ALLBASE/SQL screens and information and has been reorganized for easier access to product-specific information.

Users with support contracts for software updates will receive enhancements and manuals through normal update procedures. The enhancements will be available with the next release for HP MPE/iX systems with shipments scheduled for June 1992, and with Release 23 for HP MPE V systems with shipments scheduled for May 1992.

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Introducing HP PerfView performance management software

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## Bell Canada increases performance at repair service bureaus to step up consolidation drive



Bell Canada needed to upgrade the computer systems that supported its repair service bureaus (RSBs); the existing architecture was obsolete and unable to permit database consolidation. The telecommunications company turned to Hewlett-Packard for the HP 9000 Series 800 computer systems. HP 9000 Series 800 systems provided Bell Canada with the online transaction processing (OLTP) speed needed for its application. The HP 9000 Series 800 also supports the UNIX-based operating system; use of that system was critical in the Bell Canada purchase. Benefits of the implementation have been substantial:

- Faster response times to customers' service requests
- Ability to consolidate RSBs, improving efficiency
- Reliability (no hardware failures since system installation)
- Reduction in system maintenance times by a factor of three

- Ability to implement software enhancements
- Ability to meet station growth by adding users without degrading system efficiency
- Ability to perform online activities (backups), reducing overtime costs

Bell Canada exhausted the software and hardware capabilities of its existing 16-bit architecture. With 200,000 to 250,000 access lines per RSB, the system response was degraded, and they were unable to provide adequate system resources to handle the demands.

The most effective solution was to migrate to a 32-bit system in order to provide the performance the RSBs needed and implement the UNIX-based operating system, which was the preferred operating system in the telecommunications industry. Bell Canada also wanted a hardware platform that was part of a larger family for future growth. Reliability was also a requirement, since they wanted to ensure that 250 telephone craftspeople plus office personnel remained productive.

Designed for large work group requirements, the HP 9000 Series 800 systems provided Bell Canada with the best transition path. The HP-UX UNIX-based operating system currently adheres to all industry standards for networking, languages, graphics, and databases.

### Comprehensive software solution

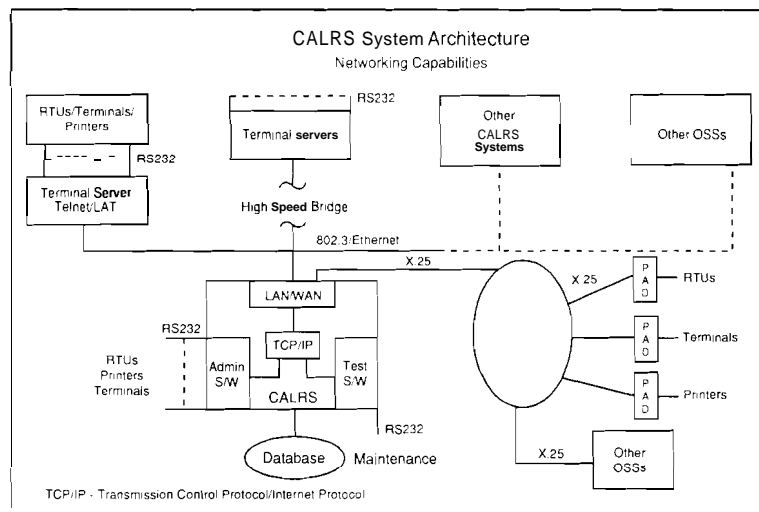
Bell Canada uses a centralized automated loop reporting system (CALRS), an operations support system that maintains the loop portion of the telephone network. CALRS' reporting and analysis capabilities also allow Bell Canada to measure and manage RSB performance, workloads, as well as work force utilization.

### Hardware improves system performance

Bell Canada installed its first

HP 9000 Series 800 systems in June 1989. The system was installed in Port Credit, Ontario. Port Credit also was the most active area, experiencing an abundance of

growth and demand for service. Bell Canada found this area especially difficult for its previous system to relieve the pressure on the RSB.



## More power, lower price on HP 9000 Model 807S

Effective April 1, the HP 9000 Model 807S has greater functionality at a lower price. The new HP 9000 Model 807S base memory increases from 8 to 16 Mbytes, and base configuration disk increases from 234 to 328 Mbytes. The price also has been decreased.

Hewlett-Packard is adding power to its entry-level business server to offer a more competitive eight-user commercial UNIX-based system

and local-area network server. The HP 9000 Model 807S offers up to 50% greater transaction performance than an Intel 486\* PC at a similar price. The new changes on the HP 9000 Model 807S also make it competitive against the new IBM RS/6000 Model 220. The HP 9000 Model 807S is priced at parity with an eight-user IBM RS/6000 Model 220 and offers greater commercial performance and expansibility, as follows:

The options listed here have been added to the HP 9000 Model 807S to increase functionality and competitiveness in the low-end commercial UNIX-based systems marketplace. Options 025 and 601 enable you to have 16 RS-232/serial ports, external SCSI, and parallel/Centronics in one slot. Options AM9 and UF4 reduce the price of the HP 9000 Model 807S. The price of the increased disk capacity (to 422 Mbytes) option was decreased to enable the HP 9000 Model 807S to be price-competitive in 400-Mbyte configurations.

	HP 9000 Model 807S	IBM RS/6000 Model 220
Memory	16 Mbyte	16 Mbyte
Maximum internal disk	1.3 Gbyte	400 Mbyte
Maximum internal tape	2 Gbyte	None
Slots	2	2
LAN	Optional	Standard
SCSI	Optional <sup>1</sup>	Standard
Serial ports	8-16	2
Parallel ports	Optional <sup>1</sup>	1
Floating point	Optional	Standard
<b>Performance</b>		
TPS (TPC-A)	30.4	Approximately 20
SPECmarks	20.1	25.7

Product No.	Description
Opt. 025	Add external SCSI and one parallel port to HP Personality Card
Opt. 601	Add 8 US-232 ports to Opt. 025 HP Personality Card
Opt. AM9	Replace integrated DAT drive with QIC drive
Opt. UF4	Delete 8 Mbyte memory

*Intel 486\* is a U.S. trademark of Intel Corporation.*

<sup>1</sup> The HP Personality Card with SCSI and Centronics is priced to match the IBM RS6000 Model 220 in an eight-user configuration.



## HP 9000 Model 837S competitively repositioned

The HP 9000 Model 837S business server is being repriced and restructured as of April 1, 1992. The HP 9000 Model 837S (new P/N A1704B) includes higher memory (32 versus 16 Mbytes) and higher disk capacity in its base configuration (677 versus 328 Mbytes). The previous version (P/N A1704A) will be removed from the HP Price List.

Combining aggressive pricing and fast performance makes the HP 9000 Model 837S more competitive. In a midrange server configuration the three-year cost of ownership on an HP 9000 Model 837S matches that of the new IBM RS/6000 Model 350 while providing more than a 20% performance advantage in commercial UNIX-based systems applications. (Price estimates based on published list prices; performance based on estimated transactions-per-second performance.)

Repricing and restructuring for the HP 9000 Model 837S combined with the promotional discounts on Models 8478, 8578, 8678, and 877S help provide more competitive high-end solutions. For more information, contact your HP representative.

## HP OmniBack and OmniBack/Turbo on QIC 525 tapes

Effective April 1, 1992, HP OmniBack and HP OmniBack/Turbo can be ordered on QIC 525 tapes for HP 9000 Series 600 and 800 business servers. This allows the purchase of HP OmniBack and OmniBack/Turbo together with business server systems having embedded QIC 525 drives. For more information, contact your HP representative.

Product No.	Description
<i>Software on QIC 525 distribution media</i>	
B1920A	HP OmniBack
B1921A	HP OmniBack/Turbo
<i>Specify for both products</i>	
<i>Opt. ABA</i>	<i>Language option</i>
<i>Opt. AA4</i>	<i>Media option</i>
<i>Specify tier option according to business server type.</i>	
<i>HP OmniBack and OmniBack/Turbo do not support QIC 525 as backup devices.</i>	

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## Introducing Domain Network Services

Hewlett-Packard introduces Domain Network Services (P/N SQ0218099A) that extends Domain Network File System (NFS) to include several standard utilities. You now can create a single point of system administration, access remote NFS file systems transparently through Automounter, and port ONC applications to the Domain/OS environment. DNS utilities have been added to Domain/OS through a specialized server process called daemons, which are based on a remote procedure call (RPC) facility. Both RPC and external representation (XDR) libraries are supported in DNS, so programmers can write network-independent applications in a Domain/OS environment that will interoperate within a heterogeneous network.

### Features and benefits

- *RPC facility* — allows processing on servers in remote machines in a heterogeneous environment (procedures are implemented as if they were local to the calling program)
- *XDR facility* — translates differing data formats into a universal format so heterogeneous nodes and operating systems can communicate with each other over a network
- *Automount* — automatically mounts and unmounts NFS directories without the need of system administrator intervention
- *PCNFSD daemon* — provides authentication, printing, and other services to NFS clients on PCs

- *Network Information Service formerly known as Yellow Pages* — allows access to networkwide data independent of the relative locations of the client or the server
- *Network lock manager* — supports System-V compatible advisory file and record locking for both local and NFS-mounted files
- *Network status monitor* — provides a mechanism by which network applications can detect machine reboots and trigger application-specific recovery mechanisms
- *Portmapper system service* — provides a way for client programs to look up the port number of any supported RPC program
- *Remote execution facility service* — allows the execution of commands in an environment similar to that of the invoking user
- *Remote procedure call protocol compiler* — converts applications running on a single computer to applications that run over a network
- *Rusers* — reports who is logged on to remote machines
- *Rwall utility* — reads a message from standard input and transmits the message to users on specified host systems
- *Spray* — sends a one-way stream of packets to a host using RPC and reports the transfer rate and the number of packets received

The prerequisite for this product is Domain SR 10.3 and Domain NFS 2.3. This product is on a special price list, not the HP Price List. Hewlett-Packard can provide software support to users under a special support contract. For more information, contact your HP representative.

Product No.	Description
SQ0218099A	Domain Network Services <sup>1</sup>

<sup>1</sup> This is discountable (consistent with workstation products).

## Announcing HP Open Migration Program

The HP Open Migration Program is a set of products and services that enable HP 68000-based workstation users to plan and build for the future based on PA-RISC and HP-UX/Open Software Foundation (OSF). The program addresses the migration of hardware and software to HP-UX/OSF-based systems, interoperability between HP-UX and Domain/OS, and services for the planning and implementation of both.

The products listed here add to the current suite of HP-UX and Domain/OS-based interoperability products that includes HP TaskBroker, HP OmniBack, HP W E, Network Node Manager, Shared X, and Passwd Etc. Contact your HP representative for more information.

- *HP Apollo 9000 Series 400 to Series 700 board upgrade* — HP Apollo 9000 Model 425e to Model 710 available this summer; HP Apollo 9000 Models 400t/s/dl, 425t/s, and 433s to future Series

700 models available early next year

- *Trade-up program* — provides a credit toward purchases of HP Apollo 9000 Series 400 or 700 systems; enhancements to this program **will** occur in May 1992 (for North and South America)
- *Advise* — consists of source code scanner for porting Domain/OS-based programs to standards-based code, GPR to Xsample emulation program to help port proprietary 2D code to X Windows, and porting documentation; available in the second quarter of this year
- *Apollo Token Ring on HP Apollo 9000 Models 720, 730, and 750* — provides physical connectivity of the HP Apollo 9000 Series 700 into a Domain/OS network using TCP/IP
- *DMX* — DM-like editor provides much of the functionality Domain/OS users are accustomed to; works with character and X-based applications; available second quarter of this year
- *Interoperability guide* — explains how to bring HP-UX systems into a network of Domain/OS systems; available second quarter of this year
- *NFS 2.3* — improvements include bug fixes and stability; additional functionality and performance improvements like Automounter and NIS will be available later this year

### New services for implementation and planning

- *Customer interoperability seminar* — Scheduled for this spring/summer, the seminar will discuss and recommend alternative paths for moving forward to PA-RISC and HP-UX/OSF systems. Topics will range from networking to user interface.
- *Domain/OS to HP-UX solution services* — HP technical consultants **will** provide needs assessments and recommend the best technology paths and other services available to help you implement Domain/OS to HP-UX migration.

### HP ALLBASE/Query supports HP-UX systems and operating systems

HP ALLBASE/Query has expanded the supportability of HP-UX systems to include HP Apollo 9000 Series 400 and 700 and HP 9000 Model 8X7 systems. The HP ALLBASE/Query product structure has been modified to support the ordering of the HP-UX 7.0 and 8.0 operating systems for HP-UX systems. HP ALLBASE/Query for HP-UX systems and operating systems is orderable and is available for shipments.

Product No.	Description
B2327A	HP ALLBASE/Query for HP Apollo 9000 Series 700, English language
Opt. AAH	Software on digital-audio tape
Opt. AAU	Software on CD-ROM

### HP ALLBASE/4GL on HP Apollo 9000 Series 700, 400, and HP 9000 Series 300 with HP-UX 8.0

HP ALLBASE/4GL on HP-UX 8.0 is available and shipping to HP 9000 Series 300 as well as HP Apollo 9000 Series 400 and 700 users. This latest release of HP ALLBASE/4GL provides users the same functionality that was provided to HP 9000 Series 800 users. HP 9000 application developers building commercial applications based on ALLBASE/SQL databases can have improved productivity, high performance, and the single vendor solution that HP ALLBASE/4GL delivers across HP 9000 systems.

#### Features

HP ALLBASE/4GL on HP-UX 8.0 provides the following new features to improve speed in creating, maintaining, and executing applications:

- *CALL command* — provides a way to combine C language routines with HP ALLBASE/4GL and execute them in the same process for peak performance. This allows you to add your own functionality, build up libraries of object code, and create extensive development systems without giving up performance.
- *Pull-down menus* — allow you to navigate through the system easily. These menus leave a portion of the screen uncovered

*continued on next page*



to allow viewing of additional menus and options.

- **Name recall** — allows you to scroll through names when creating and naming new functions, records, scratch-pad fields, or other items. This is a context-sensitive function.
- **Catalog display** — gives you push-button access from any screen to HP ALLBASE/4GL's Catalog Index of item types. Like name recall, this function helps you specify new HP ALLBASE/4GL items to ensure consistency with current items.
- **Larger logic blocks** — allow you to develop applications efficiently. The maximum number of HP ALLBASE/4GL logic block lines in a function or process has increased from 30 to 99.
- **Improved data type support** — allows you to specify the storage type of any field defined in HP ALLBASE/4GL. Data types supported are IEEE floating points (4 and 8 byte), 2s complement integers (2 and 4 byte), packed decimal, and character.

To order HP ALLBASE/4GL Version B.04 on HP-UX 8.0 for use with ALLBASE/SQL E.1, order Option APB under any of the product numbers listed here for HP 9000 Series 300 and 800 as well as HP Apollo 9000 Series 400; order Option APF for the HP Apollo 9000 Series 700.

Option APA under the same product numbers for the HP 9000 Series 300 and 800 represents the version of HP ALLBASE/4GL to use on HP-UX 7.0 with ALLBASE/SQL D.O.

Users under support contracts for HP ALLBASE/4GL will receive updated manuals and software as part of the delivery for HP 9000 Series 800 or delivery for Series 300 distribution. HP Apollo 9000 Series 400 and 700 are first being supported by HP ALLBASE/4GL; so update distributions do not apply. For more information, contact your HP representative.

Product No.	Description
92471A	HP ALLBASWGL developer for HP 9000 Models 300-340
92470A	HP ALLBASE/4GL run-time for HP 9000 Models 300-340
98112A	HP ALLBASE/4GL developer for HP 9000 Models 350-380
98118A	HP ALLBASE/4GL run-time for HP 9000 Models 350-380
B2332A	HP ALLBASE/4GL developer for HP Apollo 9000 Series 400
B2333A	HP ALLBASE/4GL run-time for HP Apollo 9000 Series 400
B2342A	HP ALLBASE/4GL developer for HP Apollo 9000 Series 700
B2343A	HP ALLBASE/4GL run-time for HP Apollo 9000 Series 700

## HP OmniBack/Turbo for HP Apollo 9000 Series 700 on CD-ROM

As of April 1, 1992, CD-ROM has been added as a software distribution media for HP OmniBacWTurbo on HP Apollo 9000 Series 700 workstations. HP OmniBacWTurbo software is part of the HP Apollo 9000 Series 700 application CD sets for HP-UX 8.05 and 8.07.

The HP OmniBacWTurboCD certificate is the base requirement for receiving the code word to make the HP OmniBacWTurbo software installable from the CD set. Documentation for HP OmniBack/Turbo is not included with the CD.

In addition to the CD-ROM, digital-audio tape/DDS tapes are available as distribution media for HP OmniBack/Turbo for HP Apollo 9000 Series 700 workstations. For more information, contact your HP representative.

Product No.	Description
B1929A	
Opt. AAU	HP OmniBack/Turbo CD certificate
Opt. ABA	Manual set



## Introducing HP 9000 QuickShip/800 program

As of April 1, you can choose among the four most popular integrated HP 9000 Series 800 system configurations and receive quick delivery. The goal of the QuickShip/800 program is to ship bundles within 10 business days. Depending upon your country and its customs processes, the actual delivery may be longer.

Since customer needs may vary each of the four QuickShip/800 bundles is available with or without support. *All* bundles are positioned and sized to offer 8-, 16-, 32-, and 48-user solutions on low-end HP 9000 Series 800 systems. If you choose bundles that do not include support, support can be ordered through your local Hewlett-Packard sales office.

The benefits of the program include quick delivery and simplified ordering, configuration, and installation. *All* QuickShip/800 bundles can be ordered through your local Hewlett-Packard sales office order processing system. U.S. customers, distributors, and VARs can order directly through HP DIRECT at 800-637-7740. HP DIRECT can also address presale technical questions. For more information, contact your HP representative.

To ensure shipment from the factory within 10 business days, strict ordering guidelines must be followed:

- No exceptions to the bundles
- One bundle per order/section
- Additional products must be ordered on a separate order/section
- No scheduled deliveries

	Configuration 1 8-user bundle	Configuration 2 16-user bundle	Configuration 3 32-user bundle	Configuration 4 48-user bundle
HP 9000 model	807S	817S	827S	827S
HP-UX preloaded	8.02	8.02	8.02	8.02
HP-UX license preloaded	8 user	16 user	32 user	64 user
Main memory	16 Mbyte	24 Mbyte	32 Mbyte	64 Mbyte
Integrated disk	677 M byte	1.3 Gbyte	1.3 Gbyte	1.3 Gbyte
DDS backup device	2 Gbyte	2 Gbyte	2 Gbyte	2 Gbyte
Console	HP 700192	HP 700192	HP 700192	HP 700192
Networking	LAN, ARPA, NFS	LAN, ARPA, NFS	LAN, ARPA, NFS	LAN, ARPA, NFS
RS-232 ports	8	16	32	48
Structured solution P/N <sup>1</sup>	A2313A	A2314A	A2315A	A2316A
Bundle PIN <sup>2</sup>	A2302A	A2303A	A2304A	A2305A

<sup>1</sup> Structured solution products include priority hardware and HP *BasicLine* software support

<sup>2</sup> Bundles do not include support.



## HP internal sales and training tools available for VAB direct purchase

*For the U.S. only*

Beginning April 1, 1992, authorized U.S. value-added businesses (VABs) can use a toll-free 800 telephone number to purchase directly selected HP sales tools and training materials currently stocked at Hewlett-Packard.

You can choose from more than 25 self-paced Level 1 internal Hewlett-Packard sales training courses. Topics include HP multiuser and workstation product fundamentals, open systems, networking, information technology, CASE, as well as industry marketing and finance selling basics. In addition, certain HP internal sales tools such as the HP 9000 Series 800 price, configuration, and buyer's guides are available for purchase.

### Eligibility

If you are an employee of an HP VAB located in the U.S., you are eligible to directly purchase certain training materials. To qualify, your company must have a current channel contract or catalog agreement with Hewlett-Packard and be listed in the U.S. Value-added Channels Marketing Center database (VALID). If your company does not meet these requirements, you should contact your HP representative before attempting to order these items.

### Ordering information

To place orders, call 800-227-8164. To save time, have part number information available for the items you are ordering. Orders typically **will** be delivered within four business days. Orders **only** will be shipped to one of the U.S. addresses listed for your company in the VALID database. Hewlett-Packard **will** send your company an invoice for each item ordered. Credit card and C.O.D. orders **will** not be accepted.

To find out what's available, access the following:

- *HP fax information retrieval system (HP FIRST)* — Contains a new section, HP sales/training tools for VABs. An annotated list of available items including part numbers, prices, and ordering instructions **will** be maintained.
- *HP Internal sales training Catalog for VABs (P/N 5091-4087EUS)* — Contains detailed descriptions of self-paced training courses. Copies sent to VAB contacts who are coded as "sales" in the VALID database in early April.

For more information on the direct-order program or to request a copy of the catalog, contact your HP representative.

## HP Software tools advertising

*For the U.S. only*

U.S.-based print advertisements for HP GlancePlus and Software Vendor **will** appear in customer publications from April through September.

The advertisement for HP GlancePlus entry-level performance software tool, which is available for HP MPE V, HP MPE/iX, HP-UX, and Sun SPARC systems, *will* appear in *HP Professional*, *HP Chronicle*, and *InterACT*.

The advertisement for HP Software Vendor PC software management tool, which is available for HP 3000 and HP 9000 systems and most PC local-area networks, including LAN Manager, NetWare, and OfficeShare, *will* appear in *HP Professional* and *InterACT*.

The objective of each advertisement is to convince target audiences to call a toll-free number to qualify to receive a no-cost trial HP GlancePlus or demo/evaluation copy of HP Software Vendor.

## HP OpenSpool/UX and OmniBack print advertising

Starting this month, there is print advertising for HP OpenSpool/UX, OmniBack, and OmniBack/Turbo in HP user group magazines.

The advertisements are being placed in *HP Professional*, *InterACT*, and *HP Open World*.

Evaluation software for corresponding products is promoted within the product descriptions.

## Additions to HP FIRST

HP FIRST can be accessed from any Group 3 touch-tone fax machine. Dial 208-344-4809, and you will be connected to a voice-operated menu that guides you through the literature selection process.

The computer systems items listed here have been added to the HP FIRST system.

Title	Fax ID number
Being More Productive is Easy as 1-2-3 product brief	2188
HP Apollo 9000 Model 425e Workstation photo card	2251
HP Apollo 9000 Model 705 Workstation photo card	2268

## VAB promotions

The following promotion is specifically for VABs. The promotions featured on pages 7 and 8 of the main publication also apply to VABs. Contact your HP representative for more information.

*Hewlett-Packard assumes no responsibility for any errors that might appear in these listings.*

### HP 3000 Systems

#### Midrange Upgrade Installed Base

If you are on VAR schedule A1001A and purchase selected XL systems, you are eligible to receive promotional discounts off selected system upgrade products. Contact your HP representative for a listing of eligible upgrade products.

You must purchase one of the products listed here and one upgrade option. You may purchase either of the HP 700/92 or 700/94 terminal products and trade in one HP terminal per each new terminal purchased. You will receive a trade-in allowance per terminal.

- **Scope:** For the U.S., Europe, and intercontinental region only
- **Eligible products:** P/Ns A1707A/08A/09A/52A/58A/71A/72A
- **Start date:** December 1, 1991 (U.S.), February 1, 1992 (Europe and intercontinental region)
- **End date:** May 31, 1992 (U.S.), July 31, 1992 (Europe and intercontinental region)
- **Promotion number:** 2.602

## Available literature

The following new literature is available through your local HP sales office. The literature is separated by product line and in order of publication number. Contact your HP representative for more information.

### HP 9000 Systems

#### Ten Reasons to Choose the HP 9000 brochure

- **Audience:** HP sales and marketing personnel, customers
- **Format:** 6 pages, black and white
- **P/N:** 5091-2625E
- **Description:** Provides a quick reference for customers to view ten of the strongest selling points of the HP 9000 product line. Illustrations depict each point with accompanying text.

### Workstations

#### Hewlett-Packard Remanufactured Products: A New Tradition

- **Audience:** HP VAB partners
- **Format:** 8 pages, color
- **P/N:** 5091-2033E
- **Description:** Informs you about the benefits of purchasing HP remanufactured products. Describes the nine-point refurbishing process and includes examples of how customers have benefited from purchasing remanufactured equipment.

**HP Apollo DIRECT Workstation Catalog**

- **Audience:** U.S. HP-UX and Domain/OS installed base customers
- **Format:** 96 pages, 8½ × 11
- **P/N:** 5091-3577EUS
- **Description:** Lists up-to-date descriptions, technical specifications, and pricing information of select HP-UX and Domain/OS products. Consolidates items from the *Domain Add-ons and Upgrades Catalog*, *HP Apollo Documentation Catalog*, and the *HP Apollo DIRECT Workstation and Complementary Products Catalog*.

**Quickship/800 price guide**

- **Audience:** U.S. VABs
- **Format:** 8 pages, black and white, two-color cover
- **P/N:** 5091-3608EUS
- **Description:** Provides information on the HP 9000 Series 800 Quickship/800 bundles. Features product structure information and pricing.

**Quickship/800 program guide**

- **Audience:** U.S. VABs
- **Format:** 20 pages, black and white, two-color cover
- **P/N:** 5091-3991EUS
- **Description:** Provides information on the HP 9000 Series 800 Quickship/800 program and bundles. Helps identify customers and contains information on ordering, quick delivery, and product structures.



**HP DIRECT phone numbers**

HP's fast-order phone lines provide customers with an easy, direct way to order supplies, accessories, media, furniture, and software from Direct Marketing Organization.

Location	Telephone number*
Argentina	7814061
Australia	through 4069 008 339 861 (toll free)
Melbourne	(03) 272 2861
Austria	(0222) 2500-614 (0222) 2500-615 (0222) 2500-616
Belgium/Luxembourg	(02) 761-31-11
Brazil	(011) 709-1300
Canada	800-387-3154
Toronto	416-671-8383
China	2566888
Denmark	80301640
Finland	(90) 8872-2361
France	(1) 60 77 34 07
Germany	(0130) 3322
Greece	(01) 672-6090
Hong Kong	(5) 8487569
Italy	(02) 9530 1632
Japan	427-59-1321
Korea	7690-600 7690-700 7690-800
Malaysia	(03) 2986665
Mexico	905-676-7892
Netherlands	(06) 0501
New Zealand	(04) 820400
Norway	(02) 24 41 80
Singapore	279-8824
Spain	(91) 6374013 (91) 6370011
Sweden	(08) 750 24 00
Switzerland	(057) 31 24 90
Taiwan	(02) 7179608
United Kingdom	(0344) 369333
United States	800-538-8787
Venezuela	2394477

\*Numbers listed are localized



### HP 9000 Series 300 RAM price decrease

Effective May 1, 1992, prices for the HP 9000 Series 300 random-access memory products listed here will be decreased. Users who require increased performance and additional RAM should consider an MC68040 upgrade to their current systems. MC68040 upgrades offer up to five times the performance and in most cases increased RAM capacity. For more information, contact your HP representative.

Product No.	Description
98229A	HP 9000 Model 345,375,380 4-Mbyte RAM
98229S	HP 9000 Model 345,375,380 16-Mbyte RAM
98244C	HP 9000 Model 375 upgrade Opt. 116 Add 8-Mbyte RAM Opt. 124 Add 16-Mbyte RAM Opt. 132 Add 24-Mbyte RAM
98244D	HP 9000 Model 380 upgrade Opt. AN1 Add 24-Mbyte RAM Opt. AN4 Add 8-Mbyte RAM Opt. AN6 Add 32-Mbyte RAM
98257A	HP 9000 Model 310,320 1-Mbyte RAM
98258A	HP 9000 Model 330,350,370 4-Mbyte RAM with controller
98258C	HP 9000 Model 330,350,370 12-Mbyte RAM
98267A	HP 9000 Model 360 4-Mbyte RAM
98267B	HP 9000 Model 360 8-Mbyte RAM
98267C	HP 9000 Model 360 12-Mbyte RAM
98268A	HP 9000 Model 340 4-Mbyte RAM
98269A	HP 9000 Model 332 1-Mbyte RAM
98269B	HP 9000 Model 332 4-Mbyte RAM

### HP 9000 Series 300 monitor discontinuance

The following HP 9000 Series 300 monitors will be removed from the June 1992 HP Price List. There are no replacements for these products. Final U.S. orders will be accepted through June 30, 1992; final international orders will be accepted through July 31, 1992; final shipments will be made through November 30, 1992.

Product No.	Description <sup>1</sup>
35741A	12-inch medium resolution color monitor
3574188	12-inch medium resolution color monitor, European power cord
35741BM	12-inch medium resolution color monitor, U.S. power cord
3574180	12-inch medium resolution color monitor, Swiss power cord
35741BU	12-inch medium resolution color monitor, U.K. power cord
35741BY	12-inch medium resolution color monitor, Danish power cord

<sup>1</sup> All monitors are 512 x 400.

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## New disk drive support on HP 1000 A-Series

Hewlett-Packard announces support of new small computer standard interface (SCSI) disk drives for HP 1000 A-Series computers. These disk drives are supported under HP RTE-A Revision 5.1 or a more current release. The device driver (DDQ30) and interface driver (IDQ35) require Revision 5270 or later.

The disk drives are supported as system disks with boot support or as peripheral disks. The part numbers listed are for the disk drives in standalone configurations. The drives also are available as add-on mechanisms to HP Series 6000 mass storage systems.

External cabinets can hold three each of the disk drives (order one cabinet and two kits). The 420-Mbyte disks can fit seven per minitower or five per rackmount enclosure.

Support of the differential disk drives allows up to 25 meters of cable between the HP 1000 and the disk drive. Differential and single-ended devices cannot be connected to the same HP 12016A SCSI interface card.

Read/write caching enhances performance; no data caching ensures data integrity upon power fail. Contact your HP representative for more information.

## HP 7980S SCSI tape drive support on HP 1000 A-Series

Hewlett-Packard announces support of the HP 7980S small computer standard interface (SCSI) nine-track tape drive on HP 1000 A-Series computers. The HP 7980S, which connects to the P/N 12016A SCSI interface, is supported as a boot device and an archival backup device. SCSI device driver DDQ24 Revision 5271 or later is required for support of the HP 7980S.

## HP 1000 A-Series I/O price increase

Effective April 1, 1992, prices of the HP 1000 A-Series I/O products listed here increased.

Product No.	Description	VSCSI ID <sup>1</sup>
Single-ended SCSI devices; require single-ended cable (P/N 12016-60001) which comes standard with P/N 12016A		
1,350-Mbyte capacity		
C2214B	Model 1350S read/write caching, 325-mm rackmountable enclosure (upgrade kit only, P/N C2295B)	HP 97560
C2217T	Model 1350SE read/write caching, minitower enclosure (upgrade kit only, P/N C2474T)	HP 97560
C2462F	Model 1350F no data caching, minitower enclosure (upgrade kit only, P/N C2474F)	HP C2474S
C2462R	Model 1350R no data caching, rackmountable enclosure (upgrade kit only, P/N C2474R)	HP C2474S
670-Mbyte capacity		
C2216T	Model 670SE read/write caching, minitower enclosure (upgrade kit only, P/N C2473T)	HP 97556
C2461F	Model 670F no data caching, minitower enclosure (upgrade kit only, P/N C2473F)	HP C2473S
C2461R	Model 670R no data caching, rackmountable enclosure (upgrade kit only, P/N C2473R)	HP C2473S
420-Mbyte capacity		
C2460F	Model 420F no data caching, minitower enclosure (upgrade kit only, P/N C2472F)	HP C2472S
C2460R	Model 420R no data caching, rackmountable enclosure (upgrade kit only, P/N C2472R)	HP C2472S
Differential SCSI devices; require differential cable (P/N 12016-600031 available as P/N 12016A Opt. 001		
1,350-Mbyte capacity		
C2482A	Model 1350SX read/write caching, up to 25 meters total cable length, minitower enclosure (upgrade kit only, P/N C2492A)	HP 97560
670-Mbyte capacity		
C2481A	Model 670SX read/write caching, up to 25 meters total cable length, minitower enclosure (upgrade kit only, P/N C2491A)	HP 97556

Product No.	Description
120058	ASIC interface
12075A	X.25 interface
120078	HDLC modem interface
120608	Analog input interface
12060BC	Analog input cable
12061AC	Analog input cable
12062A	Analog output interface
12062AC	Analog output cable
12063A	Isolated digital interface
12063AC	Digital I/O cable
120428	Programmable serial interface
12043A	Multiuse PSI
12025A	14-slot I/O extender
12012A	Priority jumper card

<sup>1</sup> VSCSI/ID is the device's response to the display command from the HP 1000 SCSI diagnostic.

## HP 1000 A-Series memory card discontinuance

In July 1991 the discontinuance of several HP 1000 A-Series memory cards was announced. Although the availability of a few memory products was extended to accommodate your needs, those cards for which discontinuance was previously announced will be removed from the May 1992 HP Price List.

Discontinuance is also being announced for other HP 1000 A-Series memory cards.

Ordering grace periods of 30 days in the U.S. and 120 days outside the U.S. apply. For more information, contact your HP representative.

Product No.	Description	Discontinuance date
<i>HP 1000 A400, A600+, A700</i>		
12103C	.5-Mbyte memory card	November 1, 1992
12103D	1-Mbyte memory card	November 1, 1992
<i>HP 1000 A600+, A700</i>		
121108	A600+ controller with 1-Mbyte memory	May 1, 1992
121118	1-Mbyte memory card	May 1, 1992
12111C	2-Mbyte memory card	May 1, 1992
<i>HP 1000 A900, A990</i>		
12220A	.75-Mbyte memory card	November 1, 1992
122208	2 x .75-Mbyte memory card package	May 1, 1992
12220C	4 x .75-Mbyte memory card package	May 1, 1992

## HP 1000 A-Series I/O products discontinuance

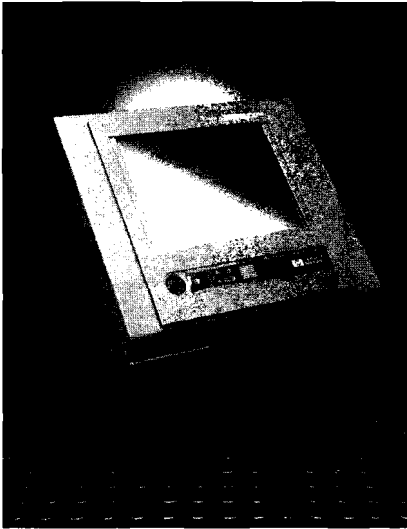
The following HP 1000 A-Series I/O products will be removed from the November 1992 HP Price List. These products (excluding P/N 91732R) have 10-year support ending October 31, 2002.

Product No.	Description
12092A	HP 1000 A-Series Datalink master
12072A	HP 1000 A-Series Datalink slave
91732R	Datalink software right to copy
12073A	Bisync modem interface
12082A	Bisync direct connect interface
12064A	68-circuit screw terminal termination accessory





## HP TestBook service tools



HP TestBook is a PC-based service tool that combines a 386 SX PC with test instrumentation, a touchscreen, and a CD-ROM drive in a single, ruggedized package to provide portable test and electronic book functionality.

### Features and benefits

This fully integrated system provides a unique combination of advanced features in a portable, ruggedized, and customizable package including 386 SX PC functionality; adjustable LCD touchscreen; programmable instrumentation; industry-standard

expansion slots; programmable serial interface; MS-DOS, OS/2, or SCO UNM, built-in CD-ROM drive; 40 200-Mbyte hard disk; 4 16-Mbyte RAM, and built-in battery pack.

HP TestBook can help you provide prompt, accurate, and consistent test, diagnosis, and service in remote locations, keep up-to-date on the latest service procedures and information, and deliver cost-effective service.

Service information system (SIS) platform software is available with HP TestBook. SIS provides you with the information retrieval and display capabilities of both text and graphics to allow volumes of technical information and service manuals to be placed online. SIS allows for the development and execution of diagnostics to help you troubleshoot the products.

HP TestBook is a custom product. Since HP TestBook requires custom configuration for specific applications, it is not sold individually as an off-the-shelf product. It is typically part of a large project or program or is only available in volumes of 50 or more. HP TestBook is price dependent on the configuration and needs of the user. For more information, contact your HP representative.

## HP Vectra boot ROM accessory with Novell and LAN Manager support

As of April 1, 1992, a new version of the HP Vectra 386/N PC boot ROM is available as an accessory. This version offers remote boot protocols for both Novell NetWare and Microsoft® LAN Manager 2.1; the first version supplied only remote boot for Novell NetWare. Local-area network (LAN) models of the network-ready HP Vectra 386/16N and 386/20N PCs will continue to ship with the current revision (Novell only) of the boot ROM after April 1 until they contain the new version.

### Features and benefits

The HP Vectra PC multiprotocol boot ROM can be combined with any HP LAN adapter card. Users will be able to boot from either a Novell NetWare or a Microsoft LAN Manager 2.1 server using the same boot ROM chip, receive a step-by-step guide for easy installation and network configuration, and benefit from optimal use of memory for applications and hardware drivers; the boot ROM does not take up any memory.

### Identifying new versus old boot ROM

Through the set-up program: each boot ROM automatically configures the set-up program to the network operating system protocol it supports. With current boot ROM,



only Novell options come up in set-up. With new boot ROM both Novell and IAN Manager options come up automatically. If there is doubt about which boot ROM is in a particular machine, a quick look at the set-up will tell you. You can also look at the revision number on the chip itself: Current boot ROM has the revision number A.01.XX. New boot ROM will have the revision number A.02.XX.

**Interchangeability between new and old boot ROM**

New boot ROM is backward compatible on any HP Vectra 386/N PC, regardless of its set-up program, BIOS version, or manufacture date.

The accessory is also supported on the new HP Vectra 386s/20 PC. The IAN administrator manual documents the installation of the boot ROM in the PCs and provides installation procedures of remote boot services for both IAN Manager and Novell. Only Revision 2.1 of MS IAN Manager supports remote boot capabilities. Microsoft IAN Manager 2.1 works on OS/2 Revision 1.3.

Product No.	Description
D2407A	HP Vectra PC multiprotocol boot ROM (six-pack) contains six boot ROMs (for six PCs), LAN administrator manual, and disks with Novell and LAN Manager drivers for different HP Ethernet LAN cards

*Microsoft is a U.S. registered trademark of Microsoft Corp.*

**HP PC software developer kits**

HP PC software developer kits (P/N D1827A) are available for users developing both Named Pipes and Sockets applications. This product is not on the HP Price List but is available through direct telephone ordering. Call 800-848-9283 within the U.S. and 303-353-7650 outside the U.S. Payment may be made by cash, check, credit card, money order, or purchase order. Each product includes six months of CompuServe™ support. Additional support may be purchased.

*CompuServe is a U.S. trademark of CompuServe, Inc.*

**MS-DOS 3.3 and 4.0 discontinuance**

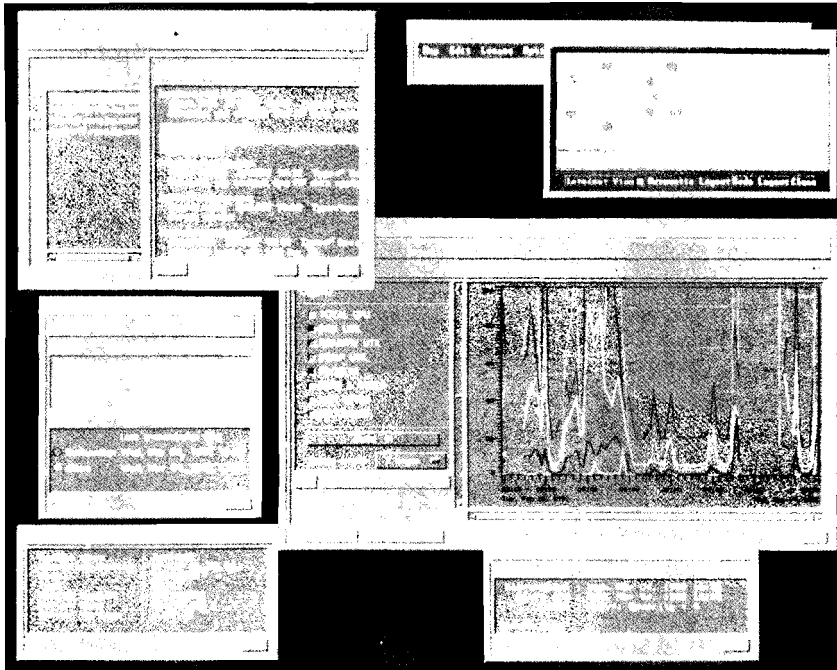
MS-DOS 3.3 and 4.0 products and associated options will be removed from the May 1992 HP Price List. Contact your HP representative for product numbers. The replacement for both products is MS-DOS 5.0. Language options available include English, French, German, Italian, and Spanish. The MS-DOS 5.0 product contains both 5¼- and 3½-inch media

**Microsoft OS/2 121 discontinuance**

The following products will be removed from the May 1992 HP Price List. There are no replacement products available from Hewlett-Packard. For Microsoft LAN Manager users, OS/2 1.3 is supplied with LAN Manager 2.1. LAN Manager is available from Microsoft authorized network specialists.

Product No.	Description
D1302D	OS/2 1.21
Opt. ABA	English language version
Opt. ABD	German language version
Opt. ABF	French language version

## Introducing HP PerfView performance management software



Hewlett-Packard introduces HP PerfView performance management software for effective management of the performance of large numbers of multivendor systems within distributed environments. HP PerfView uses management-by-exception techniques to identify and resolve quickly existing and potential performance problems before they affect system and network users. HP PerfView software is integrated with HP OpenView network management software.

HP PerfView lets system and network administrators understand the performance health of their computing environments at a glance.

### Features and benefits

- *Easy-to-use graphical user interface based on centralized*

*hierarchical design; robust online help* — provides quick characterization and resolution of performance problems before they affect users

- *Management-by-exception techniques; centralized management and monitoring of customizable alarms* — allows reduction of overhead of managing environment performance and improvement in service levels
- *Multivendor platform management; HP 9000, HP 3000, and Sun SPARCstation interfaces to import performance data and alarms from other vendors* — enables performance management of all nodes within the environment
- *Integration with other network, system, and performance management products* — allows

efficient management of environments through a single user interface

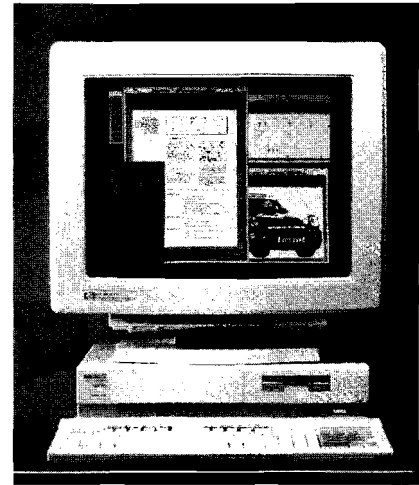
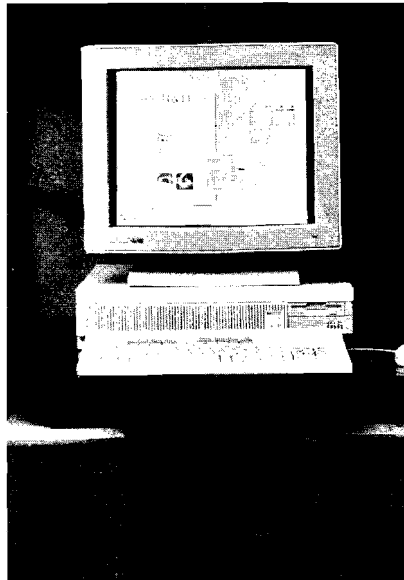
- *Automatically generated and updated network mapping for TCP/IP networks* — saves network/system/performance administrators time in entering configuration information and tracking dynamic changes within networks
- *Standards such as TCP/IP and OSF/Motif* — ensures effective management of a wide range of systems

HP PerfView provides new capabilities to manage the performance of large numbers of distributed systems. It also provides an integrating umbrella for node-specific performance management products such as HP GlancePlus. This approach allows the use of capabilities that already exist for managing the performance of individual systems and protects your investments in products and associated user training.

There is currently no direct competitor to HP PerfView software. Integrated network management systems such as HP OpenView, IBM NetView, and Sun Microsystems SunNet Manager can display a number of high-level system performance metrics, but you may not have enough information to characterize and resolve performance problems. Niche products such as Aim Technology's Sharpshooter, which manages NFS performance, do not offer HP PerfView's capabilities nor do they manage multiple vendor platforms. For more information, contact your HP representative.

Product No.	Description
H5288A	HP PerfView analysis software for HP 9000 Series 300/HP Apollo 9000 Series 400, includes HP Network Node Manager
Opt. AAO	¼-inch tape and manual
Opt. AAH	DDS tape and manual
Opt. AAU	CD-ROM
Opt. 0B1	Manual only
Opt. OAK	License to use
H5289A	HP PerfView analysis software for HP 9000 Series 600/800/HP Apollo 9000 Series 700, includes HP Network Node Manager
Opt. AAO	¾-inch tape and manual
Opt. AA1	¾-inch tape and manual
Opt. AAH	DDS tape and manual
Opt. 0B1	Manual only
Opt. OAK	License to use
H5290A	HP PerfView server license for HP MPE V systems
H5291A	HP PerfView server license for HP MPE/iX systems
H5292A	HP PerfView server license for HP-UX systems
H5293A	HP PerfView server license for Sun SPARC systems
<b>Options for HP PerfView server licenses (P/Ns H5290A, H5291A, H5292A, and H5293A)</b>	
Opt. UDF	Up to 5 nodes
Opt. UDG	Up to 10 nodes
Opt. UDH	Up to 25 nodes
Opt. UDJ	Up to 50 nodes
H5294A	HP PerfView desktop server license for HP-UX systems
H5295A	HP PerfView desktop server license for Sun SPARC systems
<b>Options for HP PerfView desktop server licenses (P/Ns H5294A and H5295A)</b>	
Opt. UDG	Up to 10 nodes
Opt. UOH	Up to 25 nodes
Opt. UDJ	Up to 50 nodes
Opt. UDK	Up to 100 nodes

## Introducing SNAplus for HP 9000/HP Apollo 9000



HP SNAplus3179G with an OSF/Motif interface.

Release 1 of the HP SNAplus product family is the first phase of a multiyear plan to provide a single code base for IBM connectivity across the HP 9000, HP 3000, Domain/OS, and HP Vectra PC platforms. HP SNAplusLink includes SNA/SDLC, client/server gateway, NetView alerts, and NetView response time monitor. HP SNAplus3270 includes 3270 terminal display; HLLAPI; 3270 response time monitor; multiple sessions; Model 2, 3, 4, 5; and character oriented windows. HP SNAplusAPI includes LJT62 API with conversation and session-level security.

Release 2 will add functionality to these products: HP SNAplusLink will support PU 2.1 Primary SDLC, SNA over X.25 (QLLC), Token Ring, and NetView API. HP SNAplus3270 will support OSF/Motif and full color. HP SNAplusAPI will support LUA interface and NetView API and include two new products, HP SNAplusRJE and

Release 1 is for users who require SNA connectivity on the HP Apollo 9000 Series 700. Release 2 will be a general release shipped to all users with support contracts.

### Features and benefits

- *Improved system performance* — client/server architecture offloads communication protocols to the server. Multiple servers can provide load balancing and fault tolerance.
- *Easier network management* — centralized network management simplifies management of multiple server networks.
- *Improved productivity* — standards, such as OSF/Motif, allow for efficient development and maintenance of software products.
- *Customized solutions* — HLLAPI provides accuracy and flexibility in product development for more efficient solutions.

*continued on next page*

- *Investment protection* — migration path is provided with standards-based products.
- *Value* — new functionality is being provided at no additional cost. Standard products reduce the cost of support.

**Migration**

If you do not have the SNA link connectivity requirement on the HP Apollo 9000 Series 700, Release 2 is the recommended migration path from the current HP-UX SNA products. Migration to HP SNAplus will require changes to LU6.2 applications. Migration tools for LU6.2 API will be available with Release 2. HP SNAplus products are on the March 1992 HP Price List. Contact your HP representative for ordering information.

**HP NetWare 386 Version 3.11 site licenses available**

Hewlett-Packard will distribute certain Novell NetWare 386 Version 3.11 products directly to users and authorize each end user to copy the product onsite. HP will distribute Novell's standard version of NetWare Version 3.11. This is a full-featured 32-bit network operating system that supports key desktop operating systems like MS-DOS, Windows, OS/2, UNIX-based systems, Apple Macintosh, as well as the IBM SAA environment. NetWare Version 3.11 provides a high-performance integration platform for businesses requiring a sophisticated enterprisewide network computing solution in a multivendor environment.

NetWare Version 3.11 offers centralized network management. It is available from Hewlett-Packard in 100- and 250-user versions in volumes of 20 or more servers, allowing your organization to standardize on a **high-performance networking** solution regardless of your size.

**Features**

- 32-bit multitasking operating system that runs on Intel 80386\* and 80486\* hardware
- Support of MS-DOS, Windows, Macintosh, OS/2 (SE and EE), and UNIX-based system clients
- Support of separate products that provide AFP, AppleTalk, NFS, OSI, FTAM, communication, and database services
- 100- and 250-user versions
- Support of Novell's NetWare name service
- Ability to manage remote servers from a central site
- Sharing of files, information, applications, printers, and other peripherals in a multiclient environment
- Built-in routing services for IPX and TCP/IP networks
- Selection of local-area network, disk, and backup services
- Allowance for new services to be added as needed by Novell, third parties, and customers
- Compatibility with third-party applications and services
- Design that is for easy installation and use

You may purchase either 100- or 250-user licenses. A minimum order of 20 units is required. You must

order only one Option UBD when ordering 100-user servers and only one Option UD6 when ordering 250-user servers. The remainder of the licenses must be ordered using Option UCU or UCV. The total of all options must be 20 or more. Add-on orders also must be in units of 20 or more. The master copy disk for NetWare Version 3.11 product is on the April 1992 HP Price List. For more information, contact your HP representative.

Product No.	Description
J2242A	Master copy disk for NetWare Version 3.11
Opt. UBD	Manuals, disks, and one 100-user server license
Opt. U06	Manuals, disks, and one 250-user server license
Opt. UCU	Right to copy one 100-user server license
Opt. UCV	Right to copy one 250-user server license

*Intel 80386\* and 80486\* are U.S. trademarks of Intel Corporation.*

**HP OpenView Campus Management Station now includes HP Apollo 9000 Model 710**

Effective April 1, 1992, the HP OpenView Campus Management Station (P/N B1039A) was upgraded to include the latest HP Apollo 9000 system technology. The product includes the HP Apollo 9000 Model 710 workstation in place of the Model 425e. Product pricing and structure remain unchanged. The related HP OpenView Enterprise Management Station is unaffected.

## HP OpenView MS-Windows/DOS upgraded, nonbundled price increased

The HP OpenView MS-Windows/DOS software product is being upgraded to the A.05.01 release. The new product supports Windows 3.0 help, PostScript® printers, more pictures per map, .BMP background files, and more than 10 applications. A new go to symbol has been added to increase usability.

Due to the complicated nature of its different software products and to cover the cost of support, the price of the nonbundled product has been increased.

The old product will be removed from the April 1992 HF Price List. The new product is on the April 1992 HP Price List and is available two weeks after receipt of order. Contact your HP representative for more information.

Product No.	Description
<i>Old product</i>	
32048A	HP OpenView Version A.04.00
<i>New product</i>	
32048C	HP OpenView Version A.05.01

*Postscript is a registered trademark of Adobe Systems, Inc. in the U.S. and other countries.*

## HP LanProbe adds echo test capability

The HP LanProbe Version C0000 distributed local-area network analysis system performs the following echo tests: Ethernet CTP, 802.2, ICMP echo, as well as Novell 802.2 and Novell Ethernet II. These echo tests can be performed either one time or continuously in the background. Statistics kept on background echo tests are maximum, minimum, average, and last return times. Using these statistics a network manager can benchmark the various pathways through the network over time.

Other features of Version C.00.00 include manual adding of nodes, simple network management protocol trap forwarding, import/export of node data, duplicate internet protocol address tracking, and data switch access.

Product No.	Description
18494A	Upgrade to HP ProbeView software Version C0000
18495A	Upgrade to HP LanProbe segmentmonitor Version C0000
18496A	Upgrade to HP ProbeView Observer software Version C.00.00

*Product numbers 18494A and 18496A contain the upgrade to HP ARPA Services Version 2.00. HP ARPA Services is required for Ethernet connectivity.*

## HP Shared Resource Manager provides fast networking solutions

HP Shared Resource Manager (SRM) has been effective in the instrument controller market segment but also can be used anywhere a company does not want to invest heavily in network equipment staff to maintain the network. Users who update workstations (HP 9000 Series 200,300, HP Apollo 9000 Series 400 to HP Apollo 9000 Series 700) on standard local-area networks (LAN) can use current workstations as nodes on SRM networks.

SRM is a file and printer/plotter server for HP 9000 engineering workstations and HP Vectra PCs with the HF BASIC/DOS or Pascal measurement coprocessor. SRM provides the capability to share resources among workstations in a local cluster.

SRM combines advantages of distributed processing with advantages of a cost and space saving system. Workstations can share files on the SRM system disk and also printers and plotters through the older dedicated central SRM controller or the newer SRM/UX machine. Workstations can boot directly from the SRM system disk, gather and process information with their own CPUs, store the data on the SRM system disk, and print or plot graphics on the SRM system peripherals.

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The SRM server (P/N 50960A with options) and the SRM operating system (P/N 98619A) were discontinued last May and replaced by SRM/UX (P/N E2085A). SRM/UX allows HP BASIC or Pascal workstation client connections via LAN or SRM interfaces and cables. This product is supported by Hewlett-Packard.

SRM workstation interface cards (P/N 50962A for HP 9000 Series 200 and 300 as well as HP Apollo 9000 Series 400 and P/N 50963A for HP Vectra PCs) were scheduled for discontinuance in January 1992; but the discontinuance is being delayed for at least one year. For more information, contact your HP representative.

## Trial-size HP LAN Manager/X discontinuance

The trial-size HP LAN Manager/X program has been discontinued immediately in lieu of a new HP LAN Manager/X demonstration program. If you requested trial-size HP LAN Manager/X through a business reply card, you **will** be sent a letter explaining how to obtain copies of the HP LAN Manager/X demo from your HP representative. The letter instructs you to have the software demo installed on your systems. The demonstration copy of HP LAN Manager/X for the HP 9000 is a full-featured copy that **will** expire 30 days after installation.

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## Mass Storage

### New HP mass storage devices for Macintosh

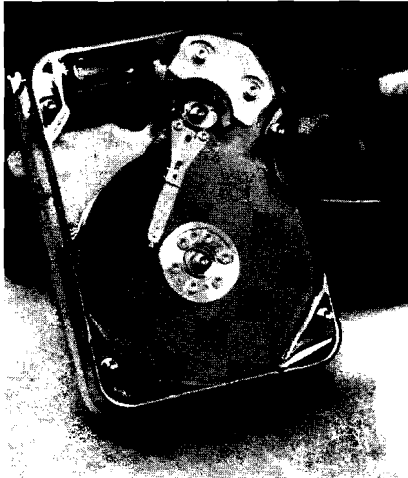


Hewlett-Packard introduces a 5-Gbyte external compressed-data digital-audio tape (DAT) for the HP Storage System for Apple Macintosh (P/N C2225M) and a 422-Mbyte 3%-inch-half-height disk drive for integration in Macintosh IIci, IIcx, or Quadra 700 systems (P/N C2454M).

The HP DDSDC DAT (P/N C2225M) targets high-end Macintosh users who fill towers with highcapacity 5%-inchdisk drives, manage a local-area network, or work with graphic-intensive applications and who need a device that will match file sizes for these considerations. The HP internal hard disk drive (P/N C2454M) is for Macintosh IIci, IIcx, and Quadra 700 users.

#### Features and benefits

The HP Storage System for Macintosh, an external, multidevice storage tower, supports a new DDS-format device. This com-



pressed-data DAT can store an average of 5 Gbytes of data on a 90-meter tape. Some applications may have more compressible data, allowing you greater than 8 Gbytes. Hewlett-Packard will continue to offer the DDS-format DAT announced last August, P/N C2224M because of its positioning.

Product number C2225M has greater performance than that of product number C2224M, with or without software compression (available with Dantz Development's Retrospect Remote). If you are concerned about backup performance and are not price sensitive, you should choose product number C2225M. Capacity is not a differentiator for these two products. With Dantz Development's Retrospect Remote (a three-user version is bundled

with both products), you can achieve similar capacity on product number C2224M with the software compression feature as with the hardware-compressed product number C2225M.

Hewlett-Packard has expanded its internal storage offerings for Macintosh systems with product number C2454M. This small computer standard interface-2 drive has a mean time between failure rating of 150,000 hours, an average seek time of 12.6 ms, and a synchronous burst transfer rate of 5 Mbytes per second.

When Apple begins shipping Apple UNIX 3.0, Hewlett-Packard will have support for all external disk drives and CD-ROM offerings for the HP Storage System for Macintosh and support for internal disk drives for Macintosh systems. These offerings may be ordered now and are on the April 1992 HP Price List. For more information, contact your HP representative.

Product No.	Description
C2225M	5.0-Gbyte compressed-data DAT; includes licensed copy of Dantz Development's Retrospect Remote
C2454M	422-Mbyte 3%-inch half-height disk drive for Macintosh IIci, IIcx, and Quadra 700 systems



## QIC drive for HP 9000 Model 8X7

HP's quarter-inch cartridge (QIC) (P/Ns A2311A and A2312A) is an industry-standard device that provides a low-cost, low-capacity backup solution. Since QIC has over 600,000 units installed, HP 9000 Series 800 business server users will be able to interchange with high-

end UNIX-based PC systems, IBM RS/6000 systems, and SunSPARC systems.

The QIC DC6525 media has a capacity of 525 Mbytes and will interoperate with the following QIC formats:

Media type	Supported write formats	Supported read formats
DC6525	QIC525/320, QIC150, QIC120	QIC525/320, QIC150, QIC120, QIC24
DC6320	QIC525/320, QIC150, QIC120	QIC525/320, QIC150, QIC120, QIC24
DC6250	QIC150, QIC120	QIC150, QIC120, QIC24
DC6150	QIC150, QIC120	QIC150, QIC120, QIC24
DC600A	QIC120	QIC120, QIC24
DC300XL/P		QIC24

Although read formats and associated media are expected to vary, you should use the QIC525/320 format and the DC6525 media as the primary write format and tape media.

The QIC drives include firmware developed specifically for Hewlett-Packard and are available as an integrated solution within the HP 9000 Model 8X7 systems. The QIC drive can be used as a boot device, backup device, and for data interchange.

For users who require an external standalone QIC drive, IEM, the current supplier of QIC format for the HP 9000 Series 300 and HP Apollo 9000 Series 400 and 700, will be providing a solution. The IEM-supported QIC drive can be used as a backup device and for

data interchange; but it cannot be used as a boot device. For ordering and availability information, call IEM directly in the U.S. at 800-321-4671. IEM products and support are available on a worldwide basis. Contact your HP representative for more information.

Product No.	Description
Opt. AM9 <sup>1</sup>	QIC drive for new HP 9000 Model 807S, 817S, 827S, or 837S systems
A2311A <sup>2</sup>	QIC SPU upgrade kit for HP 9000 Model 8X7 systems with date codes 3139 and prior (U.S./intercontinental) or 3148G and prior (Europe)
A2312A <sup>3</sup>	Peripheral housing kit for HP 9000 Model 8X7 systems with date codes 3149 and later (U.S./intercontinental) or 3149G and later (Europe)
Opt. AM7	Add 2.0-Gbyte DAT drive
Opt. AM8	Add CD-ROM drive
Opt. AM9	Add QIC drive

C1520B	2.0-Gbyte DAT drive for HP 9000 Model 8X7 systems with new sheet metal
A1999A	CD-ROM SCSI drive for HP 9000 Model 8X7 systems with new sheet metal

<sup>1</sup> This option replaces the integrated DDS drive with the QIC drive. The HP-UX operating system is preinstalled on HP 9000 Model 8X7 systems. Backup HP-UX operating system tapes must be ordered using P/N B2459A. This option includes system administration notes, HP-UX operating system tapes, and the QIC hardware.

<sup>2</sup> This product should be ordered for users who have HP 9000 Model 8X7 systems with the latest peripheral bay sheet metal to accommodate the half-height peripherals. These are systems that shipped since December 1991. Deliverables include the QIC drive, associated hardware manual, system administration notes, and HP-UX operating system tapes.

<sup>3</sup> This product should be ordered for users who have HP 9000 Model 8X7 systems with peripheral bay sheet metal that will not accommodate the half-height peripherals. These are systems that shipped prior to December 1991. Deliverables include the new peripheral bay sheet metal and the associated hardware based on the option specified.

## Integrated QIC available on low-end HP 9000 Model 8X7S systems

Effective April 1, 1992, the HP 9000 Models 807S, 817S, 827S, and 837S systems have the capability to integrate a quarter-inch cartridge (QIC) drive. By specifying Option AM9, the integrated digital-audio tape drive will be replaced with an integrated QIC drive. The 525-Mbyte QIC device (P/N DC6525) provides a low-cost, backup solution.

## New DAT support on HP 9000 Series 800 systems

Beginning April 1, 1992, the recently introduced HP Series 6400 Model 2000DC digital-audio-tape (DAT) drive will be supported through a patch tape on HP 9000 Series 800 systems running *HP-UX* 8.0, 8.02, and 8.06 as a backup device only. Boot support will be available with the future *HP-UX* release.

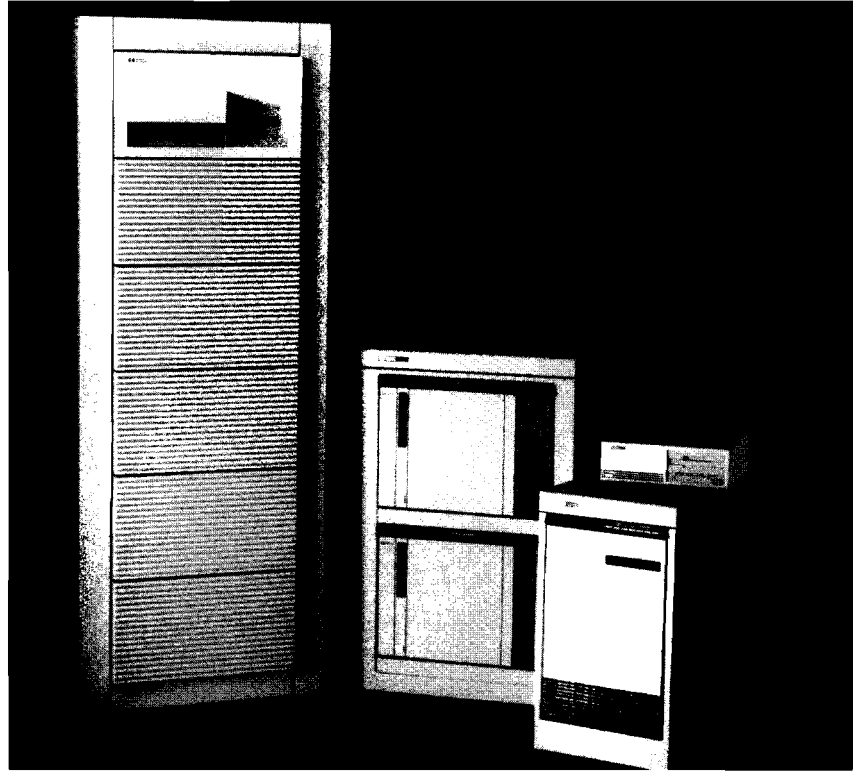
The HP Series 6400 Model 2000DC (P/N C1521B) is a standalone small computer standard interface (SCSI) DAT drive that uses data compression (DC) to provide between 4 to 8 Gbytes of capacity on a single 90-meter digital data storage (DDS) cassette. The DC factor achieved is dependent on the type of data being compressed.

With the discontinuance of Hewlett-Packard's 1.3-Gbyte DAT drives on the May 1992 (P/N C1512A) and July 1992 HP Price Lists (P/N C1511A), the support of the new DC DAT drive provides HP 9000 Series 800 users with a lower cost, higher performance solution.

The HP Series 6400 Model 2000 (2-Gbyte standalone SCSI DAT drive) only is supported on the HP 9000 Model 8X7. Full support of this product across HP 9000 Series 800 systems is planned for the future *HP-UX* release. Contact your HP representative for more information.

Product No.	Description
C1521B	HP Series 6400 Model 2000DC standalone SCSI DDS DAT drive
Opt. 800	DDS patch tape for HP 9000 Series 800 users

## Optical libraries supported on HP 9000 Model 8X7 systems



HP Series 6300 Model 60GB/A optical library (P/N C1704A) and HP Series 6300 Model 100GB/A optical library (P/N C1705A) are high-capacity libraries that will be supported on *HP-UX* Release 8.02 on the HP 9000 Series 800. Installation scripts and support patches for *HP-UX* 8.02 were released on April 1, 1992, and accompany the products. The driver included with *HP-UX* 8.02 allows you to mount optical disks to the file system, giving applications transparent access to each of the disk surfaces. Contact your HP representative for more information.

Product No.	Description
C1704A	HP Series 6300 Model 60GB/A optical library with 88 disks, 4 rewritable drives
<b>Must select Opt 001 and only one of Opt. 231 or 241:</b>	
Opt. 001	Add PIN 88410A single-ended SCSI Interface
Opt. 231	Include only 1 rewritable disk
Opt. 241	Include 88 rewritable disks
Opt. 120	Air shipment or export package
C1705A	HP Series 6300 Model 100GB/A optical library with 144 disks, 4 rewritable drives
Opt. 001	Add P/N 88410A single-ended SCSI interface
Opt. 231	Include only 1 rewritable disk
Opt. 241	Include 144 rewritable disks
Opt. 120	Air shipment or export package
C1720A	Upgrade from HP Series 6300 Model 60GB/A to Model 100GB/A

## HP 6000 mass storage system disk upgrade kits replaced

HP Series 6000 Models 330S/D and 660S/D mass storage systems and associated upgrade disks **will** be

removed from the October 1992 HP Price List.

Product No.	Description	Replacement
<b>Mass storage systems</b>		
C2212A	HP Series 6000 Model 330S, HP-UX	P/Ns C2214B, C2216T, C2217T
C2212D	HP Series 6000 Model 330D, Domain/OS	P/Ns C2214B, C2216T, C2217T
C2213A	HP Series 6000 Model 660S, HP-UX	P/Ns C2214B, C2216T, C2217T
C2213D	HP Series 6000 Model 660D, Domain/OS	P/Ns C2214B, C2216T, C2217T
<b>Disk upgrade kits</b>		
C2290A	330-Mbyte disk, HP-UX	P/N C2295B Opt. OMG
C2290D	330-Mbyte disk, Domain/OS	P/N C2295B Opt. OMG
C2291A	660-Mbyte disk, HP-UX	P/N C2295B Opt. OMG
C2291D	660-Mbyte disk, Domain/OS	PIN C2295B Opt. OMG

## HP 1.3-Gbyte DAT upgrade kit discontinuance

The HP 1.3-Gbyte digital-audio tape (DAT) kit **will** be removed from the July 1992 HP Price List. This

product has been superseded by the less expensive 2.0-Gbyte DAT kit.

Product No.	Description	Replacement
C2292A	1.3-Gbyte DAT for HP Series 6000 Models 330S/D, 660S/D	P/N C2297A with P/N C2283A cable <sup>1</sup>
C2292T	1.3-Gbyte DAT for HP Series 6000 Models 670SE, 1350SE	P/N C2297T

<sup>1</sup> P/N C2283A internal cable upgrade to P/N C2212/13 cabinet is needed if P/N C2212/13 serial number is less than 3712XXXXXX.

## HP Series 6400 Model 1300S DAT drive discontinuance

The HP Series 6400 Model 1300S 1.3-Gbyte small computer standard interface digital-audio tape drive (P/N C1512A) **will** be removed from the May 1992 HP Price List. The replacement product is a low-cost solution for unattended backup and

software distribution and can store 2 Gbytes of data on a single 90-meter DDS cassette at transfer rates of up to 650 Mbytes per hour. For more information, contact your HP representative.

Product No.	Description	Replacement
C1512A	HP Series 6400 Model 1300S 1.3-Gbyte SCSI DAT drive	HP Series 6400 Model 2000 2-Gbyte SCSI DAT drive. P/N C1520B

## SCSI tape support for Microsoft OS/2 1.30.1 and LAN Manager 2.1

The HP 525-Mbyte internal small computer standard interface (SCSI) tape drive and HP DDS digital-audio tape (DAT) SCSI drives are supported on HP Vectra PCs running the Microsoft OS/2 1.30.1 operating system and the Sytos Plus tape backup software. The DAT drives also are supported on all IBM PC-compatible systems.

Microsoft OS/2 1.30.1 supports the layered device driver architecture allowing both SCSI hard disks and tape devices to be connected to a single SCSI host bus adapter (HBA). The HP 525-Mbyte SCSI tape drive (P/N D2034A) and the HP DAT tape drives (P/Ns C1520A, C2224B, and C2225A) can be connected to either an extended industry standard architecture (P/N D1681A) or industry standard architecture (P/N D1682A) HBA. In addition, the HP DAT drives may be connected to an MCA HBA (P/N C2800A).

Microsoft LAN Manager 2.1 includes the Microsoft OS/2 1.30.1 operating system and the Sytos Plus 1.33 tape backup application; but the tape device drivers for the supported HP tape drives must be obtained from the Hewlett-Packard Star System Bulletin Board Service (file name OS2SYTOS.ZIP).

For standalone or local-area network client systems using Microsoft OS/2 1.30.1, Sytos Plus also can be ordered through Hewlett-Packard.

Product No.	Description
SYTR-64AA	Sytos Plus file backup manager U.S. English version
SYTR-64AD	Sytos Plus file backup manager German version
SYTR-64AF	Sytos Plus file backup manager French version

also  
in this  
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### HP 7980S SCSI tape drive support on HP 1000 A-Series

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#### Printers

### HP 2680A return credits extended for HP 5000 printers

If you purchase an HP 5000 production capacity printer, you **will** receive a return credit for the HP 2680A through October 31, 1992. Only one HP 2680A credit per HP 5000 printer is available. The return credit **will** be reduced on November 1, 1992. Contact your HP representative for program requirements.

### HP PaintJet XL printer price increase

Effective April 1, 1992, the price of the HP PaintJet XL color graphics printer increased. Orders received between April 1-30 **will** be shipped at the old price as long as delivery is within 90 days of order date.

Product No.	Description
C1602A	HP PaintJet XL color graphics printer
Opt 1AX	RS-232-C serial interface and Centronics parallel interface

#### Terminals

### HP 700/RX CD-ROM media option

Effective April 1, 1992, HP 700/RX X-server software can be ordered on CD-ROM format. X-server software media options now include 5/8-inch cartridge tape, DDS cartridge, and CD-ROM. The CD-ROM media option is available with X-server software for HP 9000 Series 300 and 800, HP Apollo 9000 Series 400 and 700 as well as Sun Microsystems Sun/4 SPARC-based systems. Hewlett-Packard is the first X terminal vendor to offer X-server software on CD-ROM media format.

As the CD-ROM format emerges as the standard media for software and data storage, you may prefer this media option for X-server software. If you are using CD-ROM drives in networks, you can use the X-server CD-ROM media option to streamline software administration methods. For more information, contact your HP representative.

Product No.	Description
C2715A	
Opt. A & F	CD-ROM for HP 9000 Series 300/HP Apollo 9000 Series 400 systems
C2716A	
Opt. A & F	CD-ROM for HP 9000 Series 800/HP Apollo 9000 Series 700 systems
C2718A	
Opt. A & F	CD-ROM for Sun/4 SPARC-based systems

### HP RISC X station 8-Mbyte SIMM price reduction

Effective April 1, 1992, the price of the 8-Mbyte SIMM DRAM module (P/N C2323A) was reduced. Users have available a choice of 2-, 4-, and 8-Mbyte SIMM DRAM modules as optional HP 700/RX user memory modules. For more information, contact your HP representative.

Product No.	Description
C2321A	2-Mbyte SIMM DRAM module
C2322A	4-Mbyte SIMM DRAM module
C2323A	8-Mbyte SIMM DRAM module

## HP Sales Offices

For more information about the products described in this issue, call your local HP representative.

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