

Announcing the new HP 9000 Model 860S 30% increase in OLTP performance over Model 855S



HP CHANNELS

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

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See back cover for subscription information.

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On the cover



New HP 9000 Model 860S provides up to 30% increase in OLTP performance over the current HP 9000 Model 855S system. It also offers an additional price/performance point within a broad performance range of high-end systems from the HP 9000 Model 850S through Model 870S/200 systems, See articles beginning on page 7.

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HP Computer Museum www.hpmuseum.net

For research and education purposes only.

PARTNERS WITH HP

Upcoming seminars for HP VABs

November and December feature two exciting new training programs for HP value-added businesses: The Winter '90 HP Apollo Workstation Technology Camp and The S.A.L.E.S. Course.

The Winter '90 Workstation Technology Camp

The Winter '90 HP Apollo Workstation Technology Camp is HP's first major technical symposium for software developers. We are offering two intensive days of workshops geared to help experienced software developers expand their HP-UX and Domain/OS skills even further. Main features include developing and improving performance with Motif, X11, operating systems, and compilers.

The workshops will be taught by HP's technical experts, people from teams currently dedicated to giving specialized technical consulting for valueadded businesses. Attendees will leave with a binder full of presentation notes, reference material, and a tape of examples to help reinforce and enhance what they've learned.

The camp will take place November 28–29 in Andover, Massachusetts, and December 5–6 in Mountain View, California. (*Note: Products not yet publicly introduced or announced will be discussed. Attendees will be required to sign a nondisclosure agreement.*) Listed below are the topics that will be offered.

- HP Apollo workstation family
- Cooperative object computing
- Understanding, selecting, and using GUI toolkits
- OSF status report
- HP-UX OS and compiler hints and tips
- Domain/OS performance hints and tips
- ICCCM and Window Manager compliance

- Programming with **SoftBench** and Encapsulator
- Performance characterization and optimization
- Motif and X11 hints and tips
- Debugging, testing, and tuning X11 applications
- Graphics overview
- Comparison of workstation and X Terminal performance
- Software distribution methods
- Concurrent FTN on the DN10000
- Domain/OS future porting path
- K+R C to ANSI C

Invitation brochures with a complete description are available by calling 800-472-5277 (in the U.S.) or 415-960-3773 (worldwide).

The S.A.L.E.S Course

The S.A.L.E.S Course is the solutionselling fundamentals course that HP has been offering to its dealers. Taught by America's Return Inc., we've now opened it up to our VABs, as well. The seminar is taught in two separate oneday sessions one to two weeks apart to better reinforce and put into practice what has been learned.

For more information and a course description, call Chip Pettibone at HP (408-447-4175) or Richard Chambers at America's Return (415-525-2504).



Date	Location	Fee*	
The HP Apollo Worksta	tion Technology Camp		
November 28–29	Andover, Mass.	\$450	
December 5-6	Mountain View, Calif.	450	
Registration: Call 800-I	HP CLASS (800-472-5277)		
The S.A.L.E.S Course			
November 1, 14	Fullerton, Calif.	495	
November 7, 15	North Hollywood, Calif.	495	
Registration: Call Amer	rica's Return Inc., at 415-525-2504		

*U.S. list prices

Hewlett-Packard reserves the right to cancel seminars or change prices, dates, and locations.

HP outranks major competitors in 1990 VARBUSINESS annual report card review

For the past four years, VARs have rated Hewlett-Packard above its major competitors in the majority of categories included in *VARBUSINESS* magazine's annual surveys. This year was no exception. HP outranked IBM in 18 out of 18 categories, DEC in 17 out of 18, and Sun Microsystems in 16 out of 18.

HP was ranked first overall in 6 of the 18 categories, including "Overall Impression" and received the only A+ ("Product Quality") given to any vendor in the 1990 Review.

In addition, HP was included in *VARBUSINESS* magazine's "Best of the Best" summary categories for "Support," "Partnership," and "Best Overall."

HP first in six categories

Here's a review of HP's first-place wins and a sampling of what our VARs and *VARBUSINESS* magazine editors had to say about HP as a computer partner:

- Quality of Products "Hewlett-Packard continues to be a winner in this category. It also received the only A+ awarded this year and achieved the largest score differentiator in product categories over the numbertwo finisher." (VARBUSINESS)
- VAR Technical Support "Hewlett-Packard is way out in front in technical support. . ." (VARBUSINESS)
 "From a support standpoint, either locally or with the national response center, we've never been disappointed with timeliness or effectiveness of response." (Bob Sans, director of national support for Pilot Systems Inc.)

- Quality of Sales Leads "Once again, Hewlett-Packard is on top, nearly a full point ahead of its nearest competitor. ." (VARBUSINESS) "HP sales leads are usually very good. They know our niche and they don't want to waste our time on something that doesn't fit." (Anonymous VAR)
- End-User Support "HP has really great stuff... It almost never breaks down in the first place, but when it does, they roll hard." (Jim Grimsley, CEO at First Total Systems Inc.)

"You get the feeling that they'll do whatever is necessary to solve a customer's problem. They're always right behind you." (Anonymous VAR)

"They take ownership of a problem when it comes to end-user support. You get the feeling they'll solve it at any cost."

- Joint Sales Calls and Other Assistance — "They make a lot of joint sales calls with us. They let us take the lead. The HP rep can make presentations with us or we can take clients to their office. It reinforces our image. We don't take advantage of them, but when we need them, they're there." (Jeff Vendetti, president of Accudate, Inc.)
- Overall Impression "Hewlett-Packard wears the laurel wreath in overall impression. The reasons? Excellent products, great management, and a real feel for the market, according to its VARs. Communications and operational skills go a long way with resellers, and Hewlett-Packard is long on both." (VARBUSINESS)

"They're very organized. HP puts one person in charge and you can get an answer from them." (Anonymous VAR)

"They bend over backwards to help us meet customers' needs that are out of the ordinary." (Anonymous VAR)

"They're dedicated to quality. It's the way they approach everything they do in the business." (Anonymous VAR)

Changes in 1990 VARBUSINESS survey process

In the past, VARBUSINESS has published the results of surveys conducted for one or more different computer vendors each month. At the end of the year, the published reports for all vendors were compared against each other and the results summarized in the annual review. This method created a situation where the individual survey results being compared for the various vendors could have been collected as much as 11 months apart.

This year, representative samples of VARs for all vendors were surveyed on a monthly basis. This means the vendors were measured for their performance over a 12-month period, rather than using a once per year rating. This new procedure ensures that survey results are more equitable for the vendors being evaluated by their VARs.

Thanks to all HP VABs for your support and loyalty to the HP Value-Added Channel Program as reflected in the 1990 VARBUSINESS survey results. HP will continue to strive to make a good program even better.

HP hosts VABs at ADUS (HP) Workstation User Group Conference

More than 40 representatives from 23 value-added businesses attended a recent reception given for them during the **ADUS** (HP) Workstation User Group Conference at the San **Diego** Marriott Hotel and Marina in California. This was the first time a VAB reception was held in conjunction with the conference.

The reception, sponsored by the HP Value-Added Channels Group, was well attended by both VAB and HP personnel. In fact, HP management support for the event was impressive. More than 20 HP managers and staff members from various HP workstation entities were on hand to meet and mingle with HP's invited VAB guests — a fact that contributed heavily to the success of the event.

HP's Computer Products Sector Marketing Manager Dick Watts, who was the official HP host for the evening event, warmly welcomed the VABs and ended his brief remarks with a wellreceived joke. The mood for the evening seemed to be one of good will and enthusiasm. Overall VAB reaction to the event was positive.

Many thanks to the HP VABs whose employees attended and supported this event. It was HP's pleasure to meet with you.

To be sure your company receives invitations to similar events in the future, please keep your company, product, and contact information listed in the U.S. HP VAB database (VALID) current and complete. See your HP representative or factory account manager for assistance in updating your VAB database listings.

Multiuser Systems

HP 250 and 260 discontinuance

All remaining HP 250 and some outdated HP 260 product numbers were discontinued on November 1, 1990. The HP 260 Series 30 and Series 40 replace most of the obsoleted products. The support period will last until November 1, 1995.

Product No.	Description
45260A	HP 250 computer system
45261D	HP 260 computer system
45006A	256-Kbyte memory board
45170A	SLIDE1250 software
45160A	TEXT/250 software
45150A	Decision support graphics software
45124R	Right to copy HP 45124A DSNIDS
45123R	Right to copy HP 45123A RJE
45116A	INP direct-connection cable
45112A	20 milliamp current loop cable
45170R	Right to copy HP 45170A SLIDE/250
45150R	Right to copy HP 45150A DSG software
45122D	INP board for HP 260 SPU
45114A	AS1 board to RS-422 connec- tion cable
45265D	Operating system upgrade kit
45124A	DSN/DS data communications software
45160R	Right to copy HP 45160A TEXT1250
45209A	APD/260 software
45120A	ASI board for 45251A
45120B	ASI board for 45260A
45122B	INP board for 45251A
45276A	CPU ROM upgrade for 45260A
45113A	RS-232-C direct connect cable
45115A	Modem/auto call unit connec- tion cable
45125R	Right to copy HP 45125A Network1250 software
45123A	RJE software
45276B	Loader ROM kit
45073A	HP 260 Series 30 SSP Starter- pack bundle
45003A	64-Kbyte memory board
45004A	128-Kbyte memory board

Product No.	Description
45007A	512-Kbyte memory board
45025U	Upgrade kit 5-Mbyte to 10-Mbyte disk
45026U	Upgrade kit 10-Mbyte to 15-Mbyte disk
45063A	Minirack cabinet 110V
45064A	Minirack cabinet 220V
45107A	Cable assembly 20mt
45110A	Interface bus cable
45111A	Modem cable HP 250
45112A	Current loop cable
45113A	Direct connect cable
45114A	ASI RS-422 interface cable
45115A	Syncron/Auto cable
45116A	Syncron direct-connect cable
45120A	ASI interface board HP 250 Series 35
45120B	ASI interface board HP 250 Series 30
45140D	AS1 interface board 5X RS-4221232-C
45141D	ASI interface board mix 312
45122B	DSN/INP interface board HP 250
45122D	DSN/INP interface board HP 260
45126D	VIDEO interface board HP 260
45262A	HP 260 computer system
45265A	System upgrade kit
45216A	GA/250 training
45220A	PAY/250 software
45226A	PAY/250 training
45230B	Operating system B upgrade kit
45230D	TIO-II utility software
45260L	Bundle HP 250 Series 30 with HP 2608A
45260S	Bundle HP 250 Series 30 with HP 2631B
45262D	Video terminal
45265A	Upgrade kit system software HP 250
45265D	Upgrade kit system software HP 250
45265E	Upgrade kit system software HP 260
45273G	Material floppy disk 9895K
45276A	CPU ROM upgrade kit
45285K	Disk drive material kit 5 Mbytes
45285L	Disk drive material kit 15 Mbytes
99083C	Data management software package
99086C	Data communication software package

HP 3000/MPE HP 3000 Series 920, 922, 932 with four internal disk drives

In order to have an HP 3000 Series 920, 922, and 932 system with four internal disk drives, it is also necessary to have two CIO HP-IBs. Manufacturing constraints do not allow these systems to be built with four disk drives and the DDS tape drive, all on one HP-IB. Both Option 007, which provides 2345 Mbytes of disk, and Option 008, which provides 2680 Mbytes, require that these systems have two HP-IB cards. Since the Series 920 and 922 systems come standard with only one HP-IB, it is necessary to order another as either Option 402 (increase HP-IB to two) or Option 403 (increase HP-IB to three). The Series 932 comes standard with two HP-IBs. As a result, ordering this system with four internal disks does not create a problem. The only potential problem occurs if Option 550 is ordered as well. This option substitutes one HP-FL for the second HP-IB. creating a system with only one HP-IB. In this case, Option 403 must also be ordered. This provides a system with two HP-IBs, in addition to the HP-FL card. Contact your HP representative for more information.

Ordering information

The following products require Option 402, which increases HP-IB to two; or Option 403, which increases HP-IB to three.

Product No.	Description
A1702A Opt. 007 Opt. 008	HP 3000 Series 920 With 2345-Mbyte disk With 2680-Mbyte disk
A1027A Opt. 007 Opt. 008	HP 3000 Series 922LX With 2345-Mbyte disk With 2680-Mbyte disk
A10464 Opt 007 Opt 008	HP 3000 Series 922RX With 2345-Mbyte disk With 2680-Mbyte disk
A1033A Opt 007 Opt 008	HP 3000 Series 922 With 2345-Mbyte disk With 2680-Mbyte disk

The following products cannot be ordered with Option 550. Substitute one HP-FL for one HP-IB, unless Option 403 is also ordered.

Product No. Description

•		
Al041A	HP 3000 Series 932	
Opt 007	With 2345-Mbyte disk	
Opt 008	With 2680-Mbyte disk	

For more information, contact your HP representative.

HP 3000/MPE HP 3000 Series 980 shipping, memory reduced

Shipment of the HP 3000 Series 9801100 began in September. In order to ship the Series 9801100 earlier than planned, initial shipments will be supported on MPE XL Release 2.2. This release supports a maximum of 256 Mbytes of main memory.

Support for a maximum of 512 Mbytes will be available on Release 3.0, scheduled for first user shipments in the first half of calendar 1991.

Do not load extra memory

The system should not be loaded with memory in excess of 256 Mbytes. The utilities necessary to dump data after system failures will not work with memory sizes greater than 256 Mbytes with Release 2.2. This will be resolved on Release 3.0.

Performance impact

Support for 512 Mbytes in Release 3.0 is done primarily for competitive reasons to position the Series 9801100 against IBM and DEC. Most applications will not need this much main memory and will run sufficiently with 256 Mbytes of memory or less. However, because of MPE XL's ability to cache data, some applications that make extensive use of caching can take advantage of the extra memory to get some additional throughput and better response times.

Memory deletion process

A special ordering process has been established for those users who have Series 9801100 field upgrades on order with memory that will exceed 256 Mbytes when added to memory currently installed.

If you have any questions or concerns, please contact your HP representative.





↓ HP 3000/MPE

ThinLAN link upgrade for HP 3000 Series 980

When upgrading to an HP **3000** Series 980, be sure to upgrade the accompanying networking products. All of the networking links and services offer upgrade credits to protect the investment users have made.

When upgrading the ThinLAN link (P/N 36923A), users moving to the Series 980 will receive a new Turbo LAN card. This new LAN card began shipping with all new systems in December 1989. Because of the processing power of the Series 980, the older LAN card may cause performance degradation. Therefore, the Turbo LAN card will be the only one supported for Series 980 systems. The user's medium attachment unit (MAU), providing the physical and electrical connection to the network cable, should be used with the Turbo LAN card.

To upgrade to the Series 980, order the following three options:

- Opt. 442 Series 980 hardware upgrade
- Opt. 350 For Series 980
- Opt. OXX Upgrade credit option, based on user's present system, select appropriate OXX option

A second Turbo LAN card will be included with the Series 980 upgrade product (PIN Al137A) for support of the DTC. Users who already have a Turbo LAN should specify the delete option (Opt. 510). Contact your HP representative to determine the type of LAN in the system and whether the delete option is required. HP 3000/MPE

HP MICRO 3000XE removed from price list

Effective January 1, 1991, the following HP MICRO 3000XE products will be removed from the HP Price List. The last day to order these products new is December 31, 1990. Remarketed versions will still be available. The HP MICRO 3000XE products will be supported at least through 1995. If you have questions on ordering these remarketed systems, or on the new HP MICRO 3000XE products, please contact your HP representative.

Product No.	Description	Replacement
32545A	HP MICRO 3000XE	32545AR remarketed system
32545AH	HP MICRO 3000XE box upgrade	32545AR rernarketed system
30545AX	HP MICRO 3000 to 3000XE upgrade	32545AR remarketed system
30545A	Series 37 to MICRO 3000XE upgrade	30545AR rernarketed upgrade
30545AE	I/O expansion box	30545ER remarketed box
30462A	2 Mbytes RAM for Series 37, MICRO 3000XE	30462AR remarketed board
30482A	4 Mbytes RAM for Series 37, MICRO 3000XE	30482AR rernarketed board

HP 3000/MPE HP System Utilization Service

The HP System Utilization Service – Application (PIN H2367A) is a consulting service that provides users with an overview of their current overall system utilization and resource use by their top five applications. It is targeted toward HP 3000 users who currently do not have performance management software in house or who need presentationquality reports.

Features and benefits

This is a new, fixed-price consulting service that expands on the information available in the HP System Utilization Service — Global (PIN H2366A). It provides users with a presentationquality color graphic report that summarizes system resource utilization. The report includes an executive summary written by a performance specialist. The service lets users visualize, interpret, and effectively communicate the current utilization of their system for a low, fixed price. It also allows users to determine which applications are the heaviest users of system resources, and the service levels provided to users of these applications.

HP product-line positioning

This service assists users in understanding the utilization of their systems. It provides additional information **on** system resource usage by applications that are not available in the Global version of the System Utilization Service. Contact your HP representative for more information.

HP 3000/MPE

Information Access prices reduced

Effective October 1, Hewlett-Packard reduced the prices on all HP NewWave Office products that include Information Access. The price reductions range from 13% on entry level systems to 45% on midrange systems (U.S. list). The price reductions span MPE V, MPE XL, and HP-UX system products. Below is a list of the affected products. Contact your HP representative for more information.

Product No. Description MPE Vproducts

	B1726A*	Information Access host license
	Opt. 310	For HP 3000 Series 37.
	Opt. 310	MICRO 3000
	Opt. 320	For HP 3000 Series 4X, 5X
	Opt. 320	For HP 3000 Series 6X, 70
	Орг. 550	Tor III 5000 Berles 0X. 70
	MPE XL prod	lucts
	B1716A*	Information Access XL host
		license
	Opt. 310	For HP 3000 Series 920.
		922LX
	Opt. 315	For HP 3000 Series 922RX
	Opt. 320	For HP 3000 Series 925.932
	Opt. 330	For HP 3000 Series 935
	Opt. 335	For HP 3000 Series 949
	Opt. 340	For HP 3000 Series 95X, 96X
	Opt. 350	For HP 3000 Series 980
	B1717A*	Information Access SQL host
		license
	Opt. 310	For HP 3000 Series 920,
	1	922LX
	Opt. 315	For HP 3000 Series 922RX
	Opt. 320	For HP 3000 Series 925,932
	Opt. 330	For HP 3000 Series 935
	Opt. 335	For HP 3000 Series 949
	Opt. 340	For HP 3000 Series 95X, 96X
	Opt. 350	For HP 3000 Series 980
-		

Product No. Description HP-UX products B1707A* Information Access SQL host license For HP 9000 Model 808 Opt. AH0 For HP 9000 Model 815 Opt. AEL For HP 9000 Models 825, 832 Opt. AE5 Opt. AE6 For HP 9000 Model 835 Opt. AEN For HP 9000 Models 840, 845 Opt. AEP For HP 9000 Models 850, 855 Opt. AHI For HP 9000 Model 870

*Corresponding price reductions have also been made on all other HP NewWave Office products and upgrades containing Information Access Services.

Note: Prices for user-based license product options remain unchanged.

HP 3000/MPE HP Spell price change

Effective October 1, 1990, HP Spell (PIN 3652A, U.K. version) changed price. HP Spell offers spelling verification and correction capabilities on HP 3000 family of business computers. HP Spell can be accessed interactively with HP DeskManager and HP TDP using a British dictionary. Contact your HP representative for more information.

Product No.	Description
3652A	HP Spell (U.K. version)
Opt. OCD	Credit upgrade (Opt. 310-320)
Opt. OCE	Credit upgrade (Opt. 320-330)
Opt. OCF	Credit upgrade (Opt. 330-340)
Opt. 310	For HP 3000 Series 37, 922LX
Opt. 320	For HP 3000 Series 4X, 5X,
	922, 922RX, 925, 925LX, 932
Opt. 330	For HP 3000 Series 6X, 70,
	935
Opt. 340	For HP 3000 Series 949, 95X,
	960,980

HP 3000/MPE

HP Schedule price change

Effective October 1, the price of HP Schedule (PIN 27522A) was changed, localized products inclusive.

HP Schedule used with

HP DeskManager enables the work of arranging meetings to be offloaded, therefore freeing up the user's time to perform other tasks. The product will inform when individuals are available to be booked for meetings, ensuring the optimum time is chosen for the meeting, as well as using the most up-to-date availability of information.

	Product No.	Description	
1	27522A	HP Schedule	
	Opt. OCD	Credit upgrade (Opt. 310-320)	
	Opt. OCE	Credit upgrade (Opt. 320-330)	
	Opt. OCF	Credit upgrade (Opt. 330-340)	
	Opt. 310	For HP 3000 Series 37, 922LX	
	Opt. 320	For HP 3000 Series 4X, 5X,	Į
		922, 922RX, 925, 925LX, 932	Ì
	Opt. 330	For HP 3000 Series 6X, 70,	
		935	
I	Opt. 340	For HP 3000 Series 949, 95X.	
	-	960,980	
i			i

HP 3000/MPE HP TDP price change

Effective October 1, the price of the HP Text and Document Processor (HP TDP, PIN 36578A) was changed. HP TDP is a formatting mark-up language for the HP 3000 business computers, largely found in MIS departments for technical host-based word-processing functions. Contact your HP representative for more information.

Product No.	Description
36578A	HP TDP
Opt. OCD	Credit Upgrade (Opt. 310-320)
Opt. OCE	Credit Upgrade (Opt. 320-330)
Opt. OCF	Credit Upgrade (Opt. 330–340)
Opt. 310	HP 3000 Series 37, 922LX
Opt. 320	HP 3000 Series 4X, 5X, 922,
	922RX, 925, 925LX, 932
Opt. 330	HP 3000 Series 6X, 70. 935
Opt. 340	HP 3000 Series 949, 95X, 960,
-	980



HP 3000/MPE HP OfficeConnect to PROFS discontinued November 1

HP OfficeConnect to PROFS (PIN 27521A/R) was discontinued November 1. HP OfficeConnect to PROFS provides a communications link between HP DeskManager and IBM's Professional Office System (PROFS) Electronic Mail Systems. It has been replaced by HP OfficeConnect to X.400. Contact your HP representative for more information.

HP 1000

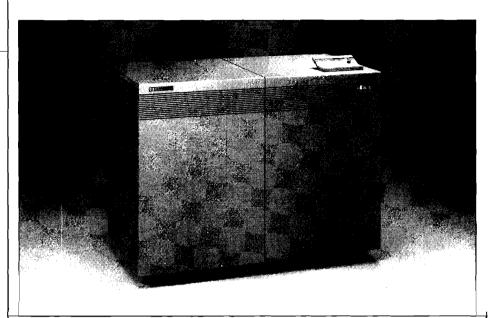
RTE-A and RTE-6 now support HP-IB DDS tape drive

HP's new HP-IB version of the DDS tape drive, the HP Series 6400 Model 1300H, is now supported under both RTE-A and RTE-6. The 1.3-Gbyte tape drive is ideal for archival and unattended backup storage.

By the end of the year, the SCSI version of the DDS drive will be supported under RTE-A using the SCSI interface (PIN 12016A). The data stored on the HP-IB DDS drive will be fully compatible with data written on the SCSI DDS drive. This provides an ideal mechanism for transferring large data files between HP 1000 A-Series computers, or between EIF-Series and A-Series computers.

The Model **1300H** is supported at RTE-A and RTE-6 revision 5.1 and 5.2 by genning the device as an HP 7980 tape drive at 1600 bpi.

New HP 9000/HP-UX New HP 9000 Model 860S system



The HP 9000 Model 860S (PIN A1843A) is both an upgrade from the existing Models 850S/855S as well as a standalone system. The HP 9000 Model 860S offers an increase of up to 30% in online transaction processing (OLTP) performance over the Model 855S. The Model 860S includes one processor, 48 Mbytes ECC RAM, and a 64-user HP-UX license. The Model 860S is field upgradeable to the Model 870S/100.

The HP 9000 Model **860S** is targeted for users and applications with increased levels of OLTP requirements relative to the Model **855S**. Examples of markets where these opportunities arise include telecommunications, manufacturing, state and local government, lodging, and medical.

Features and benefits

Additional price/performance point within a broad performance range of high-end systems from the Model 850S through the Model 870S/200 — The Model 860S adds another wellpositioned performance point in the high end of the HP 9000 family giving users more choices to choose the right systems today, with the assurances of field upgrades for the future.

- Up to 30 percent increase in OLTP performance relative to the HP 9000 Model 855S — Users who need increased levels of OLTP performance but do not yet need the performance levels of the Model 870S/I00 can now choose the Model 860S.
- 256-Mbyte ECC RAM support With HP-UX 7.06, the Model 860S supports up to 256 Mbytes of ECC RAM. This gives users the ability to configure increased amounts of memory into their systems to assure system performance is optimized. This is especially important in OLTP applications.

HP product-line positioning

The Model 860S is positioned between the Models 855S and Model 870S/100. The Model 860S gives users up to 30% increase in OLTP performance over the Model 855S for users requiring increased levels of OLTP performance over the Model 855S, but who do not yet need the performance of the

continued on next page

Model 870S/100. The addition of the Model 860S gives users an additional performance level within the high-end package of the HP 9000 family giving users increased flexibility to configure systems that best fit their needs today, with the confidence of field upgradeability tomorrow. With the Model 860S, users get a truly smooth board upgradeable growth path within the high end of the HP 9000 product family. HP continues to deliver on the promise of scalability.

Configuration information

The HP 9000 Model 860S uses the same system cabinet, memory, I/O subsystems, and power supplies as the existing Models 850S and 855S. With HP-UX Release 7.06 (required for the Model 860S), the memory support is increased to a total of 256 Mbytes supported using the 16-Mbyte memory card. The product structure for the Model 860S is identical to the Model 855S.

HP 9000 Model 860S benchmark information

Benchmark description	Relative gain over Model 855S
Large complex simulation program	12-19%
Batch database application	Up to 30%
Multiuser general-purpose workload	12 %
Interactive Oracle*	23%
Interactive Informix*	22%

*specific user benchmark

Ordering information

Product No.	Öpt.	Description
A1843A		HP 9000 Model 860S includes cabinet, power supply, one HP-IB, one 6-channel MUX, 64-user HP-UX license, 48 Mbytes RAM, C compiler, symbolic debugger, assembler, and I/O library
A1844A		Model 850S to 860S upgrade includes Model 860S processor board
All41A	725	Model 860S to Model 870S/100 upgrade

Note: The Model 860S requires HP-UX 7.06. Users must ordrr media and manuals for HP-UX 7.06 (P/N 92673A). Also, Opt. 519 for P/Ns All14A and All18A has been discontinued and will be replaced by the above products.

Contact your HP representative for more information.

HP 9000/HP-UX

HP-UX Release Z06 required for HP 9000 Models 860S and 870S/100

HP-UX 7.06 (PIN 92673A) is required for use with HP 9000 Models 860S and 870S/100. It is targeted toward all HP 9000 Model 860S and 870S/100 users.

Features and benefits

- Models 860S and 870S/100 supported under HP-UX Release 7.06 — Users who want to order and install a Model 860S or 870S/100 can do so without waiting until HP-UX Release 8.0.
- Supports 256 Mbytes memory Allows users to configure the Model 860S or 870S/100 system with increased amounts of memory over the current 128-Mbyte limit of HP-UX Release 7.0.

HP product-line positioning

HP-UX Release 7.06 is required for HP 9000 Models 860S and 870S/100 (this requirement is for Models 860S and 870S/100 only). Users with HP-UX 7.06 should upgrade to HP-UX Release 8.0 after the introduction of HP-UX 8.0 to take advantage of the HP-UX features that will be supported in RP-UX 8.0. Contact your HP representative for more information.

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Workstations

General Network License System

Software licensing has historically consisted of node-lock licensing and sitelicensing. With today's prevalence of distributed computing in heterogeneous environments, these licensing models are no longer sufficient. If an application is node locked, it restricts an end user's ability to utilize distributed computing by tying a license to a particular machine, even though the software itself need no longer be resident locally. If the software is to be licensed on a sitewide basis, the end-user cost can easily become prohibitively expensive. Additionally, these licensing models do not provide the ability to match the licensing and pricing of a product to its actual usage and perceived value. The Network License System (NetLS) changes this by providing flexible license distribution, management, and enforcement capabilities.

NetLS provides the application developer and the end user a wide variety of ways in which to license or purchase software. These methods include: concurrent-use licensing, transactionbased licensing, node-lock licensing, and site licensing. Concurrent-use licensing controls the number of simultaneous users who can access an application, regardless of who the users are and what machines they are using. This gives application end users the ability to purchase only the number of licenses they require and share those licenses amongst users around the network. Transaction-based licensing supports licensing based on the number of invocations of an application; this is useful for software that may be used more sporadically.

New means of software distribution, trial delivery, and purchase/sale can all be accomplished with the incorporation of NetLS into a software product. To facilitate software distribution, a vendor can load all software on a single tape or CD and grant access only to those products actually purchased. Additionally, the vendor could distribute the software with trial licenses that enable limited usage based on time or number of invocations. Actual purchases of those applications are then simplified, and require only the transmittal of permanent licenses. Vendors can also investigate new sales options - such as leasing — where appropriate. These new methods save both selling and distribution costs while increasing a software product's visibility and trialability in the marketplace.

NetLS is built on top of the Network Computer System (NCS), which handles the disbursement of processing tasks across machines in distributed. multivendor networks. NCS is the foundation for the Open Software Foundation's Distributed Computing Environment (DCE) offering. By utilizing NCS technology, NetLS allocates its services across a network, end users are assured of continued access to application licenses, and network traffic is kept to a minimum. Additionally, NetLS is designed to easily and efficiently scale as networks increase in size, distribution, and heterogeneity.

Version 2.0 of the Network License System is now shipping on the Apollo/ Domain platform, while versions for the HP-UX, Sun, and DEC platforms will be available in the coming months. NetLS offers easy-to-use graphical user interfaces and extensive report generation facilities. The reports are based on software usage metrics that NetLS automatically tracks. Contact your HP representative for more information.



Domain/OS SR10.3 now available

SR10.3 started shipping to users on October 1, 1990. All users (including international users) should receive the SR10.3 release in six to eight weeks, well before January 1991. Upgrading to this release from SR10.1 or SR10.2 should have a minimal impact. Installation from SR10.1 or SR10.2 can be done with the standard installation tools (Minst, or Distaa and Install++). This is a very straightforward installation and it does *not* require a reformat of the hard disk (invol).

Benefits of upgrading to SR10.3

Upgrading to SR10.3 holds many benefits. Below is listed just a brief synopsis of these benefits.

- Fixes to defects against SRIO.X Operating System releases. Much attention has been paid to making SR10.3 a "quality" release and the release is by far the most stable **Domain/OS** release.
- Support for the new HP Apollo 9000 Series 400 workstations.
- Support for increased number of user processes and locks on the Apollo Series 2500, 3500, 4000, 4500,5500, 10000, and HP Apollo 9000 Series 400 workstations.
- Greater standards compliance with POSIX (only four exceptions), and full support of ANSI C (with CC version 6.8).
- Performance improvements and enhancements to many system components such as X Window System and TCP/IP.

Impact on optional products

Many optional products have been revised since SR1O.1 and SR10.2. Users can check to see if they are using the latest version of a particular optional

continued on next page

product by consulting the product compatibility matrix in the SR10.3 Software Release Notes (PIN 017957-A01, pages 1–1, 1–2). Provided that users upgrade their optional products to the latest versions, there are no reported problems running optional products on SR10.3. Some products have been supplanted by newer products, for instance ISNA 3270 provides new functionality as well as containing the functionality previously found in SNA3270 and LU 6.2.

Impact on hardware

All hardware supported under SRIO.I and SR10.2 is also supported under SR10.3. There are no known board revision incompatibilities with SR10.3. This means that no machines running SR10.1 should require hardware service in order to upgrade to SR10.3. Contact your HP representative for more information. See the following article for details on the SR10.1 discontinuance.

General

Support for SR10.1 discontinued

As of January 1, 1991, support for the DomainIOS release 10.1 will be discontinued. The SR10.1 operating system was first shipped in December 1988; a year later, in December 1989, the SR10.2 operating system was shipped. The SR10.3 operating system was shipped in the first week of October 1990. As of January 1990, SR10.1 will be two years old and users will have had a full year to upgrade.

Beginning January 1, users calling in to the HP Response Center with problems on SR1O.1 will be encouraged to upgrade to the latest DomainIOS release 10.3. Patches to SRIO.1 will not be provided. Support for DomainIOS release 10.2 will still be provided. This is in keeping with the Hewlett-Packard policy of supporting only the current release and the most recent previous release.

There has been some confusion in the past as to whether the previous release referred to the previous "major release" (SR8, SR9, SR10) or whether this referred to the previous "point release" (SR10.1, SR10.2, SR10.3). For the purposes of this policy, "release" is defined as a software distribution that goes out to the entire maintenance base. Thus, when 10.3 ships, 10.2 will be the "previous release." We will be notifying the user base of this, both by sending out a letter to the entire maintenance base and by posting to the internet in Comp.sys.apollo.

For more information about SR10.3, see previous article.

Apollo/IBM networking products obsolescence

The Apollo/SNA-3270 (PIN LA70Axxx) and Apollo/SNA LU 6.2 (PIN LA36Axxx) products will be replaced by the combination of the enhanced Integrated SNA products (ApolloIIntegrated SNA 3270, PIN LA36Axxx, and/or Apollo/Integrated SNA LU 6.2 (PIN LAAIAxxx) and the Integrated SNA Facility, effective February 1, 1991. Starting on that date, users will be unable to order the existing products and should order the enhanced products instead (see related article). Users on support services will receive the enhanced product automatically. Consequently, Hewlett-Packard will no longer support the existing products.

PIN LA70Axxx, Apollo/SNA-3270 – Replacement PIN LAA20xxx, ApolloIIntegrated SNA 3270

 PIN LA36Axxx, Apollo/SNA LU
 6.2 – Replacement P/N LAAlAxxx, ApolloIIntegrated SNA LU 6.2 See the accompanying article in this issue of HP *Channels* for more details about the replacement products.

Apollo Introducing enhanced Apollo/IBM products and channel controller

Apollo DomainIOS connectivity to IBM computers will be enhanced with the introduction of the Integrated Systems Network Architecture (ISNA) products, as well as the Channel Controller-AT product. The new products will replace existing SNA products, which will be obsoleted as described in the accompanying article.

ApolloIIntegrated SNA Facility

When the ApolloIIntegrated SNA Facility (PIN LAA0Axxx) is used in conjunction with an SNA interface card (either the Serial Controller-AT card or the Channel Controller-AT card, below). it provides communications between an Apollo workstation and an IBM processor.

Features and benefits

- The SNA Facility is the base IBM communications requirement, along with the SNA interface card. It offers an important new advantage to users, who now have the ability to run Integrated SNA 3270 and Integrated SNA LU 6.2 simultaneously. They will be able to run other Integrated SNA services as they become available.
- The product includes run-time code to implement LU 6.2 verbs, which means that users whose LU 6.2 applications already include the LU 6.2 verb calls can run the application directly on the SNA Facility product. The Apollo/Integrated LU 6.2 product is not required in this case.





Apollo/Integrated SNA 3270

The Apollo/Integrated SNA 3270 (PIN LAA20xxx) allows interactive communications between an Apollo workstation and an IBM System/370compatible mainframe using SNA 3270 protocols. Apollo workstation terminals, monitors, and printers on the Apollo workstations running ISNA 3270 emulate the functions of IBM 3278 terminals (Models 2, 3, 4, and 5).

Features and benefits

- Apollo/Integrated SNA 3270 enables Apollo workstations to emulate IBM 3270 terminals. This allows the use of the Apollo workstation to carry out interactive 3270 sessions with the IBM host.
- An important new feature of this product is PC file transfer, which allows users to transfer files across the SNA network.

The combination of this product (PIN LAA20xxx) and the Integrated SNA Facility (PIN LAAOAxxx) replaces PIN LA70Axxx, which will be removed from the February 1991 HP Price List. This product is licensed per session on a concurrent network license basis.

Apollo/Integrated SNA LU 6.2

The ApolloIIntegrated SNA LU 6.2 (PIN LAAIAxxx) extends Apollo's networking capabilities to include IBM's Advanced Peer-to-Peer Communications (APPC). It allows program-toprogram communications between the Apollo workstation and an IBM computer.

Features and benefits

ApolloIIntegrated SNA LU 6.2 is a developer's kit that enables Apollo workstation users to develop an application program on the workstation. The program can then communicate with a related application program on an IBM processor, such as a System/370 mainframe or AS/400. Users who need to distribute processing across their network have access to mainframe and IBM system databases while utilizing the capabilities of the Apollo workstation.

The combination of PIN LAAIAxxx and the Integrated SNA Facility PIN LAAOAxxx replaces PIN LA36Axxx, which will be removed from the February 1991 HP Price List.

Channel Controller-AT

The Channel Controller-AT (PIN COM-CHAT) provides high-speed channel connections to the IBM mainframe for workstations equipped with an AT-compatible bus. All of the integrated SNA products previously listed will run over the Channel Controller-AT card.

Features and benefits

- This product allows ApolloIIntegrated SNA 3270 and ApolloIIntegrated SNA LU 6.2 to run over a high-speed channel to the IBM processor, so that users who have requirements for high data transfers can communicate between the Apollo workstation and the IBM processor without loss of performance.
- Transfer of SNA data has been tested at 55 Kbytes per second, and non-SNA data at 600 Kbytes per second. This gives the user high-volume data transfer capability.

Channel Access Method Protocol

The Channel Access Method Protocol (P/N LAA90BAD) is an application development kit for moving non-SNA data across the channel (using the Channel Controller-AT product) between the Apollo workstation and the IBM mainframe.

Features and benefits

• The product is a tool kit for writing non-SNA file transfer applications. Users who need to transfer non-SNA data at channel-attached speeds can use this product to meet that requirement.

Ordering information

Product No.	Description
LAAO	Apollo/Integrated SNA Facility
LAA20xxx	Apollo/Integrated SNA 3270
LAAIAxxx	Apollo/Integrated SNA LU 6.2
COM-CHAT	Channel Controller-AT
LAA90BAD	Channel Access Method Protocol

Apollo COM-EXEC for T1 bridging

The recently introduced COM-EXEC T1 bridge card is a high-speed serial processor and driver software that connects Apollo Series 3500 or 4500 workstations or servers to T1 communications lines for bridging of Domain/OS and TCP/IP protocols between geographically separated Apollo workstations. It is targeted toward companies with Apollo workstations in separate locations in which they would like to configure and administer as a single network.

Features and benefits

For users who want a single Apollo Domain network to span a wide geographic area, the new COM-EXEC product fills this need when used in pairs to connect Series 3500 or 4500 workstations (or equivalent servers) to the opposite ends of a T1 communications line. The resulting network has all the transparency and administrative convenience that Apollo workstation users demand. COM-EXEC provides equivalent functionality to the COM-BRG-A product, which runs only in DSP 80/90 servers.

Configuration

A COM-EXEC drives one end of a Tl communications line, and requires a host of Series 3500 or 4500 workstation or server running SR10.3 or greater. A minimum of 8 Mbytes main memory in the host is recommended. A Series 3500 or 4500 host can accept a maximum of two COM-EXEC boards.

Each COM-EXEC to Tl connection requires a CSU/DSU modem (supplied by user) and a cable (CB-SYNC-232, CB-SYNC-449, or CB-SYNC-V35, available from HP). COM-EXEC is not compatible with COM-BRG-A. A COM-EXEC and a COM-BRG-A will not interoperate at opposite ends of a Tl line.

Norton Utilities ported to HP-UX

The Norton Utilities for HP-UX brings the legendary Norton Utilities including UnErase — HP-UX for unprecedented power, safety, and convenience. Interactive Systems Corporation, in partnership with Peter Norton Computing, Inc. and Segue Software, Inc., has implemented the famous DOSbased Norton Utilities on an HP-UX.

Comprehensive and flexible, The Norton Utilities for HP-UX helps users rescue erased files and directories, diagnose disk problems without damaging "live" data, make it easy for users to manage files, and replaces cumbersome "expert" systems tools with friendlier and more powerful fullscreen equivalents.

With its full-screen color interface, pull-down menus, and on-line help, The Norton Utilities for HP-UX is the de facto standard for system utilities providing users with a number of new system tools and more convenient versions of HP-UX commands. In all, there is a total of 18 utilities.

Target markets

- Primary Commercial and beginning systems users who interact with HP-UX only through application menu or window interface, and need to recover lost or erased files.
- Secondary Experienced or technical systems users such as system administrators and software developers who need to find out how much space is occupied by a file or want to move it to another file system, or use Norton Shell Enhancer to develop tutorial demonstrations.

Features and benefits

- use Norton UnErase to recover lost or erased files
- use Norton List Directory to print a maintenance list of system files, directories, and subdirectories
- quickly locate files. or search for text within a file, and operate within huge directory hierarchies
- use WIPEDISC and WIPEFILE to ensure confidential data has been irrecoverably erased

use Norton File information to organize large directories and reduce clutter

Norton Utilities port is scheduled for completion and release by February 1991. The product will be on the HP Price List and initially remarketed through HP DIRECT for the U.S. It will also be preloaded on Instant Ignition disk drives and distributed by releasing a password over the phone to those end users who wish to purchase it.

The product will be released on HP 9000 Series 300 and 400 workstations. A promotional introductory price will be available in the first few months of the product release. A risk implementation will follow the first release. Norton Utilities will be OSF/Motif based, and will run under X11.

Hewlett-Packard will be the first UNIX system workstation platform in the industry to have Norton available; other platforms may follow. Contact your HP representative for more information.





^{HP-UX} *V/360 restructuring*

Currently, the V/360 VXI embedded controller (PIN E1480A) includes a license-to-use for HP BASICIUX and HP-UX. The software necessary to access VXI with the V/360 (PIN E1481A/L) is sold separately.

Two issues have come up that warrant a change in the V/360 structure. First of all, the HP BASIC workstation platform will now be able to support the V/360. Therefore, some users will not have a need for the HP BASICIUX or HP-UX licenses, but will have a need for an HP BASICIWS license. (The HP BASICIWS 6.0 is now structured as a separate license and media/manuals product.)

Secondly, users have sent in requests to include the PIN El481A/L software with the V/360, since it is inconvenient to order it separately.

Listed below is the new structure for the V/360 (which became effective October 1):

Product No.	Description
E1480A	V/360 controller, included in the standard product: HP-UX platform; HP-UX license-to- use (no change from present structure); BASICIUX license- to-use (no change from present structure); PIN El481L VXIbus drivers license-to-use (addition to structure); and El481A Opt. AGI VXIbus software (addition to structure)
Opt. AGC	Substitute HP-UX platform with HP BASIC workstation platform, instead of the above components. will include: HP BASICIWS license-to-use; P/N E1481L VX1bus Drivers license-to-use; and P/N E1481A Opt. AGC VX1bus software for HP BASICIWS

The price of the V/360 has been increased. It is now the current list price of P/Ns E1481A and E1481L combined. As before, users may need to order the operating system media and manual products (the media and manuals for HP-UX, HP BASICIUX, or HP BASICIWS).

The VXIbus drivers (PIN E1481A) are required for the V/360 to access the VXI backplane to both message-based and register-based devices. They are not required when a Command Module is being used, but these drivers do provide many features and performance improvements that can be advantageous even when a Command Module is installed in the mainframe. Without these drivers, there is no difference between a standard 360 and a V/360, except for the form factor.

HP-UX HP 9000 Model 310 discontinuance

After a long and successful product life, the time has come for the HP 9000 Model 310 to be discontinued. The Model 310 was first introduced in August 1985. Since that time, over 65,000 systems have been sold, making it the most successful HP 9000 Series 300 workstation. The models affected by this discontinuance are listed below.

P/N 98561A, Model 310 SPU – Replaced by Model 332 SPU (PIN 98572A)

PIN 98580B, Model 310M – Replaced by Model 332MMA (PIN 98580C)

 PIN 98581B, Model 310C — Replaced by Model 332CMA (PIN 98581C)

The Model 310 will enter into a 10-year support life beginning April 1, 1991. Contact your HP representative for more information.

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Personal Computers

New User License Program products

The User License Program lets direct and dealer channel users purchase PC office software standard packages (disks and manuals) and user licenses (allows copying standard package disks onto one PC). We recommend a minimum user license order of 25. For some products, direct channel users can buy one manual per user license, or a user license upgrade that allows copying upgraded standard package disks onto one PC.

Direct channel users may qualify for volume discounts on VEU Exhibit Al000, VAR Al001, or Educational Exhibit AE09V (refer to exhibits for specific discounts). Manuals are nondiscountable. Users purchasing dealer channel products can get comparable prices.

HP NewWave, NewWave Access, and AdvanceLink DOS are already participating in this program.

Product No.	Description
D2101A	HP AdvanceMail standard product
D2111A	HP AdvanceMail user license
D2121A*	HP AdvanceMail user manual
D2131A*	HP AdvanceMail documenta- lion set
D2431A*	HP AdvanceMail user license upgrade
D2103A	HP NewWave Mail standard product
D2113A	HP NewWave Mail user license
D2123A*	HP NewWave Mail license
D2433A*	HP NewWave mail user license upgrade
D2104A	HP AdvanceLink Windows standard package
D2114A	HP AdvanceLink Windows user license

Product No.	Description
D2124A*	HP AdvanceLink Windows manual
D2434A*	HP AdvanceLink Windows user license upgrade
D2107A	HP AdvanceLink Mac standard package
D2117A	HP AdvanceLink Mac user license
D2125A*	HP AdvanceLink Mac manual
27536A*	HP Word PC standard product
27536J*	HP Word PC user license product
27536K*	HP Word PC manual
27591A*	HP Word PC user license upgrade
32583F*	HP AdvancePrint standard product
32583J*	HP AdvancePrint user license
32583K ^L	HP AdvancePrint manual

*Direct Channel only products

Other products will migrate from the Corporate Site License Program to the new User License Program by December 1, 1990. Contact your HP representative for more information.

New version of SCO UNIX operating system

SCO UNIX System V/386 Release 3.2.2 from Hewlett-Packard is available on the November 1 HP Price List. Release 3.2.2 is an update of Release 3.2.0. SCO UNIX System V/386 is a multiuser, multitasking, run-time operating system for HP Vectra 386 and 486 PCs. SCO UNIX System V/386 delivers full 32-bit multiuser functionality and complies with all major international standards.

New features of Release 3.2.2

support for up to 256 Mbytes of memory

enhanced and additional ISA SCSI drivers

optical media support for CD-ROM

performance improvements

system administration improvements

System requirements

HP Vectra 386 or 486 PC

- minimum 40 Mbytes of hard disk storage
- minimum 4 Mbytes RAM memory
- console, either a terminal connected to a serial port, or a graphics
 subsystem

Ordering information

1	Product No.	Description
	D2046C Opt. ABA Opt. ABB Opt. ABM	SCO UNIX System V/386 Release 3.2.2, operating sys- tem, 5 ¼-inch disk media U.S. English version Europe multilingual version Latin American version
	Opt. ABA Opt. ABA Opt. ABB	SCO UNIX System V/386 Release 3.2.2, operating sys- tem, 3%-inch disk media U.S. English version Europe multilingual version

These products replace SCO UNIX System V/386 Release 3.2.0 (P/Ns D2046A and D2046B, same language options as above). An upgrade kit to move Release 3.2.0 users to Release 3.2.2 will be available through HP DIRECT (see phone ordering numbers listed in the Supplies section of this publication).

SCO is a trademark of The Sanfa Cruz Operation.

UNIX is a registered trademark of AT&T in the U.S.A and other countries.

Desktop Discontinuance of HP Vectra 486 Model 150 PC

The HP Vectra 486 Model 150 PC (PIN D2221A) will be discontinued and removed from the HP Price List on December 1, 1990. Orders will be accepted through December 31, 1990.







The HP Vectra 486 Model 150 PC utilizes the 152-Mbyte ESDI drive (PIN D1446A), which was discontinued November 1, 1990. The capacity points offered by the 108- and 158-Mbyte ESDI drives are now provided by the new 120- and 168-Mbyte Embedded-AT disk drive accessories introduced October 1, 1990. Users should migrate to the new Embedded-AT drives as they offer more capacity, improved reliability, and better performance at a lower price.

Users who need less than 200 Mbytes of mass storage are encouraged to add the new Embedded-AT accessory drives to an HP Vectra 486 Model 1 PC (PIN D2220A). This solution allows the user to take advantage of the improved hard disk drive features.

Ordering information

Product No.	Description
D1679A	120-Mbyte Embedded-AT hard disk drive
D1680A	168-Mbyte Embedded-AT hard disk drive
D2220A	HP Vectra 486 Model 1 PC

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Peripherals

General PC utilities applications available for HP 4951C/52A/ 54A/I/AX

The HP 495X PC utilities (PIN 5062-2183), which ship standard with every HP 4951C, 4952A, and 4954A/I/AX, are a set of application programs that run on IBM-compatible MS-DOS^B computers. The utilities enable users to remotely control and analyze test data at a central site. They are targeted toward network service organizations (NSOs). The utilities are available as PIN 5062-2183 for users who already own an HP protocol analyzer.

Features and benefits

- PC remote control software This software cost-effectively allows users to control HP WAN protocol analyzers from a PC, eliminating the need for a dedicated protocol analyzer at both the central and remote test sites.
- PC file compatibility software Allows users to move disk files between HP WAN protocol analyzers and MS-DOS PCs. Once files are in the MS-DOS environment, they can be analyzed with PC protocol analysis software or other user-developed analysis tools.
- PC protocol analysis (decode) software — Allows users to perform analysis of data captured on HP protocol analyzers. Decodes provided include: BOPs (HDLC, SDLC, LAP, LAPB); COPs (async, BSC, Pollselect, IPARS); X.25 (including facility fields); and SNA (including BIND parameters).
- *Applications* Technicians can use the dedicated protocol analyzers to

run tests and capture problems. The captured data can then be forwarded to a central site where detailed and more time-consuming analysis can be performed in a post-processing mode, using an MS-DOS PC.

In addition to post processing data on a PC, the decoded displays can be stored to a disk file and then easily integrated into documentation complete with the appropriate annotations.

Contact your HP representative for more information and for a copy of the PC utilities product brief, PIN 5952-3699.

MS-DOS is a US. registered trademark of Microsoft Corporation.

Mass Storage

DDS suppport on HP Apollo 9000 Series 400 workstations

HP's DDS-format tape drives provide 1.3 Gbytes capacity on a single piece of media. With a transfer rate of 11 Mbytes a minute, a user can potentially back up over 600 Mbytes in less than an hour. The drives are ideally suited for lowcost unattended backup of workstations and networks. We have had many enquiries about support for DDS (DAT) tape drives on the HP Apollo **9000** Series 400 workstations – both HP-UX and Domain O/S. The following information clarifies both current and planned support.

HP-UX 7.017.03 support

 Series 400s — supports internal DDS tape drive (see Note 1); standalone DDS tape drive; and storage subsystem (HP Series 6000 Models 330S/660S), DDS option.

continued on next page

 Series 400t — supports standalone DDS tape drive; and storage subsystem (HP Series 6000 Models 330S/660S), DDS option.

Notes

- 1. The Internal DDS tape drive for the HP Apollo 9000 Series 400s deskside system currently can be ordered only as a field upgrade kit (P/N Al447A). The factory-installed version will be available when the 68040-based systems are introduced.
- 2. HP-VX does not currently support a DDS boot capability. This is under investigation for possible inclusion in HP-UX 8.0.
- 3. Series 300 workstations The standalone DDS drive and the DDS option for the storage subsystem (HP Series 6000 Models 330S/660S) are also supported on the Series 300 workstations under HP-VX 7.0.

Domain O/S support

The plan is for DDS support on Domain O/S (for the Series 400 workstations) to be introduced at the same time as the 68040-based workstations. DDS support is also planned for the DN2500, DN3500, DN4500, and DN10000 systems.

Contact your HP representative for more information.

Ordering information

Product No.	Description
C1512A	Standalone SCSI DDS tape drive
C2212A/13A Opt. 003	HP Series 6000 Model 330S/ 660S storage subsystem. SCSI DDS option Factory installed
C2292A	Field upgrade kit
For Series 40	0 internal SCSI DDS tape drive
A1447A	Field upgrade kit
92283A	Box of five DDS cassettes

Mass Storage

108- and 152-Mbyte hard disk drive discontinuance

The 108-Mbyte (PIN D1445A) and 152-Mbyte (PIN D1446A) half-height 5¹/₄-inch ESDI hard disk drive accessories for the HP Vectra QS/16S, QS/20, and 486 PCs will be removed from the November HP Price List. Orders will be accepted through November 30, 1990.

Due to the October introduction of the new 120-Mbyte (PIN D1679A) and 168-Mbyte (PIN D1680A) embedded-AT disk drive accessories (see October issue of *HP Channels*), the 108- and 152-Mbyte drives are no longer needed. Users who need these capacity points should migrate to the improved 120and 168-Mbyte hard disk drives. These new drives provide more capacity, improved reliability, immediate availability, and better performance — all at a lower cost.

Muss Storage 40-Mbyte hard disk drive discontinuance

The 40-Mbyte half-height 5%-inch ST-506 hard disk drive accessory (PIN D1297A) for the HP Vectra ES and ES/12 PCs will be removed from the November HP Price List.

The HP Vectra ES/12 PC was discontinued in September, resulting in low demand for the HP D1297A subsystem. Orders will be accepted through November 30, 1990.

Networks HP establishes new distributed computing standards

Hewlett-Packard has recently taken substantial additional steps in defining industry-accepted standards for distributed computing that gives HP a strong competitive edge today across all HP computing platforms, especially in the highly competitive workstation arena.

HP's solutions comprise a major part of an emerging new standard distributed environment defined by Open Systems Foundation, a nonprofit company.

Open Systems Foundation has solicited the entire industry to acquire and develop technology required to create a vendor-neutral computing environment that solves the industrywide problem of transparent distributed computing in heterogeneous environments, facilitating the creation and use of distributed applications.

This computing environment, called Distributed Computing Environment

(DCE), addresses several business needs such as faster and more transparent access to accurate and secured information, lower computer networking administration, multivendor networking, and growth. These business needs are addressed with functions such as interoperability in a heterogeneous network; ease of distributed application development and administration; network security: network performance; data availability; and network scalability.

Selling points

OSF DCE is a significant milestone for the marketplace because it provides standard solutions to very common distributed computing problems that are increasingly getting more critical due to the tremendous changes networking is undergoing today.







For example, personal computers and workstations are directly connected to local area networks, which are interconnected via high-speed worldwide networks. Suddenly, the potential exists for any user to communicate to other users, or access data from millions of other computers.

The resulting complex network of people, computers, and data requires an environment that allows information to flow from wherever it is stored to wherever it is needed, without exposing the network complexity to the end user while keeping networking administration costs down. This is precisely the environment that OSF DCE defines.

HP is a leader in providing the technology accepted by OSF for DCE. This includes support for remote procedure calls, security, PC integration, diskless operation, and network-naming facilities. HP also contributed in the specification of a distributed file service for DCE.

HP not only earned acceptance of its proposals, it also has products to back them that can be used to solve the distributed computing needs in businesses today.

This fact is especially significant when considering OSF migration on HP-UX or Domain O/S workstations since they have several of the key components of OSF DCE available today or in the near future. This makes HP-UX and Domain O/S workstations the best positioned workstations on the market today to take advantage of OSF DCE.

In addition, several of the components of OSF DCE, such as AFS and Passwrd Etc (based on NCS technology), are turnkey solutions, not requiring additional programming by the user. Some DCE components, such as NCS, can be used as tools by **ISVs** and end-users for customized distributed computing that best fits the particular business needs of the end user.

For more information on OSF DCE, contact your HP representative.

Networks

HP DTC/16 and DTC/48 rack cabinets

With the introduction of the **16-port** DTC (PIN **2340A**), many users have expressed interest in rack cabinets for this product. This article will describe the available cabinets for both the new DTC16/3000 and the DTC48/3000 (PIN 2345A).

Cabinets for DTC16

The cabinet that houses the HP 3000 Series 37, MICRO 3000, and MICRO 3000XE can also hold up to three DTCl6s. This cabinet (PIN 92211R), is available from HP DIRECT. Also required is the rail kit (PIN 92211S), which includes four sets of rails and module locks. Filler panels, used to fill empty space not occupied by the DTCs, are available and serve a cosmetic purpose only.

Cabinets for DTC48

Three cabinets are available from HP DIRECT, with heights of 720mm, 1,000mm, and 1,600mm, to house two, three, or five DTC48s, respectively. These cabinets include top and side panels only. Front and rear doors can be ordered separately as options. Note that for the 1,600-mm cabinet racked with five DTCs, rear doors are not supported due to cooling concerns. For each DTC48 to be racked, a DTC rack-mount kit (PIN A1052A) must be ordered. This kit includes mounting rails and cable management. Filler panels are also available for these cabinets.

HP DIRECT is working to develop a rack-mount **kit** to house the new **DTC16** in these cabinets as well. Watch future issues of HP *Channels* for more details.

If you have questions regarding these products, contact HP DIRECT at one of the numbers listed in the Supplies section at the end of this issue.

Ordering information

	Product No.	Description	
	HP DTC16/3000		
	92211R	System cabinet for 325-mm wide HP 9000 technical work- station devices	
	922115	Rail kit for P/N 92211R mini- rack cabinet, contains 4 sets of rails and 10 modular locks	
	9221IT	Filler panel kit for P/N 92211R minirack cabinet, contains 20 snap-in panels	
	HP DTC48/30	00	
	A1052A	DTC48 rack mount kit, includes mounting rails and cable management	
	46298A	19-inch EIA rack cabinet. 720-mm high	
	46298B	19-inch EIA rack cabinet, 1,000-mm high	
	46298C	19-inch EIA rack cabinet, 1,600-mm high	
	46298E	Front door for 720-mm rack cabinet	
	46298F	Front door for 1,000-mm rack cabinet	
	46298G	Front door for 1,600-mm rack cabinet	
	46298H	Rear door for 720-mm rack cabinet	
	46298J	Rear door for 1,000-mm rack cabinet	
	40101A	Filler panel, 1.75 inches high	
	40102A	Filler panel, 3.5 inches high	
	40103A	Filler panel, 5.25 inches high	
l	40104A	Filler panel, 7 inches high	
	40105A	Filler panel, 8.75 inches high	
,	40106A	Filler panel, 10.5 inches high	

*Quantity discounts are available on many of these products.

Networks

HP DTC/X.25 XL network link enhancements provide increased connectivity

With MPE XL release 2.2, users will be able to configure multiple DTC/X.25Network Access cards with the same IP address. This functionality is provided in the X.25 XL System Access product (PIN 36939A), which is a component of the DTC/X.25 XL Network Link. Prior to MPE XL release 2.2, the DTC/X.25 implementation was limited to one card per IP address. A combination of DTC48 and DTC16 X.25 Network Access cards can be used per each IP address. When used in conjunction with OpenView DTC Manager release 6.0, MPE XL 2.2 also provides for load balancing between DTC/X.25 Network Access cards. The X.25 XL System Access is targeted toward 900 Series HP 3000 users requiring increased X.25 connectivity and performance.

Features and benefits

- Increased performance overall X.25 throughput is increased by allowing an MPE XL host to access several DTC/X.25 cards, without needing to fragment the network by assigning different IP addresses to each card.
- *Single card performance* unchanged from earlier releases.
- *Improved reliability* if one card fails, it is possible to move that card's traffic to another card. This provides greater reliability and increased system uptime.

- Increased connectivity Up to 1,024 virtual circuits can be opened from/to one network interface (NI). Previously, users were limited to the maximum number of virtual circuits on one card: 256 virtual circuits per DTC48 and 32 virtual circuits per DTC16.
- Increased efficiency When establishing a new connection, the MPE XL host can select the DTCIX.25 card that is the least busy by utilizing loading information provided by the DTC.

For more information, please contact your HP representative or see the article entitled "Enhanced DTC Management Platform" in the October issue of HP *Channels*.

Printers Announcing new Domain/OS printer connectivity products

Products integrate HP printers into Apollo Domain/OS networks as shared resources. Any user on a network can queue files to any supported HP printer on the network. Connectivity products will support industry-standard ASCII, Postscript printing (HP LaserJet IID, LaserJet IIID, and LaserJet III printers or with optional cartridge on HP LaserJet IIP printer), raster support

Supported configurations

for X and GPR bitmaps (with X Window System and SR 10.3), and HP-GL2 support for PCL 5 devices. Likewise. the software includes a device driver that will select and implement features based on the printer capabilities such as paper tray selection and simplex/duplex operation (singleldouble-sided printing). Serial and parallel versions are offered to match node interface type and user performance requirements.

HP product-line positioning

HP offers the industry's market-leading printers in a single source solution, while providing the best network printer architecture in the industry for shared printer use at competitive prices (\$200 range plus interface board, if required).

Configurations

The printer connectivity products contain filter and driver software and installation documentation. The serial kit contains a serial cable, the parallel kit contains a parallel board and cabling, and the parallel kit **II** contains a parallel cable for the standard HP Apollo 9000 Series 400 Centronics interface. The connectivity products are supported under Domain/OS SR10.2 onwards, on the Series 2500, 3010, 3500, 4000, 4500, 10000, and HP Apollo 9000 Series 400 platforms, except as noted in the Supported configurations table below. The printers supported are the HP LaserJet II, LaserJet IID, LaserJet IIP, LaserJet III, and LaserJet IIID printers, and future HP laser printers.

Interface product	Domain/OS	Printer
Serial LaserJet PCL	All	All
Parallel LaserJet PCL interface kit	All, except Series 2500 , HP Apollo 9000 Series 400dl, 400/425t	
Parallel Lasedet PCL interface kit	All HP 9000 Series 400 except 400dl	All





Ordering information

Product No.	Description	ļ
A1904A	Serial LaserJet PCL	
A1905A	Parallel LaserJet PCL interface kit	
A1906A	Parallel LaserJet PCL interface kit II	

Printers are available through the dealer channel and are on the current HP Price List. Connectivity products will be available through the Apollo Direct Channel, 800-225-5290, and the November HP Price List. For more information, contact your HP representative.

Printers

New pricing for HP ThinkJet, QuietJet, and RuggedWriter printers

Effective October 1, 1990, the U.S. list prices for the following printer products was increased:

Product N	o. Description
2225A	HP ThinkJet printer (HP-IB)
2225B	HP ThinkJet printer (HPIL, battery power)
2225C	HP ThinkJet printer (Centronics parallel)
2225D	HP ThinkJet printer (RS-232-C serial)
2225P	HP ThinkJet printer (Centronics, battery power)
2227A	HP QuietJet PLUS printer (RS-232-C, Centronics)
2227B	HP QuietJet PLUS printer (HP-IB)
2228A	HP QuietJet printer (RS-232-C, Centronics parallel)

 Product No.	Description
2235A	HP RuggedWriter printer (RS-232-C, Centronics)
2235B	HP RuggedWriter printer (HP-IB, RS-232-C)
2235C	HP RuggedWriter printer (2235A with sheetfeeder)
2235D	HP RuggedWriter printer (2235B with sheetfeeder)
2934	HP 2934 printer (RS-232-C/422)
12239A	HP 2235 U.S. sheetfeeder
12239B	HP 2235 European A4 sheetfeeder

For more information, please contact your HP representative.

Printers

New Pretty Faces font cartridge introduced

Hewlett-Packard has introduced a new bit-mapped font cartridge for the HP LaserJet Series II, IIP, 2000, III, and IIID printers. This product is the latest addition to the HP MasterType Library of bit-mapped fonts and scalable typefaces.

The Pretty Faces font cartridge (PIN C2053A Opt. C09) features five decorative typefaces and one novelty typeface in a variety of sizes:

Typeface	Point size
Microstyle	18
Microstyle Bold Extended	36
Thunderbird Extra Condensed	54
Hobo Medium	14. 30
Signet Roundhand	14, 18
ITC Zapf Dingbats	18, 36

Use the Pretty Faces font cartridge to add variety to special documents such as fliers, posters, overhead transparencies, invitations, and announcements. The larger point sizes are especially useful for headlines and poster text. The unusual symbols and ornaments of ITC Zapf Dingbats make the Pretty Faces cartridge useful for documents requiring unique and fun type.

The Pretty Faces font cartridge includes type sizes ranging from 14 to 54 points, making it the first bit-mapped font cartridge from HP to include type sizes larger than 24 points. Also included is **AutoFont** Support software on 5¹/₄ - and 3%-inch disks. **AutoFont** Support files are needed by an application to allow the user to select fonts and format text correctly.

The Pretty Faces font cartridge is available immediately from HP-authorized dealers.



Printers

New Windows/OS/2 drivers available for HP LaserJet 111 and **ZZD** printers

Windows/OS/2 printer drivers are now available for HP LaserJet III and IIID printers with the PCL 5 printer language. The new drivers support additional functionality of the HP LaserJet printers. For Windows, there are new 2X and 3.0 drivers available. Three separate drivers exist for OS/2 versions 1.1, 1.2, and 1.21. For the Presentations Manager user, these printer drivers will provide access to PCL 5 printer language features such as:

- support for internal scalable typefaces and bit-mapped fonts
- support for accessory font products, both scalable and bit-mapped
- AutoFont support
- raster compression
- HP LaserJet IIID printer support (OS/2 version 1.21 only)

The OS/2 version 1.1 driver supports all PCL 4 printers (HP LaserJet Series II, IID, and IIP printers). These drivers are available from Hewlett-Packard's SpectraFax service by dialing 208-344-4809 from your fax machine and following the prompts. The Windows/OS/2 HP LaserJet printer drivers have also been posted onto the HP forum in CompuServe.

For more information about these drivers, call HP's Personal Peripherals Assist Line at 208-323-2551.

Printers **HP** Precision Tools now supported on new HP Apollo 9000 Series 400 workstations

The HP Precision Tools program announces the availability of tools on the new HP Apollo 9000 Series 400 workstations. The HP Precision Tools include HP Device Interface System (HP DIS), HP Interactive Visual Interface (HP IVI), HP Real-Time Database (HP RTDB), and HP Software Integration Sockets (HP Sockets).

Ordering information

Product No.	Description
92568A	HP Software Integration Sockets
Opt. UA2	4 processes
Opt. UA5	16 processes
Opt. UA8	48 processes
Opt. UAA	96 processes
92572A	HP Real-Time Database devel-
	opment copy
Opt. AEL	For Models 808, 815, 822
Opt. AEM	For Models 825, 832, 835,
•	845,635,645
Opt. AEN	For Model 840
Opt. AEP	For Models 850, 855, 870/100,
	8701200
Opt. AEQ	For Series 300 and 400
92576A	HP Interactive Visual Interface
	development copy
Opt. AEL	For Models 808. 815, 820
Opt. AEM	For Models 825, 832, 835,
	845,635, 645
Opt. AEN	For Model 840
Opt. AEP	For Models 850, 855, 8701100,
	8701200
Opt. AEQ	For Series 300 and 400
92580A	HP Device Interface System
	development copy
Opt. AEL	For Models 808, 815, 822
Opt. AEM	For Models 825, 832, 835,
-	845,635,645
Opt. AEN	For Model 840
Opt. AEP	For Models 850, 855. 8701100,
	8701200
Opt. AEQ	For Series 300 and 400

Note: E-copy versions arc available for all products and options previously listed at 25 percent of the A-copy prices (U.S. list).

Contact your HP representative for more information.

Printers

AppleTalk — HP LaserJet printer tools updute

Available in the US. and Canada only

Hewlett-Packard now has an updated printer tools disk for the AppleTalk interface kit (PIN 33416A). The AppleTalk interface kit connects the HP LaserJet IID, III, and IIID printers to Macintosh computers.

Features

The update provides Macintosh users of the HP LaserJet IIID printer with a "Page Setup" dialog box and a "Print" dialog box that allow access to the printer's advanced paper handling and Resolution Enhancement technology features.

The update disk also contains Aldus Printer Description (APD) files for Aldus Pagemaker customers. These files allow easier access to features specific to the HP LaserJet IIP, IID, III, and IIID printers when using Aldus Pagemaker.

No changes have been made to the interface board or to the Postscript cartridge (P/N 33439P). The interface kit and Postscript cartridge that shipped before October 1 support the HP LaserJet IIID printer. However, users will need to select their preferred setting of Resolution Enhancement from the front panel and then use the HP LaserJet IID printer driver for "Page Setup" and "Print" commands.



The update kit (PIN 33449-60018) contains a 3%-inch disk with the updated printer tools resource, a revised AppleTalk Interface User's Guide, a revised Postscript Cartridge User's Guide, and the APD files.

Ordering information

The updated Printer Tools disk is now being shipped with the AppleTalk interface kit. For those users who purchased the HP LaserJet IIID printer, an AppleTalk interface kit, and Postscript cartridge before October 1, 1990, a free driver update kit is available. To order directly, call 303-353-7650 and ask for HP LaserJet IIID printer tools.

Users can also fax HP FIRST (fax information retrieval support technology) at 208-344-4809. Orders placed with this number will be forwarded to the direct number.

The new driver can also be downloaded from **CompuServe** under the HP and/or Apple printer forum. If you only need the Aldus Printer Descriptions (APDs), they can be downloaded from **Compu-**Serve under the Aldus forum or from **AppleLink** on the Aldus Developers bulletin board. Contact your HP representative for more information. Primers Components to configure HP LaserJet IIP printers for Apple Macintosh available

Beginning October 1, 1990, all the components necessary to configure an HP LaserJet IIP printer for the Apple Macintosh are available under a single product number. The HP LaserJet IIP printer (PIN 33471B) for the Apple Macintosh is available in two configuration options:

Product No.	Description
33471B	HP LaserJet IIP printer for Apple Macintosh
Opt. 001	Includes: base printer (PIN 33471A), PostScript car- tridge (PIN 33439P), Apple- Talk interface (PIN 33417A), and 1-Mbyte memory hoard (PIN 33474B)
Opt. 002	Includes the same components for Opt. 001 (except the I-Mbyte memory board) and 2-Mbyte memory board (PIN 33475B)

Please remember that one of the configuration options must be selected in addition to the base product number, and that the **products** are shipped as separate components. The dealer or the end user must still configure the printer. Contact your HP representative for more information.

Printers HP LaserJet printer memory price reduction

Effective October 1, 1990, HP LaserJet Series II and IID printer 1- and 2-Mbyte memory board prices were reduced. The price of the 4-Mbyte memory board remains the same. For more information, contact your HP representative.

Product No. Description		
33443B	1-Mbyte memory board	ſ
33444B	2-Mhyte memory board	

Terminals

HP 700/X terminals now supported on Apollo systems

The HP 700/X second-generation X-terminals are now supported to boot off the HP Apollo Series 2500, 3500, 4500, and 10000 systems. The Apollo Domain X-server ¹/₄-inch cartridge software tape (PIN C2312A) for HP 700/X terminals, contains the host-downloadable X11 server code, BOOTP, X11 R2/R3 fonts, and a compiler to convert fonts to 700/X format.

continued on next page

Ordering information

Only one copy of the Domain X-server software tape is required per user site. To ensure that you continue to receive the latest revision of the server software, contact your HP representative to make sure you are included on software support services for the HP 700/X terminals.

For detailed configuration and ordering information on the HP 700/X terminals, order the technical data sheet (PIN 5952-1953) from your HP representative.

Also in this issue

HP 3000 Series 920, 922,	
932 with four internal disk drives	4
ThinLAN link upgrade for HP 3000 Series 980	5
RTE-A and RTE-6 now	
support HP-ZB DDS tape drive	7
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Apollo/IBM networking products obsolescence	10
Zntroducing enhanced Apollo/IBM products and channel controller	10
COM-EXEC for TI bridging	10
Zntroducing HP-ZB to Centronics interface converter for HP-ZB	
instruments and computers	22

Supplies

Supplies Zntroducing HP-IB-to-Centronics interface converter for HP-ZB instruments and computers

The MicroPrint 45CH (PIN 922035, U.S.; PIN 92203K, international) is an HP-IB-to-Centronics interface converter. The MicroPrint 45CH allows an HP-IB instrument or computer to print to a Centronics printer, such as an HP DeskJet or LaserJet printer. MicroPrint 45CH is targeted toward HP-IB instrument and computer users.

HP product-line positioning

The MicroPrint 45CH is positioned as an inexpensive solution for HP-IB instrument or computer users to print data to a wide array of Centronics printers. It was tested and qualified to work with HP instruments, computers, and Centronics printers. The MicroPrint comes with a one-year warranty. Support is provided by Intelligent Interfaces, Inc. (800-842-0888, tollfree in the U.S.; 404-381-9891, worldwide).

Features and benefits

Proven product at low cost — product was tested and approved by HP to be compatible with HP instruments and computers

No programming needed — transparent to systems, easy to use

- Small and simple to install installation takes only minutes, just connect an HP-IB cable (PIN 10833A) to one end of the MicroPrint, a Centronics (parallel) cable (PIN 92284A) to the other end, and plug it in
- Switch-selectuble address

Ordering information

Product No.	Opt.	Description
92203J		MicroPrint 45CH, U.S.
92203K		MicroPrint 45CH, international (need to order the appropriate AC adapter below)
8224IA	ABG	AC adapter, Australia
82241A	ABU	AC adapter, U.K.
82241A	ABB	AC adapter, Europe
82241A	ABJ	AC adapter, Japan

For more information, contact your HP representative to get a copy of the MicroPrint 45CH data sheet, PIN 5952-3646.



HP DIRECT order phone numbers		
HP DIRECT Fast Phones—the easy, direct way for users to order supplies, accessories, media, furni- ture, and software from HP DIRECT.		
Location	Telephone Number	
Australia	(3) 895-2645	
	(3) 895-2615	
	(3) 895-2815	
	(3) 895-2861	
	(3) 895-2619	
	(008) 339-861 (toll-free)	
Austria	(222) 2500-61416151616	
Belgium/Luxembourg	(2) 761 31 11	
Canada	800-387-3154	
Toronto Local Denmark	416-671-8383	
Finland	80 30 16 40	
Finland	(0) 887 2361 (1) 69 86 17 25	
Greece	(1) 69 80 17 25 (1) 6828 811	
Italy	(02) 95 301 532	
Japan	(02) 75 501 552	
Sagamihara	0120 091321 (toll-free)	
Middle East/Africa,		
Geneva	(22) 83 1212	
Norway	(2) 24 60 90	
South Africa		
Johannesburg	(11) 802 5111	
Cape Town	(21) 537 954	
Spain	(91) 637 4013	
	(91) 637 0011	
Sweden	(8) 750 2400	
Switzerland	(57) 31 24 90	
Taiwan		
Taipei	080-211228 (toll-free)	
The Notherlands	(2) 717-9608	
The Netherlands	6-0501	
United Kingdom United States	(0734) 44 12 12 800-538-8787	
West Germany	(30) 3322	
	(30) 3322	

Software Packages Available and Wanted

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

Software Packages Available

Industry: Financial, distribution, and manufacturing

Abstract: On-Line Computing. Inc. (OLC) has 20 years experience working in the financial/distribution/manufacturing market. OLC's Financial Management System (FMS) version 3.1 is a set of integrated software modules designed for the medium-to-large size wholesale distributor or process manufacturer needing up-tothe-second information. FMS provides a complete interactive online solution written in Informix 4GL. This powerful relational database provides the user with enhanced flexibility and reporting capabilities. The system consists of the following modules:

- General Ledger
- Accounts Receivable
- Accounts Payable
- Payroll
- Purchasing/Receiving
- Inventory
- Order Entry/Invoicing
- Sales Analysis

Production Control

- Production Planning
- Shipping

 Point of Sale
- Features

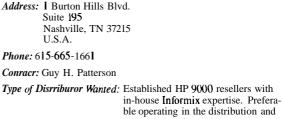
multicompany-oriented financials that allow for tracking profit center activities as well as consolidation

ability to create financial statements according to user requirements

 complete inventory reporting to assure tight control multiple classification of inventory to allow for pricing by customer type

sales commissions tracked by item, customer, or total

- order entry processing allows for complete and timely process ing of orders with inventory lookup and substitute items
- allows for work order generation of all required manufactured items with complete costing information of work-in-process
- full MRP capabilities complete with bill of materials, routing. capacity planning, and master production scheduling
- point of sale interface for city counter activity or store front with multiple tender or split tender processing
- bar-code integration on the shop floor updates the work order to provide complete results of operation and personnel time



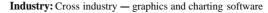
process manufacturing arena.

Geographical Coverage: Worldwide

HP Platform: HP 9000

Operating System: HP-UX

Company Name: On-Line Computing, Inc.



Abstracr: CHART^TPRO is a new and powerful charting and graphics package that can be transparently integrated into your system. All standard graph formats are supported, along with text charting, drawings, and chart annotations. CHART*PRO runs on PCs (MS-DOS), HP 9000 systems (HP-UX), and 900 Series HP 3000 systems (MPE XL) in native mode.

CHART*PRO was designed for data and statistical charting and general business graphics. CHART*PRO provides capabilities previously found only on the largest mainframe computer systems. It utilizes a straightforward command language or promptlresponse menu, and outputs to the screen and to just about any plotter. printer, or laser printer.

Extremely easy to integrate and use, **CHART*PRO** communicates with your system in real time or through ASCII files. Defaults and automatic settings exist for all graph parameters. Phone support and implementation assistance are included at no additional cost.

Enhance your software by giving your users high-quality graphic output "directly" from your system. Initial license set-up fee is **\$1,000**. Royalties are negotiable and demos are available for \$50.

Requirements

- HP 3000 system (MPE XL)
- HP Vectra PC or IBM-compatible PC with MS-DOS 3.3 or later, 640K memory, and hard disk; EGA/VGA and math coprocessor desirable

HP 9000 system (HP-UX)

Company Name: Interactive Solutions Corporation

Address: Route 1 Box 500 Eastsound, WA 98245 U.S.A.

Phone: 206-376-5085 800-545-4723

Far: 206-376-2151

Contact: Stephen T. Hance

Type of Distributor Wanted: Software developer/integrator or reseller

Geographical Coverage: Worldwide



Industry: Commercial 3GL Application Development

Abstracr: C-thru — anew, high-level character-based windowing tool, for use with commercial application software in a UNIX system environment. *Features*

C-thru, from BCT Business Systems, has been specifically designed for commercial software developers who require an up-to-date "look and feel" for their products, without having to invest in major **recoding** effort. By integrating a small number of easily understood C-thru calls into an application, a software product will be enhanced with:

- pop-up windows
- user-definable on-line help
- · access to the operating system
- desktop calculators
- on-screen line and box drawing

The product integrates with most third-generation languages (3GL) available under UNIX systems, such as 'C', COBOL (specifically Micro Focus COBOL/2) and UNIX Shell Scripts.

Requirements: HP 9000 Series 800 computer, HP-UX

Company Name: BCT Business Systems Ltd.

Address: Bridge House, New Road,

Lymm, Cheshire, WA139DY England

Phone: (44)92575-6074 Contact: Angela Cone Type of Distributor Wanted: Open Geographical Coverage: Worldwide

Industry: Cross-industry; systems integration software

Abstract: PICSTalk is a multidirectional communications gateway software product used to create interfaces between applications running on otherwise incompatible systems. It provides support for multiple communications protocols and for the reformatting of the messages, allowing the interfaces to be created and rendered useful with a minimum of host effort. ASCII text files (templates) are used to define message structures and message handling procedures that are used on the gateway.

PICSTalk is run on a dedicated AT-compatible system that is connected to departmental or mainframe systems through communications or through a local area network connection. **As** an MS-DOS application, PICSTalk can make use of local or network printers for status messages and error reports, as required. Network disk resources may be used for communications queueing or to hold data derived from messages that need to be combined with later messages. This "holding" file capability acts as a short-term database for the use of the interface.

PICSTalk provides configuration. Analysis tools to use as interfaces are created by technical personnel. Five levels of message and memory analysis displays are coded into PICSTalk to use during complex message handling.

PICSTalk can be used in any setting in which there is a desire to share data that otherwise would remain in separate, incompatible computer systems.

Requiremenrs: PC-DOS or MS-DOS 3.3, AT-compatible system with a minimum of 640K RAM and 40M hard disk.

Company Name: Trinity Computing Systems, Inc.

Address: 11 Greenway Plaza Suite 1212 Houston, TX 77046 U.S.A. Phone: 713-621-6911 800-231-2445 In Canada: 800-233-5964 Fax: 713-621-4750 Contact: Evelyn Roberts

Type of Distributor Wanted: Value-added reseller Geographical Coverage: U.S., Canada

Software Packages Wanted

Industry: Construction

Abstract: Wanted: structural design/analysis software relating to the construction industry for the U.K. and European markets to run on **IBM-compatible** PCs or HP Apollo UNIX workstations. We are also interested in CAD products for this market sector together with any related products appropriate to the needs of consulting engineers, fabricators, and civil/structural engineers.

HP Platform: HP 9000

Operating System: HP-UX

Company Name: Computer Services Consultants (UK) Limited

Address: New Street Pudsey, Leeds West Yorkshire LS28 & AQ England

Phone: (0532) 393000

Far: (0532) 553917

Contact: Andrew J. Beveridge, Sales Director

Type of Distributor Wanted: Well established company with its own sales force and support staff.

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HP CHANNELS

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