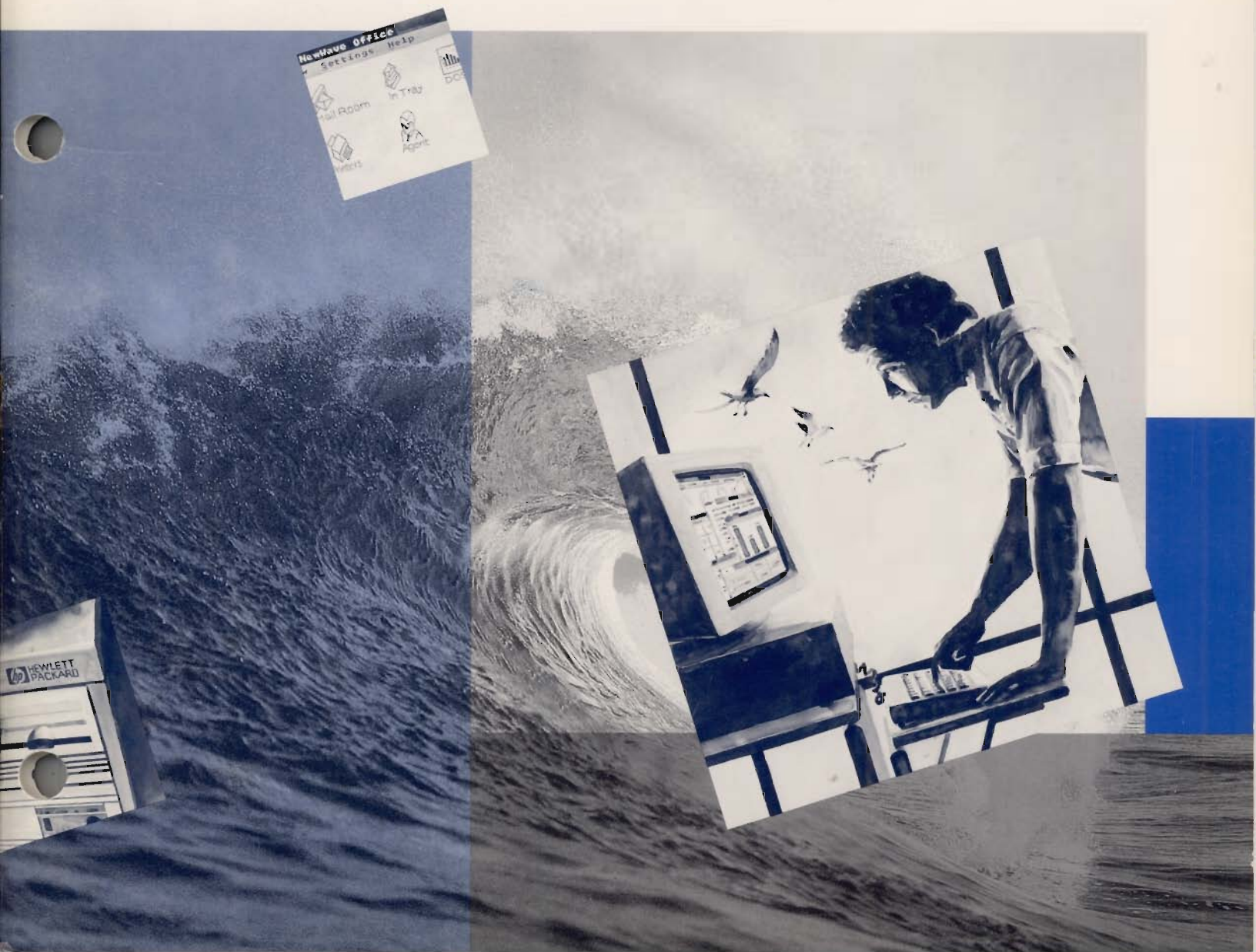




HP NewWave Office

Sales Guide
Internal Use Only



- At this meeting have any material that will contribute to the customer's understanding and implementing any new or enhanced products in the release. This includes potential products as well as those already installed.

Tasks

- If possible, implement the new release on an office system by following the update procedures. This will provide firsthand knowledge of any obstacles encountered during the update.
- Demonstrate the system to show the new features.

Tips

- If this update corrects any major deficiencies that may have prevented a purchase, be sure to discuss this change.
- If possible, have newly supported peripherals available for demonstration.
- When appropriate, integrate the SRP materials from divisions with the customer's installed products.

Tools

- Software Release Planning material (from HP product division).
- Software release documentation (packaged with media).
- *Software Status Bulletin* and *Software Release Bulletin*.
- *Communicator*.
- Articles from *Computer News* or *Support News*.
- Response Center application notes.
- Division newsletters (for example, *PA NEWS*, *CSY newsletter*, *PN²*, *Computer News*, and so on).

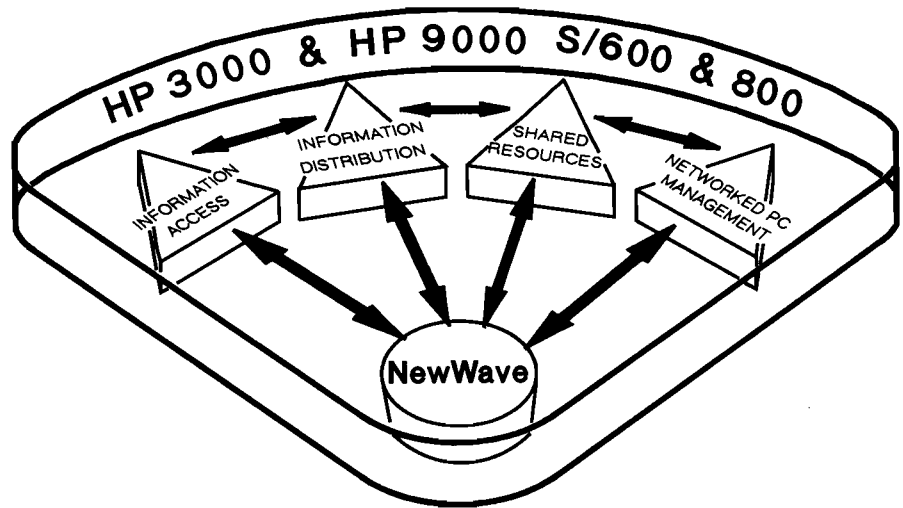
HP NewWave Office

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What is HP NewWave Office?

Business System Plus + HP NewWave = HP NewWave Office, available on both MPE and HP-UX platforms.

Business System Plus has made a major contribution in networking HP 3000 minicomputers with PCs for shared files and shared resources, easy database access, and powerful organizational communication. With BSP, your customers have been able to order a single product and get everything they needed for a true networked computer environment.

HP NewWave is an easy-to-use PC environment for integrating applications and automating tasks.

Now we've integrated these two winners into a single solution: HP NewWave Office.

HP NewWave Office software offers organizations unparalleled flexibility to manage the flow and use of information. It enables more effective decision making and information sharing among departments and ad hoc teams. HP's implementation offers the industry's best solution for integrating PC applications, tapping into diverse corporate information sources, and exchanging information with all users in a multi-vendor network.

- HP NewWave Office extends HP's leadership in PC integration. People can integrate the PC software of their choice from HP and other vendors. They can establish meaningful links among their favorite PC applications that were not originally designed to work together.
- People can create flexible, open information systems that bridge islands of corporate information, from micros to larger host systems that hold company data.

- The HP NewWave Agent can learn sequences of tasks and repeat them on request, improving productivity. A consistent user environment makes the system easy to use and reduces training.
- PCs are linked into a network that offers comprehensive services across a full range of platforms (MPE V and XL, HP-UX, and OS/2).
- HP NewWave Office automates the management and control of networked PCs with centralized software distribution/updating and simplified installation processes. HP was the first major vendor to offer an automated approach to networked PC management.

HP's NewWave Office software breaks down technology barriers, empowering organizations to use information to their fullest advantage. It protects their investment in PCs and makes the most of corporate data and computer resources.

What's New with HP NewWave Office?

HP NewWave Office has enhanced BSP and HP NewWave and gives you a much broader set of capabilities - platform support, networking, host, and client services. Key enhancements your customers have asked for include:

HP NewWave Environment

- Full integration of HP's NewWave environment. The HP NewWave environment, licensed for one user, is delivered with every HP NewWave Office product. Networked PC Management distributes HP NewWave to selected PCs on the network. Additional user licenses for HP NewWave environment can be purchased as an option to HP NewWave Office. With the ability to store and retrieve objects on the network, HP NewWave becomes a powerful workgroup application.

HP NewWave Office on HP-UX

- A complete, industry-standard implementation of the HP NewWave Office solution on HP-UX for HP 9000 (Series 600 and 800) SPUs. HP NewWave Office for HP-UX provides a consistent set of services:
 - Information Access SQL (to HP ALLBASE and ORACLE®)
 - Information Distribution through HP OpenMail
 - Shared Resources with HP LAN Manager/X
 - Networked PC Management
 - HP NewWave environment for DOS PCs

Priced for Users or Systems

- User-based pricing in addition to systems-based pricing. You can tailor pricing to your customer's needs. User-based pricing allows you to provide valuable HP NewWave Office services to smaller user bases - regardless of their SPU size. Customers with larger user bases can take advantage of the economy and simplicity of systems level pricing. Use this flexible pricing to sell into your hardest accounts.

HP LAN Manager/X

- HP NewWave Office provides a consistent networking foundation based on HP's LAN Manager family of networking products. HP has taken the lead with Microsoft, developing and introducing HP LAN Manager networking products which will provide a broad range of networking services and a consistent set of APIs for application developers.

Relational Database Access

- Information access to HP ALLBASE/SQL and ORACLE databases provides relational database users the information services that TurboIMAGE customers enjoy. Information Access/SQL services are available on both MPE XL and HP-UX, HP 9000 (Series 600 and 800).

HP NewWave Office for Direct Connections

- HP NewWave Office provides services for direct connection environments as well as LAN-based environments. The HP NewWave Office Information Access and Information Distribution Services, with the HP NewWave environment, are available for customers who will not need HP NewWave Office Shared Resource Services and Networked PC Management.

Novell Connectivity

- Support of Novell connectivity through the HP NS LAN Gateway for HP NewWave Office for MPE customers. You can sell HP value into more accounts with HP NS LAN Gateway multi-vendor connectivity.

With these enhancements, HP NewWave Office incorporates key integrated services and standards to provide the flexibility and choice you need to sell into more accounts, and keep the competition out of your installed base.

New Opportunities with HP NewWave Office

HP Advanced Image Management System - A Value Added Example

The HP Advanced Image Management System is a document image management system which, consistent with HP NewWave Office, adopts a client/server approach to business information systems. Based on industry standards, the system comprises hardware and software and forms the basis of a totally customized solution. It is targeted at those industries where paper-intensive, transaction processes are mission critical. It provides flexible development tools that enable VARs or end-users to develop document image management applications. Available initially as an encapsulated product within HP NewWave, it will be migrated to a fully supported solution within HP NewWave Office in 1991.

For further information, please see Appendix C.

The Complete Solution

HP NewWave Office offers a single integrated family of products which deliver a complete cooperative computing software solution.

HP NewWave Office includes:

- Information Access Services
- Information Distribution Services
- Shared Resource Services
- HP NewWave environment (non-HP NewWave PCs are supported as well)
- HP NewWave Office Networked PC Management

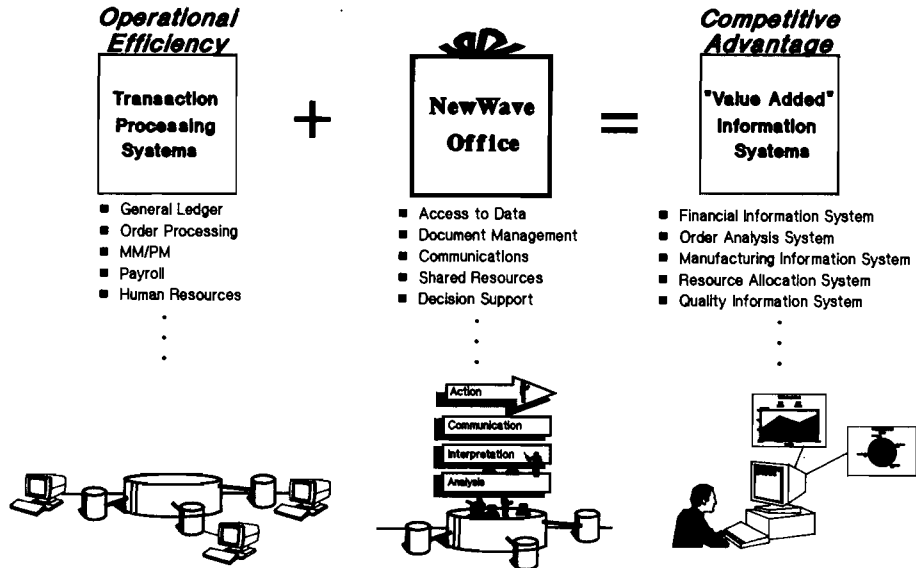
These services are integrated on both MPE and HP-UX operating platforms. HP NewWave Office allows you to sell the complete solution by delivering a single product, or where needed, delivering just the required functionality at the right price with other products in the HP NewWave Office family.

HP NewWave Office Expands Your Sales Opportunities

One of HP's traditional strengths has been in On Line Transaction Processing (OLTP) systems. A key characteristic you'll find in these accounts is the need to:

- **Get to information more easily.**
- **Analyze and interpret data.**
- **Communicate results efficiently.**
- **Take effective action quickly.**

A Key Opportunity: Value Added Information Systems



With HP NewWave Office you have the chance to deliver truly integrated value-added information systems to transaction processing environments. The key services in HP NewWave Office complete your customer's computing picture by helping them turn their operational systems into true information systems. The difference is the competitive advantage they will get from their information systems. HP NewWave Office can make the difference in your OLTP sale, as well as maintain your competitive advantage in the future.

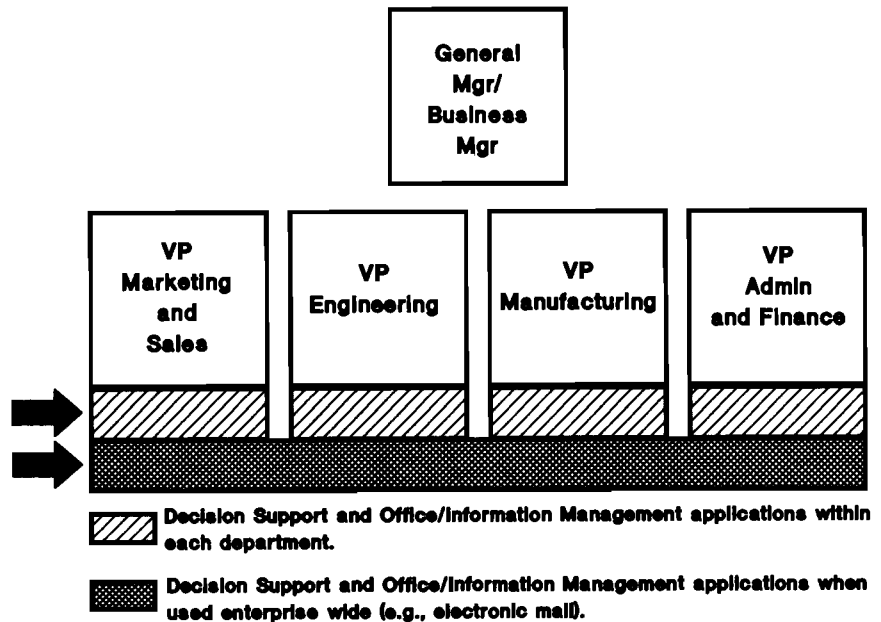
HP NewWave Office for Application Developers

Because HP NewWave Office takes advantage of HP's leadership implementation of the HP LAN Manager family of products, developers can count on an open, consistent set of Application Programming Interfaces (APIs) across operating platforms. When they develop cooperative computing applications with HP NewWave Office LAN Manager APIs, their applications will be much more portable across platforms. This means VABs can invest in HP NewWave Office with confidence that their development effort will have broad applicability.

Why is HP NewWave Office better?

Flexibility and Choice. Across industries, customers are demanding flexibility and choice in the way their systems are designed and implemented.

Where HP NewWave Office Fits!



Customers want complete solutions for decision support and information management which take advantage of their choice of workstations, application software and networking. HP NewWave Office is designed to meet those needs. HP NewWave Office has enhanced your solution on MPE, and now with the same complete set of services on HP-UX, HP is the first major systems supplier to introduce a completely integrated office solution on an open, standards-based operating environment. With HP NewWave Office, you can approach sales situations with confidence and know that you're selling a solution that provides you and your customer choices that your competitors can't offer.

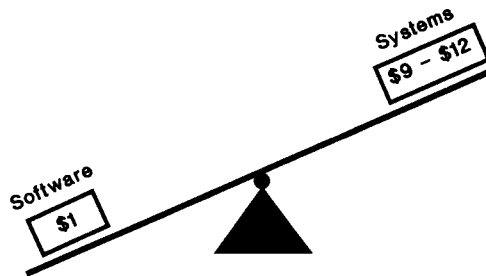
HP NewWave Office can make the difference in your quota

When you sell HP NewWave Office software, you establish a key sales advantage which helps you:

- Leverage more hardware.
- Lock out the competition.
- Lock in the installed base.

Leverage more hardware...

For every dollar of HP NewWave Office that you sell, you're likely to leverage \$9 - \$12 more in computers, networking, and peripherals over time. Think about it - \$20,000 of software sales translates to over \$200,000 of total business.



More Hardware? Some recent examples ...

	Office Software	FY89 Sales
German Army	\$300,000	\$13.0 Million
A major airline	\$300,000	\$3.6 Million
Houghton Mifflin	\$200,000	\$1.5 Million
Industria Resistol	\$200,000	\$1.5 Million
Italsiel	\$215,000	\$1.5 Million

In each of these accounts, and hundreds of others, sales were made because HP delivered completely integrated solutions which provided the flexibility and choice that met the customer need.

Lock out the competition ...

HP NewWave Office gives your customers what they really want — an all-encompassing system solution that is at the leading edge of the computer industry.

When you compete with HP NewWave Office, you'll be selling a cooperative computing system which has real advantages in:

- **Cost of ownership.** Cooperative computing takes advantage of all the computing power on your customer's network. HP has proven the leader in independent cost of ownership studies - clearly beating DEC and IBM - and delivering the most flexible solutions by far.
- **PC integration.** HP has been a leader in making the PC a full-fledged member of the network. HP NewWave Office capabilities continue to build on that leadership.

- **HP NewWave environment.** The press coverage couldn't be better. HP NewWave is an intuitive environment for integrating applications and automating tasks that puts the power of networked computing directly into the hands of ordinary users.
- **Built on standards.** With the introduction of HP NewWave Office on HP-UX, you have another competitive advantage over IBM and DEC. Incorporating HP Open Mail and LAN Manager on HP-UX for networking capabilities, HP has taken another major step towards leadership in standards-based cooperative computing.

You're there first -- with the best cost of ownership, the best application integration, and the best standards-based offering.

Lock in the installed base . . .

HP's competitors have used office software as a way to maintain account control and keep you out. With HP NewWave Office you can deliver a unique solution to every HP installed account. As their productivity increases with the use of HP NewWave Office, customers will not want to step backwards into solutions from other vendors — solutions that cannot deliver what HP does. You'll count the results in increased sales and long-term revenue streams that come from a satisfied and productive installed base.

HP NewWave Office - Key Features

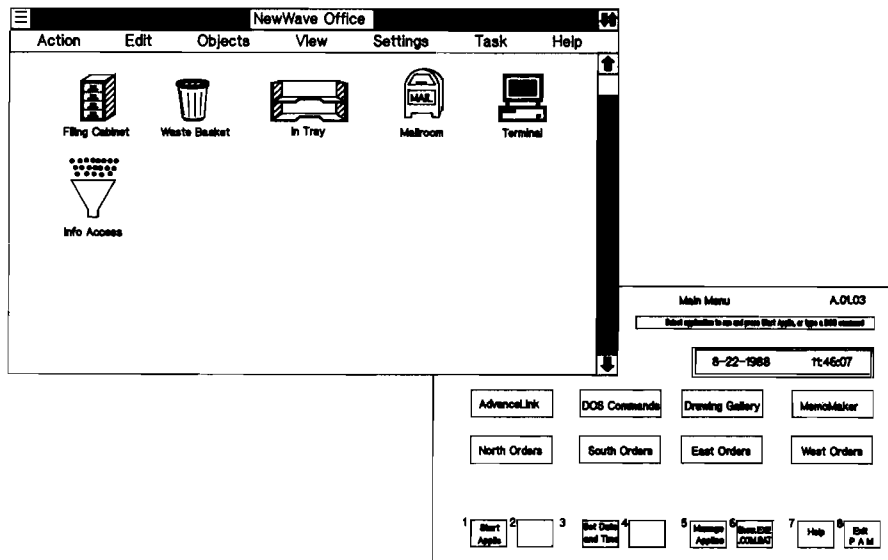
HP NewWave Office products on MPE and HP-UX include the following leadership features. Differences in platform offerings are described in the MPE and HP-UX sections.

HP NewWave Environment

HP has integrated the powerful capabilities of the HP NewWave environment with the key HP Business System Plus services you need to offer a leading value added system. A personal computer software environment which works together with Microsoft® Windows and MS-DOS®, HP NewWave allows customers to manipulate, link, and combine information from multiple applications such as text, spreadsheets, and graphics. This high level of integration allows users to create a compound document by simply selecting items with a mouse and dropping them into a document. For example, to include a graph or a spreadsheet in a word processing document, a customer can simply pick up the graph and drop it into the document window. HP NewWave also allows the customer to edit items in the compound document by selecting them with the mouse. This single step process greatly reduces the effort required to assemble and manage different types of information. HP NewWave accommodates many types of information today. In the future, as developers make new types of applications available (e.g., voice and video), they can all be added to HP NewWave without changing the environment itself or individual applications.

HP NewWave PCs

Non-HP NewWave PCs are supported



HP NewWave Office continues to protect customers' investment in personal computers by delivering the Personal Applications Manager (PAM) to PCs which don't use the HP NewWave environment. The HP NewWave environment software (an evaluation copy -- single-user license) is delivered with every HP NewWave Office installation. Non-HP NewWave users can upgrade to the HP NewWave environment simply by purchasing additional user right-to-copy licenses as an option to HP NewWave Office.

Object Storage and Retrieval for Workgroups

HP NewWave Office will change the way people do and share work. PC users won't have to think in terms of applications - allowing them to think in terms of the work at hand.

HP NewWave Office allows people to organize and use information in a more natural and easy to understand manner. Users are no longer limited by the constraints of normal PC filing systems. Each user can easily tailor the way information is organized to their individual needs.

HP NewWave Office also makes working with other people faster and easier. As a workgroup application, HP NewWave Office extends its information management capabilities by allowing users to store and access objects anywhere on the network. The HP NewWave environment allows users to:

- copy objects from the PC to the network.
- move objects from the PC to the network.
- check-out and check-in objects on the network.
- view objects that are already checked out.
- track the user and location of checked-out objects.
- use the HP NewWave environment with the network by storing and retrieving any HP NewWave Object, including compound objects.

HP has integrated these key services to ensure that your networked systems customers who use the HP NewWave environment can take full advantage of HP NewWave Office cooperative computing.

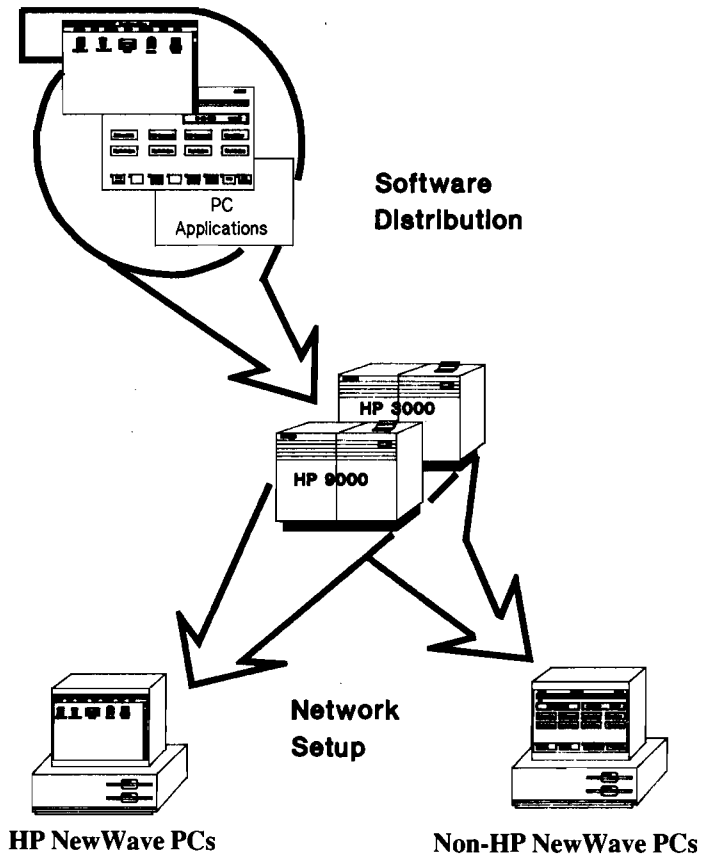
HP NewWave Office Networked PC Management on MPE and HP-UX

Designed to make installation and management of networked PCs and PC software easy, HP NewWave Office Networked PC Management provide a set of tools that:

- Simplify the installation of PCs on to the network and
- Help centralize PC software delivery and management.

These utilities save your customer countless hours that would otherwise be spent managing software on PCs throughout the network. Your customer's installation of PCs in a networked environment will be much easier and faster. Networked PC Management makes delivery of PC client and application software simple. Additionally, updates become a centrally managed task that puts the systems administrator in control.

HP NewWave Office Networked PC Management



In the LAN-based HP NewWave Office, these utilities take full advantage of LAN flexibility and performance to distribute client software to selected PCs. The HP NewWave environment (or PAM) is delivered and installed on PCs - from the HP 3000 or HP 9000 (Series 600 and 800). HP NewWave Office PC applications are automatically encapsulated for HP NewWave environment users. The HP NewWave Office PC Applications:

- Gallery Collection
- Lotus® 1-2-3® Version 2.01
- Executive MemoMaker
- AdvanceLink for MS-DOS

are purchased as a complete package, and delivered in tape format for delivery and update over the network. With enhancements, other PC applications can be centrally distributed, provided they are appropriately licensed.

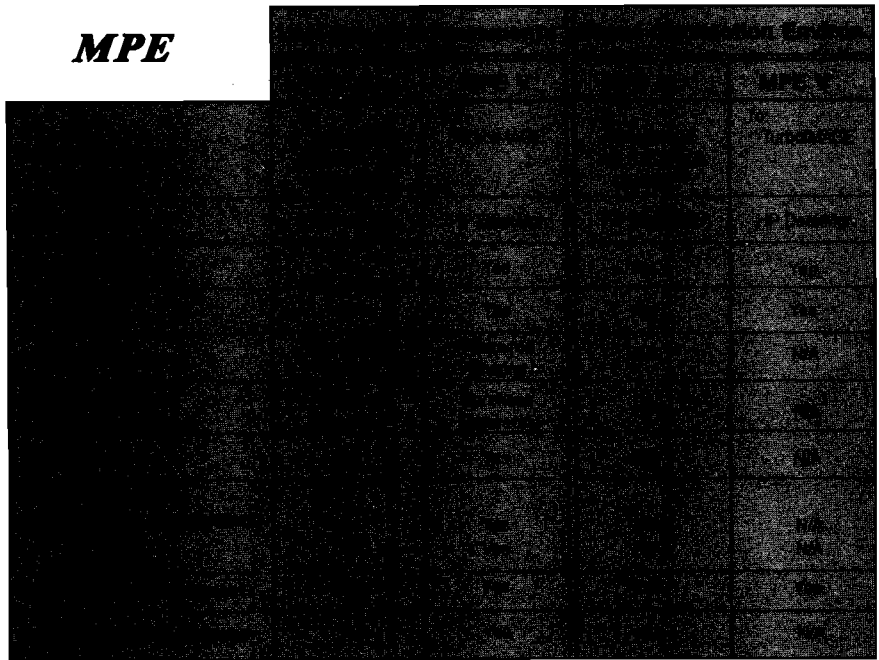
NOTE: HP NewWave Office Networked PC Management is delivered only with LAN-based products on MPE or HP-UX.

HP NewWave Office for MPE

Available on both MPE V and XL, HP NewWave Office delivers HP's promise of leadership cooperative computing with all of the flexibility of the HP NewWave environment for use with your customer's choice of PC applications. Complete solutions include information access to TurboIMAGE or HP ALLBASE/SQL and ORACLE databases, mailing services that include interoperability with HP-UX mailing services, and the ability to share information and HP 3000 resources in those installations implementing local area networks.

Flexibility and choice for your customer's environment:

MPE



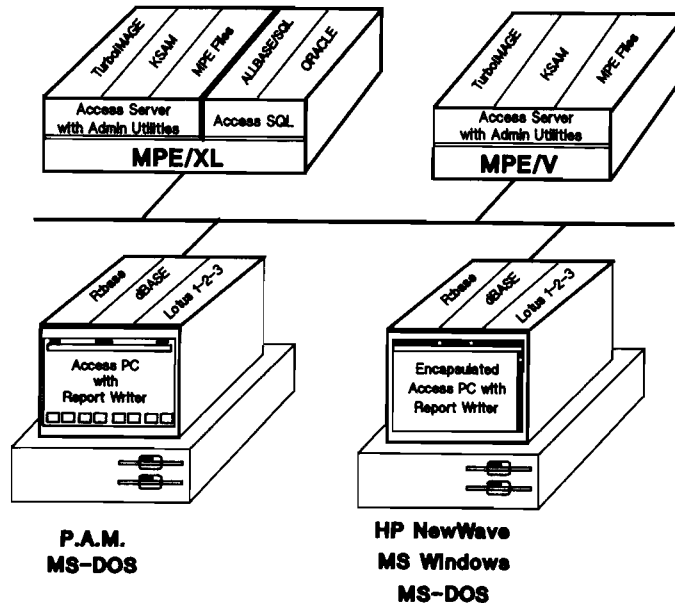
HP NewWave Office for MPE Information Access Services

HP Information Access is an information retrieval service for HP NewWave Office which allows users to access a broad range of data sources on their HP 3000s or PCs and output data to PC applications of their choice. Within the cooperative computing environment, the information access capability consists of an easy-to-use client interface on the user's PC and a data server on the HP 3000. With HP NewWave Office Information Access, decision makers spend less time gathering data and more time analyzing and solving business problems.

PC users can select, sort, summarize and convert data from a variety of sources in either an HP NewWave or MS-DOS environment. Data results can then be used in popular PC applications. Additionally, a built-in report writer can be used to generate professional reports without involving the database administrator. A batch processing feature is available for automation of repetitive tasks. Within the HP NewWave environment, these tasks can be scheduled and executed by the HP NewWave agent.

On the HP 3000, administration functions are provided to control access to the database sources. For non-relational data (TurboIMAGE databases, KSAM, SD and MPE files) a soft-key driven utility is included on the HP 3000 server, allowing the database administrator to specify which data tables and combination of existing data tables PC users can access. Relational databases (HP ALLBASE/SQL and ORACLE) provide these same administration functions as an integrated part of their database management system. In either case, database administrators can satisfy their users' needs for data while maintaining central security and control of the data sources.

HP NewWave Office For MPE Information Access



New Information Access SQL Server

On MPE XL systems, a new SQL server has been added to support the retrieval of data stored by the HP ALLBASE/SQL and ORACLE database management systems. Using both of these server capabilities, your customers will now have the ability to access information from both relational and non-relational databases.

For SQL databases, these database administration functions, which enable controlled access to data sources, are provided as part of the database management system. Additional utilities provided by the HP 3000 information server are not required. The existing database utility currently offered with Information Access supports only the non-relational databases. Based upon this product difference, the MPE/SQL server will be orderable as a separate product or in conjunction with Information Access and the HP NewWave Office services. For specific details on how to order this new SQL product, please refer to the Information Access appendix section within this sales guide.

Executive Insight - a Value Added Example

HP NewWave Office combines information access and shared resource services with Graphics Gallery to deliver true cooperative computing power to decision makers. Every manager needs to have access to important operational information residing in their systems - but most are unable to take full advantage of their information asset. With the HP NewWave Office Executive Insight solution, up-to-date graphs of key business metrics are delivered to decision makers' desktops at the push of a button. This is the kind of solution that helps you stay ahead of competitors and continues to be used to close more sales by demonstrating the power of cooperative computing in an effective, easy to understand manner for higher level managers. You can use HP NewWave Office and Executive Insight to beat your competition today.

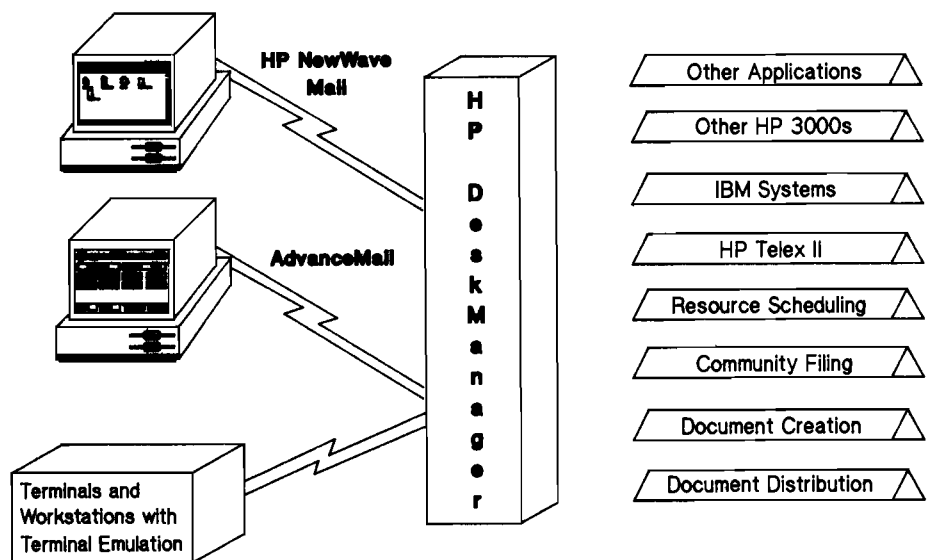
For more information on Executive Insight, please refer to the *Executive Insight Product Evaluation Guide* (P/N 5959-2541).

HP NewWave Office for MPE - Information Distribution Services

HP NewWave Office delivers powerful information distribution services and multi-vendor connectivity through HP DeskManager, which provides

- Interoperability with HP NewWave Office for HP-UX Information Distribution Services.
- Support for HP NewWave clients through HP NewWave Mail.
- Support for non-HP NewWave clients through AdvanceMail.

HP NewWave Office for MPE Information Distribution Services



**HP DeskManager provides access
to a range of applications and systems**

HP DeskManager's support for multiple client types - PCs (HP NewWave Mail, AdvanceMail), terminals and UNIX or Macintosh workstations (in terminal emulation mode) - enables users to exchange files and documents with other users throughout the network. Because HP DeskManager can handle multiple media and file types, HP NewWave Mail and AdvanceMail users can communicate information created with their preferred PC applications.

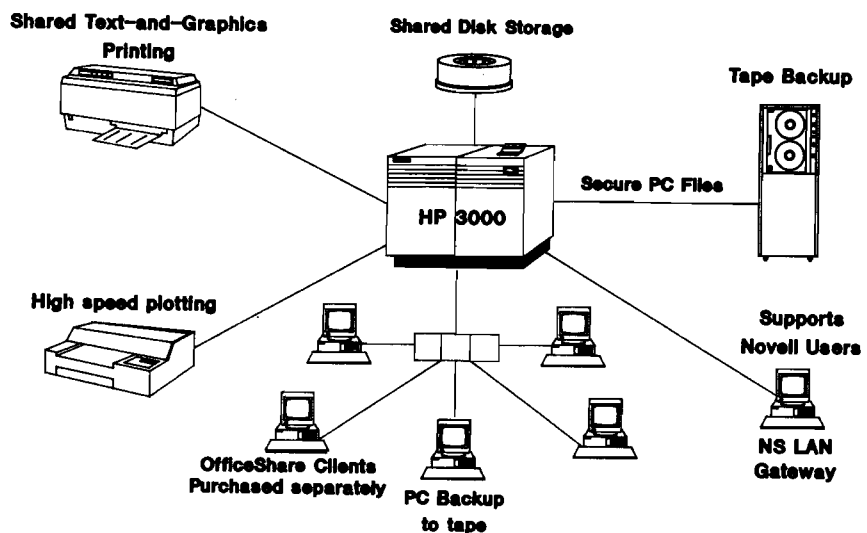
HP DeskManager's X.400 gateway and support of external mailing services provides users with fast, effective inter and intra company communications. In addition, HP DeskManager, HP NewWave Mail, and AdvanceMail provide users with a host of personal management tools for effective information communication and management.

HP DeskManager also provides directory management services which means directory updates can be synchronized across all nodes on the network (MPE and HP-UX) — ensuring that messages and documents always get delivered to the right person.

HP NewWave Office MPE - Shared Resource Services

HP NewWave Office integrates the HP LAN Manager family of networking products to provide powerful shared resource capabilities to LAN users. PC users on the network can take advantage of HP 3000 security, share high quality printers and plotters, or share PC information transparently on HP 3000 disks.

HP NewWave Office for MPE Shared Resource Services



The safety and security of the minicomputer is extended to PCs when users save important PC-generated files on HP 3000 shared disks or use the PC Backup capability. By sharing high quality printers and plotters, more users can produce professional, high quality output - sharing the full value of the peripherals. Users can share PC files on the HP 3000, eliminating the need for flexible disks to share and store data.

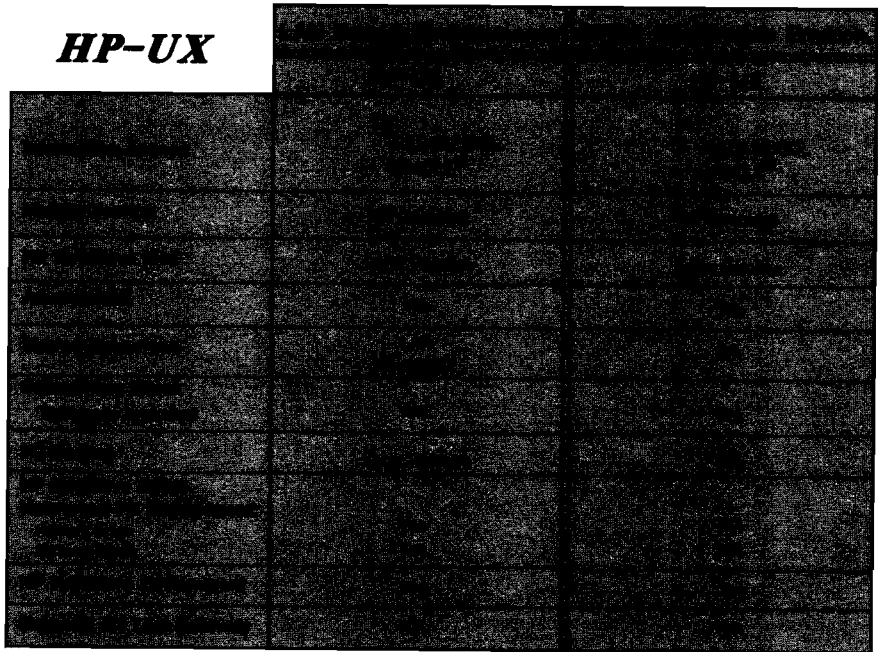
NOTE: The PC Backup capability on MPE lets LAN-based PC users back up files from their PC disks to backup tapes on the HP 3000 - for HP NewWave environment users, PC Backup supports only full backups and restores - for other users, full or partial backups and restores are supported.

HP NewWave Office for HP-UX

HP continues to fulfill its commitment to standards-based, open systems with the introduction of HP NewWave Office on HP-UX. Now you can integrate complete value-added cooperative computing systems on HP 9000 (Series 600 and 800) systems, incorporating the same popular HP NewWave Office services available on MPE:

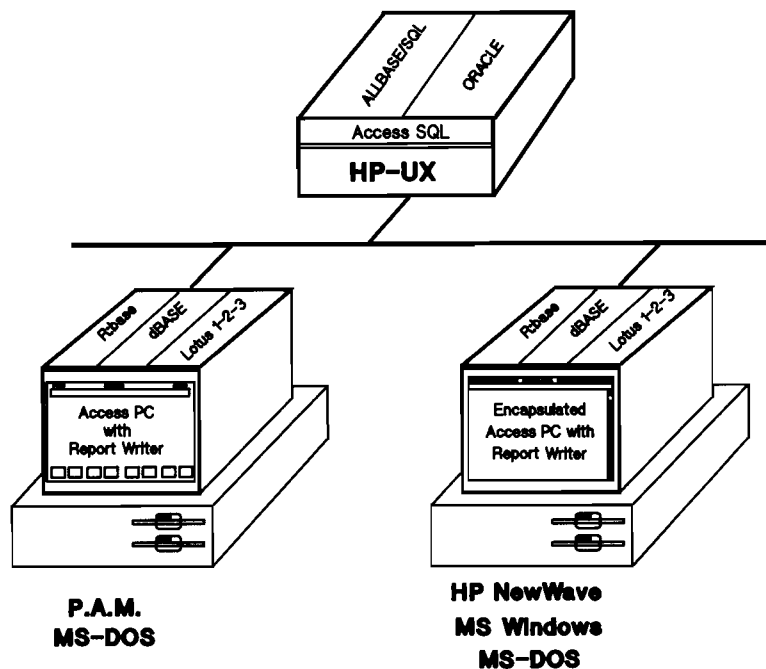
- Information Access to HP ALLBASE/SQL or ORACLE databases
- Information Distribution Services
- Shared Resources from HP's leadership implementation of HP LAN Manager/X
- HP NewWave environment
- HP NewWave Office Networked PC Management

HP-UX



HP NewWave Office for
HP-UX Information Access
SQL/UX

HP NewWave Office For HP-UX Information Access SQL



For the past four years, Information Access has provided customers with the capability to access data on HP 3000 systems through their PC workstations. Today, Information Access has been extended to support HP 9000 (Series 600 and 800) multi-user computer systems and allows users to access HP ALLBASE/SQL and ORACLE relational databases. Additionally, users will have the capability of encapsulating Information Access for use in the HP NewWave environment. With the addition of SQL tables as a data source, it broadens the scope of hardware platforms from which Information Access can extract data while using a single common PC interface.

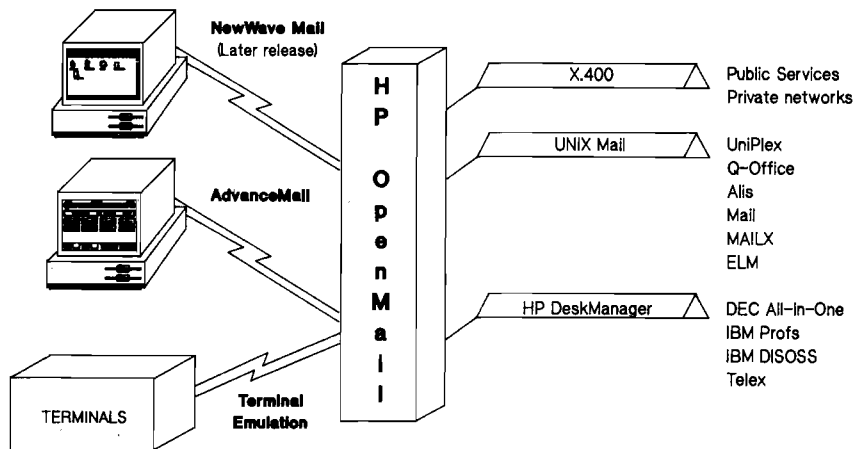
The HP NewWave Office Information Access Services allow users to select a range of data sources from their HP 9000 (Series 600 and 800) or PC and output the data to PC applications of their choice. Within the cooperative computing environment, Information Access consists of an easy-to-use client interface on the user's PC and a data server on the HP 9000 (Series 600 and 800). With HP NewWave Office Information Access, decision makers spend less time gathering data and more time analyzing and solving business problems.

HP NewWave Office for HP-UX - Information Distribution Services

HP NewWave Office for HP-UX provides X.400-based information distribution services to all HP NewWave Office HP-UX users through HP OpenMail, including:

- Interoperability with HP NewWave Office for MPE Information Distribution Services.
- Support for HP NewWave clients through NewWave Mail (later release).
- Support for non-HP NewWave clients through AdvanceMail.

HP NewWave Office for HP-UX Information Distribution Services



HP OpenMail is a standards-based electronic mail server that integrates a variety of client types — PCs (NewWave Mail, AdvanceMail), terminals and UNIX or Macintosh workstations (in terminal emulation mode). HP OpenMail provides a common user interface for all users, whatever their workstation type — for ease of use and learning. Both NewWave Mail and AdvanceMail give PC users access to HP OpenMail and HP DeskManager services. Those customers requiring information distribution services for both HP-UX and MPE can be certain that the common user interface will reduce training time and costs.

HP OpenMail gives users the flexibility to exchange a variety of file and document types. Its powerful information distribution services enable users to exchange information with users of other UNIX-based mailing products, X.400-based mailing services, and multi-vendor electronic mail services such as IBM's Profs and DISOSS. HP OpenMail brings industry leading information distribution services to all users throughout the HP NewWave Office network.

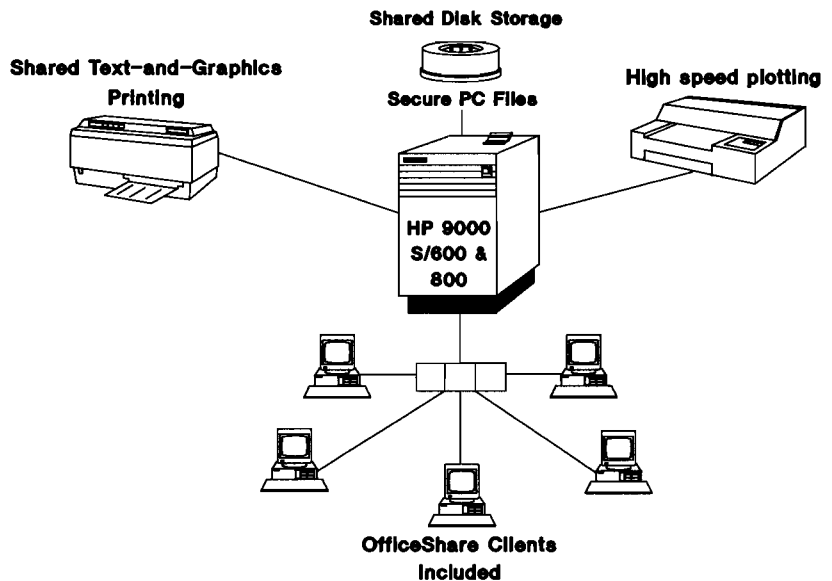
HP NewWave Office for HP-UX - Shared Resource Services

HP LAN Manager/X*

The HP-UX implementation of HP NewWave Office takes advantage of HP's development of the HP LAN Manager standard on UNIX. PCs networked to HP 9000, (Series 600 and 800) computers have the same basic shared resource capabilities that MPE users have had with BSP (NOTE: the initial HP NewWave Office implementation uses OfficeShare MS-Net-based PC client software. Refer to the following section "OfficeShare Clients Today" for further information.):

- Access to shared high quality printers and plotters.
- Access to private and public HP 9000 shared disks.
- Computer room security for files stored on HP 9000 disks.

HP NewWave Office for HP-UX Shared Resources with HP LAN Manager/X



NOTE: Backup of PC hard disks to HP 9000 tape drives is not available on HP NewWave Office for HP-UX. PC security is provided when files are stored on HP 9000 shared disks.

Additional functionality provided by HP LAN Manager/X (when using HP LAN Manager clients) includes:

- Comprehensive printer management and print spooling.
- Wide range of powerful network administration and management capabilities.
- Additional security mechanisms.
- Consistent set of application programming interface for developers.

** Based on Microsoft LAN Manager/X.*

HP's leadership implementation of HP LAN Manager/X is a major milestone - clearly establishing a superior, standards based implementation of networking capabilities. Customers and application developers can take advantage of the consistent APIs delivered by HP LAN Manager/X (when using HP LAN Manager clients) to ensure portability and interoperability of cooperative computing applications. HP's commitment to the LAN Manager standard means that your customers will be able to take advantage of many cooperative computing applications being written to HP LAN Manager/X standards today.

OfficeShare Clients Today

In its initial release, HP NewWave Office delivers OfficeShare clients. The OfficeShare client is a MS-Net based client that permits full shared resource capability with HP LAN Manager/X. The OfficeShare client also provides full connectivity for Information Access, PC client mailing services, and virtual terminal (see the following section "Networking and Connectivity").

The LAN Manager clients (included in the second release of HP NewWave Office) provide full LAN Manager APIs for customers interested in developing cooperative computing applications.

Customers should be encouraged to purchase support contracts in order to receive future releases of HP NewWave Office with LAN Manager client software. LAN Manager clients will also be available through upgrade promotions beginning in mid-1990 (prior to the second release of HP NewWave Office).

Networking and Connectivity

LAN and Serial Based Products

HP NewWave Office delivers the flexibility to use advanced cooperative computing solutions in LAN or direct connection customer environments. PCs connected to HP 3000 or HP 9000 (Series 600 and 800) minicomputers can take advantage of their own client software and powerful host services. This means that you can sell HP NewWave Office into more traditional transaction processing or terminal based environments where PC users need the key services, but have not implemented a LAN. As your customer's needs grow, you can deliver high performance LAN connectivity with HP NewWave Office Shared Resource capabilities and Networked PC Management.

HP 9000 Series 300 Servers

HP offers key product capabilities on HP-UX which allow customers with Series 300 SPUs to use them as mail or network servers. HP OpenMail provides Information Distribution Services that are interoperable with HP DeskManager on MPE, or with other electronic mail services which support the X.400 standard. HP OpenMail is a true X.400 based mailing system providing a standard method for exchanging messages and documents with the growing number of mail systems which use X.400 gateways. UNIX workstations and Macintosh PCs can be integrated through the HP OpenMail terminal interface. Compatible PCs can be integrated using terminal emulation or AdvanceMail client software. HP OpenMail can be ordered under product numbers:

- B1600A HP OpenMail
- B1602A HP OpenMail Language Support

(Note: HP Open Mail is not available on Series 300 Model 310)



Customers can purchase HP's leadership implementation of LAN Manager/X with LAN Manager clients today. LAN Manager/X is a full featured network operating environment that enables HP-UX SPUs to be operated as shared resource servers to MS-DOS and OS/2 PCs. Series 300 customers can only purchase HP LAN Manager/X as specified below. Series 600 and 800 customers who don't purchase HP LAN Manager/X as part of HP NewWave Office can purchase HP LAN Manager/X as follows:

HP LAN Manager/X can be ordered under product number:

- B1003A HP LAN Manager/X for the HP 9000 Series 300*

If not purchased as part of HP NewWave Office:

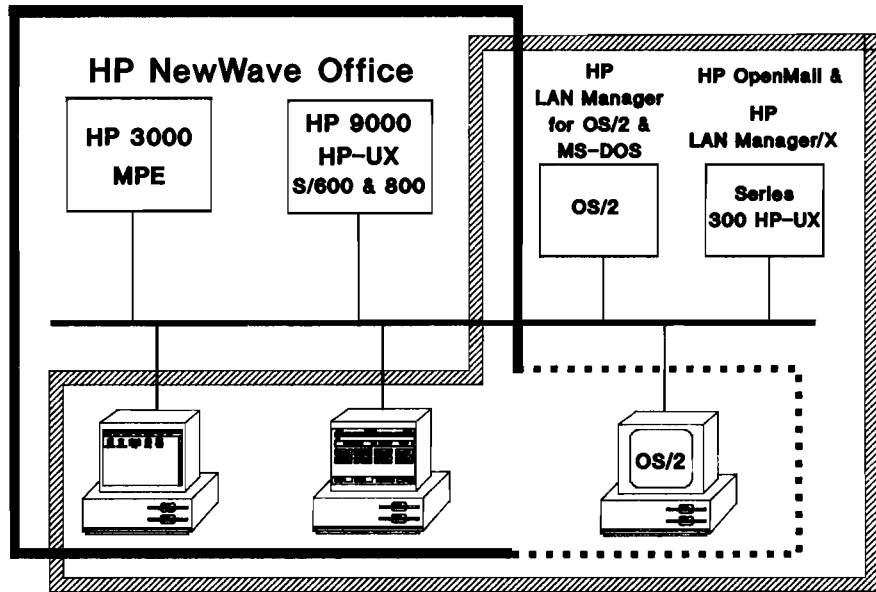
- B1011A HP LAN Manager/X for the HP 9000 Series 800

Optional HP Network Products include:

- D1814A HP LAN Manager Developer's Kit for MS-DOS, OS/2 and UNIX
- D1813A HP PC Sockets Developer's Kit 1.0
- B1012A NS Services/300
- B1013A NFS Services/300
- B1014A ARPA Services/300

**All models are supported except the 310, 318, 320, 330, and 332.*

HP's Wide Range of Computing Platforms Includes OS/2 and Series 300 Servers



HP LAN Manager for OS/2 and MS-DOS*

HP's commitment to LAN Manager networking standards means your customers can take advantage of a wide range of scalable cooperative computing systems - **HP NewWave Office** for MPE and HP-UX, and with **HP LAN Manager for OS/2 and MS-DOS** on OS/2 servers. Customers requiring PC based servers integrate their LAN Manager for OS/2 or OfficeShare PC servers with HP NewWave Office on the platform of their choice - MPE or HP-UX.

With this powerful set of products you can meet your toughest competition head on - and win - with superior flexibility and choice.

The LAN Manager for OS/2 and MS-DOS product consists of three parts:

- The OS/2 server software
- MS-DOS client software
- OS/2 client software

and can be ordered for five users under product number:

- D1809A

or for unlimited users:

- D1810A

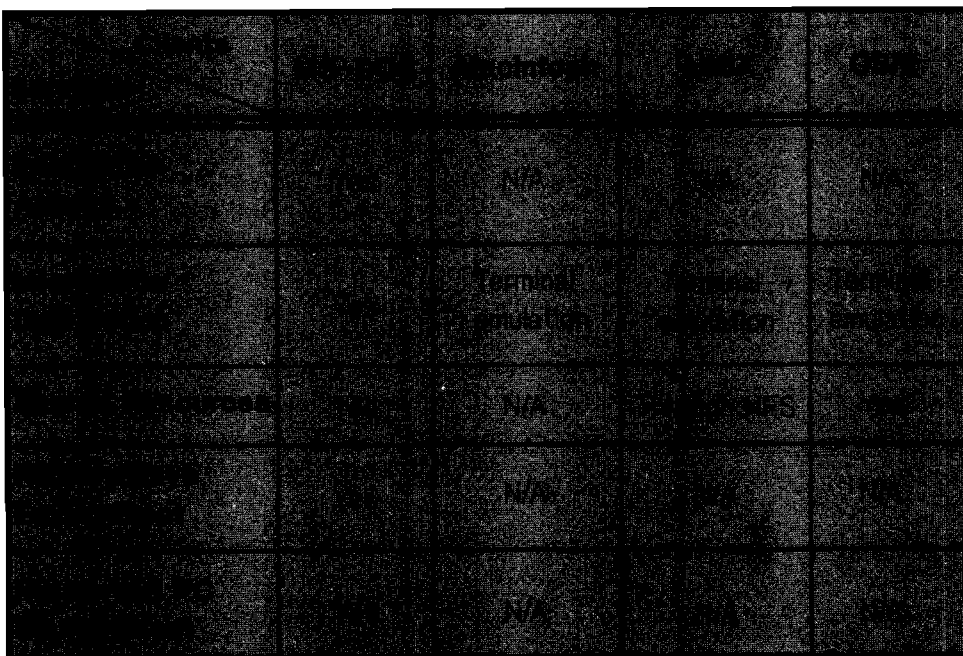
Network Services and ARPA Services are orderable for MS-DOS:

- D1811A Network Services/MS-DOS 2.0
- D1812A ARPA Services/MS-DOS 2.0.

* Based on Microsoft OS/2 LAN Manager and on 3Com 3+Open.

HP NewWave Office Client Support

Clients Supported



The HP LAN Manager clients communicate with HP NewWave Office for HP-UX - HP LAN Manager/X, or HP NewWave Office for MPE - Resource Sharing, today.

The full range of scalability includes MS-DOS clients on an **HP LAN Manager for OS/2 and MS-DOS** network which can take advantage of the HP NewWave environment. MS-DOS clients can also take advantage of the HP NewWave Office services when the OS/2, MPE, and/or HP-UX servers are on the same network. OS/2 clients will have terminal emulation capability which allows them to have access to HP NewWave Office Information Distribution Services on either MPE or HP-UX as well as other terminal-based applications your customer may be operating. For more information refer to the *HP AdvanceNet Sales Reference Guide*.

HP 9000 Series 300 Workstations

Users with UNIX workstations can take advantage of HP NewWave Office Information Distribution Services from both HP-UX and MPE servers via terminal emulation. HP NewWave Office Information Distribution Services provide an easy to use terminal interface that delivers complete information distribution and messaging capability to all users. UNIX workstation users can send and receive compound documents throughout the enterprise-wide mailing systems - to other UNIX users as well as PC and terminal users throughout the network.

HP NewWave Office Information Access and Shared Resource capabilities are not offered on UNIX workstations.

Macintosh Connectivity

You can now provide Macintosh users with an HP PC LAN integration solution — AdvanceLink for the Apple Macintosh. AdvanceLink integrates the Macintosh into an HP LAN environment for terminal emulation and file transfer services to the HP 3000 and HP 1000. A future release will support the HP 9000 Series. This increases your flexibility to sell HP 3000 and HP 9000 solutions into accounts with Macintosh PCs. AdvanceLink for the Macintosh also gives Macintosh users LAN access to HP Desk-Manager and OpenMail via terminal emulation. Your customers using HP NewWave Office can connect into HP's mail servers. AdvanceLink for the Macintosh allows the Macintosh user to feel at home with color graphics and support for the Macintosh's Multifinder environment including background terminal operations and file transfer, cut and paste, and Clipboard facilities.

What You Need to Order

Any of the following AdvanceLink Products for the Apple Macintosh:

Single-User Copies

D2105A	AdvanceLink for Macintosh Text
D2106A	AdvanceLink for Macintosh Graphics
D2107A	AdvanceLink for Macintosh Color Graphics

Multi-User License Products

D2115A	AdvanceLink for Macintosh
D2116A	AdvanceLink for Macintosh Graphics
D2117A	AdvanceLink for Macintosh Color Graphics

The Kinetics Etherport II and Apple Ethertalk Interface cards are the supported network cards for the Macintosh workstations. For further details contact the Network Sales Center and see the *AdvanceLink for Macintosh* data sheet P/N 5959-9626.

Increased Macintosh Integration Planned

In the future look for more HP solutions to help you connect the Apple Macintosh into the HP PC LAN environment. Hewlett-Packard has announced Macintosh print and file sharing support in a future release of HP OS/2 LAN Manager based on 3+Open. This product is currently planned for release in mid-1990.

The HP Vectra with HP NewWave is HP's strategic client and provides full integration to all HP NewWave Office services. However, when protecting the customer's investment in Macintosh PCs it is important to sell AdvanceLink for the Macintosh to bring HP's application support to Macintosh users, allowing you to sell into more accounts.

Sell HP NewWave Office for Novell LAN PCs

Now a Novell office **CAN BE** an HP NewWave Office. HP NewWave Office supports Novell LAN PCs via the HP NS LAN Gateway. (**NOTE:** the HP NS LAN Gateway supports the MPE V and MPE XL server environments only.)

The HP NewWave Office and HP NS LAN Gateway solution can help you to:

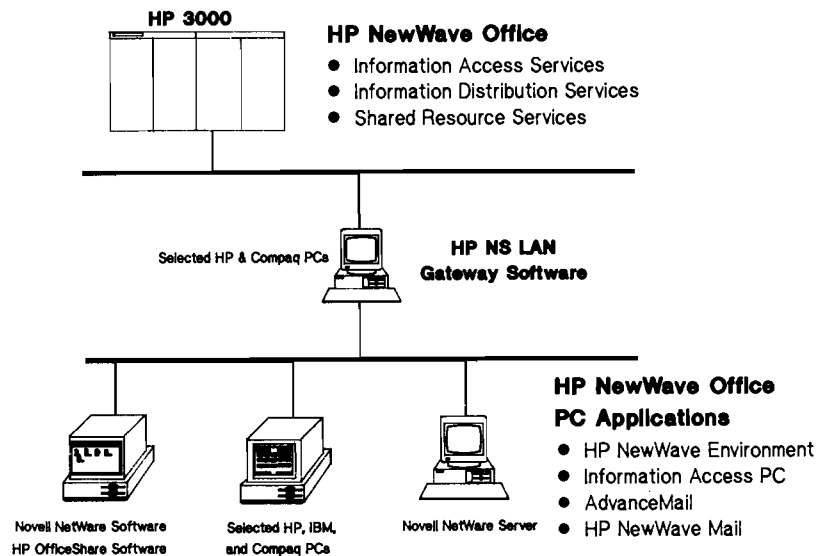
- Gain more control in your accounts by selling HP NewWave Office to existing NetWare users.
- Pursue new HP 3000 accounts that have Novell connectivity requirements.

Sell the advantages of the HP NewWave Office high capacity shared disk and PC Backup functionality, easy access to HP 3000 database information and integration with HP NewWave Office Information Distribution Services.

HP NewWave Office capabilities supported via the HP NS LAN Gateway:

- Information Access Services
- HP DeskManager with NewWave Mail/AdvanceMail
- Shared Resources
- PC Backup
- Networked Object Sharing
- HP NewWave Office Application Distribution (Network Setup Services are not offered).

HP NewWave Office <-> Novell PC LAN Connectivity



Gateway Specifics:

A dedicated PC running the HP NS LAN Gateway software connects the HP and Novell LANs. HP NS User Services are installed on each Novell NetWare PC workstation. The Gateway supports Novell NetWare version 2.15 LANs and workstations can access either a Novell NetWare or HP 3000 server without rebooting. Additional information on the HP NS LAN Gateway can be obtained by sending an HP Desk message to: Network Hotline/HP6650/11, with Novell as the subject.

The HP NS LAN Gateway is designed to give Novell users full access to the advanced services available on HP 3000 servers; however, this solution is not positioned to compete with the performance of Novell servers for local print and file services. Users should expect some performance degradation through the gateway.

What You Need to Order:

I. HP NewWave Office (Any LAN based MPE product)

II. D1807A HP NS LAN Gateway

- option 100 HP NS LAN Gateway software
(AND one of the following options.)
- option 200 HP NS User services/configuration and diagnostics for a single-user workstation
- option 210 HP NS User services/configuration and diagnostics: 10-user workstation license
- option 250 HP NS User services/configuration and diagnostics: 50-user workstation license

Sell HP NewWave Office with the HP NS LAN Gateway when customers ALREADY have Novell PC LANs installed. When selling into new LAN accounts always sell the HP OfficeShare solution which provides full integration to HP NewWave Office.

HP NewWave Office Ordering Information

HP NewWave Office products have been configured to help you sell and deliver complete software solutions with flexibility and choice. Whether your customer:

- needs HP NewWave Office on MPE or • HP-UX,
- has a LAN or • has PCs on direct connections
- wants all the HP NewWave Office services or • just one or two
- wants to use NewWave on every PC or • wants to use non-NewWave PCs
- wants to purchase HP NewWave Office for a discrete number of users or • wants to purchase HP NewWave Office for all users connected to an SPU

HP NewWave Office has the **complete cooperative computing** product that you need.

Evaluate the HP NewWave Environment

Each HP NewWave Office product includes an evaluation -- single-user license for the HP NewWave environment and HP NewWave Support Pack software. In the LAN-based products, the HP NewWave environment can be distributed to selected PCs when your customer buys additional HP NewWave User Licenses (available as an option to every HP NewWave Office product). If your customer chooses not to use the HP NewWave environment at first, PAM can be distributed to PCs on the network. In customer environments which use direct connections, HP NewWave and PAM are delivered in flexible diskette form - additional licenses allow customers the right-to-copy.

User-based Ordering

All HP NewWave Office products (Appendix E in this guide) include a User-based Pricing option for four users for use on any supported HP SPU. This means that you have the flexibility to sell into price sensitive accounts with fewer users - and you can still sell the complete solution. When your customer orders HP NewWave Office with the user-based option, system level options are not required. Whether your customer uses a MICRO or a Series 950 or 850, user-based pricing can help you sell value-added solutions everytime.

System Level Ordering

Cooperative computing is simple and more economical for larger user bases with HP NewWave Office systems level pricing. Unlike Business System Plus, when your customers purchase a systems level license for HP NewWave Office, all users connected to the SPU are licensed for all of the HP NewWave Office capabilities - including Information Access PC, HP NewWave Mail and AdvanceMail client software. HP NewWave Office delivers both HP NewWave Mail and AdvanceMail for use as required by all connected MS-DOS PCs.

Great Discounts for complete products

When you sell a complete HP NewWave Office solution with all services on a systems based license, your customer receives up to a 10% discount over stand alone purchases. You sell a complete solution - your customer gets a better deal.

Order HP NewWave Office Today

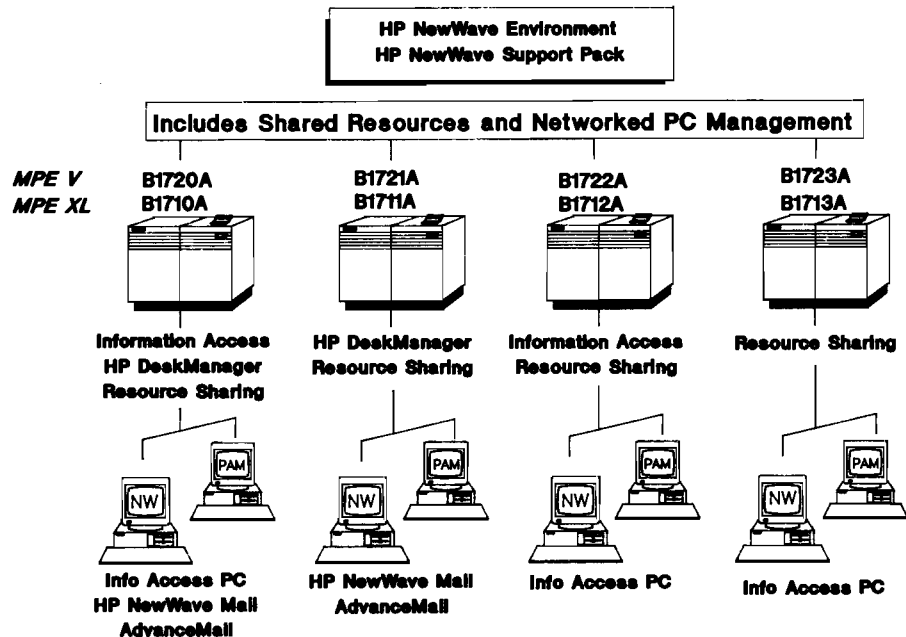
HP NewWave Office products on MPE and HP-UX are on your December '89 Corporate Price List. First customer shipments of English language products will be in May 1990. Announcements regarding availability of localized HP NewWave Office products will be made at a later date. If delivery is required prior to May, customers should order BSP with the appropriate support contract to ensure updates to HP NewWave Office.

HP NewWave Office Products for MPE

HP NewWave Office products on MPE include full cooperative computing services with information access to TurboIMAGE, HP ALLBASE, and ORACLE databases, Information Distribution Services through HP DeskManager with NewWave Mail and AdvanceMail, and LAN services with Resource Sharing. The MS-Net based Resource Sharing requires the separate purchase of OfficeShare client software for each LAN-based PC. Consult your *Network Reference Guide* or contact the Network Sales Center for ordering information on OfficeShare products.

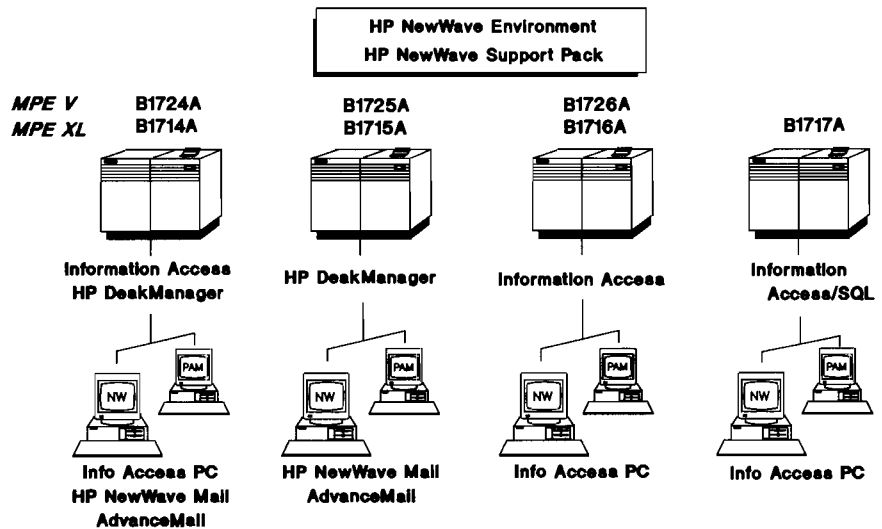
The series of LAN-based products on MPE XL and MPE V are:

LAN-Based Solutions



MPE products which can be used in either serial or installed LAN-based environments do not include shared resource capabilities or HP NewWave Office Networked PC Management. All other cooperative services are available.

Solutions For Direct Connections Or LANs (No Shared Resources or Networked PC Management)

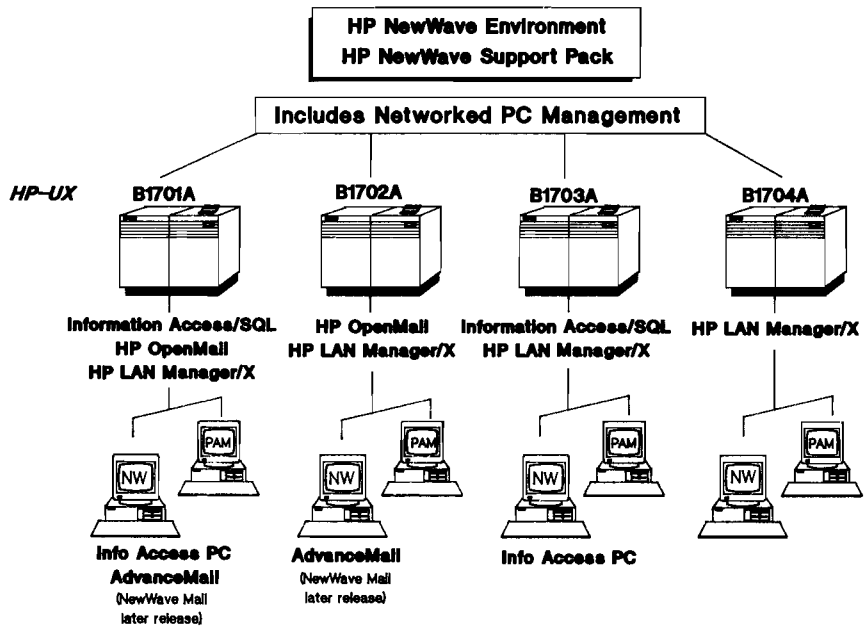


HP NewWave Office Products for HP-UX

The same combinations available on MPE are available with the HP NewWave Office products for HP-UX. The same PC environments and client software are provided to ensure PC users have transparent access to cooperative computing resources - regardless of the platform.

The LAN-based HP NewWave Office HP-UX products take full advantage of the same Networked PC Management as well. Information Access Services are provided to HP ALLBASE/SQL and ORACLE databases, Information Distribution Services are provided by HP OpenMail with AdvanceMail (HP NewWave Mail will support OpenMail in later releases), and HP LAN Manager/X provides the services with Shared Resource Services.

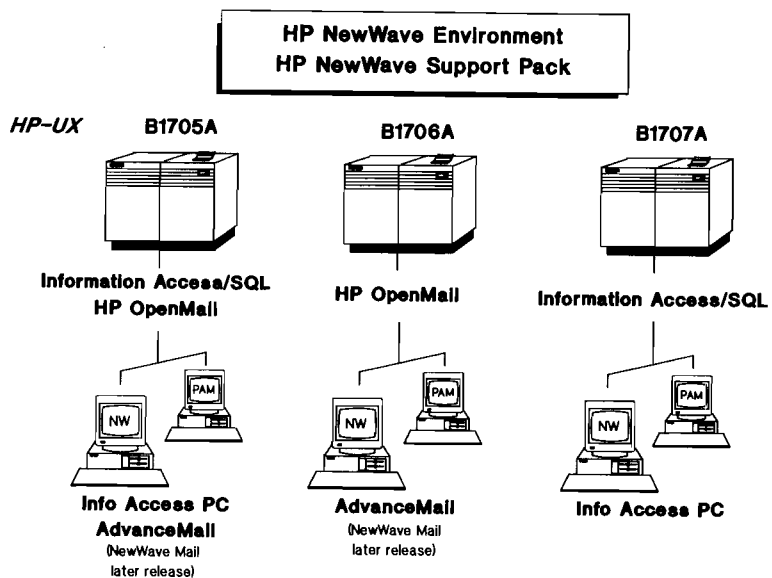
LAN-Based Solutions



When your customer purchases an HP NewWave Office for HP-UX product which includes HP LAN Manager/X, OfficeShare client software is included for each PC licensed with the HP NewWave Office purchase. OfficeShare software includes virtual terminal capability, allowing PC users with HP AdvanceLink (or alternative) products to access host-based terminal applications over the LAN.

Products which can be used in either serial or installed LAN-based accounts deliver all the services except HP LAN Manager/X and the Networked PC Management.

Solutions for Direct Connections or LANs (No Shared Resources or Networked PC Management)



HP NewWave Office Personal Applications

Available for use with HP NewWave Office Networked PC Management Services only, the HP NewWave Office personal applications:

- Executive MemoMaker
- Gallery Collection
- AdvanceLink
- Lotus 1-2-3 (version 2.01)

are delivered in the appropriate tape format for delivery and installation over the LAN. Each personal application product includes:

- Software licensed for 1-4 users
- 1 documentation set for Executive MemoMaker, Gallery, and AdvanceLink
- 4 documentation and disk sets for Lotus 1-2-3 (version 2.01)

Product numbers are:

- B1708A for MPE systems
- B1709A for HP-UX systems

HP NewWave Products and Prices are included in Appendix E.

NOTE: Networking hardware for HP 3000s, HP 9000s (Series 600 and 800), and PCs must be purchased separately for use with HP NewWave Office products. Consult the *AdvanceNet Sales Reference Guide* or contact the Network Sales Center for configuration assistance.

HP Support is a Competitive Advantage

Hewlett-Packard's industry leading software support program should be used as a competitive advantage in closing a sale. Software support ensures your customers will be more productive and satisfied with the HP products you sell. Customers with support contracts are more self-sufficient, so after the sale, you spend less time supporting them and less time solving their problems.

Software Materials Update service will ensure your customers' software is up-to-date. It provides software updates that include product enhancements and fixes as well as manual updates.

Updating Current Business System Plus Customers

The Software Update Materials service will be used to update Business System Plus customers to HP NewWave Office.

HP NewWave Office software will be distributed to all customers who have Business System Plus Software Update Materials support contracts. This distribution will take place at the same time that regular HP NewWave Office customer shipments begin.

Make sure that your existing Business System Plus customers have Software Update Materials contracts so that they will receive the HP NewWave Office software. Also make sure that any new Business System Plus orders include Software Update Materials contracts.

Ordering HP NewWave Office Support

Support for HP NewWave Office is easy to order. It is ordered in the same way that support is ordered for other HP software products. There are two things to remember when completing the Software Support Quote Worksheet:

- If TeamLine or ResponseLine Support is ordered, select option #0F8 Integrated PC Office Applications in the **APPLICATION SOFTWARE OPTIONS** section.
- For Software Materials Updates, enter the HP NewWave Office product number (B17XXA) in the **SOFTWARE PRODUCTS** section. Referencing the single HP NewWave Office product number will order updates for all of the software components. Enter the product number to order Software Materials Updates for the HP NewWave Office Personal Applications: B1708A for MPE systems, B1709A for HP-UX systems.

For a complete description of the software support services available, refer to the *HP Software Support Sales Guide* p/n 5959-2406. Data sheets that describe the support services (*HP TeamLine*, *HP ResponseLine* and *HP BasicLine*) are also available from LDC.

HP NewWave Office Installation

The installation responsibilities for HP NewWave Office on MPE are different from those of HP NewWave Office on HP-UX.

Installation of HP NewWave Office for MPE

Installation Responsibilities

MPE	Standard Installation	B0780A PC Software Installation Assistance
	Install and Configure HP NewWave Office Server Software	SE
Install HP NewWave Office PC Software on the first PC	SE	_____
Install HP NewWave Office PC Software on remaining PCs	Customer	SE

The installation policy for HP NewWave Office on the MPE platform remains the same as it is for Business System Plus.

Two hours of SE installation time are bundled into each of the HP NewWave Office products for MPE V and MPE XL that include HP Shared Resource Services and Networked PC Management.

The products that include SE installation are:

MPE XL	MPE V	Description
B1710A	B1720A	HP NewWave Office with Resource Sharing, HP DeskManager, HP Information Access, and Networked PC Management
B1711A	B1721A	HP NewWave Office with Resource Sharing, HP DeskManager, and Networked PC Management
B1712A	B1722A	HP NewWave Office with Resource Sharing, HP Information Access and Networked PC Management
B1713A	B1723A	HP NewWave Office with Resource Sharing and Networked PC Mgmt

The MPE V and MPE XL HP NewWave Office products that do not include Shared Resources and Networked PC Management are customer-installable and no installation time is included.

Quote Time and Materials consulting for customers who want HP to install these products:

MPE XL	MPE V	Description
B1714A	B1724A	HP NewWave Office with HP DeskManager and Information Access
B1715A	B1725A	HP NewWave Office with HP DeskManager
B1716A	B1726A	HP NewWave Office with Information Access
B1717A		HP NewWave Office with Information Access/SQL

Installation of HP NewWave Office for HP-UX

Installation Responsibilities

HP-UX



HP NewWave Office for HP-UX is a customer-installable product. No installation time is bundled into the product.

For the four HP NewWave Office products that include HP LAN Manager/X and Networked PC Management, an installation assistance product is available. This installation assistance is ordered by appending "+17A" to the HP NewWave Office product number. B1701A+17A, for example. This service is delivered by the CEO and includes the software installation on the server software and on the first PC workstation.

B1701A+17A	HP NewWave Office Installation
B1702A+17A	Assistance
B1703A+17A	
B1704A+17A	
Price	\$250.
Delivered by the CEO.	

Travel time is not included. Quote 51427A Time & Materials and Travel.

The "+17A" installation service is available for these HP NewWave Office for HP-UX products:

HP-UX	Description
B1701A	HP NewWave Office with HP LAN Manager/X, HP OpenMail, HP Information Access/SQL, and Networked PC Management
B1702A	HP NewWave Office with HP LAN Manager/X, HP OpenMail and Networked PC Management
B1703A	HP NewWave Office with HP LAN Manager/X, Information Access/SQL, and Networked PC Management
B1704A	HP NewWave Office with HP LAN Manager/X and Networked PC Mgmt

The three HP NewWave Office products for HP-UX that do not include HP LAN Manager/X are customer installable.

Quote Time and Materials consulting for customers who want HP to install these products:

HP-UX	Description
B1705A	HP NewWave Office with HP OpenMail and Information Access
B1706A	HP NewWave Office with HP OpenMail
B1707A	HP NewWave Office with Information Access

PC Workstation Installation Assistance

The 50780A HP NewWave Office PC Software Installation Assistance is a new product for customers who want HP to install the HP NewWave Office Personal Applications on their PCs. It provides HP NewWave Office software installation on 1-5 PCs and applies to HP NewWave Office on either MPE or HP-UX.

Order in multiples for the installation of more than five PCs.

50780A	HP NewWave Office Installation Assistance for 1-5 PCs
Price	\$750.
Delivered by the AEO.	

Customer Training Means Success

HP NewWave Office goes beyond hardware and software. It extends to giving customers the skills that will make them successful. Customer training can put your customers on the fast track to getting their HP NewWave Office up and running quickly as well as help them optimize their use of the products. Satisfied, productive customers lead to additional purchases or referrals.

Customer training for both platforms is available:

- 32572A - HP NewWave Office for MPE: Implementation and Administration
- 32573A - HP NewWave Office for HP-UX: Implementation and Administration.

These two-day courses will train your customers how to plan, configure, and maintain HP's integrated information solution. Practical and technical information is balanced so that students can return to their work-site and implement their cooperative computing environment.

Who Should Attend

Network Managers and System Administrators who are responsible for planning and managing a LAN office environment using HP NewWave Office should attend this training. The time they spend in class will be saved many times over when they return to their own work-site. Besides learning how to use HP NewWave Office more efficiently, they will also understand why HP is leading the way with its cooperative computing strategy.

Don't Forget New Prospects

Do you have customers that are not yet convinced that HP NewWave Office is for them? This training provides a cost effective way to evaluate the benefits of **sharing resources** using HP NewWave Office. Once your customers can visualize the benefits of Executive Insight, selling HP NewWave Office will be easy.

What Students will Learn

- The ability to plan and configure HP NewWave Office solutions.
- An understanding of HP NewWave Office benefits and how it produces the best office computing environment.
- An overview of local area network concepts as a foundation for using HP NewWave Office.
- Practice using HP NewWave Office configuration and maintenance tools.

Consult your HP Education Training Schedule for dates and locations of this course. These courses can also be delivered at customer sites. To order "HP NewWave Office for MPE: Implementation and Administration," specify course number HP 32572A. To order "HP NewWave Office for HP-UX: Implementation and Administration," specify course number HP 32573A.

HP NewWave Office Delivers What the Competition Can't!

HP NewWave Office provides an integrated business solution that IBM and DEC don't have, but are promising to have next year - maybe!

With HP NewWave Office, you offer your customers a full choice of servers, with a variety of applications that are truly integrated in the HP NewWave environment. These include choice of HP NewWave or non-HP NewWave environment, Information Access Services, Information Distribution Services, Shared Resource Services, and Networked PC Management.

Users are able to automate repetitive tasks, freeing them for more productive work. Novice users can easily come up to speed on new applications via HP NewWave's computer-based training facilities. And with everyone on the network connected electronically, solving problems together becomes the rule, not the exception.

Add HP's well-acknowledged strengths in service and support, and you give your customers a solution package that outruns DEC and IBM on any track!

Major Competitors

Let's take a look at our two major competitors to see what they really have to offer. We'll focus on IBM's OfficeVision, announced in May 1989, and DEC's All-In-1 Phase II, announced in October 1989.

IBM's OfficeVision

Positioning

IBM's office offering for the future is OfficeVision, an important part of IBM's System Application Architecture (SAA). SAA is a framework for IBM third party developers to create common application portability, common network protocol, and a common user environment across IBM's incompatible product line.

With OfficeVision, IBM has essentially validated key elements of HP's strategy:

- client/server computing
- PC integration with the PC as the workstation of choice
- easy-to-use application integration.

IBM Strengths

- Constant press coverage.
- Strong IBM commitment to OfficeVision as part of the SAA strategy.
- True multi-tasking environment with large addressable memory through OS/2 Extended Edition.
- Consistent user interface.

HP's leadership over IBM is based on 4 key points

	IBM OfficeVision	HP NewWave Office
Desktop Environment Functionality	Consistent, intuitive interface Compound documents OS/2-based	Consistent, intuitive interface • Object management facility (OMF) • Agent facility • Full integration of desktop applications
Flexibility and Choice of Components	IBM proprietary choices required: • OS/2 EE Operating systems (MVS, VM, OS/400, OS/2 EE) • IBM networking • OfficeVision applications	• Broad choice of multiple servers (MPE, UNIX, and OS/2) • Any industry-standard PC with MS-DOS and MS-Windows • LAN Mgr & Novell networking
Protection of Investment -- Commitment to Industry-standards	• Requires OS/2EE s/w • MS-DOS not compliant with CUA • Primarily IBM networking • No UNIX offering	• Based on open systems connectivity with all standard components: - HP NewWave env. - UNIX - HP LAN Manager - Open to relational database sources
Migration Path	Several significant upgrades needed to attain consistent services across platforms	Fundamental services for all platforms available TODAY! - HP NewWave env. - Information Access - Information Distrib. - Shared Resources - Networked PC Mgmt.

Additional Advantages of HP NewWave Office

- HP offers MS-DOS users the complete set of services and accommodates existing MS-DOS applications (while IBM is ignoring them).
- Ease of deployment and management of PC applications, plus network installation with HP NewWave Office Networked PC Management.
- Emphasis on integrating products from leading vendors rather than developing an all-HP proprietary solution.

**Five Killer Questions
Regarding IBM's OfficeVision**

Q. When will IBM's OfficeVision offer true cooperative computing functionality with common services?

A. Gartner Group has stated 1992 at the absolute earliest!

HP has been shipping PC integration with client/server applications for over five years. HP NewWave Office provides interoperable cooperative computing solutions across clients (MS-DOS, OS/2; UNIX and Macintosh in terminal emulation mode - see client matrix on page 25) and servers (MPE, UNIX and OS/2) TODAY!

Q. Where is IBM's UNIX offering?

A. IBM has not announced any OfficeVision support for UNIX!

UNIX servers are a key aspect of HP's client/server strategy so our customers can choose an industry standard open server platform. HP offers a complete client/server system for UNIX. Examples of HP's commitment to UNIX include our implementation of HP NewWave Office for UNIX, HP LAN Manager/X, our role in developing OSF Motif and Presentation Manager for UNIX, and our current broad based UNIX offering including NFS.

Q. Will industry leading PC applications be available for OS/2 Extended Edition?

A. Very few applications are currently available for Presentation Manager. Many major PC software companies are developing OS/2 applications for industry-standard environments but very few have made the commitment to the proprietary OS/2 Extended Edition system. There are more applications available on the first HP NewWave end-user release than on OfficeVision today.

Q. Will OfficeVision protect my existing investments?

A. In general, OfficeVision does a poor job in supporting existing investments in PCs and networking. For example, only one MS-DOS application can be used at a time with the OfficeVision OS/2 Extended Edition PC. MS-DOS applications are not expected to have access to the OfficeVision user interface. Also MS-DOS PCs will not get the following announced services: full user interface, decision support services, editor features, and an image editor. And, only Token Ring connections will be supported for MS-DOS PCs in a LAN environment (OS/2 Extended Edition workstations will support Token Ring and Ethernet).

Q. Is OfficeVision really an open system?

A. How open is the IBM OfficeVision strategy and will it support industry standards? Will it support — non-IBM PCs? Macintoshes? UNIX workstations? TCP/IP? Connection to third party LANs like Novell and 3Com? Connection to LAN Manager servers? Third party databases?

The answer to all these questions is NO. IBM's architecture, SAA, is IBM proprietary. It is their hope for locking customers into their hardware and their way of doing things well into the 1990s. HP's approach on the other hand is to architect our system around the leading industry accepted standards. HP IS COMMITTED to an open system and industry-standards like LAN Manager, UNIX, TCP/IP and X.400. HP also protects customers' investments by providing connectivity with third party LANs like 3Com and Novell as well as other vendors' workstations.

Digital's All-In-1

Positioning

All-In-1 is Digital's comprehensive office offering for accessing, communicating and sharing information resources across a network of desktop devices. Digital's vision for computing in the 1990s is founded on Network Application Support (NAS), a set of standard application services that allows MS-DOS, VMS, Macintosh, and OS/2 desktops to cooperate in a unified Digital network. All-In-1 will be the "glue" that packages these NAS services together in a client/server design.

In October 1989, DEC introduced All-In-1 Phase II, designed to incorporate PC environments into All-In-1. With All-In-1 Phase II, Digital has also validated key elements of HP's strategy of client/server computing and the need for easy application integration. This announcement introduced a PC interface for desktops to access All-In-1 and an X.400 mail product.

DEC Strengths

- Momentum and large installed base of All-In-1 users.
- All-In-1 allows PC users access to All-In-1 services while retaining their native environment.
- Compound document architecture integrated into All-In-1.

HP's leadership over Digital's All-In-1 is based on 3 key points

	Digital's All-In-1	HP NewWave Office
Desktop Environment Functionality	<ul style="list-style-type: none"> • Character-based user interfaces • Compound document architecture 	<ul style="list-style-type: none"> • Consistent, intuitive desktop interface • Object management facility (OMF) • Agent facility • Full integration of desktop applications
Flexibility and Choice of Components	Choice of: <ul style="list-style-type: none"> • Clients No UNIX or OS/2 server	Choice of: <ul style="list-style-type: none"> • Servers (MPE, UNIX, and OS/2) • LANs • Clients
Integration of Cooperative Computing Services	<ul style="list-style-type: none"> • NAS services not integrated with All-In-1 • Inconsistent levels of processing on different clients 	Fully integrated with: <ul style="list-style-type: none"> • HP NewWave env. • Information Access • Information Distrib. • Shared Resources • Networked PC Mgmt

Additional Advantages of HP NewWave Office

- HP's commitment to supporting a broad range of servers (MPE, UNIX, and OS/2) and clients (MS-DOS and OS/2; UNIX and Macintosh in terminal emulation mode).
- HP's support of LAN Manager - offering interoperability with IBM and DEC LAN Manager implementations, as well as connectivity to third party LANs, such as Novell and 3Com.
- The Object Management Facility (OMF) and the Agent facility

Five Killer Questions Regarding Digital's All-In-1

- Q.** Does Digital offer full integration of PCs into minicomputer-based networks?
- A.** No. The server still does most of the processing. PCs are not fully integrated. HP NewWave Office makes the PC a full-fledged member of the network by providing powerful PC cooperative computing applications (e.g., Information Access PC, AdvanceMail, NewWave Mail), supporting more users on smaller SPUs.
- Q.** How does UNIX fit into the All-In-1 plan?
- A.** All-In-1 is not supported on the UNIX server platform. HP is committed to supporting both UNIX clients and servers.
- Q.** Have many third parties signed up with Digital to write to NAS's Application Programming Interfaces (APIs)?
- A.** Only a handful of third parties have announced their intention to write to NAS in the next six months. Lotus has announced commitment to release Lotus 1-2-3 and Ashton-Tate® has announced commitment to release dBASE IV within the next six months.
- Q.** Has Digital announced plans for a graphical user interface?
- A.** No. The interface for All-In-1 is still character-based. Interfaces for the OS/2 and Macintosh have been announced — but will not be available for one year. Use this window of opportunity to sell the strong merits of the HP NewWave environment and HP NewWave Office.
- Q.** When will Digital fully implement their stated clients (MS-DOS, OS/2, IBM 3270, and Macintosh)?
- A.** Implementation will be at least one year away. HP offers PC clients (MS-DOS, OS/2; UNIX and Macintosh in terminal emulation mode) today operating with standard networking to PC and minicomputers (MPE and UNIX) servers too.

HP Leads IBM and DEC in Cost of Ownership

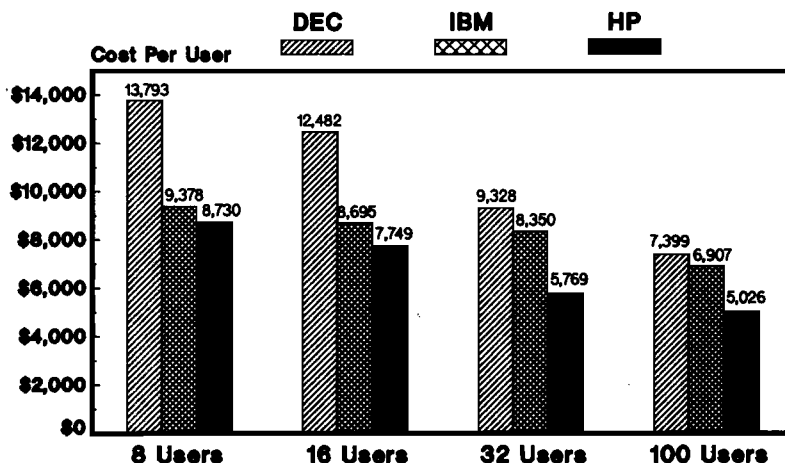
Superior solutions at better prices - you can beat the competition every time. In the "Sierra Group 1989 Cost of Ownership Study", HP solutions were rigorously compared to many other vendors - including IBM and DEC. While IBM's OfficeVision and DEC's All-In-1 Phase II announcements were after the study, the primary solutions that they used in the study are very similar to their current offering. IBM used a variety of OS/2 EE LAN servers and AS/400 with AS/400 Office software. DEC used All-In-1 with MicroVAXs and VAX clients.

HP used Business System Plus and OfficeShare solutions across PC servers and HP 3000s to provide the best cost of ownership on almost every user group level. The following comparisons demonstrate leadership in 1989 with Business System Plus - HP NewWave Office will provide cost of ownership leadership in 1990.

Solutions included complete software packages, CPUs, networking, and support for five years.

This independent study proves - HP's total solutions help you win by providing the best overall cost of ownership.

HP Offers Cost Advantages Over IBM and DEC (5 Year Cost of Ownership)



Source: The Sierra Group 1989 Cost of Ownership Study

Summary

HP has the edge on both IBM and DEC when it comes to providing customers a completely integrated, state-of-the art networked system — HP NewWave Office.

- Nobody else can give customers a real choice in servers.
- Nobody else has a truly integrated PC network solution.
- Nobody else — not even Apple — delivers an object-oriented, user-friendly interface that ties into network functionality like shared files and printers.
- With HP NewWave, users can share objects so that when the source object changes, the linked objects update accordingly! Nobody else has an interface that truly shares information between different applications.
- HP offers all of this at a low cost of ownership, with a commitment to open standards that is equaled by no other company in the industry.
- HP is the undisputed leader in automating software installation, distribution, and updating.

You have a window of opportunity. So take advantage of it, and sell HP NewWave Office!



Appendix A – Selling HP NewWave Office Information Access Service

Know your customers, identify solutions to fit their needs, and know your competition. Follow these three guidelines and you'll be able to close more sales effectively. Here's some information that will help you.

Target Customers

In any organization, you'll find these three categories of users.

1. The business executive

Executives need the right information at the right time. Without timely, accurate data, they can't function successfully in today's highly competitive business world.

HP Executive Insight gives decision-makers graphs of key metrics at the push of a button. A combination of Information Access, Shared Resources, and Graphics Gallery, is the right solution for the business executive. For more information, refer to the Executive Insight Evaluation Guide (P/N 5959-2541).

2. The MIS manager

A company's lifeline often involves the MIS Manager's prompt response to urgent requests from his executive clientele. MIS managers need the ability to provide timely reports while maintaining centralized security and control of information sources.

3. The Knowledge Worker

Executive staff members require the right tool to retrieve information from their company's data sources.

Information Access gives these users the ability to retrieve, analyze, and convert raw data into reports, spreadsheets, graphics, and other integrated PC applications without additional involvement from MIS.

Customer Needs and Solutions

Information Access addresses four major business problems.

- provide PC users with immediate access to key information databases
- make data available for use in PC applications
- give PC users an easy-to-use report writer tool
- ensure security and control of confidential data

with these solutions.

- Information Access software retrieves data from HP 3000 and HP 9000 (Series 600 & 800) and PC data sources, providing PC users access to the information they need at the right time wherever it resides.

- PC users integrate data directly from local and remote databases into PC applications, such as Lotus 1-2-3 and HP Graphics Gallery, for comprehensive and professional reports and graphs. Within the NewWave Environment, the data stored in these spreadsheets and graphs can be integrated into other applications and compound documents.
- Information Access PC software provides an easy-to-use interface for interactive queries, as well as a batch facility to automate routine queries and tasks. The built-in report writer allows users and business professionals to generate both ad hoc and routine reports to effectively communicate the information to decision makers.
- Database administrators can ensure maximum security of the information through the administration functions provided within the database management system for relational SQL databases or through the Information Access administration utility for non-relational databases.

Competitive Update

Information Access is positioned as a full-functioned user information retrieval service within HP NewWave Office. The following is a summary of competitors that compete directly with Information Access. A brief overview of each product's positioning, supported data sources, interface characteristics and relative strengths and weakness is provided.

DataExpress (IMACS)

- Positioning:** Data extraction tool.
- Primary User:** MIS, technical tool.
- Data Sources:** TurboIMAGE and HP 3000 files (MPE, KSAM); Powerhouse Dictionary; Omnidex.
- Interface:** Character (dialog).
- Strengths:** Economical; also offers \$995 DataExpress Jr. for converting IMAGE data to Lotus 1-2-3 format; both Omnidex and PowerHouse dictionary supported; report writer offered as a separate component.
- Weaknesses:** Requires technical knowledge on part of the user; must understand data structure and location to link databases.
- Conclusions:** PC user interface is very cumbersome and technical in nature. Not recommended for the business professional user.

Visimage (Cogelog)

Positioning:	Report writer
Primary User:	Knowledge worker.
Data Sources:	TurboIMAGE and HP 3000 files (MPE, KSAM); supports Powerhouse dictionary.
Interface:	Character pull-down windows (what you see is what you get)
Strengths:	Integrated graphics available as a separate, but economical option; ease-of-use; PC-based.
Weaknesses:	For U.S. customers, marketing and sales support is based in Europe; single platform tool (i.e., no SQL, DEC, IBM DB2 etc.)
Conclusions:	PC interface tool is comparable to Information Access. Limited to server data sources and not PC data sources.

OmniView (Omnidex)

Positioning:	Lotus 1-2-3 add-in
Primary User:	Knowledge worker.
Data Sources:	IMAGE; supports PowerHouse dictionary
Interface:	Lotus 1-2-3 spreadsheet with pull down menus.
Strengths:	Ability to access data from within the data destination application (Lotus 1-2-3); several formats for portraying incoming data to the spreadsheet; tight integration with Omnidex; can use Lotus 1-2-3 macro language for automating procedures.
Weaknesses:	Does not provide report writing capabilities (this may not be necessary to satisfy most users); data sources supported are limited at present.
Conclusions:	Only supports IMAGE databases. Only output to one PC data format (specifically Lotus 1-2-3). No built-in report writer.

View/PC (DB/Access)

Positioning:	Data retrieval tool.
Primary User:	Knowledge worker.
Data Sources:	All HP 3000 file formats; DEC RDB; Tandem; IBM DB2 and IMS, ORACLE, Sybase, Ingres.
Interface:	Microsoft Windows.
Strengths:	Users do not have to understand structure or location of data; multiple platform solution.
Weaknesses:	Does not provide integration with graphics solutions.
Conclusions:	Lack of graphical support prevents an implementation of a "push button" solution for business executives.

Quiz (Cognos)

- Positioning:** Report writer/Query component of the PowerHouse toolset.
- Primary User:** MIS.
- Data Sources:** All HP 3000 file types utilizing either PowerHouse dictionary (Dictionary Plus) or Dictionary 3000; currently accesses DG MV family and DEC VAX databases.
- Interface:** Character mode, expect upgrade to mouse-oriented windows or menus.
- Strengths:** Partnership with Ashton-Tate and Interbase will provide added expertise in database technology and a channel for user products; Dictionary Plus has become widely supported by other vendors.
- Weaknesses:** Slow to market on user tools, but plans are to introduce new PowerHouse as well as user tools over the next 6 months. Terminal-based product.
- Conclusions:** MIS-oriented tool. Not suitable for a professional user. Does not support PC workstations and TurboIMAGE database.

What's New

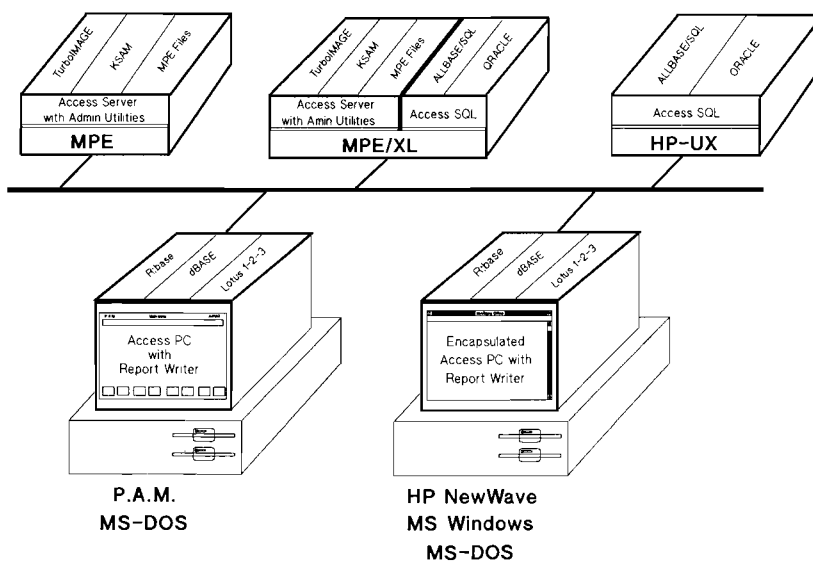
Information Access has been enhanced to provide your customers with access to relational databases as well as other features. New product numbers have been assigned to reflect these changes and will be orderable on the December 1, 1989 Corporate Price List. Customer shipments will begin in March of 1990. Listed below is a summary of the enhancements that have been implemented on the PC and server components of Information Access.

PC Enhancements

Information Access PC software has been updated (version A.05.00) to provide your customer with the following enhanced capabilities:

- Support of Information Access as an “advanced encapsulated” application within the NewWave environment. This encapsulation will enable the full-screen Information Access to be represented as an icon and have the NewWave Agent execute Information Access command files. With Microsoft Windows 2.1 features, Information Access can utilize the capabilities of context switching.
- The Information Access PC application contains a soft-key-driven interface. Using this interface, PC users can establish connections to a variety of systems, including HP 3000 or with additional software, HP 9000 (Series 600 & 800), and retrieve selected data to their PCs.

Connections to Multiple Systems Through a Common Interface



- Support of dBASE IV database (for both read and write capability).
- Support of COM3 and COM4 for basic serial connections (except in the MS Windows environment).
- Interactive support of up to 10 "GROUP BY" items in the Summary screen for remote tables.
- The ability to edit and save report writer formats without first loading the data.

These PC enhancements are supported by both the HP 3000 and HP 9000 (Series 600 & 800) servers.

Server Enhancements

The Information Access server for non-relational databases on MPE V (version A.05.00) and MPE XL (version A.05.10) systems has been updated to provide the following enhanced capabilities to your customers:

- The ability to join more tables in a single view table (16 on MPE V and 16 on MPE XL).
- Allow the use of other editors (such as EDITOR, TDP, QEDIT).
- Provide prompting and user input for variables in the Host Batch facility as well as supporting up to 10 "GROUP BY" items.
- Allow more sorted joins (joins done without an IMAGE or KSAM key) per view table (12 for MPE V and 12 for MPE XL).
- Output to an SQL table (on MPE XL systems only)
- Additional secondary DBA (Database Administrator) capability to designate or "pass" the responsibility for tables to another secondary DBA.
- Remote Link, P/N 36896A/R and 36897A/R, (via DS/3000 or NS/3000) is now included as part of the base product instead of an additional separate product.
- The ability to perform an open or outer join.

New Server

As previously discussed, a new SQL server for MPE XL systems has been added to support the retrieval of data stored by the HP ALLBASE/SQL and ORACLE database management systems. This new relational database capability (including both server and PC components, version A.05.20) is available to your customers as a separate product or in conjunction with Information Access and other HP NewWave Office services. Listed below are two examples of how to order HP NewWave Office with Information Access using the LAN environment on MPE XL systems for the new SQL server and existing server.

Example #1: NewWave Office with Information Access/SQL for MPE XL

Note: By ordering these two products, your customer will get Information Access for the LAN environment with access to HP ALLBASE/SQL and ORACLE.

P/N	Description
B1713A	HP NewWave Office MPE XL includes NewWave environment and Support Pack (for one user), Resource Sharing and NewWave Office Utilities.
B1717A	HP NewWave Office Information Access SQL/XL includes NewWave environment and Support Pack (for one user) and Information Access SQL/XL (both server and PC).

Example #2: NewWave Office with Information Access for MPE XL

Note: By ordering one product, your customer can get Information Access for the LAN environment with access to Turbo IMAGE databases, KSAM, SD or MPE files.

P/N	Description
B1712A	HP NewWave Office MPE XL includes NewWave environment and Support Pack (for one user) Resource Sharing, NewWave Office utilities and Information Access (both server and PC).

Data Sources and Formats

Listed below are the supported data sources and data formats for the HP 3000 systems (MPE V, MPE XL) and for HP 9000 (Series 600 & 800) systems.

HP 3000 Input Data Sources

For Relational Databases
(MPE XL Only)

- HP ALLBASE/SQL
- ORACLE

For Non-relational Databases

- TurboIMAGE/3000
- KSAM files
- Self Describing files (SD)
- MPE Flat files (including binary and ASCII)
- Business Report Writer Intermediate Report File (BRW/IRF)
- Information Access Saved Tables

**HP 3000 Output Data
Formats****For Non-relational Databases**

- ASCII files
- MPE Flat files (including Binary and ASCII)
- SD files
- DIF files
- Business Report Writer Intermediate Report File (BRW/IRF)
- Information Access Saved Tables (Host Batch only)
- HP ALLBASE/SQL (MPE XL Only)

HP 9000 Input Data Sources

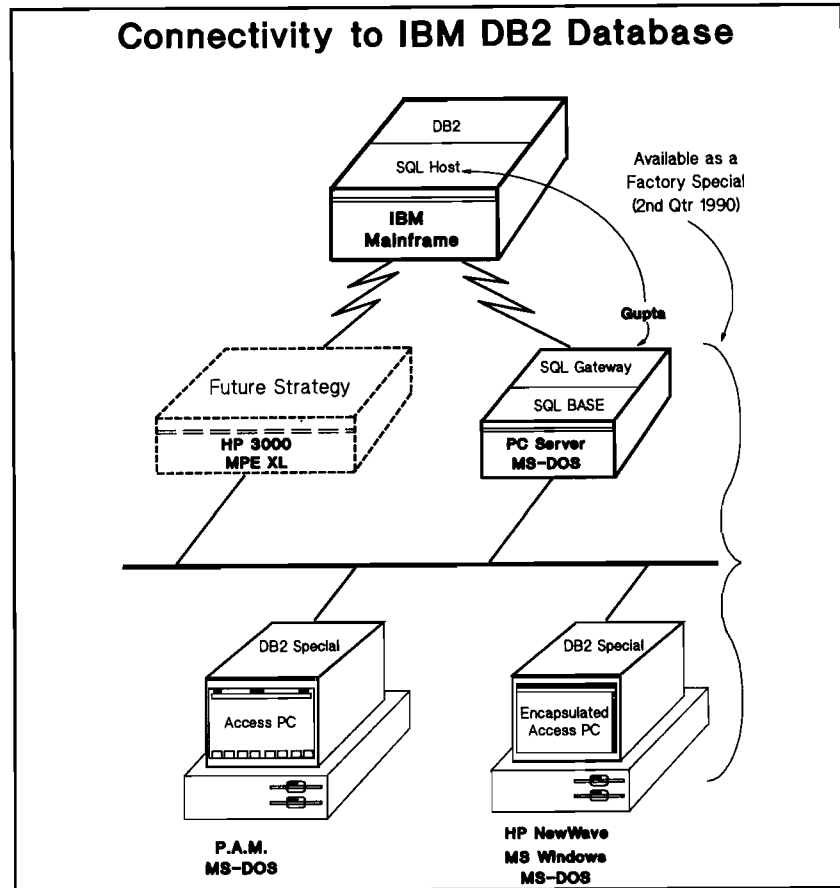
- HP ALLBASE/SQL
- ORACLE

**Connectivity to IBM
DB2 Databases**

Customers have indicated the need to access DB2 databases residing on IBM mainframe systems. We've responded to this need with the availability of a factory special that will enable customers to access DB2 databases on their IBM mainframes using Information Access and Gupta Technologies products. A PC server will be utilized for the connection of the PC workstation to the IBM mainframe within this special.

The IBM DB2 special will require customized support plans and special pricing for each individual customer along with the purchase of SQLBase®, SQL Host, and SQLGateway software products from Gupta Technologies Inc. Distribution of the Information Access portion of this special will be performed by Data Management Systems Division directly (instead of SRDO). For details on the IBM DB2 special, please contact the Sales Response Center.

In addition to the DB2 special, our future strategy for IBM DB2 databases will enable connectivity to IBM mainframe systems through HP 3000 MPE XL systems. This strategy will utilize standardized support plans and product pricing as well as regular procedures for product distribution. With this capability, your customers can access information from personal computer systems, HP 3000 MPE XL systems, and IBM mainframes while using a common PC interface.



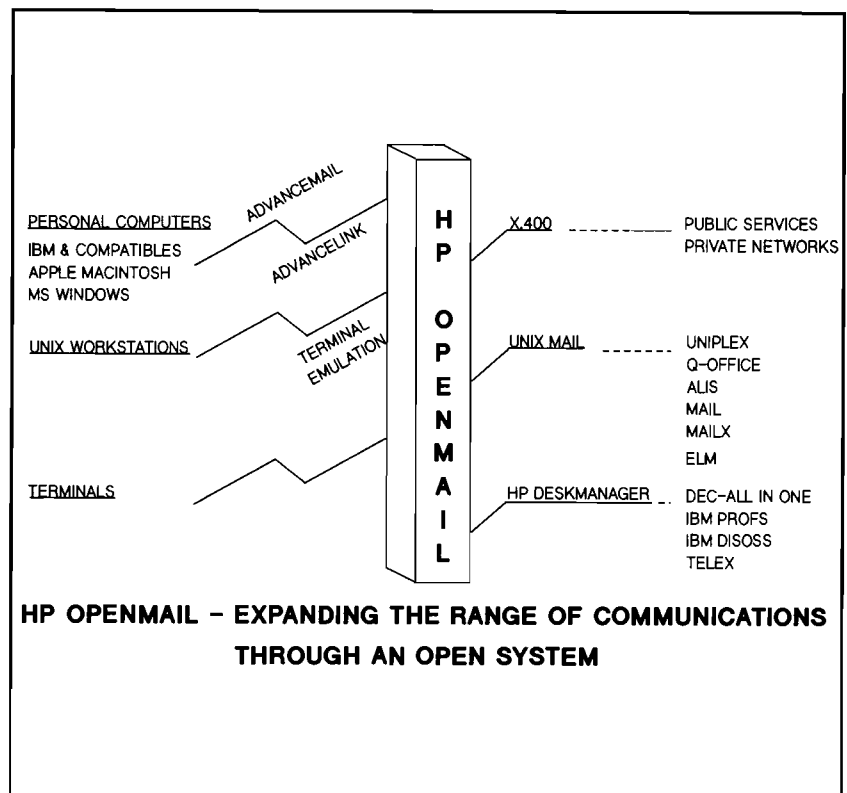
Discontinuance of Cullinet Link

As of January 1, 1990, the Cullinet Link product (P/N 32598A/R) will be removed from the Corporate Price List (CPL). The Cullinet Link product was an extension of the Information Access product offering which provided the capability to retrieve data from ICMS databases residing on IBM mainframes via HP 3000 MPE V systems. The discontinuance of the Cullinet Link product reflects the change in market demand for this capability.

Appendix B – Selling HP NewWave Information Distribution Services on HP-UX, HP OpenMail

What is HP OpenMail?

HP OpenMail is a standards-based electronic mail server for HP-UX which enables users of PCs, terminals and workstations to communicate with other users on both private and public mailing systems. HP OpenMail will enable the transmission of HP NewWave objects and other media types.

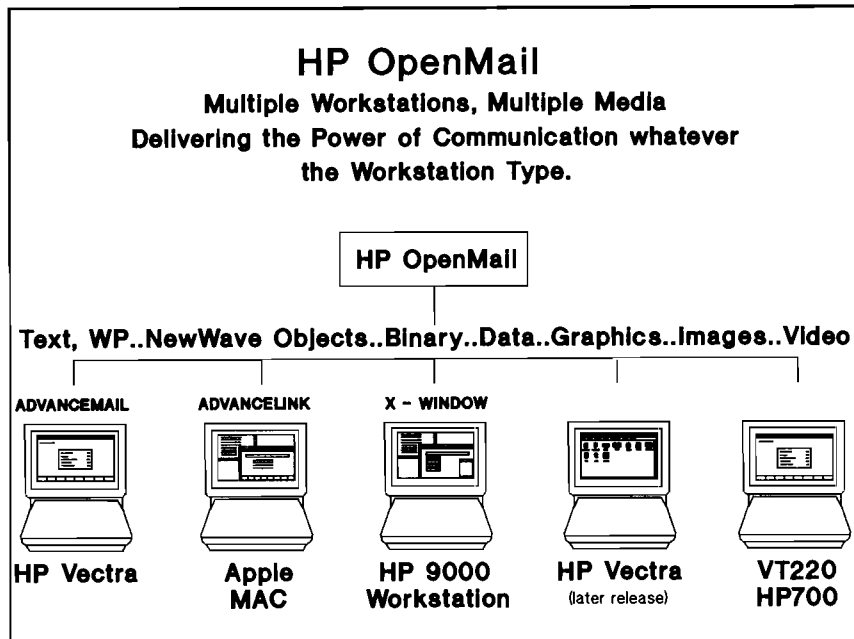


When to Sell HP OpenMail

Sell HP OpenMail when your prospect:

- has an existing network of multi-vendor mailing systems or needs to connect to customers or suppliers with standards-based mailing
- wishes to gain maximum benefit from the installed base of PCs in his environment, and wishes to tie them into the network.
- has a policy of implementing standards-base software.
- has or plans to have many different workstation types in the network
- has many different hardware server platforms and wants consistent mailing services across those platforms.

HP OpenMail Capabilities



PC Integration

Capability: HP OpenMail integrates the PC mailing product, AdvanceMail. This integration enables PC users to exchange messages and documents with other PC and terminal-based users on the network.

Benefit: HP OpenMail helps your customer to maximize their PC resources by fully integrating them into the communications network.

AdvanceMail users can process their mail at off-peak times, thereby minimizing their use of HP 9000 resources and enabling more users per system.

NewWave Mail will be supported by HP OpenMail in a later release due out in second half 1990. See (*Computer News*), September 15th for more details.

Choice of Workstations

Capability: In addition to the ability to integrate PCs, HP OpenMail enables users of terminals, and terminal emulators running on MS-DOS PCs, Apple Macintosh's and UNIX workstations to access communication services. This is all achieved through a consistent user interface, AdvanceMail.

Benefit: This means your customer's organization will make more timely and better business decisions because the maximum number of users are given access to the appropriate communication tools. It also protects existing investments in user hardware, software and training.

Choice of Media Types

Capability: HP OpenMail users can distribute a variety of media types. So, whether it's HP NewWave objects, graphics, files, word processing documents, spreadsheets etc, HP OpenMail will deliver them in their correct format. In addition, HP OpenMail can correctly identify documents received, enabling the user to browse, convert, edit, and their documents without special intervention.

Benefit: This means that users can continue to use existing application packages and thereby protect investments made in UNIX and MS-DOS software packages.

Choice of Connections

HP OpenMail

Connecting to MULTIPLE Mailing Systems

Whoever you want to communicate with, wherever they are, HP OpenMail gives you the power to make the right connections

Capability: HP OpenMail is fully integrated with HP's X.400/800 Message Transfer Agent (MTA), enabling users to exchange information with other users on X.400 compatible mailing systems in multi-vendor environments.

This product is purchased separately and is usually only needed on one machine in the network as a gateway to multi-vendor systems. Approximate prices are as follows (check the current CPL before quoting):

	HP 9000	HP 300	HP 100
HP OpenMail	\$105K	\$75K	\$55K
HP OpenMail (with X.400)	\$155K	\$115K	\$85K
HP OpenMail (with X.400 and MTA)	\$205K	\$145K	\$105K

Benefit: HP OpenMail is a true X.400 based mailing system providing a standard method for exchanging messages and documents with the growing number of mail systems supporting an X.400 gateway. X.400 makes special, system-specific, mail gateways unnecessary, and therefore controls the costs of operating a multi-vendor environment.

Capability: HP OpenMail is fully integrated with HP's mailing service on MPE, HP DeskManager. This enables HP-UX and MPE users to transparently exchange information and also enables HP-UX users to have full access to those gateways supported by HP DeskManager (e.g. IBM's Profs, DISOSS and HP Telex).

Benefit: This protects any investments already made in other HP communication products.

A new version of HP Desk Manager (subsequent to B.03.B0) is required to make this work properly. In the meantime there are patches available, which when applied to B.03.B0 will enable the gateway to work. Contact your Systems Engineer for more information.

Capability: HP OpenMail is fully integrated with the Sendmail transport system on HP-UX, which enables HP OpenMail users to exchange information with users on UNIX Mailing systems running on HP-UX and other manufacturers hardware running the UNIX operating system. It is also used for the transmission of messages within the HP OpenMail network.

Benefit: Sendmail is an established transport system in the UNIX environment. HP OpenMail, therefore, leverages existing and planned investments in Sendmail software and training and removes the cost of administering a non-standard transport system.

Overall Benefit: Your customer's organization will get the greatest value from HP OpenMail because it connects all of your customer's existing or planned mailing networks together. This provides effective communications to the maximum number of users, whatever mailing systems they use.

X.400 Connections

HP OpenMail has recently made successful X.400 connections with two DEC systems, one running VMS Mail and the other running ALL-IN-1. Furthermore, HP will be present at the "Interop Conference" in California in October 1989, where we intend being part of a multi-vendor X.400 network.

HP will be working to validate other connections in the future. The above connections, in the meantime prove our capabilities as a serious player in the integration of multi-vendor networks.

Minimizing the Cost of Administration

Capability: HP OpenMail can be installed by your customer, with no assistance from HP. The mailing server is administered either locally or from a remote site.

Benefit: This enables one administrator to service many nodes, reducing training and administration costs.

Capability: The administration interface has two levels of help, one for each screen within the system and one for each field on each screen. In certain fields HP OpenMail presents a set of system values to select from.

Benefit: This provides ease-of-use and therefore cost savings in implementing the HP OpenMail network.

Capability: Using the Test Server function in HP OpenMail, your customer's administrator can test the mail transfer links between network nodes providing an error free network before your network goes live.

Benefit: HP OpenMail reduces the time to establish a reliable network and ensures the productivity of early network users.

Capability: If problems occur during normal running of the HP OpenMail service, then your customer's administrator simply describes the problem to the Computer Based Problem Solving System, which has access to an HP OpenMail knowledge-base.

Benefit: This provides the administrator with the information required to quickly resolve problems, and so provide users with a service designed for maximum availability.

Overall Benefit: HP OpenMail minimizes the time and cost of successful administration.

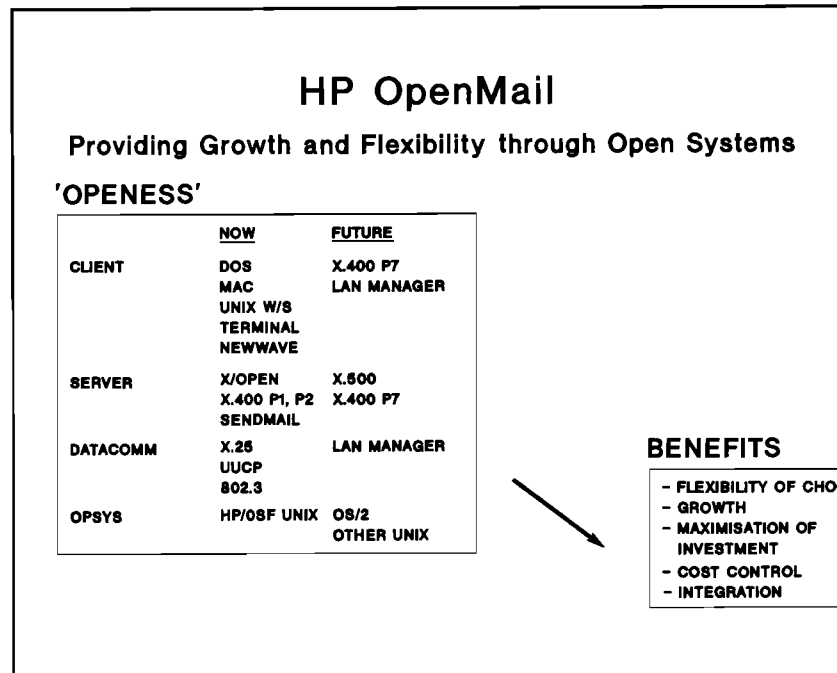
Directory Services

Capability: The HP OpenMail directory service enables all users simply to type the names of the recipients of their messages, whether those recipients are on HP OpenMail, HP DeskManager, X.400, UNIX mail or any other mail system.

Benefit: To successfully send a message, there is no need to know any addresses. Time is saved getting message to the correct destination.

It is HP's goal to further reduce the time it takes to find a user's correct name and address and to be able to do this in a network where many different mail systems are operating. HP intends providing this through the X.500 Distributed Directory Service specification.

Built on Standards, Built to Last



Capability: HP recognizes the importance of standards-based, open systems, and is fully committed to these as a way of delivering lasting solutions that provide flexibility, choice and multi-vendor integration.

Benefit: Customers' current investments in hardware, software and training are protected, and future costs can be contained.

HP plans to incorporate other standards in the HP OpenMail product as they emerge, further improving the flexibility, choice, connectivity and cost savings you will achieve with open systems.

Competition

HP OpenMail vs the Competition									
	HP OpenMail A.00.00	Uniplex II Plus Version 6.0	Q-Office+ Version 1.95	ALL-IN-1 Starter Version 2.3	Officevision/ 400 Version 1	HP Desk Version B.03+	3+Open Mail Version 1.0	Network Courier Version 7	Officevision/ LAN Version 1
Discounted Price/User	\$180	\$375	\$400	\$330	\$260	\$275	\$230	\$140	\$190
PC Integration	●	○	○	○	● Restricted	●	●	●	● Restricted
X.400 Compatibility	● native	○	○	●	● via PROFS	● via FSC	○	●	● via PROFS
Workstation Integration	●	●	●	○	○	○	○	○	○
Terminal Interface	●	●	●	●	●	●	○	○	○
NewWave Integration	●	○	○	○	○	●	○	○	○
Connection to IBM	● via X.400/PROFS or HP Desk	○	○	●	●	●	●	●	●
Connection to DEC	● via HPDesk	○	○	●	○	●	●	○	○
Connects to UNIX Mail	●	●	●	●	○	○	○	○	○
Distributed Directories	○ X.500 planned	○	○	● not X.500	○	○	○	○	○
Directory Updates	●	○	○	●	○	●	●	○	○
Multiple File Types	●	●	●	●	○	●	○	○	●
Globalised	● Europe and Far East	○ French, German	○ Languages	○ French, German	○	● Europe and Far East	○	○	○
Scalable	●	●	●	●	●	○	○	○	○
Portable	●	●	●	○	○	○	○	○	○

● = Feature Supported ○ = Feature Not Supported Blank = No data

Uniplex II Plus from Uniplex

Product Description

Uniplex is an Integrated Office System (IOS) providing mailing, word processing, spreadsheet, graphics, record management and calendaring services to terminal-based users. The integration of PCs is not a strength of the Uniplex product.

Uniplex comes in three flavors:

- Uniplex II Plus provides word processing database, spread-sheet and graphics.
- Uniplex Advanced Office System adds the electronic mail, time management, personal organizer and card index and a powerful report writer.
- Uniplex Advanced Graphics System, offers a wide range of charts and graphs and freehand drawing capabilities.

Differentiators for HP OpenMail:

- Supported alongside 3Com and Novell in the same account by HP, Uniplex cannot provide such comprehensive support in a mixed vendor environment.
- PC Integration
- X.400 Connectivity
- NewWave Support

HP OpenMail will work with AdvanceMail and NewWave Mail to provide superior levels of integration for PCs.

Q-Office from Quadratron

Product Description

Q-Office is an Integrated Office System (IOS) providing mailing, word processing, spreadsheet, graphics, record management and calendaring services to terminal-based users. Quadratron also have a version of Q-Office running on an MS-DOS PC, with a bridge to the UNIX version. Q-Office is not known for good integration for PC users.

Differentiators for HP OpenMail:

- PC Integration
- X.400 Compatibility
- User Interface protects user/administrator from UNIX
- NewWave Integration
- Supported alongside 3Com and Novell in the same account by HP
- Quadratron cannot provide such comprehensive support in a mixed vendor environment

All-In-1 from DEC

Product Description

All-In-1 is an integrated office system for VAX users and includes the following functionality:

- Menu-driven interface
- Word Processing (including spelling and grammar checker)
- Electronic Mail
- Customization and Application Integration
- Calendar and Scheduler
- Filing
- Directory System
- X.400, IBM, Wang, HPDesk and UNIX mail connections
- Ability to connect to MCI mail and telex services
- Voice integration

DEC sell All-In-1 in vertical market bundles:

- All-In-1 System for Sales and Marketing
- All-In-1 System for Telecom Management
- All-In-1 System for Executive Services
- All-In-1 System for Employment Services
- All-In-1 Business Operations and Strategy System (BOSS)

DEC has a second product, All-In-1 Starter, a cut down version of All-In-1. This has word processing, electronic mail and filing cabinet facilities and is fully compatible with the full All-In-1 product.

All-In-1 runs on the VAX range of machines and when running on a MicroVAX, a dedicated machine is required. DEC has also produced a version for the VAXmate and other AT compatibles (called PC All-In-1). Because of DEC's offensive toward IBM (i.e., to compete at the high-end) they have not really understood how to produce good products at the low-end (i.e., the PC), consequently, the PC version of their product has many weaknesses and has not been at all praised by consultants. Its main weakness is the dependence on a dedicated MicroVAX.

DEC is committed to re-writing All-In-1 for ULTRIX. No announcement concerning availability has been made yet.

On April 16th, 1989, DEC announced personal licensing for it's ALL-IN-1 and ALL-IN-1 Starter products. A four subscriber license for ALL-IN-1 costs \$2495 list, regardless of system size. The same size license for ALL-IN-1 Starter is \$1747 list. Personal licenses can be traded in (with credit) for one of the system licenses above.

Differentiators for HP OpenMail

- PC integration. DEC are inherently weak in this area, despite several attempts to rectify (Apple, Compaq, Tandy).
- UNIX implementation. Until All-In-1 is ported, DEC does not have a true UNIX solution. UNIX users have to communicate with other UNIX IOS products.

OfficeVision/400 Office from IBM

Product Description

OfficeVision/400 includes the following functionality:

- Full function word processing (Displaywrite)
- Electronic Mail
- Calendar and Resource Scheduler
- Spell Checking

apparently all based upon the SAA interface-standards which determine the look and feel of menus and screens.

Optional products include:

- AS/400 Language Dictionaries
- AS/400 Query
- AS/400 Business Graphics
- API's
- PC Support

These office products are basically enhanced System 36 functions, and lack the true PC integration that the HP NewWave Office product (and AdvanceMail and HP OpenMail) offers.

There are changes to the interfaces and so both System 36 and System 38 users will need some minimal training. Additionally, these products are not the final SAA products that IBM intend; users will have to further migrate to these as they become available.

Differentiators for HP OpenMail

- Superior PC integration. No PC mail product and therefore no distribution of the workload. Performance hit on the AS/400.

- X.400 compatibility. Although OfficeVision/400 will connect to PS/36, PS/38, Profs, DISOSS, it has no X.400 capability whatsoever. It gets it's X.400 through a connection to Profs.
- UNIX connectivity. The AS/400 solution cannot connect to UNIX. AIX is not implemented on the AS/400.
- NewWave interface. IBM has introduced a consistent interface but not with the capabilities of HP NewWave. There is an ICON-based Windows interface but no object management.

3+Open Mail from 3Com

Product Description

3+Open Mail is an electronic mail service that runs on the latest networked operating system from 3Com's 3+Open. 3+Open is a LAN Manager based operating system running on OS/2 servers, PS/2s or 3Com's proprietary network server. This is the same mail (3+Mail) service as 3Com offers on their 3+Share operating system for DOS servers.

The 3+Open Mail service running on the server is available to clients on the LAN using DOS or OS/2 workstations, as well as 3Com 3Station and 3Station/2E workstation users. In addition, 3+Open Mail users can exchange messages with 3+Mail and 3+Mail for Macintosh users across Ethernet, token ring, and Apple Localtalk networking systems.

Through the optional products 3+Open Internet and 3+Remote, users on a LAN can get Wide Area Network mailing, allowing distant work groups to share information and remote users to dial in to their mail service from home or from a remote office. 3+Remote operates on DOS PCs only.

Other optional products include:

- 3+Open Reach/X.400. Enables users to share mail with other users on X.400 mail systems or gateways (e.g. Profs, All-In-1 and Telemail 400).
- 3+Reach/MCI. Enables access to the MCI mail service.
- Soft-Switch SNADS Gateway/3+Mail. Available from Soft-Switch Corp. Connects users with MCI Mail, All-In-1, VMSmail, Profs, DISOSS, Wang Office etc
- 3+Open Name. A central directory service for mail users providing:
 - personal names
 - aliases
 - distribution lists
 - network addresses

Differentiators for HP OpenMail

This product is very similar to HP OpenMail in its mailing capabilities. However, the main differentiator for HP OpenMail (and the other BSP products) is their scalability. 3+Open Mail relies on OS/2 servers, thereby providing no growth for work groups (other than buying another server).

HP OpenMail, with the AdvanceMail and NewWaveMail PC interfaces will be very similar to the above products but will have an added benefit—HP solutions will be scalable at the server. HP OpenMail will run on any size Series 300 or Series 800 server. It will also be portable to other implementations of UNIX (e.g., UNIX/386, AIX, NCR, etc., etc.) and to OS/2.

Network Courier from Consumers Software Inc.

Product Description

Network Courier is an electronic mail system similar in functionality to 3Com's solution and runs on a number of LANs:

- Novell,
- 3Com,
- IBM,
- Banyan.

It provides traditional mail capabilities to users of DOS PCs (local and remote) connected to DOS servers. It supports character-based and Windows based operation and resembles the Lotus style of user interface.

Network Courier users can exchange mail with other Network Courier users worldwide with the inter-networking extensions and also with All-In-1, MCI, Profs, VAXMail and X.400 users through gateways.

Differentiators for HP OpenMail

Scalable, the Network Courier relies on a DOS server, cannot run on UNIX and there are no known plans to make an OS/2 version available.

HP OpenMail, with the AdvanceMail and NewWave Mail PC interfaces will be very similar to the above product but will have an added benefit—HP solutions will be scalable at the server. HP OpenMail will run on any size Series 300 or Series 800 server. It will also be portable to other implementations of UNIX (e.g., UNIX/386, AIX, NCR, etc., etc.) and to OS/2.

Future Directions

We have many areas to investigate for HP OpenMail II, which is currently planned to complete late in 1990. This is an indication only, and not a commitment.

The following areas are important to customers because they:

1. Increase our ability to be an "open" system. LAN Manager and X.400 P7 enable us to support more clients in a standard way, and therefore to truly become "the leading de facto standard mailing system".
2. Add further functionality to our administration capabilities. X.500 is already an HP product for Manufacturers Automation Protocol MAP and therefore, HP has already shown commitment to this standard. IND is investigating the X.500 requirements for HP OpenMail and HP DeskManager.
3. We want to be able to add to the number of users that we can connect. The FAX gateway project is under investigation at PWD. Voice integration will be investigated soon.

HP OpenMail Future Directions

Items to be investigated for future releases:

- | | |
|---------------------------|----------------------|
| ▶ LAN Manager support | ▶ HP OpenMail API |
| ▶ X.400 P7 support | ▶ SNADS Gateway |
| ▶ X.500 Support | ▶ Voice Integration |
| ▶ Motif Style Terminal UI | ▶ Plug in converters |
| ▶ FAX Gateway | ▶ 16 Bit Support |

HP OpenMail Questions and Answers

- Q.** Is there an upgrade program from HP DeskManager to HP OpenMail?
- A.** No, there are no upgrade credits. There are also no upgrade credits to AdvanceMail A.03.00 (the version required to connect to HP OpenMail).
- Q.** User interface for OpenMail; Terminal and PC interface?
- A.** OpenMail will provide, primarily, information distribution and mailing services for the PC mailing products—AdvanceMail and NewWave Mail. OpenMail will also have a terminal user interface which will provide intray, outtray, distribution list management and the Import/export of UNIX files.
- Q.** Will the terminal interface look the same between the electronic mail product for HP-UX and HP Desk Manager on MPE?
- A.** No. The terminal interface will be designed to be as close to the AdvanceMail interface as possible. This will ensure that there is a consistent user interface between the PC and terminal user environments.
- Q.** Will the terminal interface to OpenMail run in an X-Window?
- A.** Yes.
- Q.** Without HP NewWave on UX workstations, sending local files through OpenMail will be an awkward process (download the file to host through NFS, then send with OpenMail).
- A.** OpenMail will have a terminal user interface that will look very much like AdvanceMail on the PC. PWD is considering offering a cut-down version of OpenMail which will give the facilities of the user interface and connection to another (full copy of) OpenMail for information distribution to the network.
- Q.** UNIX Mail is often used in a programmatic way. Unless OpenMail provides the same ease of programming, there might be two mail systems used in parallel.
- A.** OpenMail will have programmatic access, though not until a later release. PWD is investigating how UNIX Mail is being used in a programmatic way so as to understand the customer needs. If you have any customers or prospects that require his capability, please contact PWD with the details.
- Q.** There are two name-server architectures in use/in definition— ARPA and X.500. Will OpenMail support both (they will be both needed)?
- A.** X.500 will be supported by OpenMail when X.500 is available. Other name servers will be investigated for inclusion in the OpenMail product; however, the current priority for name-servers will be to implement the ISO standard first (X.500).

Q. Which document converters/browsers will OpenMail provide?

A. OpenMail will provide the following conversions TO TEXT only:

- HPWord/PC
- AdvanceWrite
- Revisable Form DCA
- NewWave Package
- Memomaker

and this will be for DISPLAYING, PRINTING and CONVERTING.

For a subsequent release of OpenMail, PWD will be investigating other popular word processing packages, and the need to provide conversion between different formats in addition to converting to text.

Q. Will OpenMail be useful as the HP internal gateway between HP Desk Manager and UNIX Mail replacing (HPDesk Manager (HTU) to UNIX)?

A. Yes, OpenMail will fulfill the role of HTU.

Q. Will OpenMail be useful as the gateway to X.400 from HP Desk Manager and UNIX Mail?

A. Yes. However, HP Desk Manager will also have a gateway to X.400 and this will be an onboard solution by 2H89. The customer will not need to purchase OpenMail to get the X.400 capability in an exclusively HP 3000 environment.

As a gateway to X.400 for UNIX Mail users: yes, OpenMail will perform this function.

If a customer will have both OpenMail and HP Desk Manager in his network, it will be advisable to have only one gateway to X.400. This is to reduce X.400 subscription costs.

Q. Will OpenMail be useful as the gateway to INTERNET for those UNIX Mail users still using the phone network?

A. Yes, OpenMail will be able to do this through ARPA. The connection to INTERNET® will be transparent to OpenMail. OpenMail will have a gateway to UNIX Mail and so UNIX Mail could use OpenMail as the gateway to INTERNET.

Q. Does AdvanceMail have a limitation on downloading packages?

A. There are no limitations on the downloading of packages with the AdvanceMail product or the Vectra or IBM PCs, and no limitations are expected in the UNIX environment. There is limitation with the portable version of AdvanceMail in that only 2- part messages can be ransmitted. That is, a distribution list and a second part (which can contain any kind of item).

Q. Is HP DeskManager being ported to UNIX?

A. No, HP Desk Manager is not being ported to UNIX. There would not be sufficient competitive advantage over some other mature products in the marketplace (such as Uniplex and Q-Office). OpenMail has distinct competitive advantage in the UNIX marketplace as in Information Distribution/Mail server with a high level of connectivity (X.400, UNIX Mail, and HP Desk) and can serve well the needs of a whole range of workgroup sizes and particularly small groups requiring an efficient low-end server. In addition to the above, OpenMail is being written specifically (to X/OPEN standards) so that it can be ported to other UNIX implementations and to OS/2.

Simply porting HP Desk could not allow us to meet the above two objectives.

Q. How will OpenMail relate to HP DeskManager in terms of functionality?

A. There is not enough room here to give a complete account of all the finite differences. HP Desk Manager is a complete functionally-rich, integrated office system for the terminal-based user. It also provides distribution services for the PC user on AdvanceMail and on NewWave AdvanceMail. Open-Mail will NOT have a functionally-rich user-interface, that is the realm of AdvanceMail and NewWave Mail. OpenMail will provide highly efficient distribution of services to a wide range of hosts and servers for AdvanceMail and NewWave Mail users, plus the necessary installation, configuration, and maintenance tools to allow cost-effective administration of the network.

Q. My customer will be using Quadratron (1 year away from implementation). Should they be waiting for HP-UX "futures"?

A. If the customer wishes to "embrace" the HP way of providing workgroup productivity (distributed computing, PC integration) in a years time, and well into the 1990's, and can wait the extra 2-3 months, PWD strongly recommends the HP "futures". If the customer implements Quadratron and then decides later to move to HP's offering, then there will be at least two issues: migration of data and integration of the two environments -neither can be guaranteed to be without disruption.

Q. Will the electronic mail product for HP-UX have connections to UNIX Mail or other vendors' electronic mail systems?

A. The electronic mail product for HP-UX will have a transparent link to UNIX Mail. It will provide linkages to other mail systems via X.400

Q. Will the electronic mail product for HP-UX be supported on other vendors UNIX platforms?

A. The electronic mail product for HP-UX is being written to X/OPEN standards to allow it to be ported to other UNIX platforms. Support of the electronic mail product for HP-UX on other vendors/UNIX platforms is under active investigation.

Q. Will there be an electronic mail product on the OS/2 platform with capabilities similar to the HP-UX electronic mail?

A. Yes. The same basic services provided by the HP-UX electronic mail product will be available on an OS/2 server platform. The timing of this product is subject to the results of the current investigation.

Appendix C - HP Advanced Image Management System

The Business Problem

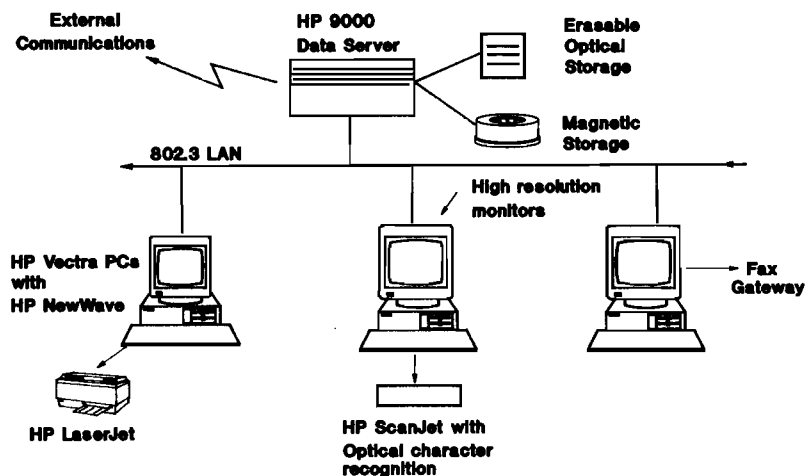
Today 95% of information exists in paper form. High volumes of paper-based information are a characteristic of even the most automated of offices. The avalanche of paper may contain the right information, but it is sometimes impossible to access and at the very best, slow to retrieve.

The HP Advanced Image Management System puts an end to the paper problem by bringing information such as handwritten letters, photographs, and forms on-line. Such information can be duplicated electronically and stored with electronic forms of data including text and graphics.

System Overview

HP Advanced Image Management System is a UNIX-based solution. Adopting HP's client/server approach to business information systems and based on industry standards, it is consistent with HP NewWave Office for HP-UX.

HP Advanced Image Management System



The Components

Dataserver

HP Advanced Image Management System supports the HP 9000 (Series 300 and 800) enabling the system to expand as user needs grow. The System uses a relational database management system (RDBMS) with standard SQL as the primary interface. The RDBMS has been extended to allow fields to support large data objects including images and other data types. This gives greater data integrity and system security.

Personal Computers

HP Vectra PC clients provide the power for image scanning, manipulation and display. To enhance the PC for the high quality display of images, it is equipped with a high resolution monitor.

In addition, each client PC has an image compression/decompression card. The card performs compression, decompression and scaling of image data using CCITT Group 3 and Group 4 FAX algorithms. Transmission speeds of image data are maximized and storage requirement minimized.

Image Peripherals

Client PCs may be used simply for retrieving images and viewing them. However, scanners for digitizing hardcopy information into electronic form, and laser printers to print high quality output of images, may be attached to provide scanning and printing workstations as required.

Optical storage

In addition to the traditional magnetic data storage, the HP Advanced Image Management System supports optical disk storage. Optical disks provide your solution with all the storage you'll ever need at costs approximately one-third of magnetic disk. Single optical drive systems and autochanger or jukebox systems are available depending on storage requirements.

HP Advanced Image Management System for Value Added Resellers

Every document image management situation is different. That is why the HP Advanced Image Management System offers application development tools. These tools include an innovative user interface designer (based on MS-Windows) that is fully integrated with the system's standard fourth-generation language and relational database. Developers can quickly and easily create image management applications that are tailored exactly to meet the customer's needs.

Target Customers

Any industry, company, or department storing and processing high volumes of paper can benefit from the HP Advanced Image Management System. Typical users are to be found in the insurance, financial, healthcare, telecommunications, and pharmaceutical industries and in government departments.

Product Announcement and Availability

The product will be announced in January at the CAP International "Document Image Processing and Optical Disk Systems Conference". At this time, a full range of sales tools will be made available - including data sheets and sales guide. The announcement will be followed by product shipments in June 1990. For further information, please contact your Sales Response Center.

Appendix D - HP NewWave Office - Questions and Answers

Server Platform Issues

Q. Can OS/2 servers be used in an HP NewWave Office environment?

A. You can offer excellent integration between HP NewWave Office and OS/2 servers today. HP LAN Manager for OS/2 and MS-DOS provides access to shared resources and the LAN Manager APIs for client/server application development. Customers who implement OS/2 servers along with HP 3000 or HP 9000 servers can provide full information access and information distribution services, and networked PC management via the HP 3000 or HP 9000 server. Client/server applications and shared resource services can be implemented on the OS/2 servers. (See the section titled - "Networking and Connectivity" for additional information.)

Key services as follows:

OS/2 Host Services

Information

Access: Under investigation.

Information

Distribution: X.400 provides connectivity to 3+Open and other third party mail solutions. A mail gateway designed specifically for 3+Open is under investigation.

Shared Resources: HP LAN Manager for OS/2 and MS-DOS

Networked PC

Management: On common networks, MS-DOS clients can receive PC client, HP NewWave and applications from HP NewWave Office HP 3000 or HP 9000 (Series 600 and 800 servers).

Q. When will HP LAN Manager/XL be available? Will there be an upgrade path for HP NewWave Office for MPE customers?

A. The current HP NewWave Office for the MPE - Resource Sharing product provides the same basic shared resource capability provided by HP LAN Manager. Client/server applications can be developed using Cooperative Services or NetIPC. HP LAN Manager/XL will additionally provide the LAN Manager APIs for industry-standard client/server application development. HP LAN Manager/XL will be available in limited release for developers in mid-1990. First customer shipments to end-users will be in early 1991. An upgrade path for HP NewWave Office for MPE customers will be available for HP LAN Manager/XL.

Q. Will LAN Manager be available on MPE V?

A. HP NewWave Office for MPE - Resource Sharing will continue to provide shared resource functionality for MPE V users. Cooperative Services and NetIPC will be available for client/server application development. Based on the availability of these services and because we expect the highest interest in LAN Manager to be on XL, there are no plans to develop LAN Manager for MPE V.

Q. Does HP NewWave Office support Series 300 HP-UX servers?

A. Series 300 HP-UX servers with HP LAN Manager/X and/or HP OpenMail can be fully integrated with HP NewWave Office on HP 3000s or HP 9000s (Series 600 and 800). Customers who implement Series 300 HP-UX servers along with HP 3000 or HP 9000 (Series 600 and 800) servers can provide full Information Access and Networked PC Management services for their PCs via the HP 3000 or HP 9000 (Series 600 and 800) server.

Q. Will HP NewWave Office support UNIX 386 servers?

A. HP LAN Manager/X for UNIX 386 servers is currently planned for the first half of 1990. This solution will provide shared resources and the LAN Manager APIs for client/server application development. Customers who implement UNIX 386 servers along with HP 3000 or HP 9000 servers can provide full Information Access, Information Distribution, and Networked PC Management services via the HP 3000 or HP 9000 servers. Client/server applications and Shared Resource services can be implemented on the UNIX 386 servers.

Q. When should HP NewWave Office be sold vs. HP LAN Manager?

A. Sell LAN Manager when customer wants client/server computing with DOS-OS/2 clients accessing MPE, UNIX, or OS/2 servers based on LAN Manager. LAN Manager provides print/file sharing and the foundation for developing/purchasing applications based on LAN Manager APIs scalable across 3000, 9000 and PC platforms.

Sell NewWave Office when customer wants a client/server system based on 3000/9000 servers with DOS-OS/2 clients with one or more of the following in addition to the LAN Manager: Networked PC Management, Information Access services, Information Distribution services, or the NewWave software environment. This application server system will be available for the 3000 and 9000 (S/600 and 800) initially and may be available for other platforms in the future.

Client Platform Issues

Q. What services do OS/2 clients have access to?

A. OS/2 clients have access to the following services.

OS/2 Client Services

Information

Access: Planned. Availability under investigation.

Information

Distribution: Planned through terminal emulation. Third party products are under investigation.

Shared Resources: Available as part of the LAN Manager product family.

PC Backup: PC Backup to tape is not available to OS/2 clients. OS/2 clients can save critical files on a shared disk which will be backed up as part of the normal system backup process.

HP NewWave

environment: Planned. Availability under investigation.

Q. What if my customers want to use LAN Manager clients rather than OfficeShare clients with HP NewWave Office for HP-UX?

A. For the first release of HP NewWave Office for HP-UX, OfficeShare will be the client networking software. If your customer wishes to purchase HP NewWave Office for HP-UX and has an immediate need to develop a client/server application using the LAN Manager APIs, they will need the LAN Manager client software. There will be a special program to provide LAN Manager client software to HP NewWave Office for HP-UX customers on an interim basis (until it is fully integrated in the second release of HP NewWave Office for HP-UX). Details of this program will be announced at a later date.

Q. How are HP 9000, Series 300 clients supported by HP NewWave Office; does that include Apollo workstations?

A. HP 9000 Series 300 workstations can use HP NewWave Office Information Distribution Services and share files and printers with HP NewWave Office for HP-UX PC users. HP 9000, Series 300 users must access Information Distribution Services via terminal emulation. To share files and printers, NFS must be installed on both the HP 9000 server and client. Since NFS and HP LAN Manager/X both use the UNIX file system, files stored by HP 9000, Series 300 users using NFS can be accessed by PC users using LAN Manager/X and vice-versa. The

only limitation is that users must adhere to MS-DOS file naming conventions if they intend to share files between the two environments. Apollo workstations have the same level of functionality as HP 9000 Series 300 workstations.

Q. How are Apple Macintosh clients supported by HP NewWave Office?

A. Through terminal emulation in either LAN or direct connection environments. Apple Macintosh users can take advantage of HP NewWave Office Information Distribution Services.

Networking Issues

Q. What other 3rd party networks will the NS LAN Gateway support in the future?

A. There are no plans at this time to add support for additional 3rd party LANs for the NS LAN Gateway.

Q. What are my options for 3Com connectivity?

A. Today's 3Com workgroups can easily be integrated into the HP NewWave Office solution. 3Com customers will need to purchase HP NS Services for MS-DOS for each client. This package provides the necessary software for HP 3000 connections. The required TCP/IP transport must be loaded as a secondary transport to the 3+Open network. When this is done, 3Com clients have the same capabilities as MS-DOS and OS/2 clients that are connected to HP servers. Customers who have 3+ networks need to upgrade to 3+Open before they purchase this package.

Information Access Issues

Q. What are HP's plans to extend Information Access connectivity to other data sources such as Ingres, Informix, DEC's Rdb, IBM's DB2, and OS/2 databases such as SQL-Server?

A. The Information Access Services of HP NewWave Office currently provide end-user access to data on MPE, HP-UX, OS/2 and MS-DOS servers. Databases supported include widely used formats including TurboIMAGE, ALLBASE/SQL, ORACLE, KSAM, SD files, dBASE, R:base and Lotus 1-2-3.

HP is currently evaluating adding support for the leading databases on each system platform. Databases under consideration include Informix and Ingres on UNIX; SQL Server, OS/2 EE, ORACLE, and SQL Base on OS/2; Rdb and ORACLE on DEC's VAX; and DB2 and SQL/DS on IBM.

Specific to DB2, HP plans to offer an HP 3000 link in the near future, as well as offering connectivity via a PC server on a "special" basis. HP's recently announced relationship with Gupta Technologies

demonstrates HP's progress in this area.

- Q.** What are HP's plans for offering a full HP NewWave-based interface to Information Access?
- A.** The current Information Access interface already provides users with HP NewWave capabilities such as direct object manipulation, automation, context switching and background processing. During the next year, HP plans to further enhance the Information Access services, incorporating a rich set of HP NewWave functionality.
- Q.** What are HP's plans for offering an HP NewWave interface to Information Access UNIX and OS/2 clients?
- A.** HP's strategy for the HP NewWave environment includes both UNIX and OS/2. When the HP NewWave environment is available on these client platforms, HP will evaluate extending Information Access to these additional client platforms as well.
- Q.** What are HP's plans for an Apple Macintosh interface to Information Access?
- A.** HP's internal development directions are to focus on HP NewWave clients only. However, as HP evolves Information Access to take advantage of future database connectivity standards, such as CL/1, this will open the possibility for third party Macintosh applications to connect to Information Access servers.
- Q.** For customers who bought Information Access on MPE XL in the past, how will they be able to obtain the new relational SQL access capability?
- A.** Information Access SQL will be offered as a separate product on MPE XL. To add connectivity to either ALLBASE/SQL or ORACLE databases, customers need only order this product.

Information Distribution Issues

- Q.** HP NewWave Office offers a number of components for its Information Distribution Services. Which pieces do what?
- A.** HP NewWave Office integrates HP's Information Distribution components to provide a leadership cooperative computing implementation of Information Distribution Services.
- HP DeskManager provides the HP NewWave Office electronic mail server on both MPE V and MPE XL.
 - HP OpenMail provides the HP NewWave Office electronic mail server on HP-UX, HP 9000 (Series 600 and 800). HP OpenMail is also available for use on Series 300 SPUs.
 - AdvanceMail provides the PC mailing services (mail client) for use on MS-DOS PCs without the HP NewWave environment. AdvanceMail

interfaces with both HP DeskManager and/or HP OpenMail.

- NewWave Mail provides the PC Mailing services for use on PCs using the HP NewWave environment. It is a fully integrated HP NewWave PC application that interfaces with HP DeskManager today, and will support HP OpenMail in mid-1990.

Q. When will HP OpenMail be available on OS/2?

A. HP OpenMail/OS2 is under development, and HP plans to introduce this product in the second half of CY90.

Q. How will 3Com 3+Mail and HP OpenMail work together?

A. HP and 3Com have committed to provide inter-connection between 3Com 3+Mail and HP OpenMail. This was announced with the original agreement earlier this year, and both companies are currently developing this capability for release in CY90.

HP NewWave Environment

Q. HP NewWave Office delivers the HP NewWave environment, does it deliver Microsoft Windows?

A. HP NewWave Office supports HP NewWave environment PCs and non-HP NewWave PCs. HP NewWave PCs require the separate purchase and installation Microsoft Windows.

Competitive Issues

Q. Why is HP NewWave Office better than IBM's and DEC's offering?

A. Flexibility and choice of applications, computers, and networking. Additionally, HP NewWave Office integrates HP's leadership HP NewWave environment for integrating applications and automating tasks. Independent consultant studies have confirmed that HP offers a significant cost per user advantage over a wide range of user group sizes. The answer is clear, HP NewWave Office is a better way because your customers want:

- Flexibility and choice to make it better their way.
- Systems which are easier to use to integrate information and applications
- The best overall cost of ownership.

Q. What is the difference between HP NewWave Office and IBM's Office Vision?

A. HP NewWave Office offers higher functionality at a lower cost TODAY.

- Very few applications are currently available for Presentation

Manager and for OS/2 Extended Edition. HP has been delivering key functionality through innovative client/server applications for over two years.

- The minimum ante to play in IBM's OfficeVision environment is \$8,500 in PC hardware and software alone. HP is a proven leader in cost of ownership, and offers a workstation price as low as \$2,000 within the HP NewWave Office environment.
- It will be 3-4 years before IBM fully implements OfficeVision solutions across its major server platforms. HP is leveraging its leadership in PC integration and in supporting standards to offer open systems solutions TODAY.

Q. What is the difference between HP's NewWave Office and DEC's office offering?

A. Here are three areas where HP NewWave Office triumphs over DEC's All-In-1 solution:

- Flexibility and choice in selecting clients, servers, and networking. While DEC insists on having a VAX server and DEC-Net networking running the show, HP is committed to supporting a multitude of server platforms - MPE, UNIX, and OS/2 - as well as industry-standard networking.
- Full citizenship for the PC in a true client/server design. While the PC in DEC's All-In-1 is limited to little more than a terminal-like interface, the HP NewWave Office PC steps up to share processing tasks with the server - realizing its full potential.
- HP NewWave towers over the All-In-1 menu interface in its ability to integrate applications and to automate tasks.

Q. How does HP NewWave Office compare to Data General's CEO Object Office?

A. Data General has subscribed to the HP vision of cooperative computing in an object-oriented environment. In fact, DG is a major HP customer, employing the HP NewWave environment as the graphical user interface for CEO Object Office. Through HP NewWave Office, HP has staked out a leadership position in two key areas:

- HP offers the benefits of HP NewWave Office across a broad range of server platforms — MPE, HP-UX, and OS/2. DG has a product available today only on its proprietary ECLIPSE/MV family of servers; they plan to provide a UNIX server based CEO Object Office in the future.
- DG offers a basic set of office capabilities (information distribution and shared resources). HP, in addition to leading with the HP NewWave environment, provides a completely integrated set of host services for information access, information distribution, shared

Pricing and Upgrade Issues

resources, and networked PC management.

- Q. HP NewWave Office is on the CPL today with Business System Plus. Which should my customer order?
- A. HP NewWave Office is HP's strategic office product offering - replacing Business System Plus. BSP will be removed from the *Price Guide* in second quarter 1990. HP NewWave Office should be ordered unless your customer requires shipment prior to May 1989. If your customer orders BSP, make sure they order support contracts to ensure their upgrade path to HP NewWave Office.
- Q. How do my BSP customers who haven't purchased support contracts get upgraded to HP NewWave Office?
- A. BSP customers on current support contracts will receive upgrades to HP NewWave Office (refer to Support Ordering section). Support contracts offer the most economical upgrade paths for all customers. If your customer is not currently on an HP support contract they can purchase one now and ensure their upgrade to HP NewWave Office. For those customers who choose not to order support contracts, partial upgrade credits may be offered through limited promotions in 1990.
- Q. How does the customer who purchased HP LAN Manager/X separately upgrade to HP NewWave Office HP-UX?
- A. Customers desiring the full set of HP NewWave Office Services can expect upgrade programs in the future which will help protect their investment in standalone services. Upgrade paths are being investigated at this time, and can be expected in 4th Quarter of 1990.
- Q. What is the advantage of user-based pricing?
- A. Fewer users on larger SPUs - with user-based pricing you can sell complete HP NewWave Office solutions priced for as few as 4 users. Now you can sell HP NewWave Office into accounts that wouldn't have considered the solution before. In general, the system level price will be advantageous for larger user groups or groups that are growing. Always compare.
- Q. Will there be upgrade credits for user-based licenses?
- A. HP NewWave Office pricing does not include upgrade credits because your customer has the choice to consider either user-based or system-level pricing - and choose the right option for their size and growth. Again, growing customers should probably purchase system-level licensing because of the long term advantage it provides for cost per

user.

- Q.** What controls are in place to ensure customers do not deliberately or inadvertently abuse the the user-based pricing licenses?
- A.** HP is implementing controls so that customers will only be able to utilize the number of licenses that have been purchased. These controls will be included in future releases of HP NewWave Office. It is the responsibility of sales representatives and application engineers to ensure that customers are aware of software licensing restrictions.

Networked PC Management Issues

- Q.** What are the plans for PC Backup capabilities for HP NewWave Office for HP-UX?
- A.** PC users can store critical files or HP NewWave objects on any HP NewWave Office server for automated backup via normal server backup procedures. PC Backup to an HP NewWave Office for HP-UX server tape drive is under investigation. PC users in a mixed MPE/HP-UX server environment can backup to an MPE server even if they use an HP-UX server for most of their work.

Miscellaneous

- Q.** What are the APIs that developers can count on to ensure consistency and portability among HP's products?
- A.** Developers should write applications to the LAN Manager API set to ensure consistency across HP-UX and OS/2 implementations today, and HP LAN Manager/XL implementations in the future. The specific APIs include:
- Administrative APIs which enable programs to work with the basic server functions such as sharing resources and administering sessions, connections, and open files.
 - A full set of security APIs.
 - Interprocess communication APIs which allow program-to-program exchange across platforms. These IPC APIs are:
 - Named Pipes - providing highly reliable two way communication
 - Mailslots - high speed one-way communication
 - Sockets
 - PC Application developers should use Microsoft Windows and HP NewWave standards.
- Q.** What are the localization plans for HP NewWave Office?
- A.** Plans are underway in each region to ensure solutions worldwide. As dates are determined they will be communicated within the appropriate region. In the interim the following strategies apply by country:
- **Japanese** - Continue to merchandise Japanese-IBS to customers that

require a local language solution. Japanese HP NewWave will be available in FY90. The full localization of HP NewWave Office will not be available during the next 12 months.

- **Traditional** - Continue to merchandise Chinese-IBS to customers that require Chinese a local language solution. The localization of HP NewWave Office will not be available during the next 12 months.
- **Korea** - Continue to merchandise Hangul-IBS to customers that require a local language solution. The localization of HP NewWave Office will not be available during the next 12 months.
- **Brazil** - The localization of HP NewWave Office will not be available during the next 12 months.

Appendix E - HP NewWave Office Products and Prices

HP NewWave Office Products for MPE XL

		<u>US List</u>	<u>EBP</u>
B1710A HP NewWave Office for MPE XL	Includes HP NewWave environment and Support Pack (for one user), Resource Sharing, HP DeskManager with NewWave Mail and AdvanceMail, Information Access, and Networked PC Management.	\$0	\$0
#320	Host Based License for S925LX, 925 - No user licenses required	\$40,840	\$40,827
#330	Host Based License for S935 No user licenses required	\$68,400	\$68,387
#340	Host Based License for S950,955 - No user licenses required	\$84,210	\$84,197
#UA2	1-4 User license - Does not require host license	\$13,980	\$13,967
#OAP	1 User license for NewWave environment	\$ 195	\$ 193
#OG1	Purchase credit for MPE V Option #310	-\$17,480	-\$17,467
#OG2	Purchase credit for MPE V Option #320	-\$39,310	-\$39,297
#OG3	Purchase credit for MPE V Option #330	-\$66,080	-\$66,067
#OCE	Upgrade credit for MPE XL Option #320	-\$40,840	-\$40,827
#OCF	Upgrade credit for MPE XL Option #330	-\$68,400	-\$68,387
B1711A HP NewWave Office for MPE XL	Includes HP NewWave environment and Support Pack (for one user), Resource Sharing, HP DeskManager with NewWave Mail and AdvanceMail, and Networked PC Management.	\$ 0	\$ 0
#320	Host Based License for S925LX, 925 - No user licenses required	\$29,830	\$29,817
#330	Host Based License for S935 No user licenses required	\$51,910	\$51,897
#340	Host Based License for S950,955 - No user licenses required	\$64,830	\$64,817
#UA2	1-4 User license - Does not require host license	\$ 4,280	\$ 4,267
#OAP	1 User license for NewWave environment	\$ 195	\$ 193
#OG1	Purchase credit for MPE V Option #310	-\$12,260	-\$12,247
#OG2	Purchase credit for MPE V Option #320	-\$28,230	-\$28,217
#OG3	Purchase credit for MPE V Option #330	-\$49,350	-\$49,337
#OCE	Upgrade credit for MPE XL Option #320	-\$29,380	-\$29,367
#OCF	Upgrade credit for MPE XL Option #330	-\$51,910	-\$51,897
B1712A HP NewWave Office for MPE XL	Includes HP NewWave environment and Support Pack (for one user), Resource Sharing, Information Access and Networked PC Management.	\$ 0	\$ 0
#320	Host Based License for S925LX, 925 - No user licenses required	\$24,990	\$24,977
#330	Host Based License for S935 No user licenses required	\$40,990	\$40,977
#340	Host Based License for S950,955 - No user licenses required	\$50,190	\$50,177
#UA2	1-4 User license - Does not require host license	\$11,000	\$10,987
#OAP	1 User license for NewWave environment	\$ 195	\$ 193
#OG1	Purchase credit for MPE V Option #310	-\$11,030	-\$11,017
#OG2	Purchase credit for MPE V Option #320	-\$23,370	-\$23,357
#OG3	Purchase credit for MPE V Option #330	-\$38,270	-\$38,257
#OCE	Upgrade credit for MPE XL Option #320	-\$24,990	-\$24,977
#OCF	Upgrade credit for MPE XL Option #330	-\$40,990	-\$40,977

		<u>US List</u>	<u>FBP</u>
B1713A HP NewWave Office for MPE XL	Includes HP NewWave environment and Support Pack (for one user), Resource Sharing and Networked PC Management.	\$ 0	\$ 0
#320	Host Based License for S925LX, 925 - No user licenses required	\$12,900	\$12,887
#330	Host Based License for S935 No user licenses required	\$23,200	\$23,187
#340	Host Based License for S950,955 - No use licenses required	\$28,400	\$28,387
#UA2	1-4 User license - Does not require host license	\$ 1,300	\$ 1,287
#0AP	1 User license for NewWave environment	\$ 195	\$ 193
#OG1	Purchase credit for MPE V Option #310	-\$ 5,360	-\$ 5,347
#OG2	Purchase credit for MPE V Option #320	-\$11,200	-\$11,187
#OG3	Purchase credit for MPE V Option #330	-\$20,200	-\$20,187
#OCE	Upgrade credit for MPE XL Option #320	-\$12,900	-\$12,887
#OCF	Upgrade credit for MPE XL Option #330	-\$23,200	-\$23,187
B1714A HP NewWave Office for MPE XL	For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user), HP DeskManager with NewWave Mail and AdvanceMail, and Information Access (Does not include Resource Sharing or Networked PC Management).	\$ 0	\$ 0
#320	Host Based License for S925LX, 925 - No user licenses required	\$28,990	\$28,977
#330	Host Based License for S935 No user licenses required	\$47,200	\$47,187
#340	Host Based License for S950,955 - No user licenses required	\$58,420	\$58,407
#UA2	1-4 User license - Does not require host license	\$12,680	\$12,667
#0AP	1 User license for NewWave environment	\$ 195	\$ 193
#OG1	Purchase credit for MPE V Option #310	-\$12,430	-\$12,417
#OG2	Purchase credit for MPE V Option #320	-\$28,990	-\$28,977
#OG3	Purchase credit for MPE V Option #330	-\$47,200	-\$47,187
#OCE	Upgrade credit for MPE XL Option #320	-\$28,990	-\$28,977
#OCF	Upgrade credit for MPE XL Option #330	-\$47,200	-\$47,187
B1715A HP NewWave Office for MPE XL - Information Distribution Services	For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user) and HP DeskManager with NewWave Mail and AdvanceMail.	\$ 0	\$ 0
#320	Host Based License for S925LX, 925 - No user licenses required	\$18,600	\$18,587
#330	Host Based License for S935 No user licenses required	\$32,050	\$32,037
#340	Host Based License for S950,955 - No user licenses required	\$40,350	\$40,337
#UA2	1-4 User license - Does not require host license	\$ 2,980	\$ 2,967
#0AP	1 User license for NewWave environment	\$ 195	\$ 193
#OG1	Purchase credit for MPE V Option #310	-\$ 7,460	-\$ 7,447
#OG2	Purchase credit for MPE V Option #320	-\$18,600	-\$18,587
#OG3	Purchase credit for MPE V Option #330	-\$32,050	-\$32,037
#OCE	Upgrade credit for MPE XL Option #320	-\$18,600	-\$18,587
#OCF	Upgrade credit for MPE XL Option #330	-\$32,050	-\$32,037

**B1716A HP NewWave Office
for MPE XL - Information
Access Services**

	<u>US List</u>	<u>FBP</u>
For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack for one user), and Information Access.	\$ 0	\$ 0
#320 Host Based License for S925LX, 925 - No user licenses required	\$13,350	\$13,337
#330 Host Based License for S935 No user licenses required	\$19,800	\$19,787
#340 Host Based License for S950,955 - No user licenses required	\$24,050	\$24,037
#UA2 1-4 User license - Does not require host license	\$ 9,700	\$ 9,687
#0AP 1 User license for NewWave environment	\$ 195	\$ 193
#OG1 Purchase credit for MPE V Option #310	-\$ 6,200	-\$ 6,187
#OG2 Purchase credit for MPE V Option #320	-\$13,350	-\$13,337
#OG3 Purchase credit for MPE V Option #330	-\$19,800	-\$19,787
#OCE Upgrade credit for MPE XL Option #320	-\$13,350	-\$13,337
#OCF Upgrade credit for MPE XL Option #330	-\$19,800	-\$19,787

**B1717A HP NewWave Office
for MPE XL - Information
Access/SQL Services**

	<u>US List</u>	<u>FBP</u>
For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user), and Information Access/SQL.	\$ 0	\$ 0
#320 Host Based License for S925LX, 925 - No user licenses required	\$10,680	\$10,667
#330 Host Based License for S935 No user licenses required	\$15,840	\$15,827
#340 Host Based License for S950,955 - No user licenses required	\$19,240	\$19,227
#UA2 1-4 User license - Does not require host license	\$ 9,700	\$ 9,687
#0AP 1 User license for NewWave environment	\$ 195	\$ 193
#OCE Upgrade credit for MPE XL Option #320	-\$10,680	-\$10,667
#OCF Upgrade credit for MPE XL Option #330	-\$15,840	-\$15,827

HP NewWave Office Products for HP-UX

	<u>US List</u>	<u>FBP</u>	
B1701A HP NewWave Office for HP-UX	Includes HP NewWave environment and Support Pack (for one user), HP LAN Manager/X, HP OpenMail with AdvanceMail, Information Access/SQL, and Networked PC Management.	\$ 0	\$ 0
	#AEL Host license for S808,815 - No user licenses req'd	\$14,420	\$14,407
	#AE5 Host license for S825 - No user licenses req'd	\$30,880	\$30,867
	#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$48,720	\$48,707
	#AEP Host license for S850, 855 - No user licenses req'd	\$64,760	\$64,747
	#UA2 1-4 User license - Does not require host license	\$13,680	\$13,667
	#OAP 1 User license for NewWave environment	\$ 195	\$ 193
	#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
	#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
	#OGE Upgrade credit from S808, 815	-\$14,420	-\$14,407
	#OC8 Upgrade credit from S825	-\$30,880	-\$30,867
	#OGF Upgrade credit from S835S, 835SE, 635SV	-\$48,720	-\$48,707
B1702A HP NewWave Office for HP-UX	Includes HP NewWave environment and Support Pack (for one user), HP LAN Manager/X, HP OpenMail with AdvanceMail, and Networked PC Management.	\$ 0	\$ 0
	#AEL Host license for S808,815 - No user licenses req'd	\$10,630	\$10,617
	#AE5 Host license for S825 - No user licenses req'd	\$22,670	\$22,657
	#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$36,340	\$36,327
	#AEP Host license for S850, 855 - No user licenses req'd	\$50,320	\$50,307
	#UA2 1-4 User license - Does not require host license	\$ 3,980	\$ 3,967
	#OAP 1 User license for NewWave environment	\$ 195	\$ 193
	#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
	#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
	#OGE Upgrade credit from S808, 815	-\$10,630	-\$10,617
	#OC8 Upgrade credit from S825	-\$22,670	-\$22,657
	#OGF Upgrade credit from S835S, 835SE, 635SV	-\$36,340	-\$36,327
B1703A HP NewWave Office for HP-UX	Includes HP NewWave environment and Support Pack (for one user), HP LAN Manager/X, Information Access/SQL and Networked PC Management.	\$ 0	\$ 0
	#AEL Host license for S808,815 - No user licenses req'd	\$ 9,250	\$ 9,237
	#AE5 Host license for S825 - No user licenses req'd	\$19,190	\$19,177
	#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$28,750	\$28,737
	#AEP Host license for S850, 855 - No user licenses req'd	\$40,310	\$40,297
	#UA2 1-4 User license - Does not require host license	\$11,000	\$10,987
	#OAP 1 User license for NewWave environment	\$ 195	\$ 193
	#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
	#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
	#OGE Upgrade credit from S808, 815	-\$ 9,250	-\$ 9,237
	#OC8 Upgrade credit from S825	-\$19,190	-\$19,177
	#OGF Upgrade credit from S835S, 835SE, 635SV	-\$28,750	-\$28,737

		<u>US List</u>	<u>EBP</u>
B1704A HP NewWave Office for HP-UX	Includes HP NewWave environment and Support Pack (for one user), HP LAN Manager/X, and Networked PC Management.	\$ 0	\$ 0
	#AEL Host license for S808,815 - No user licenses req'd	\$ 4,320	\$ 4,307
	#AE5 Host license for S825 - No user licenses req'd	\$ 8,800	\$ 8,787
	#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$13,450	\$13,437
	#AEP Host license for S850, 855 - No user licenses req'd	\$21,780	\$21,767
	#UA2 1-4 User license - Does not require host license	\$ 1,300	\$ 1,287
	#0AP 1 User license for NewWave environment	\$ 195	\$ 193
	#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
	#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
	#0GE Upgrade credit from S808, 815	-\$ 4,320	-\$ 4,307
	#0C8 Upgrade credit from S825	-\$ 8,800	-\$ 8,787
	#0GF Upgrade credit from S835S, 835SE, 635SV	-\$13,450	-\$13,437
B1705A HP NewWave Office for HP-UX	For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user), HP OpenMail with AdvanceMail, and Information Access/SQL	\$ 0	\$ 0
	#AEL Host license for S808,815 - No user licenses req'd	\$10,280	\$10,267
	#AE5 Host license for S825 - No user licenses req'd	\$22,690	\$22,677
	#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$36,330	\$36,317
	#AEP Host license for S850, 855 - No user licenses req'd	\$44,830	\$44,817
	#UA2 1-4 User license - Does not require host license	\$12,380	\$12,367
	#0AP 1 User license for NewWave environment	\$ 195	\$ 193
	#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
	#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
	#0GE Upgrade credit from S808, 815	-\$10,280	-\$10,267
	#0C8 Upgrade credit from S825	-\$22,690	-\$22,677
	#0GF Upgrade credit from S835S, 835SE, 635SV	-\$36,330	-\$36,317
B1706A HP NewWave Office for HP-UX - Information Distribution Services	For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user), and HP OpenMail with AdvanceMail	\$ 0	\$ 0
	#AEL Host license for S808,815 - No user licenses req'd	\$ 6,400	\$ 6,387
	#AE5 Host license for S825 - No user licenses req'd	\$14,400	\$14,387
	#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$24,300	\$24,287
	#AEP Host license for S850, 855 - No user licenses req'd	\$30,300	\$30,287
	#UA2 1-4 User license - Does not require host license	\$ 2,680	\$ 2,667
	#0AP 1 User license for NewWave environment	\$ 195	\$ 193
	#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
	#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
	#0GE Upgrade credit from S808, 815	-\$ 6,400	-\$ 6,387
	#0C8 Upgrade credit from S825	-\$14,400	-\$14,387
	#0GF Upgrade credit from S835S, 835SE, 635SV	-\$24,300	-\$24,287

**B1707A HP NewWave Office
for HP-UX - Information
Access/SQL Services**

	<u>US List</u>	<u>FBP</u>
For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user), and Information Access/SQL	\$ 0	\$ 0
#AEL Host license for S808,815 - No user licenses req'd	\$ 4,960	\$ 4,947
#AE5 Host license for S825 - No user licenses req'd	\$10,680	\$10,667
#AE7 Host license for S835S, 835SE, 635SV - No user licenses req'd	\$15,840	\$15,827
#AEP Host license for S850, 855 - No user licenses req'd	\$19,240	\$19,227
#UA2 1-4 User license - Does not require host license	\$ 9,700	\$ 9,687
#OAP 1 User license for NewWave environment	\$ 195	\$ 193
#AAO 1/4" Cartridge Tape	\$ 0	\$ 0
#AA1 1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0
#OGE Upgrade credit from S808, 815	-\$ 4,960	-\$ 4,947
#OC8 Upgrade credit from S825	-\$10,680	-\$10,667
#OGF Upgrade credit from S835S, 835SE, 635SV	-\$15,840	-\$15,827

NewWave Office Products for MPE V

	<u>US List</u>	<u>EBP</u>
B1720A HP NewWave Office for MPE V	Includes HP NewWave environment and Support Pack (for one user), Resource Sharing, HP DeskManager with NewWave Mail and AdvanceMail, Information Access, and Networked PC Management.	\$ 0 \$ 0
#310 Host Based License for MICRO 3000, S37 No user licenses required	\$17,480	\$17,467
#320 Host Based License for S4X-5X - No user licenses required	\$39,310	\$39,297
#330 Host Based License for S6X-70 No user licenses required	\$66,080	\$66,067
#UA2 1-4 User license - Does not require host license	\$13,980	\$13,967
#OAP 1 User license for NewWave environment	\$ 195	\$ 193
#OCD Upgrade credit for Option #310	-\$17,480	-\$17,467
#OCE Upgrade credit for Option #320	-\$39,310	-\$39,297
 B1721A HP NewWave Office for MPE V	 Includes HP NewWave environment and Support Pack (for one user), Resource Sharing, HP DeskManager with NewWave Mail and AdvanceMail, and Networked PC Management.	 \$ 0 \$ 0
#310 Host Based License for MICRO 3000, S37 No user licenses required	\$12,260	\$12,247
#320 Host Based License for S4X-5X - No user licenses required	\$28,230	\$28,217
#330 Host Based License for S6X-70 No user licenses required	\$49,350	\$49,337
#UA2 1-4 User license - Does not require host license	\$ 4,280	\$ 4,267
#OAP 1 User license for NewWave environment	\$ 195	\$ 193
#OCD Upgrade credit for Option #310	-\$12,260	-\$12,247
#OCE Upgrade credit for Option #320	-\$28,230	-\$28,217
 B1722A HP NewWave Office for MPE V	 Includes HP NewWave environment and Support Pack (for one user), Resource Sharing, Information Access, and Networked PC Management.	 \$ 0 \$ 0
#310 Host Based License for MICRO 3000, S37 No user licenses required	\$11,030	\$11,017
#320 Host Based License for S4X-5X - No user licenses required	\$23,370	\$23,357
#330 Host Based License for S6X-70 No user licenses required	\$38,270	\$38,257
#UA2 1-4 User license - Does not require host license	\$11,000	\$10,987
#OAP 1 User license for NewWave environment	\$ 195	\$ 193
#OCD Upgrade credit for Option #310	-\$11,030	-\$11,017
#OCE Upgrade credit for Option #320	-\$23,370	-\$23,357

		<u>US List</u>	<u>FBP</u>
B1723A HP NewWave Office for MPE V	Includes HP NewWave environment and Support Pack (for one user), Resource Sharing and Networked PC Management.		
#310	Host Based License for MICRO 3000, S37 No user licenses required	\$ 5,360	\$ 5,347
#320	Host Based License for S4X-5X - No user licenses required	\$11,200	\$11,187
#330	Host Based License for S6X-70 No user licenses required	\$20,200	\$20,187
#UA2	1-4 User license - Does not require host license	\$ 1,300	\$ 1,287
#0AP	1 User license for NewWave environment	\$ 195	\$ 193
#0CD	Upgrade credit for Option #310	-\$ 5,360	-\$ 5,347
#0CE	Upgrade credit for Option #320	-\$11,200	-\$11,187
B1724A HP NewWave Office for MPE V	For Direct Connection or LAN environments. Includes HP NewWave Environment an Support Pack (for one user), HP DeskManager with NewWave Mail and AdvanceMail, and Information Access.		
#310	Host Based License for MICRO 3000, S37 No user licenses required	\$12,430	\$12,417
#320	Host Based License for S4X-5X - No user licenses required	\$28,990	\$28,977
#330	Host Based License for S6X-70 No user licenses required	\$47,200	\$47,187
#UA2	1-4 User license - Does not require host license	\$12,680	\$12,667
#0AP	1 User license for NewWave environment	\$ 195	\$ 193
#0CD	Upgrade credit for Option #310	-\$12,430	-\$12,417
#0CE	Upgrade credit for Option #320	-\$28,990	-\$28,977
B1725A HP NewWave Office for MPE V - Information Distribution Services	For Direct Connection or LAN environments. Includes HP NewWave environment and Support Pack (for one user), HP DeskManager with NewWaveMail and AdvanceMail.		
#310	Host Based License for MICRO 3000, S37 No user licenses required	\$ 7,460	\$ 7,447
#320	Host Based License for S4X-5X - No user licenses required	\$18,600	\$18,587
#330	Host Based License for S6X-70 No user licenses required	\$32,050	\$32,037
#UA2	1-4 User license - Does not require host license	\$ 2,980	\$ 2,967
#0AP	1 User license for NewWave environment	\$ 195	\$ 193
#0CD	Upgrade credit for Option #310	-\$ 7,460	-\$ 7,447
#0CE	Upgrade credit for Option #320	-\$18,600	-\$18,587

**B1726A HP NewWave Office
for MPE V - Information
Access Services**

For Direct Connection or LAN environments.

**Includes HP NewWave environment and Support Pack
(for one user) & Information Access**

		<u>US List</u>	<u>FBP</u>
#310	Host Based License for MICRO 3000, S37 No user licenses required	\$ 6,200	\$ 6,187
#320	Host Based License for S4X-5X - No user licenses required	\$13,350	\$13,337
#330	Host Based License for S6X-70 No user licenses required	\$19,800	\$19,787
#UA2	1-4 User license - Does not require host license	\$ 9,700	\$ 9,687
#OAP	1 User license for NewWave environment	\$ 195	\$ 193
#OCD	Upgrade credit for Option #310	-\$ 6,200	-\$ 6,187
#OCE	Upgrade credit for Option #320	-\$13,350	-\$13,337

HP NewWave Office - Personal Applications

**B1708A HP NewWave Office
for MPE - Personal
Applications**

**Includes Executive Memomaker, Gallery Collection,
Lotus 1-2-3 Version 2.01, and AdvanceLink for MS-DOS.
Licensed for 4 users.**

		\$ 5,320	\$ 5,307
# 022	Cartridge Tape	\$ 0	\$ 0
# 051	Mag Tape - 1600 BPI	\$ 0	\$ 0

**B1709A HP NewWave Office
for HP-UX-Personal
Applications**

**Includes Executive Memomaker, Gallery Collection,
Lotus 1-2-3 Version 2.01, and AdvanceLink for MS-DOS.
Licensed for 4 users.**

		\$ 5,320	\$ 5,307
#AAO	1/4" Cartridge Tape	\$ 0	\$ 0
#AA1	1/2" Mag Tape - 1600 BPI	\$ 0	\$ 0

Appendix F - HP NewWave Office - Sales Tools

Literature

Part Number

HP NewWave Office for MPE Data Sheet	5959-2542
HP NewWave Office for HP-UX Data Sheet	5959-2543
Information Access for HP 3000 Data Sheet	5959-2545
Information Access for HP 9000 Data Shet	5959-2546
HP DeskManager Data Sheet	5959-1191
HP OpenMail Data Sheet	5959-9611
AdvanceLink Data Sheet	5959-9626
HP DeskMon Data Sheet	5959-9631
HP Desk Intrinsic Data Sheet	5959-1161
HP NewWave Data Sheet	5952-7274
AIMS Product Brief	5959-9647
HP NewWave Mail Data Sheet	5952-0262
AdvanceMail Data Sheet	5959-9634
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