

Sales Guide
December 1992

Internal and
Channel Partner
Use Only

HP 9000 Series 800 Business Servers



HP 9000
**OPEN FOR
BUSINESS**

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HP 9000 Series 800: Open for Business with the Open Systems Leader

In Open Systems Computing, you either lead, follow or get out of the way. HP continues to lead in providing the best commercial UNIX[®] server line in the industry. 1992 has been an outstanding year! You finished the year 121% of quota, with a growth rate of 42% over last years. Thanks to all your hard work, HP continues to grow over twice as fast as the UNIX market.

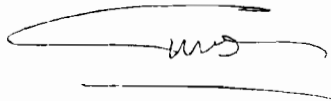
This is a very special product introduction. We are introducing a new product family to match the needs of ALL customers and ALL channel segments. We have enhanced the products by providing more flexible options and integrated solutions, and we've modified our product structure so it's more intuitive. Now you can spend less time identifying which systems your customer needs and more time selling. In addition, we've reinforced our premier customer service by providing a one-year warranty on all HP 9000 Business Servers.

Our "industrial strength" open systems offering has been enhanced with new distributed computing capabilities, multivendor networking products, peripherals, and industry-leading solutions. With these additions, the HP 9000 Business Servers are positioned better than ever!

The breadth of our product offering, industry-leading price/performance, premier support, and commitment to quality gives HP a solution that no other vendor in the industry can match. HP is the undisputed leader in Open Systems!

Congratulations on your great performance. We are in great position to continue to gain market share in FY93. We have the best solutions in the industry and the best Sales Force and Channels to win business. This Sales Guide contains information about our new products, programs and solutions that help ensure your continued success.

Thanks for your hard efforts and good selling.



Bernard Guidon
General Manager
General Systems Division

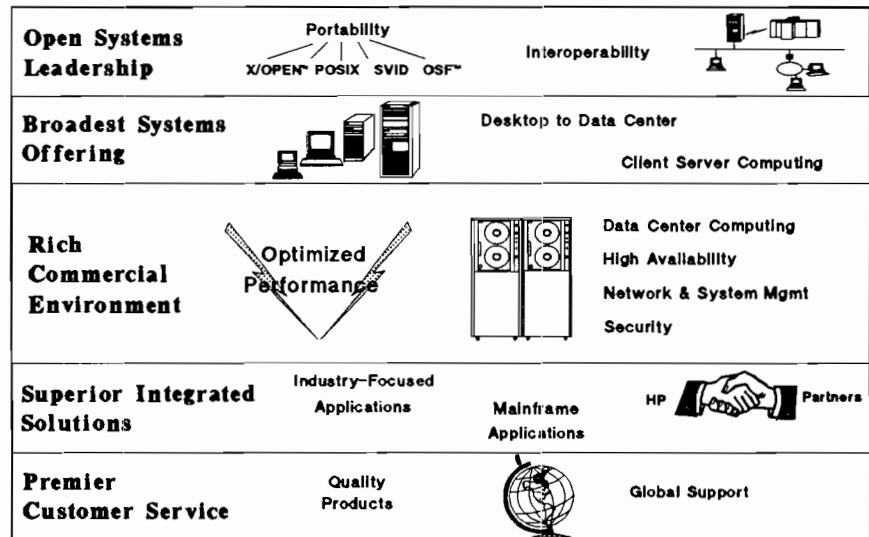
HP 9000
**OPEN FOR
BUSINESS**



Overview of the HP 9000 Series 800 Open for Business Strategy

HP's "Open for Business" strategy and framework continues to be a successful tool to communicate our complete offering with one consistent message. With each sales guide, the product, programs and enhancements introduced have built upon and enhanced the framework's five strategic areas of focus. We continue to enhance these five areas each quarter with new products and programs for the HP 9000 Series 800 Business Server solution portfolio.

Figure 1.1 HP 9000 Open for Business Framework



These five areas comprise the "Open for Business" model and are the foundation of the HP 9000 Series 800 strategy. A summary of the specific product and program announcements follow and are described in more detail at the beginning of each chapter.

Open Systems Leadership

HP is the strategic choice for those who want to implement computing strategies based on open systems. HP is the only major "industrial strength" vendor whose strategic offering is based on complete open systems. HP is not only following and implementing standards, HP is driving standards by offering our innovative technologies to the major standards bodies. This provides your customers with portability and interoperability in a multivendor environment.

What's New

The HP 9000 Series 800 offers more interoperability than anyone in the industry! We can integrate in more ways with more environments than any other vendor. Some new additions to our networking suite include HP EtherTwist Routers, Model 45 Plus Concentrators and Streams/UX. For Desktop integration we've enhanced our LAN Manager and NetWare products. We have also enhanced our server-to-server communications with Worldtalk/400 which extends HP's X.400 Messaging Backbone to the PC-Lan E-mail.

Broadest Systems Offering

HP has the broadest systems offering in the industry, with a full line of UNIX-based systems that support from 1 to 4,500 users. By supporting workstation, PC and X-station clients, the Series 800 Business Servers work in the traditional host/terminal environment, as well as the growing client/server environment. HP's Series 800 family, together with the Series 700 workstations, represent the most extensive line of compatible UNIX systems in the industry, ranging from desktop to deskside to data center. This wide array of products results in a client/server platform unmatched in the industry.

What's New

HP is introducing a new low-end and mid-range product line with great choice of performance and expandability. We've added four and eight slot packages to provide more flexibility for customers. We have also implemented menu driven product structures, so it's more intuitive and easier to configure and order. And in response to feedback from our channels partners, we have repriced the base systems and peripherals. The result: industry-leading performance at very competitive prices. Combine this with industry-leading commercial functionality, best-in-class applications, and a robust operating system and HP's got a solution that can't be beat!

Rich Commercial Environment

This is a true differentiator for the Series 800 versus other UNIX systems. By providing the full range of commercial functionality required in the data center, HP is uniquely positioned versus other UNIX vendors. The Series 800 Business Servers are optimized for commercial applications to give your customers the best performance for their money. HP has the most robust set of system management tools available on UNIX. Also, HP implements leading-edge technology in integrating information between centralized databases and the desktop so your customers can make informed decisions in a timely fashion.

What's New

HP is introducing its first Distributed Computing Environment (DCE) products for development of distributed applications. HP is also expanding its industry-leading System Management offering with some great new and enhanced products, such as SecureMax from Demax, Support Wave and Support Watch, as well as enhancements to SwitchOver/UX.

Many of our database partners have enhanced their products. Informix and Ingres and Cognos have announced new product releases. HP and Oracle have hit some great new benchmarks, and Sybase and HP have reached an agreement to have the Sybase Net Gateway product available on the Series 800.

HP and IBM have jointly announced an agreement to port CICS to HP-UX, further legitimizing the downsizing-to-UNIX movement.

Superior Integrated Solutions

By forming close relationships with our Channel Partners, HP offers the most comprehensive portfolio of integrated solutions in the UNIX marketplace. In addition to our fast growth in the number of solutions on the Series 800, HP is consistently recognized for the quality of our Channel Partner solutions.

What's New

HP continues to be very aggressive in adding several new solutions to our highly rated Channel Partner program. We have added some of the industry's best financial management solutions to our portfolio. For example, Computer Associates, Computron, D&B Software, Ross Systems and SAP are recent additions to our suite of solutions.

To complete the solution, HP offers more flexibility in terms of customer financing than any other vendor.

Premier Customer Service

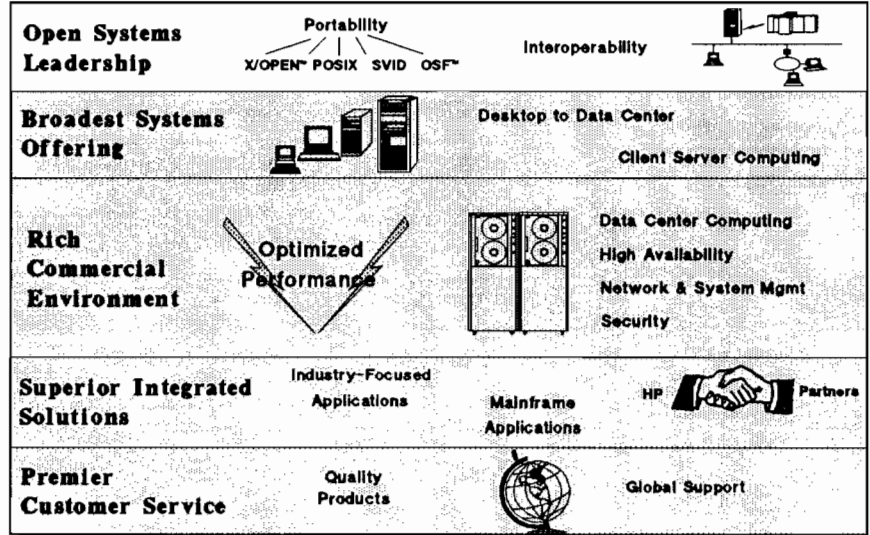
Service and support continue to be key differentiators for HP in the marketplace. HP has a worldwide, world-class support organization with extensive UNIX experience which is unmatched in the industry.

What's New

HP continues its world-class support by introducing a one-year warranty on all HP 9000 Series 800 products. In addition, four different support options are available for each system. This will greatly simplify the ordering process for support products.

Open Systems Leadership

Figure 2.1 HP 9000 Open for Business Framework



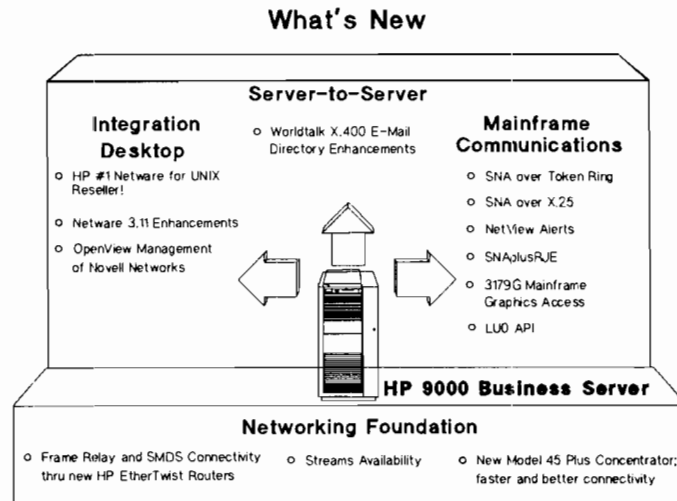
HP 9000 Series 800 Networking: Industry-Leading Interoperability

One-Minute Sale

The HP 9000 Series 800 offers more interoperability than anyone in the industry! This means that the HP 9000 can integrate in more ways with more environments than anyone! This fact was released in the Gartner Group Study, "Midrange System and Server Evaluations: 1991/1992," February 24, 1992 (LDC P/N 5091-5772E, pp. 16&19). The new capabilities outlined in this section of the sales guide further enhance HP's dominant position in this area.

HP's new capabilities are summarized in the model below:

Figure 2.2 HP 9000 Series 800 Networking



Seamless Integration from the Desktop to the Datacenter

HP's new networking products and enhancements strengthen HP's position and complement our new systems offering through:

- An update on HP's Networking Strategy.
- New Foundation products which allow HP 9000s to support more protocols and faster speeds.
- New desktop integration enhancements which makes HP the leader in PC connectivity.
- New IBM connectivity products and enhancements which make HP 9000s an even more viable Mainframe Alternative.

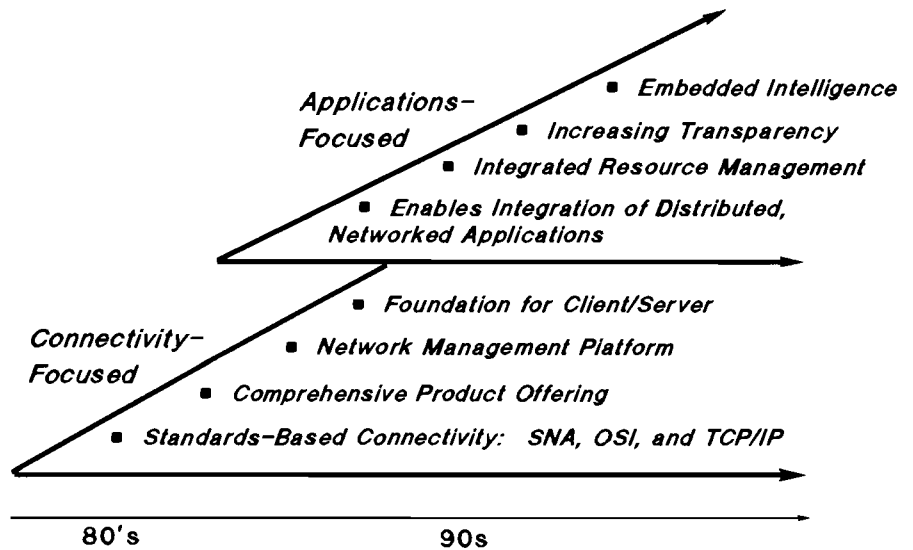
For More Information

Refer to the new Series 800 networking presentation subject "NETPITCH" on the GSY HOTLINE.

Networking Strategy Update

Providing Brilliant Solutions for Networked Applications

Figure 2.2 A Network Evolution



Building Intelligence, Manageability, and Simplified Application Development

The rise of distributed computing, especially in multivendor environments, has created an associated evolution in HP's Network Strategy. Customers still want to maintain access to legacy systems while taking advantage of the new client-server architectures. HP's Network Strategy, providing brilliant solutions for networked applications, is targeted to help customers do just that.

In the 1980s HP was focused on providing industry standard networking products to communicate with customer environments. In the 1990s, HP will be building intelligence into all levels of the network to provide end users a single view of their resources, to enable simplified application development, and to provide intelligent operations assistance to the network and systems operator. Just as HP led the way in the 1980s by embracing open, network architectures, HP will continue to lead by driving standardization into the new frontiers of distributed computing, distributed management, and distributed objects and by enabling network development tools to provide the "middleware" glue.

For More Information

A new HP Networking Strategy presentation is available on the Network Hotline, subject "NETSTRAT." This presentation provides details on all HP's overall networking strategies for the future.

Networking Foundation Products

One-Minute Sale

As customers distribute and off-load mainframe applications, enterprise connectivity requires faster speeds, larger bandwidths, and integration with more protocol environments. HP's new High Performance EtherTwist Routers allow HP 9000s on a LAN to connect into Frame Relay and Switched Multi-Megabit Data Service (SMDS) Networks. The new generation Model 45 Plus Concentrator for connections to X.25 networks allows faster links up to T1 speeds (1.5 Mbps) and enhanced SNA features. The availability of Streams on the HP 9000 Series 800 enables developers access to the kernel for applications and tools which require special tuning and capabilities.



HP EtherTwist Routers (P/N 27285A, 27286A, 27288A, 27289A)

With the addition of HP's newest Routers, the HP 9000 Series 800 can now access Frame Relay and SMDS Networks. These network protocols typically serve Wide Area communications.

The HP 9000 Series 800 connects to the Router via a LAN (e.g. Ethernet/802.3) connection. HP Routers provide connectivity to Frame Relay and SMDS using a wide area network port on the Router.

Frame Relay networks, similar to X.25 networks, can be private or public based. Unlike X.25, the Frame Relay protocol is much simpler. This simplicity results in increased throughput and response times, and Frame Relay offers line speeds of 56 KBPS or T1/E1 rates (E1 is the European Standard—2.098 MBPS).

SMDS networks provide high-speed connections beginning at T1 (1.549 MBPS). SMDS is a carrier-based (public) service which offloads network management from the customer.

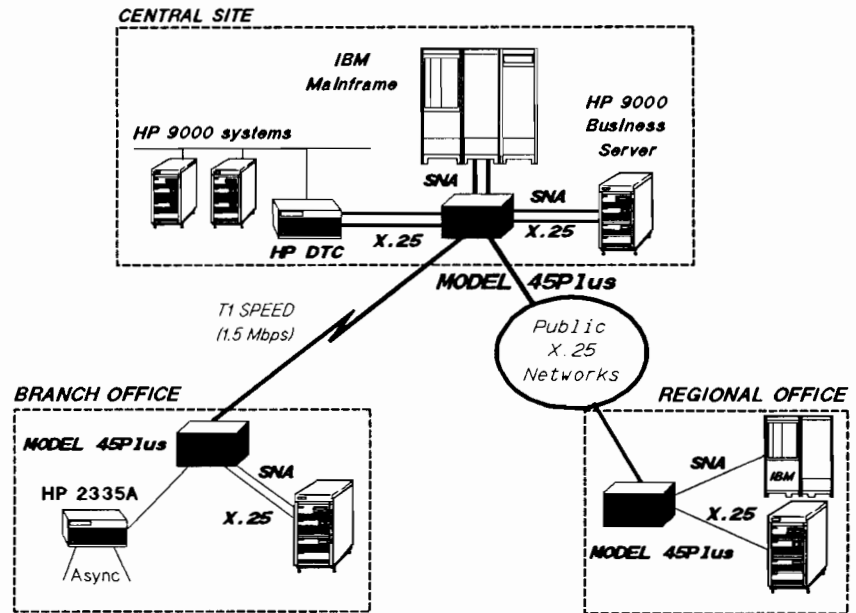
A typical connection into a Public Frame Relay or SMDS Network could provide a subscriber with access to multiple end nodes, through a single connection. This saves the cost of connecting that single subscriber to each end node, which is the traditional point-to-point mesh network.



Model 45 Plus Concentrator (P/N J2000B, J2001B)

The Model 45 Plus Concentrator is a next generation X.25 switch that is cost effective in consolidating SNA, asynchronous and X.25 traffic onto a single leased line connection. This concentrator is available today and replaces part numbers J2000A and J2001A.

Figure 2.4 The Model 45 Plus Concentrator for X.25 Network connections.



Features and Benefits

- Connects remote locations to X.25 public or private networks.
- Reduced communication and equipment costs (concentration of multiple X.25, SNA/SDLC, asynchronous lines, on one or more X.25 access lines).
- Strong IBM SNA/SDLC features allowing to integrate HP 9000 systems within IBM Mainframe environment.
- Wide choice of interfaces like RS-232/V.24, V.35, X.21 and RS-449 standards for high-speed networking.
- High performance multiprotocol links up to 1.5 Mbps (T1 speed) with up to 3000 packets per second on 30 ports.
- Can connect into satellite networks with packet size configurable up to 1024 bytes.
- High reliability. Mean-Time-Between-Failures: 35 years.
- Alternate leased line back-up over public or private data networks.
- Managed by HP OpenView Switch/PAD Manager, which manages HP DTCs, HP Hubs and Bridges, HP systems, HP2335A PADs and HP Model 45s from the SAME HP OpenView network management platform.
- Customer installable and rack mountable in standard HP 19" racks.

For More Information

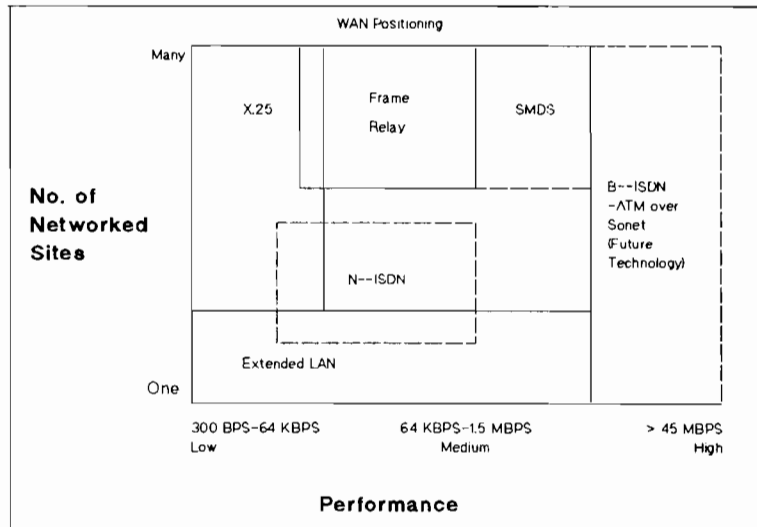
For more detailed information, please refer to your HP 9000 Series 800 Business Servers Configuration Guide, or refer to the Network Hotline, subject: "M45PLUS."

Positioning Wide Area Network (WAN) Technologies

One-Minute Sale

Since WAN communications are quite complex, and will depend on available public carrier services in your area, you should consult with your Network SE for determination of what to propose; however below is a primer to get you acquainted:

Figure 2.5 WAN Positioning



Positioning Wide-Area Network (WAN) Technologies

You customer will typically be faced with 3 scenarios when connecting an HP 9000 to a WAN:

1. LAN-to-LAN. The HP 9000 is on a LAN and needs to connect to another LAN which is geographically distant. Typical WAN protocols are:

- Extended LAN (using Router Protocols such as OSPF and PPP)—Good for a limited number of sites which need fast speeds.
- ISDN—good for telecommuting and small remote sites because of lower service costs.
- Frame Relay—A newer, medium speed technology for many networked sites.
- SMD5—Switched Multi-Megabit Data Service. This is a fast new technology which is available in limited areas.
- ATM or Asynchronous Transfer Mode is a future technology with very fast speeds (>45 MBPS).

The HP 9000 connects to these environments via a router or ISDN server which is connected to the LAN (e.g. Ethernet/802.3). The router manages the encapsulation of the LAN protocol into the WAN protocol.

2. HP 9000 into an X.25 Switched Network. These networks can be public or private and use the X.25 protocol. X.25 has been popular because it is able to connect environments with many sites. Faster technologies, such as Frame Relay, provide similar capabilities but are newer technologies than X.25

The HP 9000 Series 800 can connect to an X.25 network in several ways:

- Via the native X.25 card on the HP 9000
 - Via the M45 plus concentrator—for combining multiple system communication into a single leased line for lower cost
 - Via SNA over X.25 (release 2 SNAplus due 2Q93)
3. Direct Point-to-Point. These enable one HP 9000 to directly communicate with another system. These can be accessed via a dedicated line or public telephone line. Example protocols in this environment are UUCP (UNIX-to-UNIX Communication Protocol) or SDLC (from the HP 9000 to an IBM SNA system). Typically, no special equipment is required other than a modem (or DSU/CSU). However SDLC requires a card for the HP 9000 which is part of the SNAplus Link product.

In general, the networking transports and services supported will typically be those that are supported over the HP 9000 link protocol. For example, TCP/IP is supported over Ethernet/802.3, Token Ring/802.5 and X.25. Services which run over TCP/IP will most likely work over WAN connections which support Ethernet/802.3, Token Ring/802.5, or X.25.



STREAMS/UX (J2237A)

STREAMS is an industry standard environment for software development and deployment. STREAMS/UX provides developers standard access to the HP-UX kernel for special capabilities and performance tuning. (HP's NetWare for the HP 9000, OSI Transport Services, and SNAplus networking products on HP-UX 9.0 all require purchase of STREAMS/UX.)

Because of release timing differences between HP-UX 9.0 and STREAMS/UX, STREAMS/UX is currently a separate product available on top of HP-UX 9.0. GSY plans to incorporate STREAMS/UX in future operating systems releases. STREAMS/UX includes a System-V-Release-4 compatible version of the STREAMS framework, plus a TLI interface (to user-supplied STREAMS-based code), and a DLPI interface to HP's Ethernet/802.3 and Token Ring network adapter cards.

Desktop Integration

One-Minute Sale

The HP 9000 Series 800 has the best Desktop Integration Story in the industry! With the addition of ServerView/OV and StationView/OV from Network Edge, Inc. one can manage and monitor Novell networks centrally from the HP 9000 using HP OpenView. New Novell NetWare 3.11 enhancements on the HP 9000 improve performance and will further enhance HP's position as Novell's #1 NetWare for UNIX reseller! Scheduled enhancements to LanManager for UNIX also strengthen this very popular offering—whose sales have been exceeding quota by over 150%.

PC Network Operating System Positioning

If your customer is looking for a server to only store files and share printers for applications which run on a PC, then an Intel based server is probably a better fit. However, if your customer needs communications, database integrity, back-up or security to run a business critical application, and wishes to integrate their PCs, then the HP 9000 and NOS's are an ideal match.

The HP 9000 Series 800 used in conjunction with PC Network Operating Systems (NOS) are a strong fit when:

1. Your customer has a business critical application or database which needs to run on the HP 9000 and s/he wishes to integrate this with other PCs and/or a NetWare or LanManager network.
2. The customer wants to place and manage UNIX in their environment.
3. The customer must have PCs (Windows, OS/2 or DOS).
4. The customer may need to integrate independent PC Networks with the Enterprise.
5. The customer may wish to place multiple NOS's on the same HP 9000 server for ease of administration (e.g. Novell and LanManager or Novell and NFS).
6. Your customer wishes to centrally manage many servers and clients using OpenView.

For More Information

New information on the HP 9000 and NetWare for UNIX positioning, qualification and opportunities is now available on the GSY HOTLINE, subject "NWARE."



NetWare for UNIX Version 3.11 Enhancements (P/N J2240A)

NetWare for the HP 9000 Series 800 is off to a roaring start! With NetWare sales greatly exceeding expectations, HP has now earned the distinction as Novell's #1 NetWare for UNIX Reseller. This means that HP has sold more copies of NetWare for UNIX than any of the other 30 Portable NetWare partners including IBM, Sun, DG, and NCR/ATT.

The addition of new functionality and performance with the 3.11 version makes the HP 9000 Series 800 and NetWare an even stronger combination. The 3.11 version is currently available on HP-UX 8.0X and offers the following improvements:

- **Better performance**—Packet Burst support provides greater NetWare throughput over wide-area networks and faster overall response time.
- **Better integration into existing environments**—IP tunneling (encapsulation) provides NetWare servers the ability to utilize existing TCP/IP networks, eliminating the need to deploy and maintain additional Novell SPX/IPX networks between servers.
- **More printers supported**—Up to 16 locally attached and over 200 LAN attached printers.

Availability of NetWare 3.11 on HP-UX 9.0 and over Token Ring is scheduled for the second quarter of 1993.

New Try and Buy Program

A new *try and buy* demo option is now available for your customers. The *try and buy* demo is a complete NetWare/9000 Series 800 software product along with a temporary 30 day code word. For only \$200, your customers can receive the product for evaluation in their own environment. This \$200 will be credited back if they decide to purchase the product. To order the *try and buy*, order J2240A option 001. The 30 day code word is available on the Network Hotline under the subject "NW800S."

On November 1, 1992, the product numbers for ordering NetWare in Europe changed. NetWare on the Series 800 INVS-100003 is replaced with the worldwide product number J2240A. NetWare on the Series 700 product number INVS-100002 is replaced by J2239A.

For More Information

A new customer slide set on "HP-UX and NetWare: The Best of Both Worlds" is also available on the GSY HOTLINE, subject "UXNOVELL."



LanManager for UNIX Update (P/N B1011C)

Like NetWare, sales for LanManager for the HP 9000 have skyrocketed in recent months. GSY is committed to LanManager/X and is happy to announce that the 2.1 version is currently being ported and is planned for availability in mid-1993. Support for clients running version 2.1 is currently available. Functionality planned for the 2.1 server enhancement includes:

- **Domain Administration**—Easier management of multiple LanManager Servers

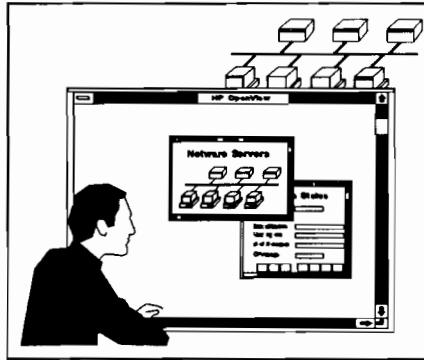
- **File replication**—Automatic copying of files to designated systems
- **Additional Security**—User account Subsystem provides enhanced logon restrictions, password aging, and account storage restrictions
- **PC based Administration**—Look and feel similar to what customers use with their OS/2 LanManager Servers reduces retraining costs

For More Information

For more information consult the Network Hotline under the subject "LMXTWO."

ServerView/OV and StationView/OV

Centrally Manage Novell and Other Networks HP 9000 and OpenView Network Management



- Manage Novell Servers and Clients with Network Edge and HP OpenView
- Reconfigure Novell Clients from the HP 9000 with Network Edge and HP OpenView
- Back-up Novell Servers and Clients to the HP 9000 with OmniBack and Quest

Better Management and Reduced Support Costs

One-Minute Sale

With ServerView/OV and StationView/OV from Network Edge, Inc. your customers can manage Novell Networks centrally from the HP 9000 using HP OpenView. HP's offering is the first and only solution today which can perform true centralized enterprise management of NetWare. These products provide a key benefit of helping customers better manage and reduce the costs of supporting the multitude of NetWare Servers and Clients in most organizations.

Product Description

These products in conjunction with the HP OpenView Network Node Manager allow you to visually monitor and collect statistics from Intel Based NetWare Servers and Clients. StationView/OV allows you to manage Novell DOS clients. One can even reconfigure the files in the client PC directly from the HP 9000 Series 800. ServerView/OV allows management of Novell servers. One can collect a myriad of statistics such as hardware, software and network status, bindery, memory allocation software versions, and response times on HP OpenView on the HP 9000.

These products are differentiated from Novell management products in that they support the clients in addition to the server. Today Novell's network management products do not provide this client capability, nor are they standards based. With HP OpenView you can manage multi-vendor networks in addition to Novell which is more typical of larger environments which need centralized management capability.

These products are available from Network Edge, Inc., an HP OpenView Premier Channel Partner. StationView/OV is scheduled for release in Q4 92. ServerView/OV is scheduled for Q1 93.

For More Information

Refer to the HP OpenView Solutions Guide for Network Edge Products, or Contact Mark Smith at Network Edge, Inc. (719) 488-0702.

Server-to-Server Communications

One-Minute Sale



Worldtalk/400 adds new capabilities to HP's industry leading X.400 messaging backbone solution by providing PC-LAN E-mail connectivity and directory services. HP's X.400 can be positioned in three ways:

- As an X.400 gateway from enterprise E-mail into public carriers (a single HP 9000 Server)
- As part of a public carrier's X.400 service (Many HP 9000 Servers)
- As an X.400 Enterprise Messaging Backbone, for use throughout an enterprise for EDI and E-mail applications (Many HP 9000 Servers)

Worldtalk 400 Adds Directory Services for PC E-mail from the HP 9000

Worldtalk Corporation now is shipping version 2.0 of Worldtalk 400 for the HP 9000 Series 800. The product extends HP's X.400 Messaging Backbone to the PC-Lan E-mail environment by allowing E-mail exchange and directory management from the HP 9000s to PC-Lan E-mail. The new product adds complete address management that automatically converts user friendly local E-mail addresses such as cc:Mail into X.400 addresses and vice versa. This feature enables PC-Lan E-mail users to exchange messages with users on other E-mail platforms just as they would with users on their own E-mail system, thus eliminating the need for additional client software or end-user training.

Other features include:

- An API for Directory Administration—Can be used to synchronize information between Worldtalk 400 and other E-mail directories
- Integration with HP's X.400 Administration and Configuration Tool to share common data

These features enable HP to provide a seamless X.400 backbone solution to integrate customers' multivendor E-mail systems. Moreover, HP X.400, HP OpenMail and Worldtalk 400 solutions establish a solid foundation to build other electronic mail enabled applications such as file transfer, document translation and EDI.

Identifying X.400 Opportunities

X.400 is an industry standard which is rapidly gaining favor as an E-mail and EDI protocol. According to a recent survey by Gartner Group, over 70% of large corporations are planning to deploy this technology. Today only 30% have deployed. Therefore this industry growth coupled with HP's outstanding X.400 functionality creates a large opportunity for you to differentiate HP in your accounts.

Three typical opportunities exist in most companies for X.400:

1. **As an external X.400 gateway**—This currently is the most popular use of X.400 today. If customers need to send E-mail outside their organization, X.400 is used to connect internal, proprietary E-mail with the rest of the world. This will often leverage an HP 9000 Series 800 server for a division or company since most customers wish to keep this type of gateway separate from other applications for maintenance and security reasons.
2. **To public carriers offering X.400 services to clients**—These companies need to build an X.400 service to manage and sell to clients.
3. **As an Enterprise Messaging Backbone**—This is for companies in which information is a strategic resource. These companies have a vision of providing superior, competitive advantage by managing their own network of messaging servers. These companies will often look at using these backbones first for E-mail integration, but the justifying factor is usually EDI or some other “product” the company provides such as a banking application.

HP's X.400 solutions are better because:

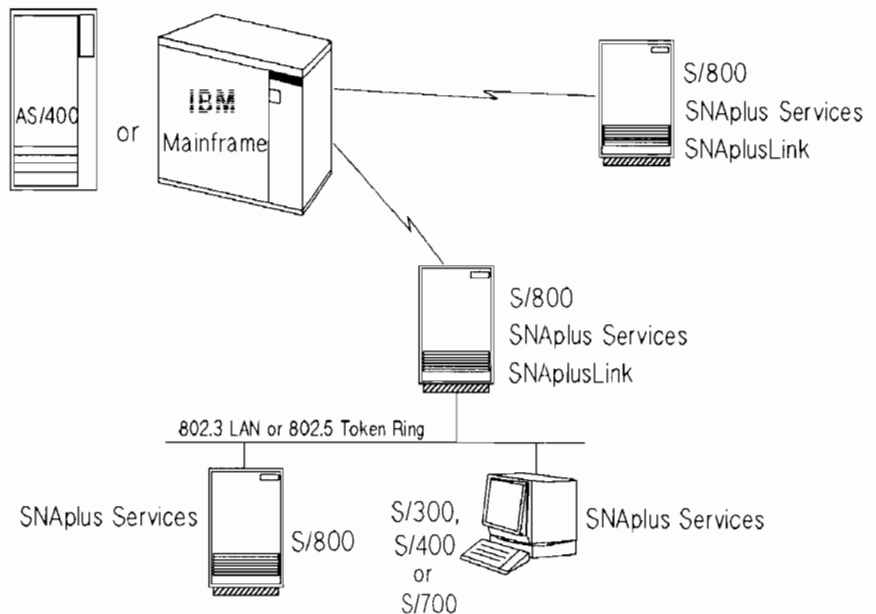
- **HP's X.400 is based on the 1988 standard**—Most vendors only offer 1984 standards compliance. Another example of HP's commitment to standards.
- **HP offers a wide range of connectivity options**—In addition to OSI, HP's offering has linkages to non-OSI environments such as SNMP and PC-Lan E-mail packages.
- **HP offers a TRUE backbone solution**—IBM RS/6000 only offers an X.400 gateway and doesn't include capabilities such as network management, administration tools, billing and accounting, and APIs.
- **Ease of Use**—HP's network management and administration tools for X.400 are just one example of HP's leadership.

Mainframe Communications

One-Minute Sale

With the addition of SNAPplus Release 2 available Q2 FY93, HP's offering for IBM environments is second to none.

Figure 2.7 HP SNAPplus—IBM Communications Second to None



SNAPplus Release 2

A number of new capabilities will be added with Release 2 of the SNAPplus product line, available Q2 FY93. Release 2 also supports HP-UX 9.0. The new capabilities are as follows:

- HP SNAPplusLink (P/N J2220A) allows the physical link to the IBM host. This release also supports native SNA services over Token Ring and SNA Services over x.25.
- SNAPplusRJE (P/N J2222A) allows batch communication to an IBM host and will effectively replace the classic SNA3770 product (P/N 36977A).
- SNAPplus 3179G (P/N J2224A) allows interactive communications to graphics packages running on an IBM host.
- SNAPplus API has been enhanced to include not only LU6.2, but NetView API (to code applications linked into IBM's NetView) and LU0 API (to code lower level, more intricate types of SNA applications).

The Classic SNA products (with the exception of SNA3270 Native Language Support) will be effectively replaced by the SNAPplus products when Release 2 is available. Existing Classic SNA customers will receive this upgrade if they have an active support contract.

For More Information

Consult the Network HOTLINE, subject "SNAPPLUS."

HP Commits to XPG4



On October 5, X/Open announced XPG4, their latest set of specifications for open systems applications, portability, storage windowing and data sharing among systems. X/Open is emerging as the "all encompassing standard" in open systems since it includes so many other leading standards. XPG4, for example, includes the most recent POSIX standards 1003.1, 1003.2 and 1003.2a.

Many vendors, including HP, announced their support of XPG4. HP, however, was one of the only vendors to make a firm commitment to availability, accounting our plans for compliance in the first half of 1993.

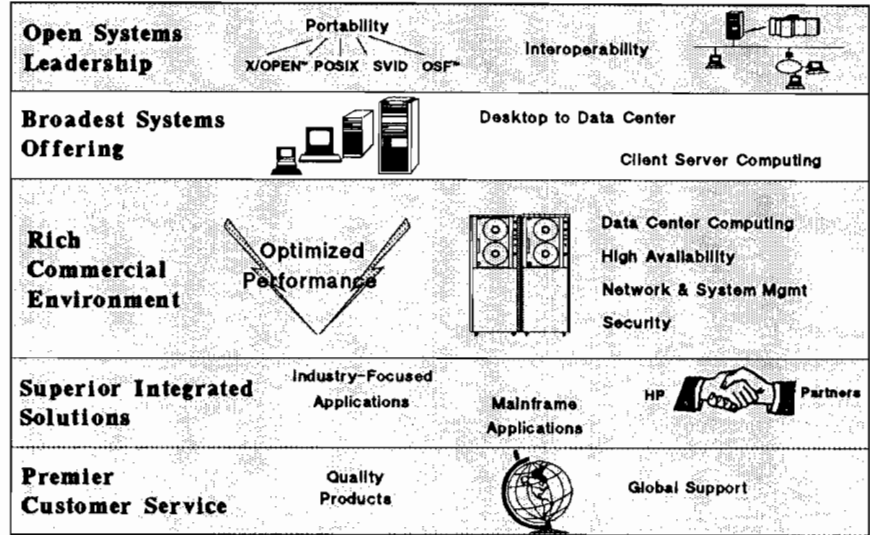
HP's commitment to XPG4 strengthens our already solid position in standards. HP was the first vendor to ship XPG2 and XPG3 compliant solutions.

For More Information

Refer to the GSY HOTLINE, subject "STDWP" for a complete view of HP's compliance with standards.

Broadest Systems Offering

Figure 3.1 HP 9000 Open for Business Framework



Introducing the New HP 9000 Business Server Low-End and Mid-Range Family

One-Minute Sale

HP is setting the standards in Open Systems and Commercial UNIX. With the December 92 rollout, HP is introducing the leading server product line in the marketplace: no holes, no gaps, no exceptions, no excuses. This is a complete, granular set of products, individually chosen and precisely designed to meet the most demanding customer needs—in expandability, peripheral integration and form factor, and fine tuned to deliver industry leading performance at industry leading prices.

Combine this very competitive price performance positioning with industry-leading commercial UNIX functionality, a robust operating system designed from the bottom up for a business environment, and HP's combination of financial stability and aggressive, advanced product technology; and this is the right server for business environments.

The new product line has been realigned as the strategic server for all of HP's client/server environments including those environments where Series 700s are used as clients. This delivers on our commitment to provide the absolute best server product line in the market. The new products feature new menu-driven product structures, attractive prices and industry leading performance, and at the same time, represent a family of tested, proven and shipping systems, with a full and complete upgrade path right off the bat for investment protection of the installed base 8x7 systems.

What's New and Why



Series 800 Business Servers: The Current Situation

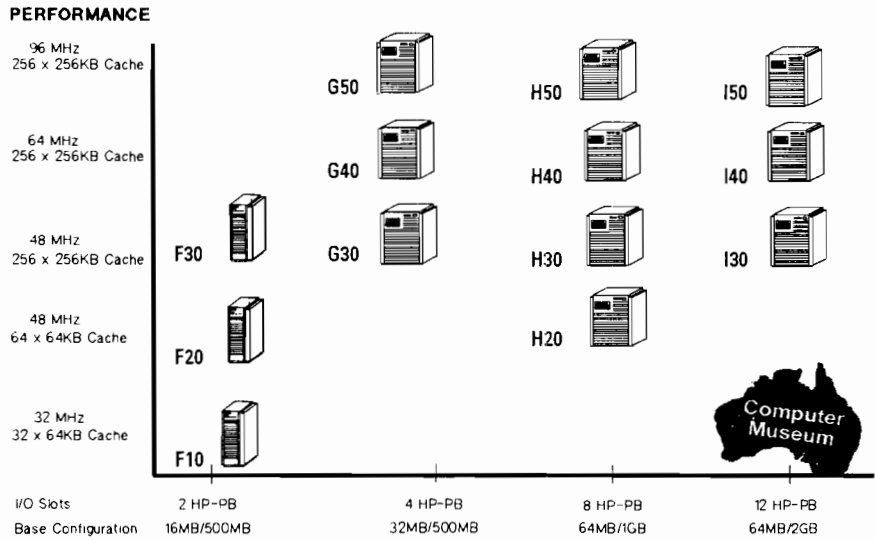
Since the introduction of our current low-end/mid-range computer line in June 1991, the Series 8x7 systems have become established as the leading open systems server line in the industry, and our competitors now calibrate their positioning relative to our systems. In the meantime, we have continued to conduct market research and perform customer surveys, both with our direct and indirect partners. We have incorporated this feedback into our product plans.

First, we are introducing a product line with great choice of performance and expandability; the new four and the eight I/O slot packages provide more flexibility to meet customer needs, and compete more effectively with our competitors including the IBM RS/6000 and Sun SPARCserver families.

Second, we are also making it much easier to do business with HP. The new product line features an intuitive product structure, a manageable set of four base products, and a dramatic reduction in product numbers and software tiers.

Finally, in response to the feedback from our Channel Partners, we have repriced the base systems, peripherals and accessories to eliminate any confusion and any pricing inconsistencies between the various channels.

Figure 3.2 The New Series 800 Business Server Product Line



New Series 800 Business Servers

The new low-end and midrange of the Series 800 Business Server family is being introduced worldwide on December 8, 1992, and the products will be orderable as of the December 1, 1992 CPL. Volume shipments are scheduled for January 1993. These new servers are available on the new DFI exhibits.

Along with the new systems comes a new product naming and numbering scheme that is easier to understand and more intuitive. The **HP 9000 Series 800 Business Server** label has been retained to maintain brand awareness, the four digit model number (i.e., 827S) has been changed to accommodate the new and future products. As can be seen from the above chart, there are four new system packages, distinguished by a letter (F, G, H, I) to indicate I/O expandability and a number (10, 20, 30, 40, 50) to signify the performance levels. All packages offer a choice of personality card, LAN/SCSI or MUX/SCSI. Refer to the Series 800 Systems Matrix for product specifics. The following chart should help you determine what systems to bid if you were bidding the 8x7 systems previously.

If you have proposed...	Now suggest...	If your customers are more price sensitive than I/O slot sensitive, consider...
807	Model F10	N/A
817	Model F20	N/A
827	Model H20	- OR - Model G30
837	Model F30	N/A
847	Model H30	- OR - Model G30
857	Model I30	- OR - Model H30
867	Model H40	- OR - Model G40
877	Model I40	- OR - Model H40
887	Model H50	- OR - Model G50
897	Model I50	- OR - Model H50

Product Description

The Series 800 Business Server line now features four different packages. The Fxx systems have two HP-PB single high slots. These are lower end servers with entry level prices and support up to 384 MB of memory and 42 GB of disk. With the 2 slot Fxx systems you will probably be competing against the IBM 2xx and Sun SPARCserver IPC, IPX and 2 products.

The Gxx systems have four HP-PB single high slots and provide support for up to 512 MB of memory and 100 GB of disk. These are medium range servers, and are positioned very attractively in the sweet spot of the overall server market. The 4 slot Gxx products will compete with the IBM 3xx line and the Sun SPARCserver 10/xx line.

Next, the Hxx systems have eight HP-PB single high slots and provide support for up to 768 MB of memory and 178 GB of disk. These systems are designed for larger departmental servers. The Hxx line will compete with the IBM 5xx and Sun SPARCserver 630/xx lines.

Finally, the Ixx systems have the highest level of expandability and are designed to meet higher end needs in the midrange package. These support up to twelve HP-PB single high slots and as such, a higher number of I/O cards, and provide support for up to 768 MB of memory and 178 GB of disk. The Ixx systems will help you beat the IBM 9xx and Sun SPARCserver 670/xx and 690/xx lines.

Our new four packages support a variety of five different performance points ranging from a 32-MHz PA-RISC processor to a 96-MHz PA-7100 RISC processor. GSY is planning a future upgrade product using a 2-way SMP high-end processor. This will provide an additional upgrade path for customers desiring even greater performance in the G/H/I Models.

New, Faster, Higher Capacity Disk



We are also supporting and integrating new disk mechanisms in the system cabinets. The new half height drives provide a formatted capacity of 566 MB and 1052 MB, and the new full height disk drive provides 2003 MB of formatted capacity. The new drives have 16% faster seek time and 33% less latency than our existing integrated disk mechanism. The MTBFs for the disks are close to 300,000 hours, double the MTBF of our existing disks. The new drives boost the maximum internal disk capacity of the systems up to 2 GB for the Fxx systems and 6 GB for the Gxx, Hxx, and Ixx systems.

Competitive Pricing and Positioning

The new low-end and midrange of the Series 800 Business Server family is priced very attractively to make the products an unbeatable value proposition against the competition. The section below details the strategy and specific positioning relative to the competition.

Beating IBM

In general, when selling against IBM, the Series 800 Business Servers will provide much higher performance at similar price points. Use this and the detailed information below to very clearly position HP as having a much superior solution compared to IBM's RS/6000 line (and as well the AS400 proprietary line, which has in general, an even lower price performance value offering).

Beating Sun

When selling against Sun, realize that Sun is far from shipping most of its announced products. At the time of print, we are hardpressed to find instances of actual customer shipments of the SuperSparc 36 MHz chip. In fact, it is widely known that Sun is actually having to ship a "new" 33 MHz

version to keep its promises. Given that Sun can not even ship the 36 MHz chip into production environments, the 40 MHz and then the 45 MHz multiprocessing versions are clearly future products. On the contrary, all of the products from HP are shipping today.

Second, realize that Sun has only estimated performance numbers. They have not filed any TPC-A or TPC-B results for the new products announced May '92. Sun literature (and sales representatives) will often talk about generic TPS numbers; DO NOT accept their unfiled performance numbers as true performance benchmarks. However, to give you the best story relative to Sun, the positioning case below assumes Sun's best estimates to be true (and still beats them).

Finally, realize that the new complete Series 800 Business Servers offer you products that are currently shipping to compete with every current and "future" Sun SPARCserver system. Your value proposition when going up against Sun should be that at the entry levels HP can provide the same performance, at similar prices; and at the higher ends of the computer line, HP provides similar performance at prices only 10% to 20% higher than Sun's.

With HP's superior commercial functionality, premier support, high reliability, leading edge application solutions and financial strength we are a clear winner in competing with Sun. For more information on competing against Sun, refer to the "Winning Against Sun Sales Guide" and the Gartner Group Mid-Range Server Report (P/N 5091-5772E).

Beating NCR

When selling against NCR, the Series 800 Business Servers provide higher performance in batch processing as well as OLTP. Keep in mind that it takes a fully loaded NCR system with a minimum of four processors to match the performance of our midrange Series 800 Business Servers with only one processor. The lack of TPC-A or TPC-B results in the low-end systems is yet another point that should not go unnoticed. In addition to requiring multiprocessors to compete in the midrange UNIX marketplace, NCR is priced significantly higher than HP's offering. Your value proposition when going against NCR should be that HP offers superior performance with a single processor and at a very aggressive price point. Price/performance is not the only way we can successfully sell against NCR. NCR 3000 systems are Intel based and therefore use old CISC architecture technology compared to the industry-leading PA RISC. NCR's relative lack of commercial applications, investment protection, and unproven track record are no match for HP's robust commercial offering, best-in-class support, and long standing track record. Lack of investment protection can be seen in NCR's history of multiple architectures (VRX, I Series, Tower, etc.) as well as limited, costly, migration tools and poor upgrade offering. Today Intel, tomorrow, who knows!

Beating DEC

At the time of this printing, specific information on the DEC Alpha product was not available. However, when selling against the DEC Alpha products, be sure to emphasize HP's long standing commitment to RISC and UNIX, superior commercial functionality, leading-edge application solutions, and compare HP's track record with the Series 800 Business Servers against the untested DEC products.

Even if DEC introduces an Alpha-based family with competitive price/performance, remember it will take DEC 18-24 months to get all their

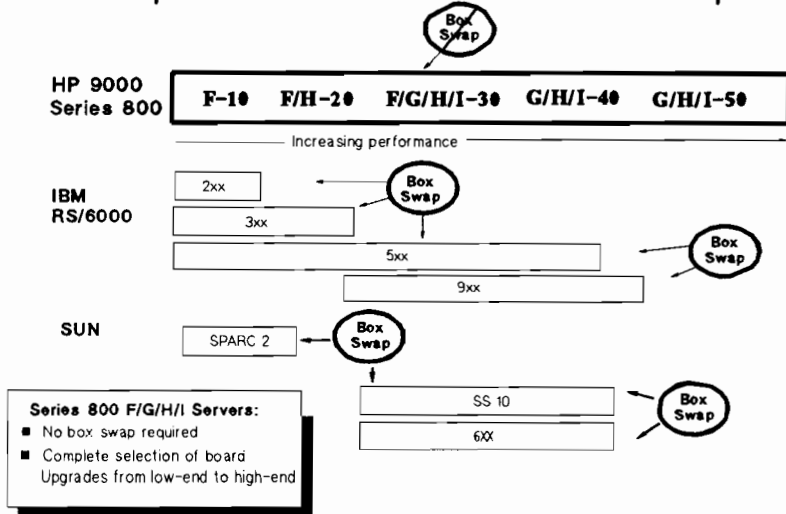
system/network and third-party applications supported on their systems. Therefore, Alpha Systems will not be "production data center" ready until 1994.

Superior Growth Path

Not only are the Series 800 Models F/G/H/I competitively priced, they also offer a cleaner and smoother growth path. Refer to the upgrade section for more information on upgrade choices.

Figure 3.3. Superior Growth Path to the Competition

HP's Superior Growth Path vs. the Competition



In addition to pricing the base systems aggressively, we have priced the accessories to complement this winning team. With aggressive pricing you can sell higher disk and memory configurations on your base systems, and deliver optimum performance to your customers.

New Disk Prices

The new disk mechanisms are priced very competitively. HP's higher capacity, higher MTBF, lower form factor, and higher performance disks are still priced almost 20% lower than IBM's latest disk drives, and about the same as Sun's lower capacity drives.

New Memory Prices

The memory prices have been changed to also mirror this unbeatable value proposition on the systems. First, remember that HP uses 80ns ECC SIMMS, the fastest and most reliable commercially available memory. In contrast, IBM's memory on the 220 and Sun's memory boards on the SPARCserver 10 are only parity memory, less suitable for commercial environments. Second, HP's memory is priced very attractively, almost 30% better than IBM's and within 20% of Sun's prices. Third, memory prices are tiered, based on the memory board capacity, and prices are most attractive on the higher capacity boards. This will help you sell higher memory configurations and deliver optimal performance to your customers. Finally, **option and stand-alone memory boards are priced alike.**

New I/O Prices

In order to position ourselves strategically against the competition, we have reduced the prices of all 16-channel Multiplexer cards by 15%. These MUX cards are supported on all HP 9000 systems. In addition to new MUX prices, our DTC solution has also been repriced. You will find the DTC16 reduced by 40% and the DTC48 reduced by 35%.

Our new prices reflect a very competitive stance particularly when compared to IBM. Use this aggressive pricing to make your system configurations more competitive and sell more systems as well as more I/O ports.

New 2-User Base HP-UX License

The new Series 800 Models F/G/H/I will have a 2-user HP-UX license bundled with the system. This will better position the Series 800 systems as servers in the marketplace. Refer to the New Software Pricing Model section of this Sales Guide for more information.

Positioning the Individual Systems

Figure 3.4 Product Line Competitive Positioning

If you are competing against... Lead with...	If you are competing against... Lead with...
SUN IPC IBM 220 NCR 3345 NCR 3445 High-end PC → Model F10	IBM 530H NCR 3450/2 → Model H30
SUN 2 SUN IPX NCR 3335 NCR 3447 → Model F20	IBM 560 SUN 630/41 → Model H40
SUN 10/30 SUN 10/20 IBM 320H IBM 340 IBM 350 → Model G30	IBM 580 Sun 630/52 SUN 630/54 NCR 3450/4 → Model H50
SUN 10/41 → Model G40	IBM 950 → Model I30
SUN 10/52 SUN 10/54 → Model G60	IBM 970 SUN 670/41 SUN 690/41 → Model I40
IBM 520H → Model H20	IBM 980 SUN 670/52 SUN 670/54 SUN 690/52 SUN 690/54 NCR 3450/4 → Model I60

Use the Product Line Competitive Positioning chart to determine what systems to bid against the competition.

Selling the Fxx Systems

The F10 is the entry point into the Series 800 Business Server product line. Sell it against the IBM 220, the Sun IPC, and high-end PC server environments such as NCR 3345 and 3445 systems. The F10 is priced the same as the Sun IPC but delivers a 20% performance advantage, and is priced at price performance parity with the IBM 220. In the case of NCR, an attempt will be made to sell "minicomputer power" on their 3345 desktop and 3445 deskside systems. In this case, be sure to note that the 27 MIPS performance claim strictly pertains to PC MIPS and not Drhystone MIPS which are typical for UNIX servers. Based on aggressive estimates, these two NCR systems may potentially have the same performance as the F10 at a 30% price premium.

Sell the F20 against the SPARCserver 2. The two products have similar price and performance. Against IBM, use the F20 to beat any 3xx system, if two slots are sufficient for the customer environment. If not, sell the Gxx system. Similarly, sell the F20 against the NCR 3335 and 3447 assuming the most aggressive performance numbers. NCR may want to sell expandability but without proven official performance results and lack of commercial software offering, the F20 is by far a better alternative.

Sell the F30 as an extremely attractive higher end server compared to IBM's and Sun's product offering. The F30 beats the Sun2 in any performance benchmark metric (TPC, SPECint92, SPECfp92), and provides more upside room for customer performance and expandability growth needs. Use this product to move your F20 potential customers to the higher performance level.

Selling the Gxx Systems

The G30 is the entry level into the 4 Slot Package. Sell this against any IBM 3xx system, and in every case, you will beat the IBM systems in both price and performance. Sell this against Sun's SPARCserver 10 Model 20 and Model 30. The price and performance (expected in the case of Sun) are similar. Combine this with the value of a more robust commercial environment to make the HP solution the clear winner.

The G40 beats the IBM 3xx product line, with similar prices and offers twice the performance. The G40 has similar price and expected performance of the "yet to be shipped" Sun SPARCserver 10 model 41.

Finally, the G50 provides more performance than the IBM 300 line does. Use this advantage to upgrade your customers to higher performance levels at a small incremental price. Sell the G50 against the Sun10 Models 52 and 54, both of which will not ship until 1993, and have untested performance. (By the time Sun ships these products in volume, HP will probably be out with the next higher end product in our mid range family.) In any case, the G50 is priced 15% to 20% higher than the Sun 10 Model 52 and about 15% lower than the Sun 10 Model 54, and will deliver 184tpsA, 77 SPECint92, 141 SPECfp92—higher than Sun's best case expected—180 TPS on the Sun10 Model 52.

Selling the Hxx Systems

The H20 is the entry level into the 8 Slot package and is very attractively priced. Sell the H20 against the IBM 520H at the same price point for twice the performance. As well, this is the right transition system for your current 827 prospects. Move them up to the higher base configuration on the H20 for the best base level performance.

The H30 is priced like the IBM 530H but delivers up to 80% more performance, sell the H30 to beat any IBM 5xx system except the recently announced 580, and to upgrade your H20 potential customers to the next performance level for a small incremental price. Assuming the most aggressive linear performance numbers, the NCR 3450, with two processors, may be positioned against the H30 in terms of performance. At the very least, expect a 38% list price premium over HP at this performance level.

Sell the H40 against the Sun 630 Model 41 and deliver much higher performance for about the same price. This price/performance, combined with the added HP value described above, will make you win every time you compete with this box from Sun.

Sell the H50 against the IBM 580, Sun 630 Model 52 and Model 54, and NCR 3450/4. Against the 580, you can deliver 10% better price/performance, and against the Sun systems, parity price/performance. The 580 from IBM is their most aggressive price/performance, and the H50 should beat it hands down in a level playing field. The NCR 3450 with four processors will have roughly the same OLTP performance as the H50 but with a 28% list price premium. The H50 will beat NCR hands down in batch processing performance. Take note, however, of the possibility of extremely aggressive discounting tactics by NCR.

Selling the Ixx Systems

The I30 is the entry level into the twelve slot package, and an obvious transition for your potential 857 customers. Move them up to the higher configuration levels for optimal base level performance. Sell the I30 against the IBM 950 at an incredible price/performance advantage.

The I40 is priced within 10% of the Sun 670 Model 41, and much below the 690 Model 41 for slightly better performance. In addition, HP is shipping today, with proven commercial performance, and has a much more successful commercial UNIX program.

Finally, the I50 is the top end of the current mid-range line. Sell it against the newly announced IBM 980 and deliver a 10% price/performance advantage. Or sell it against the 670 Models 52 and 54, 690 Models 52 and 54, and deliver a more solid high-end performance point within 20% pricing, with proven commercial performance on a shipping system, that has a better growth path into the 890 systems, and the commercial functionality and the business commitment that can come only from HP. With less than a 10% performance advantage and a 46% price premium, NCR may try to position the 3550 system with four processors (maximum 8 processors) against the I50. Again, as with the NCR 3450, sell HP's superior offering in batch processing performance as well as a significant price/performance advantage.

Very Competitive Cost of Ownership

The positioning information above basically compares similarly configured systems from HP and our competitors—the configured systems include memory, disk, backup mechanism, LAN, SCSI, base RS-232 ports, base UNIX user license, and minimum support.

Since all of the components—support, disks, memory, terminal I/O, software, etc—are all individually priced to be competitive, as you build a fully blown configuration to meet your specific needs, expect to see new, attractive cost of ownership as well.

As an example, consider the F20 in a low-end configuration including SPU, 16 MB memory, 500 MB disk, QIC, floating point, LAN, SCSI, console, base ports, base UNIX license, and three-year support. The three-year cost of ownership on the F20 is equal to that on the SPARCserver 2 and NCR 3447 and 3335; the F20 has higher performance in both cases.

Or consider the G30 with 32 MB memory, 1 GB disk, 2 GB DAT, floating point, LAN, SCSI, console, base ports, base UNIX license, and three-year support. The three-year cost of ownership for the G30 is about the same as that on the Sun SPARCserver 10 Model 30 and 30% lower than the IBM 350. And, the G30 and SPARCserver 10 Model 30 have similar performance; the G30 is 40% faster on the TPS benchmark than the IBM 350.

Similarly, the three-year cost of ownership on the H50 in a higher end configuration is the same as that on the IBM 580 and 10% higher than that on the Sun G30 Model 52. And, the H50 beats both the Sun 630 Model 52 and IBM 580 in performance. In addition, the three-year cost of ownership is 75% lower on the H50 than the NCR 3450/4.

As you can see, the new low-end and midrange Series 800 Business Servers are priced very attractively—in all of your different customer configurations.

In summary, this is the product line that beats *every single product* from your competition, and delivers an overall value proposition that is *simply the best!*

Ordering Update

With a new system announcement, HP is introducing a new menu-styled ordering system. Through a wider array of configuration options, the menu approach provides your customer increased flexibility in customizing a solution that's right for them.

The new structure collapses each processor offering for a specific chassis (2-slot, 4-slot, etc.) into a single structured solution product (SSP). For the H-Class example displayed in the sample ordering menu, the H20, H30, H40 and H50 are all orderable through a single product number, A2340A. Also, all common hardware, operating system and I/O choices are structured to the same solution. Prior to this method, each processor would have had its own product structure.

Features and Benefits

Features	Benefits
• "Menu" approach	• Increased flexibility and ease of ordering
• Factory installation of networking and I/O cards	• Ease of installation
• Direct presentation of product options	• Reduction of order errors

An example of our new menu-styled ordering system is displayed on the following pages.

SAMPLE ORDERING MENU

Order Number	Product Description	Price
A2430A	HP 9000/800 H Class Business Servers Standard server includes: <ul style="list-style-type: none"> • Integrated chassis with eight (8) single high HP-PB slots • Pre-loaded HP-UX operating system with 2-user license plus, TCP/IP, ARPA, and NFS services • Factory installation of memory, disks, back-up media and I/O • One year on-site warranty Order desired SPU option from section 1. The following standard items may be included with the SPU at no extra charge: <ul style="list-style-type: none"> • 1 GB embedded disk drive (requires HP-UX 9.0) • 64 MB ECC memory • 2.0 GB DDS drive • LAN/SCSI/RS-232 personality card (requires HP-UX 9.0) with: 802.3 thin LAN interface, single-ended (S.E.) SCSI Interface 2 RS-232 ports for console terminal and remote access • Owner's Guide, General Usage and Hardware documentation set • HP 700/96 console terminal Refer to the following ordering sections to select standard or alternate items	See below for prices
1. Select SPU (Must select ONE only)		
A2366A	a. [] Model H20 48 MHz PA-RISC CPU w/64KB-64KB cache	
A24347	b. [] Model H30 48 MHz PA-RISC CPU w/256KB-256KB cache	
A24347	c. [] Model H40 64 MHz PA-RISC CPU w/256KB-256KB cache	
A24347	d. [] Model H50 96 MHz PA-RISC CPU w/256KB-256KB cache w/Fit. Pt.	
Refer to the HP 9000 Series 800 Price Guide for support options		
2. Select floating point coprocessor (select ONE only)		
A2293A #ODU	a. [.] 48 MHz floating point coprocessor for Model H20	
A2293A #ODV	b. [] 48 MHz floating point coprocessor for Model H30	
A2293A #ODW	c. [] 64 MHz floating point coprocessor for Model H40	
3. Select pre-loaded HP-UX OS version (Must select ONE only)		
A2440A #APH	a. [] HP-UX 9.0 with 2-user license	N/C
#APC	b. [] HP-UX 8.02 with 2-user license	N/C
4. Select localization of system documentation (Must select ONE only)		
#ABA	a. [] System documentation in English	N/C
#ABC	b. [] System documentation in German	N/C
#ABD	c. [] System documentation in French/Canadian	N/C
#ABJ	d. [] System documentation in Japanese	N/C
5. Pre-selected chassis and optional battery back-up		
A2369A	[X] Pre-selected chassis	
#OE1	a. [] Optional—Add powerfail battery back-up	
6. Optional—select rack mount kit for installation into factory integrated 1.6 M or 1.1 M racks. (Integrated racks must be ordered on the same P.O./P.O. section)		
C2798AZ	a. [] Add rack mount kit	N/C
7. Select personality card (Must select ONE only)		
A2441A #ODS	a. [] Standard LAN personality card: 802.3 thin LAN, 2 RS-232 ports for console and remote access, S.E. SCSI. (requires HP-UX 9.0)	NC
A2442A #ODS	b. [] Replace standard with 8-port MUX personality card: 8 modem, RS-232 ports, S.E. SCSI and parallel port.	NC
A2442A #ODT	c. [] Replace standard with 16-port MUX personality card: 8 modem, 8 DC RS-232 ports, S.E. SCSI and parallel port.	
(Note for items 7b and 7c: RS-232 ports include console and access ports.)		

*Refer to the HP 9000 Series 800 Configuration Guide for configuration limits.

SAMPLE ORDERING MENU

Order Number	Product Description	Price
8. Select base memory (Must select ONE only)		
A2511AZ #ODS	a. [] Standard 64 MB base memory	N/C
A2516AZ #ODV	b. [] Replace base memory with 128 MB ECC module (requires HP-UX 9.0)	
9. Additional memory (Select up to five modules, total) Maximum 384 MB for H20, H30 and H40, 768 MB for H50.*		
A2231AZ #ODZ	a. [] 16 MB ECC memory module	QTY []
A2232AZ #ODZ	b. [] 32 MB ECC memory module	QTY []
A2511AZ #ODZ	c. [] 64 MB ECC memory module	QTY []
A2516AZ #ODZ	d. [] 128 MB ECC memory module (requires HP-UX 9.0)	QTY []
10. Select base disk (Must select ONE only)		
A2445A #ODS	a. [] Standard base 1 GB half height disk (requires HP-UX 9.0)	N/C
A24434 #702	b. [] Delete base 1 GB disk (diskless not supported, alternate disk required)	
Select alternate/additional internal disk Maximum 2 half height or 1 full height device*		
A2444A #ODZ	c. [] Add 566 MB half height disk (requires HP-UX 9.0)	QTY []
A2445A #ODZ	d. [] Add 1 GB half height disk (requires HP-UX 9.0)	QTY []
A2446A #ODZ	e. [] Add 2 GB full height disk (requires HP-UX 9.0)	QTY []
C2471SZ #ODZ	f. [] Add 422 MB half height disk	QTY []
C2472SZ #ODZ	g. [] Add 677 MB full height disk	QTY []
C2473SZ #ODZ	h. [] Add 1.3 GB full height disk	QTY []
11. Select back-up storage device (Must select ONE device*)		
C2477SZ #ODS	a. [] Standard 2 GB DDS DAT (half height)	N/C
A2443A #700	b. [] Delete standard 2 GB DDS DAT drive	
C2478SZ #ODZ	c. [] Add 4-8 GB DDS DAT drive (half height, requires HP-UX 9.0)	
A2311AZ #ODZ	d. [] Add 525 MB Quarter Inch Cartridge (QIC) drive (half height)	
Optional-Select additional storage device*		
C2476SZ #ODZ	e. [] Add CD-ROM (half height)	
12. Optional-Select system console terminal (Limit to ONE only) Specify appropriate keyboard localization option.		
C1064GZ #___	a. [] HP 700/96 console terminal w/Green screen	N/C
C1064AZ #___	b. [] HP 700/96 console terminal w/Amber screen	N/C
C1064WZ #___	c. [] HP 700/96 console terminal w/Soft-white screen	N/C
13. Optional-Select I/O and networking cards*		
J2092AZ #ODZ	a. [] 16 port RS-232 direct connect MUX card (1-slot)	QTY []
28655A #ODZ	b. [] S.E. SCSI interface card w/parallel port (1-slot)	QTY []
J2146A #ODM	c. [] 802.3 thin LAN/9000 interface card (1-slot)	QTY []
J2166A #ODS	d. [] 802.5 Token ring interface card (1-slot)	QTY []
J2250A	e. [] Token ring backup media and documentation	QTY []
28650B #ODZ	f. [] HP-IB interface card (1-slot)	QTY []
28615A #ODZ	g. [] HP-FL interface card (Requires HP-UX 9.0; 2-slots)	QTY []
A1749A #ODZ	h. [] HP-FL interface card (For HP-UX 8.02 or 9.0; 2-slots)	QTY []
36960A #ODN	i. [] X.25 link with RS-232-C interface card (1-slot)	QTY []
36960A #ODP	j. [] X.25 link with V.35 interface card (1-slot)	QTY []
A2321A	k. [] X.25 backup media and documentation	QTY []
14. Optional-Select end-user terminal Specify appropriate keyboard localization option		
C1080A #___	a. [] HP 700/60 Ergonomic terminal w/Amber screen	QTY []
C1080G #___	b. [] HP 700/60 Ergonomic terminal w/Green screen	QTY []
C1080W #___	c. [] HP 700/60 Ergonomic terminal w/Soft-white screen	QTY []
C1083W #___	d. [] HP 700/60ES Ergonomic terminal w/Soft-white screen	QTY []

*Refer to the HP 9000 Series 800 Configuration Guide for configuration information and limits.

Summary

In summary, HP is introducing:

- a complete, granular product line with multiple expandability options to address and beat our competition.
- aggressively priced systems upgrades for the industry's best price/performance and upgrade incentives.
- increased maximum configuration limits so customers can access more disk and memory.
- an intuitive product structure for ease of configuration and ordering.
- systems that are ready for volume shipments today.
- a thorough and complete upgrade path for maximum flexibility and investment protection.

The result? The best, most complete server line in the industry—UNIX or proprietary.

QuickShip/800 Update

The QuickShip/800 program will be redesigned in accordance with the Series 800 Model F/G/H/ and I packages. Three configurations are planned to be available to support 8-, 16-, and 32-user environments on the Models F10, F20, and G30 respectively. The bundles will appear on the February 1993 CPL. The QuickShip/800 bundles available today will still be in effect until the new bundles are introduced but have been repriced in accordance with the pricing available on the new systems.

Consistent with the November introduction of support options that can be sold with products, QuickShip/800 systems will be available with both hardware and software support options. All QuickShip/800 bundles now come standard with one-year warranty. As with the standard products, when you sell QuickShip/800 with support, the support will apply towards your quota credit and it is commissionable. Refer to the "Series 800 Products Move to One-Year Warranty with System Support Options" section of this document for more details.

Questions and Answers

Q What do I do if I have an 8X7 system currently on order ?

A You have two options. First, you can do nothing. The current 8x7s products will remain on the CPL. There are no price changes being made on the 8x7s products for the December CPL.

Second, you can cancel the original order and re-book with the new, systems. This will imply a configuration change, probably a price change, and a new ship date. All 8x7 systems are upgradable (for a fee) to the new systems, which gives customers the confidence to take delivery today.

Q Why did we change the naming system ?

A Our goal in changing the naming system was to simplify the product structure and make it easier for our direct sales force and channel partners to configure and order Series 800 systems.

The new numbering scheme is more intuitive. The first character designates the package, and as such there are four letters for the four packages. The second and third characters designate the performance level. As such F30 and G30 are the same processors in different packages; H40 is a faster processor, in the same package, as an H30.

While, the literature, documentation, labels, and quotes will all use the new terminology, the UNIX "uname" string will be rolled over at a later date to accommodate our software partners' timeframes.

Q What should I tell a customer who is currently evaluating a 6-slot package or has a 6-slot server installed?

A HP has a great upgrade story for customers who currently have 6-slot servers installed. Existing upgrades from a 6-slot package, i.e., 827S–847S will remain on the CPL for a minimum of 2 years. In addition, all existing 8x7S servers, including 6-slot servers are board upgradable to the F/G/H/I class servers, where appropriate. For customers currently evaluating a 6-slot server, they should be steered towards the new H-class (8-slot) Model. Only price sensitive customers should be steered towards the G-class (4-slot) Model.

The 6-slot servers will continue to be on the CPL until mid 1993. For strategic account customers requiring the 6-slot package after removal from the CPL, deals will be handled on a case-by-case basis. Contact the Sales Response Center for more information.

Q Why are only the new systems using the menu system?

A With the size of the new product introduction, the time was most appropriate to implement the menus only for the new F/G/H/I-Class systems. This will be a phased approach. Other existing products will be reviewed for future implementation.

Q How does the menu work?

A You or your customer simply read through the array of configuration choices and mark the selection boxes that correspond to the customer's needs.

Once completed, the menu with marked choices is presented to your order administrator for processing.

In some cases especially for networking and I/O products, there may be options associated with the products selected which do not appear on the menu. In these cases, make a note of the desired options and present them to your order administrator at the same time.

Q Where can you find copies of the menus?

A Menus are detailed in the December 1992 Series 800 Price Guide. Your order administrator should have copies as well.

Q Are there any plans to automate this process of selecting configuration choices and placing them into the ordering system?

A Initiatives are underway to automate the quoting process. These initiatives are being reviewed to determine if the process of inputting the order can be automated.

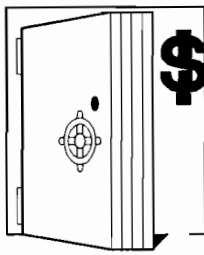
New Series 800 Upgrade Paths

One-Minute Sale

The Series 800 low-end and midrange business server family has taken on a new look; however, our commitment to provide superior investment protection has not changed. Similar to the HP 9000 Model 8X7S line, the HP 9000 Series 800 Models F/G/H/I are all board and/or chassis upgradable which provides the highest level of investment protection possible.

Figure 3.5 HP 9000 Series F/G/H/I Class Servers Offer Complete Investment Protection

HP 9000 Series F/G/H/I Class Servers Offer Complete Investment Protection



100% investment protection with a single family of products!

- No painful box swaps required
- On-site upgrades available for all Model F/G/H/I and 8X7S servers
- 100% Software compatibility
- 100% leverage of hardware:
 - memory and I/O cards
 - disk and back-up storage devices

The great news is that all existing Model 8X7S systems are board and/or chassis upgradable to the new F/G/H/I Models. From a technology perspective, the large number of customers that have bought into the Model 8X7S line can rest assured that the systems they have purchased are compatible with the new HP 9000 offering. In fact, customers will reap tremendous benefits from the new system offering. For example, depending on the system being upgraded, the cost to upgrade to higher levels of configurations has been *significantly* reduced.

Though upgrades **TO** the existing 6 HP-PB slot package will be discontinued, there is a full selection of upgrades available **FROM** this package. Refer to the following chart for details.

New Upgrade Paths

System to be Upgraded	Upgrade Path
Model 807S	Same as Model F10 (to Models F20, F30, or G30)
Model 817S	Same as Model F20 (to Models F30 or G30)
Model 827S	Any H-Class system (excluding Model H20) and the Model I30
Model 837S	Same as Model F30 (to Models G30 or G40)
Model 847S	Models H40, H50, I30, I40 or I50
Model 857S	Same as Model I30 (to Models I40 or I50)
Model 867S	Models H50, I40 or I50
Model 877S	Same as Model I40 (to Model I50)
Model 887S	Model I50 plus future upgrade TBA
Model 897S	Same as Model I50 (to future upgrade TBA)
808S, 815S, 822S, 832S	Any G/H/I-Class system
825S, 832S, 835S, 840S	Any G/H/I-Class system
835SE, 842S, 845S	Any I-Class system
845SE, 852S	Any I-Class system



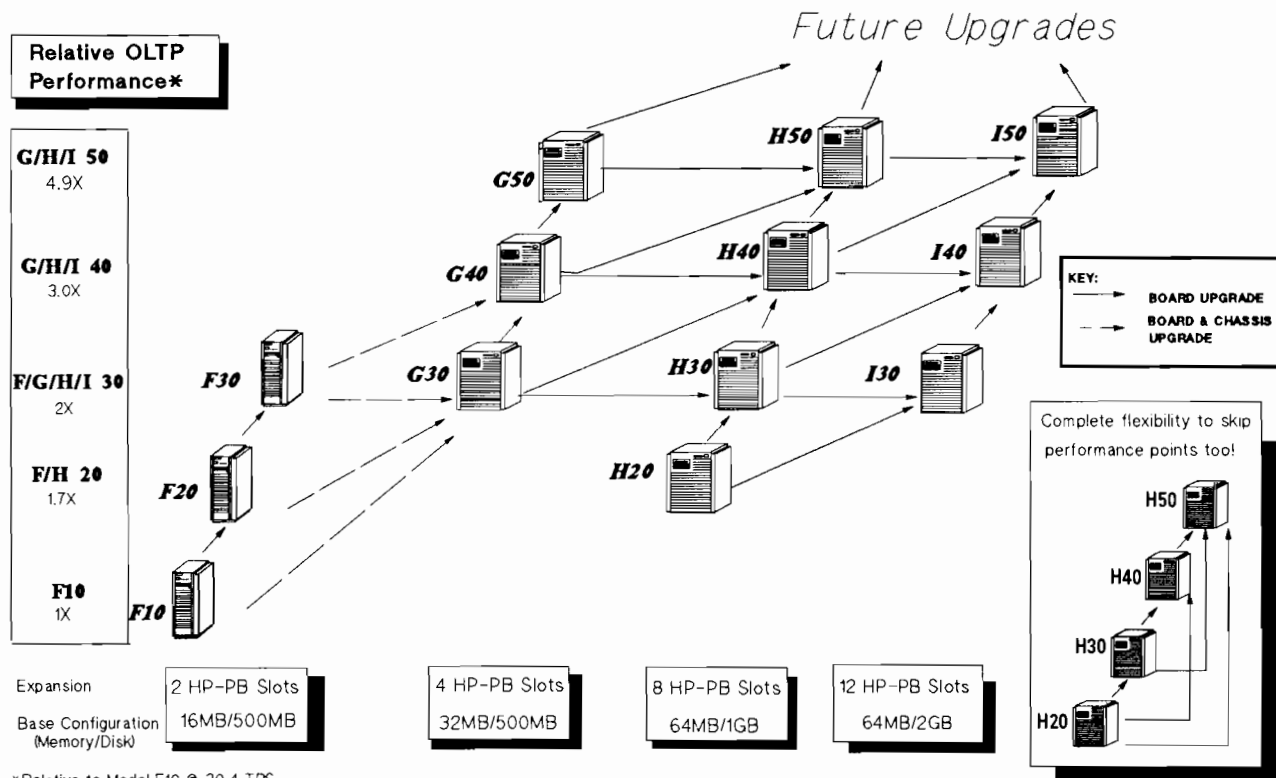
Three other changes make the HP 9000 investment protection story even better. First, more board upgrade choices have been added that will allow your installed base Model 8x7S/F/G/H/I customers to not only upgrade to the next performance point, but also to the second or third performance points as well. This will make it easier and more flexible for customers to take larger performance leaps.

Second, for Model 8X7S and Model F/G/H/I customers, add-on (standalone) memory and disk prices are now the same as system option prices. Your customers are assured the same industry competitive and affordable prices when purchasing these accessory items—even after the system has been installed!

Finally, software tiers have been reduced which in effect, make it less costly for customers to upgrade their software as they move up in performance.

New Upgrade Choices

Figure 3.6 HP 9000 Series 800 F/G/H/I Class Growth Paths



*Relative to Model F10 @ 30.4 TPS

Summary of Return Credits

System Purchased Chart (X denotes trade-in path)

Product Number	Trade-in System	G/H/I-class			Corporate Business Server 890			
		G-class	H-class	I-class	1-way	2-way	3-way	4-way
A1625AN	808S	X	X	X				
A1410AN	815S SPU	X	X	X				
A1071AN	815S Bun	X	X	X				
A1716AN	822S	X	X	X				
A1004AN	825S	X	X	X				
A1044AN	832S		X	X				
A1035AN	835S		X	X				
A1040AN	835SE		X	X				
9741AN	840S		X	X				
A1154AN	842S			X				
A1608AN	845S			X				
A1609AN	845SE			X				
A1155AN	852S			X	X	X	X	X
A1769AN	877S				X	X	X	X
A2307AN	897S					X	X	X
A1135AN	870S/100				X	X	X	X
A1146AN	870S/200					X	X	X
A1147AN	870S/300						X	X
A1148AN	870S/400							X

Return Credit Reductions

The return credits listed above will be reduced in value by 50% effective May 1, 1993. Effective August 1, 1993, the above return credits will be discontinued. Memory return credits for older generation systems will be discontinued effective January 1, 1993.

Catalog Update

The December 1992 edition of the CSO catalog went to print without the latest changes in the HP 9000 family products. A new (supplemental) catalog reflecting the product changes will be made available in the January 1993 timeframe.

HP 9000 Model 890 Corporate Business Server Update

Order History Update

Orders for the HP 9000 Corporate Business Server have substantially exceeded original expectations since the product introduction in May. System orders have been evenly balanced across the three main geographic regions of Europe, Asia Pacific and the Americas. These orders have also been well distributed across a broad range of applications and industries. This strong, broadly distributed order history is a validation of the outstanding field sales efforts as well as the market acceptance of HP's Corporate Business Server as a viable mainframe alternative.

Application Success Areas

A variety of major organizations have ordered Model 890 systems for use in mission-critical corporate level applications. Many of these key applications had previously run on mainframes and will now be run on the HP 9000 Corporate Business Server. This selection by major customers validates the suitability of the Model 890 as an attractive alternative for corporate-level, mission-critical applications.

Three of these specific application examples are:

- **Library Management.** A major U.S. library has ordered the Model 890 to automate library operations. The library management software has previously been implemented on a mainframe. The library made a decision to move to HP because of cost and a lack of performance capacity in the mainframe. The library management software is based on a Pick database.
- **Corporate Financial Reporting.** A large U.S. metal manufacturer currently has a corporate financial accounting system running on a mainframe environment. This current system is not able to close out financial results in an adequate time frame. The company has decided to implement Oracle's financials and has ordered an 890 to pilot the application.
- **Telecommunications.** A major Asian telecommunications company has selected the Model 890 for use as a transmission network control system. The customer will use multiple pairs of 890s in a high availability configuration located at several sites. These systems will be used for controlling and managing arrays of transmission equipment configured in a data transmission network. The application is home grown and accesses an Oracle database.



Shipment Status

Initial customer shipments for the Model 890 have been made. Currently, we are ramping up to full volume production by the end of 1QFY93. Given the large order backlog, the expected delivery time for new system orders will be 12-16 weeks until the 890 backlog is reduced.

Choosing the Right System

Commercial Workload Characterization

Selecting the right system to propose for a customer's solution can be challenging. The following information is a guide to assist you in proposing the right system based on number of users and upgrade potential. Remember, the most accurate way to determine how many users a system can support is with an actual application benchmark.

When selling a third-party solution, look to the solutions provider for sizing information on their particular application. Additional guidelines for memory and disk configurations can be found in the HP 9000 Series 800 Configuration Guide (December 1992). Customers will typically fall into one of the three following types of multiuser environments:

Environment Type	Workload
• Software development or commercial application with a relational database and a high rate of data entry (e.g. Oracle Forms)	• Heavy
• Commercial application with a relational database and low to medium level of data entry or nonrelational database application with a high rate of data entry (e.g. Account database query)	• Medium
• Commercial application without a relational database and low to medium level of data entry or query activity (e.g. Asset management system using ISAM files)	• Light

There are two types of users to consider when sizing a system: logged-on users and concurrent users. Definitions for these different types of users are below.

Logged-On Users—Real users who take breaks and experience interruptions in their work. Logged-on users are the type of users that a manager of a workgroup is referring to when he/she mentions that "I have 30 people in my department who need to access the computer for OLTP-type work."

Concurrent Users—Heads down continuously working users who have no interruptions and take no breaks. Concurrent range of user numbers tend to be too conservative because in reality, users take breaks. As a guideline, experience has shown in a typical commercial environment:

Logged-On Users = 2X the Concurrent Users a system can support.

The information shown in the following table describes typical concurrent users for each of the three commercial environments for each SPU. Remember to size the system based upon how many users will be actively working at peak periods instead of how many users the customer needs to connect to the system. The range of user numbers is only a guideline since each individual customer's environment is different.

Choose the HP 9000 Series 800 that Meets Your Needs

Product	Concurrent Users (see definition)		
	Light Workload	Medium Workload	Heavy Workload
F10	1-48	1-48	1-24
F20	1-120	1-80	1-40
F30	1-160	1-120	1-56
G30	1-200	1-160	1-56
G40	1-250	1-200	1-70
G50	1-330	1-260	1-90
H20	1-150	1-42	1-40
H30	1-200	1-160	1-56
H40	1-250	1-200	1-70
H50	1-330	1-260	1-90
I30	1-200	1-160	1-56
I40	1-250	1-200	1-70
I50	1-330	1-260	1-90
890 1-CPU	1-380	1-300	1-100
890 2-CPU	1-650	1-510	1-170
890 3-CPU	1-950	1-750	1-250
890 4-CPU	1-1,180	1-930	1-310

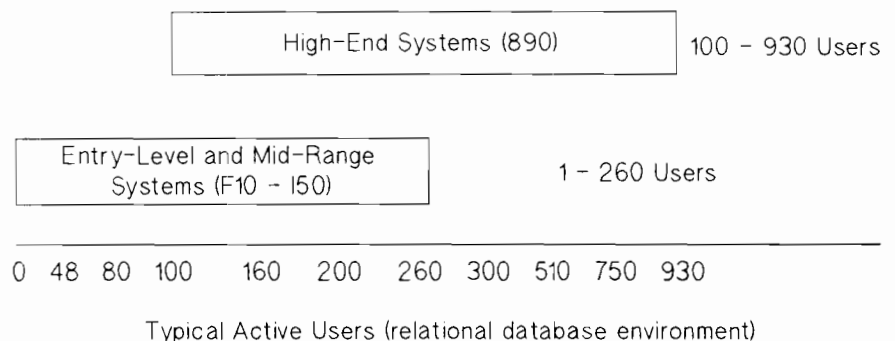
Note: Ranges shown are concurrent users as observed in typical customer environments and from benchmarks. Greater numbers of logged-on users may be connected to the system. These ranges represent terminal connectivity only. PC, workstation, and X-station connectivity will vary.

The information contained in this section supersedes all previously published range of user numbers. In summary, when determining which system to propose to a customer, you should evaluate the answers to the following questions:

1. How many logged-on users does the customer require?
2. Which of the three environments most closely matches the customer's application?
3. How many total users must be connected to the system?
4. Does the customer have upgrade requirements that must be fulfilled without a box swap?

Select the system from the HP 9000 Series 800 Systems Matrix that will support the number of users the customer requires. Check upgrade chart in the Installed Base section to be sure that the system selected is on an upgrade path acceptable to the customer.

Figure 3.7 Typical Number of Commercial Users



HP 700/RX Family of X Stations

One-Minute Sale

Today, the desktop solution of choice for more and more companies is the HP 700/RX family of RISC-based X Window stations. Why? Because they make so much sense in today's competitive business environment. HP 700/RX stations are designed specifically for high X Window performance and allow access to resources anywhere on the network. They handle display tasks quickly, while taking advantage of computing power and disk space from other devices on the network. Through the power of networks, HP 700/RX stations maximize your hardware investment and let you work more productively.



HP 700/RX offers industry-leading ease of use and flexibility. HP is the first X terminal vendor to offer a local user environment. HP VUE/RX, the X station's local user environment, gives users the look and feel of HP VUE while giving them the benefits of local clients such as host RAM and MIPS offloading. HP VUE/RX allows users to organize multiple windows into multiple workspaces. It is like having several X stations in one.

Features and Benefits

Feature	Benefit
Local HP VUE	<ul style="list-style-type: none"> • VUE/RX adds the power of workspaces and a control panel to Motif Window Manager • VUE/RX runs locally on the X station, so it can run in multi-vendor host environments • Shields users from the intricacies of UNIX • Offloads host RAM and MIPS
Other Local Clients	<ul style="list-style-type: none"> • Motif Window Manager (industry standard) is now available • HP Term access to HP 3000 based applications • TWM for memory constrained environments • X term (industry standard) terminal emulation
X11 R5 Support	<ul style="list-style-type: none"> • Can use PCF fonts and Font Server scalable fonts • Allows for support of latest MIT X11 R5
HP Shared X support	<ul style="list-style-type: none"> • Share application windows with one or several users simultaneously
SNMP Support	<ul style="list-style-type: none"> • Simple Network Management Protocol for remote control and monitoring • Easy system administration of large networks

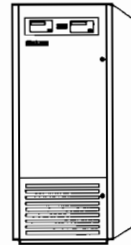
For more information, contact the Sales Response Center.

Series 1200 Fault Tolerant Update— Introducing a New Low-End System, Model 1210

One-Minute Sale

HP has recently introduced its new low-end fault tolerant UNIX system, the Model 1210. OEMed from Sequoia Systems, the system is an entry-level computer, complementing HP's high-end system, or Models 1240 and 1245. With the new system, HP will be able to go after the low-end of the fault tolerant UNIX market previously dominated by Tandem's Integrity systems. Priced very aggressively, and offering similar fault tolerant functionality available on the high-end systems, the new system is highly tuned for high-performance OLTP applications.

Figure 3.8 Model 1210 System Overview



Processors Elements	2-4 MC68040/25Mhz
Main Memory (Shadowed)	16-192 MB
Disk Storage (Mirrored)	Up to 52 GB
IO Channels	2 to 4 8-Slot VME Card Cages
Terminal Connect	Up to 900 User Connections
Tape Drive	Integrated Digital Audio Tape (DAT)
Upgrade Path	Object Code Compatible with 1240/1245

Product Description

The Model 1210 comes bundled with two MC68040/25 MHz processors, 16 MB of shadowed main memory, 880 MB of mirrored disk storage, DDS Digital Audio Tape drive with 4-8 GB data compression, Ethernet card with TCP/IP S/W, and HP-FX Operating system. The VME-based system supports HP's peripherals, as well as HP's C & C++ compilers and debuggers. It also supports industry standard databases, including Oracle Parallel Server (ver 6.2) and Informix On-line (ver 4.1), and industry standard networking, including Ethernet 802.3 and X.25.

Target Market

The Model 1210 is targeted primarily at the Telecommunications market for applications in the Advanced Intelligent Networks (AIN) such as Service Control Points (SCPs) and Adjunct Processors (APs), Enhanced Services, Operations Support Systems (OSS) and Cellular (HLR/VLR). The system also fits applications in Securities, Banking, Healthcare, Manufacturing, and others.

Features & Benefits

The Model 1210 is expandable on-line to support high-performance OLTP applications. The single-cabinet system comes bundled with processors, memory, disks, and OS. Providing a low entry point to HP's fault tolerant family, the system is object code compatible with Models 1245 and 1240. The Model 1210 is a fault tolerant system, ensuring less-than-a-second transparent recovery from any H/W faults. Applications can enjoy its fault tolerant design with no code changes, and system managers are allowed to modify its configuration on-line with no scheduled downtime.

Product Line Positioning

The Model 1210 is the entry point to HP's fault tolerant family. The following table compares the Model 1210 to the high-end Model 1245:

Description	Model 1210	Model 1245
Microprocessors	MC68040/25 Mhz	MC68040/33 Mhz
# of Processors	2-4	2-32
Memory (shadowed)	16 MB-192 MB	32 MB-2 GB
Disks (mirrored)	880 MB-52 GB	560 MB-250 GB
Users	Up to 900	Over 5000

Beating the Competition

The Model 1210 is positioned against Tandem's Integrity (UNIX) product line, Stratus' XA/R Models 5-45, and DEC's VAXft family. Tandem's Integrity is a single-point solution. It supports only a single processor (Mips R3000), up to 192 MB of shadowed memory, and 13.5 GB of mirrored disk storage. Stratus' XA/R family, based on the Intel i860 microprocessor, will not perform well in an OLTP environment. In fact, at the day of the announcement, Stratus has not published any TPC-A results, but rather released un-audited irrelevant benchmark results, including Ramp-C (IBM's proprietary), and ET-1 (debit-credit). Recently, Stratus has announced the move to PA-RISC; however, Sequoia and HP plan to introduce their jointly developed PA-RISC system long before Stratus. DEC's VAXft is a VMS-only solution, positioned as a front-end processor to DEC's large installed base of VAXClusters. The high-end system (Model 612) is slower than Model 1210.

Ordering Information

Model 1210 is on the September Corporate Price List with initial customer shipments expected by the end of December. See the December HP 9000 Series 800/1200 Price Guide for pricing and ordering information.

For More Information

Please access the GSY Hotline subject S/1200, or contact:

US	Raanan Peleg	1-447-4515
Europe	Jonathan Sharon	1-779-1590
Japan	Jin Sakurai	1-366-3077
Asia Pacific	Ka-vin Wong	1-520-8728

(Telecom only)

Peripheral Update

Several new peripherals have recently or will soon become available to address your customers' storage, backup and printing needs. These include:

- HP 10LC Optical Library and Drives Support
- 1 and 2 GB Disk Drive Support
- HP 2300/840L Line Printer Support



HP 10LC Optical Library and Drives Support

The new Model 10LC (P/N 1708C) is an entry-level library storage solution that provides low-cost online storage for applications such as image management, hierarchical storage, and unattended backup. This 10-gigabyte optical jukebox has capacity for 16 rewritable or write-once disks providing 10.4 gigabytes of online storage. Available only with HP-UX 9.0, the Model 10LC is smaller, faster, and less expensive than most optical libraries. It offers your customers several features and benefits.

Features and Benefits

Feature	Benefit
26 ms drive seek time and disk-exchange time less than 8 seconds	• Fast access to information
Less moving parts	• Greater reliability. HP has achieved 40,000 hours MTBF for all HP's optical libraries—that's 4.5 years of continuous operation
Adherence to ANSI and ISO standards	• Ensures data accessibility and interchangeability for years to come



1 and 2 GB Disk Drive Support

Customers can now make use of higher capacity and faster performance disk drives. These new drives are only supported with HP-UX 9.0. Support for these drives with HP-UX 8.0X is currently under investigation. Series 800 Model F systems can support up to 2 GB of internal disk, and G/H/I Models can have up to 6 GB of internal disk. These drives, available in a tower, a rack, or integrated into the CPU enclosure, offer the following enhancements over the previous drives.

	3.5 Inch*		5.25 Inch	
	Old	New	Old	New
Formatted Capacity	422 MB	1052 MB	1355 MB	2003 GB
Average Seek	12.6 ms	10.5 ms	13.5 ms	11.5 ms
Rotational Latency	8.33 ms	5.5 ms	7.5 ms	5.5 ms
MTBF	150,000 hrs	300,000 hrs	150,000 hrs	300,000 hrs

*This disk also comes in a 566 MB version for CPU enclosures



HP 2300/840L Line Printer Support

For those businesses needing high-speed reliable printing, HP has introduced the new HP 2300/840L Line Printer (P/N C2354A). Designed for both the office and industrial environments, this impact printer provides quiet operation, outstanding paper handling abilities and up to 840 lines per minute. This printer is supported on HP 9000 Series 800s with HP-UX 9.0. The HP 2300/840L provides your customers with the following features and benefits.

Features and Benefits

Features	Benefits
Can handle 63,000 to 230,000 pages per month	• Rugged for heavy print requirements
Multilanguage Control panel	• Provides easy installing and configuring in multiple languages
21,600 MTBF	• World's most reliable line impact printer; Mean time to repairs only 60 minutes
Standard sound enclosure	• Provides near silent operations for office environments

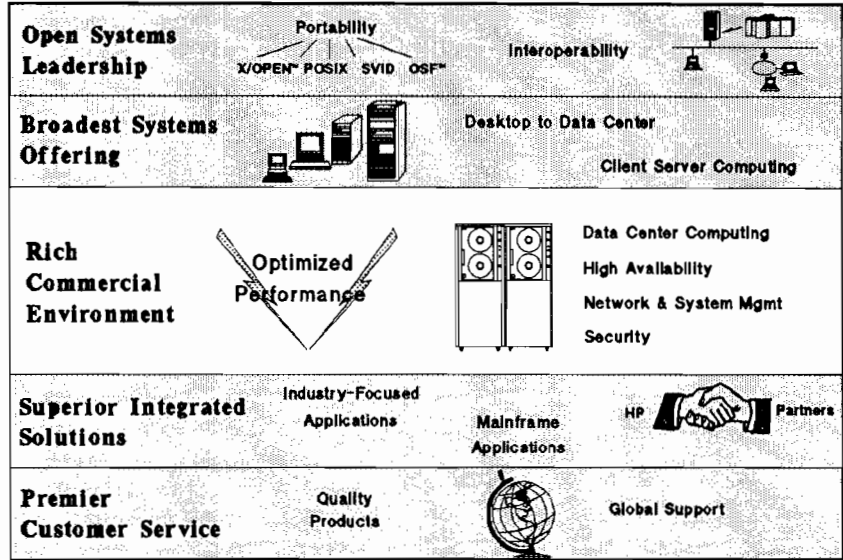
With this new printer, HP now offers the following selection of impact dot-matrix printers:

Model #	Speed		Print Language	Duty Cycle pages/month	Sound Level db(A)
	lpm	cps			
2562C	420	924	PCLII	25,000	64
2563C	420	924	PCLII	63,000	49
2300/840L	840	1,848	PCLII	63,000-230,000	55
2566C	1,200	2,640	PCLII	530,000	58
2567C	1,600	3,520	PCLII	650,000	61

For more information, contact the Sales Response Center.

Rich Commercial Environment

Figure 4.1 HP 9000 Open for Business Framework



New Software Pricing Model and HP-UX 2-user License

One-Minute Sale

With the introduction of the new Series 800 Systems, a simplified software tiering structure is being introduced. A new 2-user HP-UX license level is being bundled with the new Series 800 systems.



New Software Pricing Model

With the introduction of the new HP Series 800 systems, a new pricing scheme for add-on software also is being introduced. Today's existing 7-tier model (which is based on SPU performance) will eventually be replaced with a simpler 3-tier model which will be based on SPU expandability. This new 3-tier model will greatly improve the Series 800's competitive position.

The new 3-tier model is an improvement because the software will no longer cost more with increasing performance. This has been a sales inhibitor when going up against Sun and IBM. The 3-tier model also provides a consistent software pricing model across the HP 9000 line. The new Series 800 systems in Tier 1 have the same expandability as the Series 700 systems, so software for both systems will be priced the same. An additional benefit is that the new tier model will simplify software products' structure, which should make it easier for customers to order products, including processor upgrades.

The new 3-tier model will be implemented by evolving today's 7-tier model. The new Series 800 systems will be placed in today's tiers according to the chart below:

Tier	1	2	3	4	5	6	7
System	Fxx Gxx 807 817	827 837	Hxx Ixx 847 857	867 877	887 897	890/1-2	890/3-4

Existing orders in the backlog will not be impacted. Existing Series 800 systems will remain on their present 7-tier assignments.



New Series 800 HP-UX 2-user License

The Series 800 models F/G/H/I will have a 2-user HP-UX license bundled with the system. This new 2-user license will better position the Series 800 systems as servers in the marketplace and also improve its competitive positioning. The Series 800 HP-UX license products will add new options for the 2-user level on the December 1, 1992 CPL, along with license upgrade credit for the 2-user level. The 2-user level provides a consistent HP-UX user level across the HP 9000 family since the Series 700 systems also come bundled with a 2-user license.

Existing Series 8x7 and 890 systems will continue to have an 8-user license bundled-in so that existing orders will not be impacted. See the December 1992 Series 800 Price Guide for ordering and pricing information.

Distributed Computing Developers Environment

One-Minute Sale



HP's first Distributed Computing Environment (DCE) products are introduced on the December CPL. This is HP's first implementation of the Open Software Foundation's (OSF) DCE environment for providing a standards-based foundation for heterogeneous distributed applications. It will be the industry's leading DCE solution with a complete offering of tools, education and support services. These DCE products are designed for developers who want to begin writing distributed applications.

The information industry is changing with applications moving from running on just one machine towards running across several machines. OSF announced that DCE will provide a framework for data and applications to be distributed transparently across networks, machines and people. Virtually every computer vendor (from PCs to mainframes) has endorsed DCE, making DCE the only true open foundation for heterogeneous distributed computing.

HP's DCE Developers' Environment provides a high-quality, fully functional, standards-based framework to develop, administer and use distributed applications. In addition to being a reliable and comprehensive implementation of DCE, HP is also providing additional development tools to help develop DCE-based applications. With these products, HP will be taking a leadership roll in providing a robust foundation for the next step in developing client/server and distributed applications.

DCE is a collection of technologies integrated to provide a single, comprehensive framework to develop, administer and use distributed applications. DCE consists of 7 components. HP's DCE Developers' Environment provides the first five DCE components.

- Remote Procedure Call (RPC)*
- Threads*
- Distributed Time Service*
- Security Service*
- Naming Service*
- Distributed File System
- Diskless Support

A DCE environment will be typically grouped into entities called Cells. Each Cell is defined as a group of users that share the same resources or are involved in the same activity. DCE enables distributed applications to be developed at a high level, with communication between heterogeneous systems being done transparently, without regard for the network type or location of systems. The RPC is the basic communications mechanism for the DCE environment, with clients and servers issuing requests and information through RPCs. Threads allow applications to easily handle multiple requests for server resources from different clients, or for clients to issue multiple parallel requests. The security server addresses the authentication, authorization and privacy of communication between the DCE systems. The directory server stores the names and attributes of resources available in the DCE environment. The combination of all the DCE services means that writing distributed applications should be as simple as writing local applications.

*Available in DCE Developers Environment.

The DCE Developers' Environment consists of two software products: DCE Core Services and DCE Application Development Tools.



DCE Core Services

The table below details the list of DCE functionality included with the DCE Core Services:

Feature	Benefits
Remote Procedure Call (RPC): TCP and UDP versions	Efficient operation over both LAN and WAN
CMA Threads: POSIX 1003.4a, user space implementation	Clients and servers can handle multiple requests simultaneously
Naming: Cell Directory Services (CDS) with Global Directory Agent (GDA) to Domain Naming Services (DNS)	Provides multi-cell operation using Domain Naming Service. In addition, CDS replication is provided
Security: USA version includes Data Encryption Services (DES) library. Passwords are encrypted	Provides authorization and authentication of users and resources
Distributed Time Service (DTS)	Guaranteed time synchronization

The Core Services are licensed under 3 products:

1. DCE Executive includes the RPC, Threads and Time Service.
2. DCE Cell Directory Server
3. DCE Security Server

In addition to delivering the DCE technologies, HP will also make DCE easier to manage by integrating installation and configuration into HP-UX's System Administration Manager (SAM). Also included with the DCE Core are Validation tests designed to verify the status of DCE services and user-provided servers. Special support tools are also provided to help troubleshoot DCE related problems.



DCE Application Development Tools

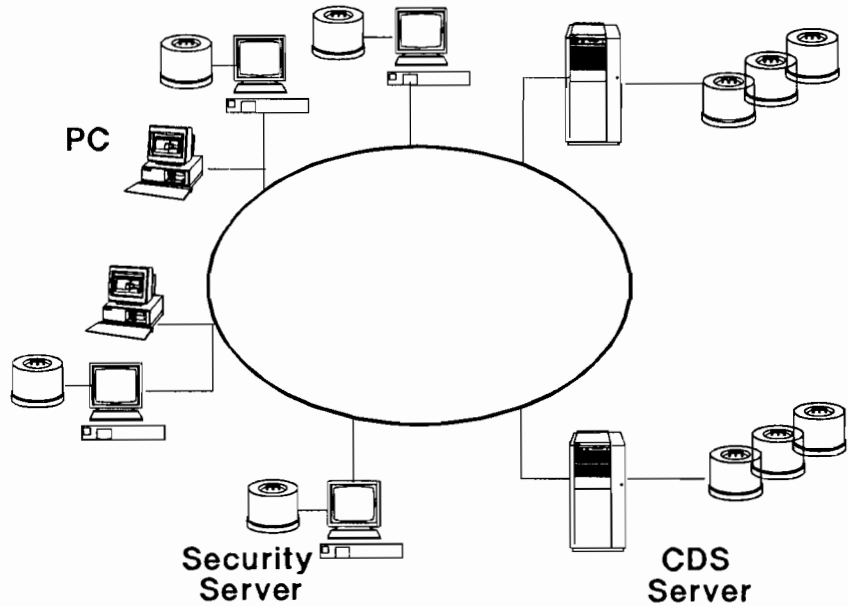
Along with the DCE Core Services products, HP is also providing a suite of development tools designed to increase the productivity of the DCE application developer. These tools include:

- RPC tracing, logging and error reporting facilities to help debug DCE applications.
- Instrumented DCE compiler to trace RPC activity in distributed applications.
- Several DCE application examples to help developers get started.

Ordering Information

DCE environments will be typically grouped into entities called Cells. Each Cell is defined as a group of users that share the same resources or are involved in the same activity. Each DCE Cell must include at least one Cell Directory Naming (CDS) Server and one Security Server. These two servers may be on different systems, or both could reside on the same system. In addition, every system (node) in a DCE cell must also have the DCE Client/Executive software and license, including the Naming (CDS) and Security Servers.

Figure 4.2 DCE Cell



A DCE cell must contain at least one naming server, (CDS server) and one security server. Each system in the DCE cell is also a DCE client.

The DCE Developers' Products are orderable under 4 license products and 2 media products for the Series 800:

License Products	Media and Documentation Products
B3189A DCE Client LTU	B3190A DCE Core Services media (US only)
B3187A DCE CDS Server LTU	B3191A DCE Core Services media (Intl.)
B3188A DCE Security Server LTU	
B3192A DCE Application Development Tools User LTU	B3193A DCE Application Development Tools media

Only one DCE Core media product needs to be purchased since it includes all the software needed for the DCE clients and servers. The Application Development Tools are licensed on a per-user basis, so one license needs to be purchased for each developer using the Tools.

Several vendors have announced their intentions to offer DCE, but only IBM has introduced products. However, they have really only introduced a DCE runtime environment, not a full solution such as HP's. HP is providing a full set of special development tools, education classes and consulting, along with our robust offering that includes enhanced usability for installation and management. In addition, IBM priced their DCE products with an annual license fee, which locks customers into an ongoing expense for DCE. HP is truly providing the industry's leading DCE implementation.

A slide presentation is available on the GSY hotline SUBJECT: DCE. A datasheet is also available under literature p/n: 5091-5841E.

Database Partners Update

Here's what's new with our leading RDBMS partners

Sybase

Recent months have seen big wins in the HP and Sybase relationship. First, HP beat out Sun and DEC in a new opportunity to provide systems in Sybase's Americas Education Centers. Today, these eight centers feature Series 827s as the hardware platform for customers attending Sybase training. This win is good evidence to use with customers interested in our partnership with Sybase.

Also, in October, HP and Sybase signed an agreement to have the Sybase Net Gateway on the Series 800 in mid 1993. This product facilitates access to DB2 databases from Sybase on the Series 800. This is very attractive to mainframe alternative customers. Sybase has also chosen to use an HP 9000 Series 890 as their "performance yardstick" platform for future performance and architecture planning.

In the Americas, HP and Sybase rolled out joint sales seminars focused on mainframe alternatives. The seminars, held in five cities during September and October, were delivered to full capacity audiences and featured HP, Sybase and industry consultants discussing mainframe alternative trends. For more information on these seminars, contact Chris Thomas at telnet 447-7653.

Oracle

HP and Oracle have hit some great benchmarks in recent months. First, in conjunction with the HP Corporate Business Server 890 introduction, HP and Oracle achieved 578 TPC-A (\$11,606/tpsA) on a Model 890 4 CPU. This was the highest TPC benchmark ever published by HP. What's more, it was achieved with minimal tuning, leaving room for even higher performance. That benchmark was followed up by a 184 TPC-A (\$10,737/tpsA) with Oracle Version 7 on the Model 897; this latter benchmark remains the highest UNIX uniprocessor number in the market.

Oracle's HP-focused business unit has worked with HP on several aggressive selling projects including joint sales seminars in eight U.S. cities with Cambridge Technology Group. The entire Oracle sales force has been equipped with a customized set of HP sales tools including literature, benchmark details and success stories to encourage them to continue to bring business to HP.

Recent releases from Oracle for the HP 9000 include: Oracle RDBMS version 6.0.36, Oracle CASE version 5, Oracle Applications MPL 9.0 with Oracle Human Resources, Financials and Manufacturing. ORACLE7 (currently in Beta) is scheduled for release and availability on HP-UX 9.0 in December 1992.

Computer Associates



In June 1992, Computer Associates announced their plans to make CA's most widely used mainframe databases available on HP-UX. This is a great mainframe alternative database opportunity since over 25% of the IBM mainframes worldwide have mission critical applications running with a CA database.

The databases and their 4GLs will be available on HP-UX before any other UNIX platform. Beta tests will begin during the first quarter of 1993 with product availability in third quarter 1993.

The product suite from CA will include:

- **CA-IDMS** (formerly Cullinet)
CA-IDMS is a complete dictionary-driven high performance database for HP-UX that is compatible with CA-IDMS-DB and CA-IDMS-DC on mainframes. CA-IDMS supports the application development system CA-ADS. It also provides full multi-user support and transparent client/server support.
- **CA-DATACOM** (formerly ADR)
CA-DATACOM is a database management and application development system that is compatible with the CA-DATACOM line on the mainframe and PC. CA-DATACOM supports the development environment CA-IDEAL.

CA also supports CA-DB, an ANSI SQL conformant relational database for HP-UX. This database combines relational access with the production power needed for today's demanding applications. CA-DB offers continuous availability, integrity enforcement, complete access control, distributed capabilities, and an active data dictionary/repository.

Software AG

Another strong database offering to use in mainframe alternative environments is from Software AG. Their ADABAS/Natural product has its history in the IBM world and has been shipping since 1991 on HP-UX. Software AG has chosen HP-UX as their base UNIX port and began a Series 800 performance tuning project in July.

Informix

Informix announced in July that they will be using HP's OpenODB technology to provide object-oriented capabilities to their Informix OnLine relational engine. OpenODB is HP's own object-oriented database product for commercial environments. Informix will also be incorporating the technology into their upcoming Informix-4GL++ for object-oriented design and programming for Informix-4GL applications. This announcement will offer an opportunity for you to offer object oriented database technology (which originated at HP) to Series 800 customers.

Ingres

New Ingres sales tools are available to help you sell Ingres/HP solutions. Two success stories, Cellular One (LDC # 5091-5783E) and Dept. of Public Housing (LDC # 5091-5781E) are available which highlight recent big deals with Ingres and the Series 800. The HP/Ingres installation at DPH earned the customer an award for Open Systems Excellence at this year's UNIX Expo. An Ingres and HP videotape featuring customers as well as company executives is also available from Carol Grant at HP-TV (part # 90560T).

Ingres engineers are developing their next database release, version 6.5, exclusively on HP-UX. Performance is a key objective of this release, scheduled for availability in the fall of 1993.

Database Availability

Product	HP-UX 8.0x	HP-UX 9.0
Online Informix 5.0	Now	Now
Ingres 6.4	Now	Now
Oracle 6.0 36 7.0 (12/92)	Now n/a	Now 12/92
Sybase 4.9 4.9.1	Now n/a	n/a Now
ADABAS 1.1 1.2 2.1	Now 12/92 n/a	Now 3/93 6/93
Progress 6.2 6.3 (12/92)	Now n/a	Now 4/93
Unify 1.3 (Now) 2.1	Now n/a	Now 1/93

**New IM Sales Tools**

Wondering how the major database partners measure up against one another on features? A new sales tool is now available on the GSY Hotline under the subject "DBFEAT." This tool includes detailed feature comparisons of Oracle, Ingres, Sybase, Informix and Software AG. Another hotline item, "DBAVB" provides a quarterly snapshot of database versions and availability on the Series 800.

Languages Update**New Release of FORTRAN/9000**

The newest release of HP-UX FORTRAN for the Series 800 has several new features. It includes the Optimizing Processor (as on FORTRAN for the 700) and allows programmers to specify optimization levels when trading off compile time, code expansion, performance, etc. Other new features include Fortran 90 features (an ISO standard which HP is leading the industry in adopting) as well as features to make Fortran ports from Sun, DEC, and IBM easier. Note that the product number has changed with this new release to B2409B.

Tools Update**ALLBASE Tools Update**

ALLBASE/4GL and ALLBASE QUERY deliver ALLBASE/SQL customers an improved productivity, high performing, single vendor solution. They are easier than ever to order:

Product Number	Product Name
B2962A	ALLBASE/4GL Developer Version
B2963A	ALLBASE/4GL Runtime Version
B2964A	ALLBASE/SQL/4GL/QUERY Bundle
B3148A	ALLBASE/QUERY—English Version
B2326AB	ALLBASE/QUERY—Japanese Version

Commercial CASE Update

Andersen Consulting

In November 1992, Andersen and HP made public their agreement to make FOUNDATION for Cooperative Processing (FCP) available for the HP 9000. FCP is the first full lifecycle CASE product to generate client/server applications. HP-UX is the first UNIX platforms targeted by FCP. Ultrix will follow in 1993. Windows clients are the current target clients.

This product is now available in Beta and is in place with several customers including Florida Power. Full availability is scheduled for first calendar quarter 1993.

Texas Instruments

In the first quarter of 1993, Texas Instruments will roll out their next release of a full lifecycle development environment, version 5.2. This will include client/server functionality with the ability to target Series 700 systems as clients and Series 800 systems as servers. With this release, the Series 800 can be used to house TI's repository. What's more, the Series 700 is the ONLY UNIX-based client which will be targeted with this new release. The opportunity here is to sell a complete, unified UNIX development and deployment solution with TI.

New CASE Sales Programs

In July of this year, HP announced the integrated-CASE sales program called "Try-Then-Buy." Qualified customers now have the opportunity to deploy software from our i-CASE partners on a trial basis. For details on how your customers can participate, send a message to the GSY Hotline under the subject, "TITRY."

Facts About Integrated CASE Products for the Series 800

Tool	Case Products			
	Foundation	IEF	Maestro	PacLAN/X
Vendor	Andersen	Texas Instruments	SoftLab	CGI
Product Components				
Methodologies	Yourdon-DeMarco, Constantine	James Martin		Yourdon-DeMarco Merise, E-R
Front End Tools	Infor. workbench	Workstation Tool Set	SA/SD	PacDesign
Back End Tools				
Client	Code Generation	Code Generation (1/93)		Code Generation
Server	Code Generation	Code Generation	Code Generation	Code Generation
Repository	Dictionary	Encyclopedia	Object Management	PacLAN/X
Other	Full Dev. Cycle	Full Dev. Cycle		Full Dev. Cycle
Development Environment				
Workstations	OS/2 DOS/Windows	OS/2 DOS/Windows HP-UX (700)	OS/2 DOS/Windows	OS/2 DOS/Windows
Repository	HP-UX (Q2/93) OS/2	HP-UX (1/93)	HP-UX	HP-UX (PacLAN/X) OS/2 (PacLAN) MVS (PacBase)
Target Environment				
Target Client	Terminal OS/2 (PM) DOS/Windows HP-UX (3/93)	Terminal OS/2 (PM) DOS/Windows HP-UX (1/93)	Terminal	Terminal OS/2 (PM) DOS/Windows
Target Server	HP-UX (FCP) MVS VMS OS/2 (FCP)	HP-UX MVS VMS OS/2 AIX	HP-UX MVS MPE	HP-UX MVS OS/2 Etc. (over 30)
Target Technologies	COBOL C Oracle Informix RDB (VMS) DB2 (MVS) DBM (OS/2)	COBOL C Oracle Ingres RDB (VMS) DB2 (MVS) DBM (OS/2)	COBOL DB2	COBOL DB2 Oracle Informix
Overall Strengths	Client/Server Cooperative Processing Integration Services	100% code generation High consistency Diagram test facility Integration Partners	Distributed Repository Supports Large Projects	Tightly integrate Repository Many target systems Document management
Best Opportunity for HP 9000 This Year	Series 800 as a target system; customers moving to client/server who want to leverage Windows PCs for development	Series 800 with X-terminal or Series 700 as development system is an installed IBM mainframe account targeting IBM mainframe and/or HP-UX	Series 800 as a development server to target new code or <i>re-engineer and maintain</i> existing code for MVS	Series 800 as a development server and/or target system in a highly heterogeneous environment
HP Contact	John Campbell (708) 357-2463	Donna Crowell (214) 830-8725	Diane DelSignore (415) 460-1612	Ted Luchsinger (203) 325-5824

CICS on HP-UX

One-Minute Sale

HP and IBM have announced plans to port IBM's CICS transaction processing monitor to HP-UX. CICS is the world's most widely-installed TP Monitor with over 20,000 customers. 80% of mainframe customers have installed applications based on CICS. This is the first time that IBM has licensed CICS beyond IBM platforms.

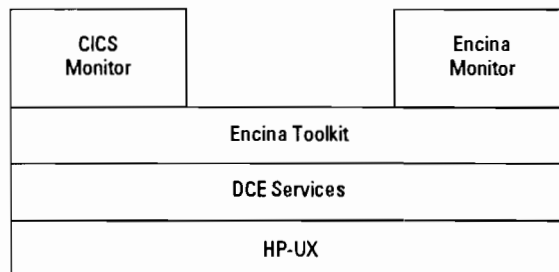
With CICS on HP-UX, mainframe customers can move to the Series 800 and take advantage of dramatic cost savings while protecting their application and expertise investments. For example, a customer moving a mainframe CICS/VSAM/COBOL application to a Series 800 would simply transfer the application and recompile!

This announcement is in line with IBM's strategy to establish CICS as an industry transaction processing defacto standard. Although IBM plans to license CICS to other vendors, HP will be the reference port. By releasing CICS to HP, IBM has recognized HP's leadership role in open systems and opened the door to potentially thousands of mainframe downsizing customers.

Product Description

CICS on HP-UX will be implemented on the Open Software Foundation's Distributed Computing Environment (OSF/DCE) and Transarc's Encina technology. Customers must have DCE and the Encina Toolkit technologies to run CICS on HP. A conceptual model of the implementation on the Series 800 is displayed below:

Figure 4.3 CICS on HP-UX



CICS on HP-UX will be available in second half 1993.

Positioning

Transarc's Encina continues to be HP's strategic enabling technology for distributed transaction management. The announcement of CICS on HP-UX strengthens Encina's role since the Encina Toolkit on DCE is the foundation for HP's CICS implementation. (This is similar to IBM's implementation of CICS on the RS/6000 which also requires DCE and the Encina Toolkit). With the CICS announcement, customers will now have a choice of monitor APIs residing on the Encina Toolkit—they may choose the Encina Monitor from Transarc or IBM's CICS monitor.

Keep in mind the following factors when helping customers make this choice:

- **Availability.** The Encina Toolkit and Monitor on HP will be available in the Spring of 1993. CICS on HP-UX will be available during the second half of 1993.
- **Existing investments in CICS Applications and Expertise.** In environments where customers have large investments in CICS skills and applications, CICS on HP-UX will be a strong fit. Again, remember that Encina will still be a critical piece of the solution for these customers.
- **“Leading Edge” Monitor vs. “20 Years Mature” Monitor**

Encina is a newer technology than CICS. While some customers will want to build their open OLTP environments with only the newest technologies, others will lean towards more established solutions such as CICS.

CICS is a robust and proven technology with the associated host of applications and industry expertise. CICS on HP-UX (and on the RS/6000) facilitates coding in COBOL and C. It offers highly integrated functionality including features such as forms management, queue management, and priority scheduling.

Encina is based on leading edge technologies such as DCE, RPC, and threads. It is highly modular allowing users to choose components as needed and upgrade on a component basis. It is a standards-based technology, complying with X/Open's XTP model and currently facilitates coding only in C.

Getting Started Today

CICS mainframe customers do not need to wait for CICS on HP-UX to get started in moving to the Series 800. We recommend that customers begin their migrations today using one of our many conversion partners, i.e., Integris, VISystems, Infsoft and Netron. A complete list of conversion partners can be found in the Business Solutions section of this sales guide.

For more information refer to MFCICS on the MFA hotline.

Systems Management Update

One-Minute Sale

HP's leadership in Systems and Network Management continues! Several new products have been introduced/enhanced to strengthen HP's leadership position.

Figure 4.4 HP-UX Systems Management Services

Performance	Operations Control	Storage	Accounting/Configuration	Security	Fault/Availability
Performance Diagnostics HP GlancePlus/UX Performance Management HP LaserRX/UX HP PerfView Capacity Planning HP RFXforecast/UX Application Optimization ITI Tuxedo/T IOLTP Top End Enclna * CICS * Sort/Merge IPI COSORT SyncSort*	Output Spooling HP OpenSpool Raxco PrintUNET Workload Management AIM Job Schedr CA-Unicenter Unison Maestro* Console Management HP Centra System Manager* CA-Unicenter Resource Allocation Unison KLA Express	Backup/Restore HP-UX commands (backup, restore) HP OmniBack HP OmniBack/Turbo CA-Unicenter Legato Networker Disk Management Disk Quotas Logical Volume Mgr CA-Unicenter Media Management CA-Unicenter SCH/Reelibrarian Raxco Backup.UNET	Accounting/Chargeback HP-UX accounting AIM Resource Acc CA-Unicenter UNISOL JobAcct Installation and Update Mgmt HP-UX Distributed Update/Install HP Software Distribution Utilities* System Config Management HP-UX SAM Network Config & Management HP OpenView Network Node Manager Control Software Licenses HP-UX NetLS	C2 Security HP-UX C2: Protected Password Database Access Control Lists Audit Trail Security Management CA-Unicenter DEMAX SecureMax/UX Raxco Security Toolkit B1 Security HP-UX BLS	Fault Management HP Support Wave - online diag - exercisers/verifiers HP Support Watch Problem Tracking CA-Unicenter Peregrine PNMS Highly Available Systems HP PowerFail AutoRestart HP Disk Arrays HP MirrorDisk/UX HP SwitchOver/UX Delltec UPS

KEY

- HP-UX OS feature
- HP-UX option
- Third party solns

* In Process

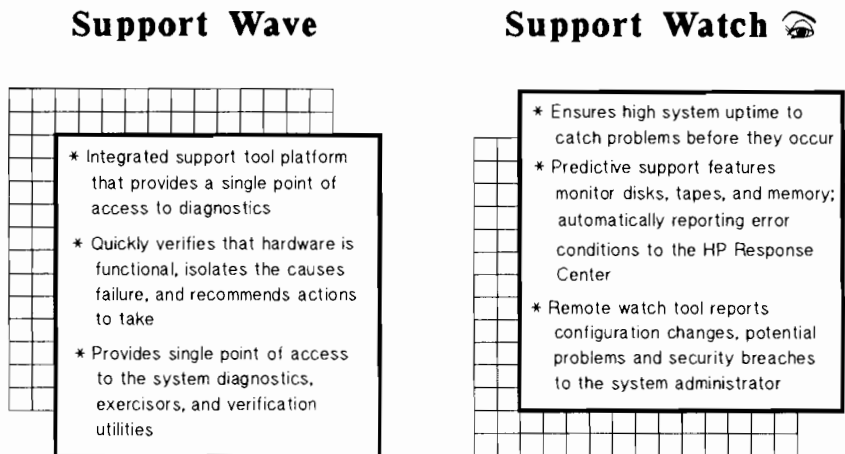


HP OpenView 3.1

HP OpenView release 3.1 is available now. It provides distributed management software for UNIX-based systems and HP OpenView for Windows for development of MS-Windows-based applications. The HP OpenView Distributed Management Platform serves as an infrastructure to develop, integrate, and distribute multiple applications and management protocols. For example, a customer can use this platform as a basis to develop a distributed-management solution for a wide area TCP/IP network. New features of HP OpenView for Windows include easy Windows-based installation, an enhanced menu system, and dynamic map updates to give network administrators accurate real-time information about their network.

In September 1991, OSF selected HP OpenView technologies to form key components for the Distributed Management Environment (DME), a standards-based framework for a unified approach to network, system and application management. Today, companies can choose from more than 130 HP OpenView solutions. Users who invest in these solutions now will be able to integrate them smoothly with the DME when it becomes available. Also, customers can manage their enterprise networks immediately and will not have to wait for the release of integrated DME products from other system vendors.

Figure 4.5 HP-UX Fault Management Solutions



Both available to customers who have a service contract

For More Information

For more information, consult the HP Support Watch Software for HP-UX Systems Data Sheet (p/n 5091-3927E).

Third-Party System Management Solutions

The following guide references the top ISVs of system management software that currently sell their solutions on the HP 9000 Series 800 Business Servers. Included for the first time is the new category of sort/merge software, which is widely available in the IBM mainframe environment.

Computer Associates

Company Background

Computer Associates is the largest worldwide vendor of mainframe, midrange, and desktop software. CA's system management products are currently installed at 95% of all MVS sites, or a total of approximately 15,000 installations.

Solution Category

Console Management, Workload Management, Security, Report Distribution, Spool Management, Automated Storage Management, Performance Monitor, and Resource Accounting.

Product Information

CA-UNICENTER is an ideal solution for IBM mainframe and midrange accounts migrating to open systems. CA-UNICENTER is a comprehensive, integrated systems management solution that leverages the power of HP-UX, and helps to manage the resources of any number of systems efficiently and cost-effectively. It brings to HP-UX the same level of feature-rich systems management capabilities common in mainframe environments and enables customers to benefit from the expertise CA has accumulated during a decade of providing systems management software to more than 15,000 mainframe system managers.

CA-UNICENTER features complete integration among its ten major components. This integration creates a synergistic relationship, making the complete system much more powerful than a collection of individual products. Through a common database, information is shared among the various modules, making the system administrator more productive.

Beating the Competition

CA-UNICENTER entered Beta test in July 1992, and the results of the testing have been extremely positive. General availability of CA-UNICENTER is scheduled for January 1993. It is important to note that CA-UNICENTER will be available on the HP 9000 Series 800 platform for a period of approximately nine months before it is generally available on any other UNIX platform. Other platforms which CA has announced support for include Sequent, Pyramid, Sun, and Novell.

Plans are also underway to provide additional HP differentiators for the HP/CA-UNICENTER offering. Keep up to date by consulting the GSY Hotline, subject CAINFO.

DCE/DME Compliance

CA has also announced its plans to make CA-UNICENTER DCE and DME compliant. CA-UNICENTER will be engineered to use DCE and DME but will not require them. The DCE functionality should be available in the mid-1993 timeframe; DME support will follow when DME becomes widely available.

Bundle Promotion Program

In June 1992, HP and CA announced plans for a special one-year promotion to bundle CA-UNICENTER with the mid-range and high-end HP 9000 business servers for a 120-day, no-cost license. At the end of the 120-day period, clients wishing to continue using CA-UNICENTER will license it directly from CA. The implementation specifics of this program are still being worked out; however we anticipate that it will begin in the February/March timeframe, AFTER CA-UNICENTER is generally available. This program will be available ONLY on HP-UX 9.0 based systems. Stay tuned via the Hotline for more details on this program.

Compatibility with Existing HP Products

HP is currently working with CA to provide CA-UNICENTER integration with HP's existing system management product suite. CA currently references HP's performance products, HP GlancePlus/UX and HP LaserRX/UX as extensions to the CA-UNICENTER product. CA is also working on integrating CA-UNICENTER into HP OpenView, for a comprehensive networked system management solution. Future efforts include providing integration between CA-UNICENTER and HP OmniBack and HP OpenSpool. More specific timeframes will be provided in future revisions of the GSY Hotline.

Availability

General availability of CA-UNICENTER is scheduled for January 1993. CA has sales offices throughout the Americas, Europe, and Asia/Pacific.

For More Information

Contact Don Marchon, HP Account Representative, at 516/753-3361.

DEMAX

Company Background	Demax is the leading provider of centralized security management solutions for networked heterogeneous systems.
Solution Category	Security Management
Product Information	SecureMax for HP-UX provides centralized security management of distributed UNIX networks. Features include consolidated network security assessment, risk analysis, security policy or baseline exception condition reporting, monitoring, and automatic correction facilities, thereby dramatically reducing the time and expertise required to maintain and improve security in distributed environments. This solution is targeted for large-scale distributed environments where network-wide security is of concern.
Availability	Demax is available today on HP-UX Release 8.0X. Demax has sales offices in the U.S., Canada, UK, Germany; it is also available overseas through distributors.
For More Information	Contact DEMAX directly in the US at 800-283-3629; in Canada at 800-267-1590; in the U.K. at 81-781-1200; in Germany at 611-520018.

Information Resources, Inc.

Company Background	Information Resources is the leading developer of commercial UNIX sort/merge facilities for the HP 9000 product line. Over 1400 UNIX installations are currently using the COSORT application.
Solution Category	Sort/Merge solution
Product Information	COSORT is a general purpose sort/merge facility for high volume commercial applications under HP-UX. COSORT supports COBOL data types, EBCDIC and other binary forms. User interfaces include a high level selection language, an interactive/batch prompt program and the system sort replacement. COSORT may also be integrated into C and COBOL programs. COSORT is being widely used in downsizing environments to replace mainframe proprietary sorting operations. In new development, coroutine architecture provides speed and user controls for database and 4GL reporting.
Availability	COSORT is available today on HP-UX Release 8.0. IRI has sales offices in the US; the product is also available through distributors in France, South Africa, and Japan.
For More Information	Contact David Friedland, Information Resources VP of Marketing, at (518) 851-2815. For general sales information, call 1-800-333-SORT.

Raxco

Company Background

Raxco is a leading supplier of system management solutions for VAX/VMS and UNIX systems. They currently have an installed base of over 10,000 VMS sites.

Solution Category

Security Management, Media Management, Print Management.

Product Information

Raxco offers a suite of system management solutions for HP-UX; customers migrating from DEC VAX/VMS are ideal candidates for these solutions. These products include Security Toolkit/UNIX which automatically collects security data from one or more UNIX systems and provides reports on the potential problems; BACKUP.UNET, an automated media management tool for multi-vendor UNIX networks; and PRINT.UNET which manages a variety of output devices across multiple UNIX systems.

Availability

Raxco solutions are available today on HP-UX 8.0X. Raxco has sales offices in the U.S., Canada, France, Sweden, and the U.K.

For More Information

Contact RAXCO at (301) 258-2620

Syncsort Incorporated

Company Background

SyncSort is the leading supplier of sort/merge solutions for mainframe and midrange systems; their product is currently installed in over 9,500 sites.

Solution Category

Sort/merge solution.

Product Description

SyncSort for UNIX is a high performance sort/merge/copy utility which runs under the HP-UX operating system. SyncSort performs sorting of all standard record formats, data types and collating sequences. It also allows for record selection, reformatting, and summarization. SyncSort can process record layouts in COBOL or SyncSort syntax.

Customers with large volumes of data where file and record level processing is a performance bottleneck are ideal candidates for SyncSort. Downsizing customers who use batch sorting, and international customers with requirements for special character sets and collating sequences are also a good target for this product.

Availability

SyncSort has sales offices in the U.S., England, France, and Germany. The SyncSort product will be available in early '93.

For More Information

Contact Andrew Coleman, SyncSort Product Manager, at (201) 930-8270.

Unison-Tymlabs

Company Background

Unison-Tymlabs is the first provider of system management applications that can run in mixed MPE/iX and HP-UX environments. Unison-Tymlabs solutions are installed in over 15,000 data centers.

Solution Category

Resource Management, Workload Management, and Print Management.

Product Information

Unison-Tymlabs currently offers three products for HP-UX. KLA/UX optimizes CPU performance and allows the user to customize the system to fit their needs. Maestro/UX provides batch job scheduling for mixed HP-UX and MPE environments. SpoolMate/UX supports bidirectional transfer of spool files in an HP-UX/MPE network. Users on both HP-UX and MPE can send reports to any printer in the combined network.

Availability

These products are available today on HP-UX Release 8.0. An HP-UX standalone version of Maestro will be available in Q1 1993. Unison-Tymlabs has sales offices in the U.S., England, and Germany.

For More Information

Contact Diana Maloney, Unison-Tymlabs Marketing Services at (408) 245-3000

High Availability Update

SwitchOver/UX Enhancements

One-Minute Sale

HP is uniquely positioned in the UNIX market today as a provider of a broad number of highly available solutions. HP currently leads the industry in hardware reliability for the Series 800 Business Server family. HP provides products which increase applications availability and data integrity. These products include: HP's Battery Backup/Power Fail Recovery, Disk Arrays, Disk Mirroring (MirrorDisk/UX), and Automatic Processor Recovery (SwitchOver/UX).

Figure 4.6 Full Range of High Availability Solutions

System Availability to Match Your Needs

High Reliability	High Data Availability	Local System Availability	Distributed System Availability	Fault Tolerance
HP 9000 Series 800 Reliable Hardware	HP Disk Arrays	HP SwitchOver/UX	AFIC's Multi Server Option	HP 9000 Series 1200
HP PowerFail/AutoRestart	HP MirrorDisk/UX	FD Consulting's MiPS	AFIC's Multi Server Option	
Uninterruptible Power Supply		* Quest Software's NetBase	* Quest Software's NetBase	
		* SDA Enterprises' DataSafe	* SDA Enterprises' DataSafe	

Increasing Availability



* in process

Product Description

SwitchOver/UX detects system failures and provides for automatic switchover between a primary and standby processor. It provides nearly continuous operation of your customers' mission critical systems by significantly reducing downtime due to system hardware or software failures. With HP-UX Release 9.0, SwitchOver/UX now supports:

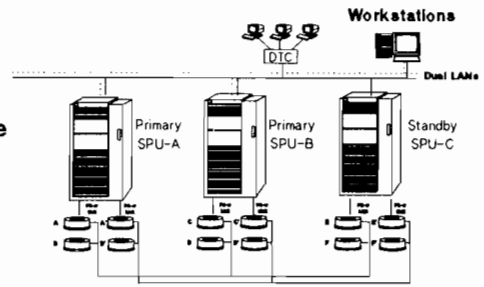


- SCSI devices
- FDDI LAN
- Interoperability with Logical Volume Manager (LVM)
- HP-PB HP-FL I/O card (28615A)
- HP-FL Disk Arrays as boot devices (with 28615A card)

Each SCSI SwitchOver/UX configuration can have up to four (HP-FL SwitchOver/UX supports up to seven) primary systems backed up by a standby system which monitors the health of the primaries. In the event of a failure, the standby system will automatically assume the role of the failed primary and resume operation within 10-25 minutes. The recovery time is dependent on the system size and the application recovery required.

Figure 4.7 Automatic Processor SwitchOver

- Automatic Fault Detection and Recovery
- No Single Point of Failure
- 10-25 Minute Recovery Time
- One Standby SPU for up to Four Primary (SCSI) or Seven Primary (HP-FL) SPUs
- Transparent to Applications
- Standby Assumes Network Address of Failed Primary



Provides Nearly Continuous Operation

Beating the Competition

High availability has been one of our key differentiators. HP's competition has recognized this. They have also recognized that high availability is often a major customer requirement. Specifically, IBM offers the AIX High Availability Cluster Multiprocessor (HACMP)/6000 which provides similar functionality to HP's SwitchOver/UX solution. IBM's HACMP/6000 is offered in three modes. Mode 1 has a designated primary and designated standby system. The idle standby system takes over for the failed primary system. Mode 2 allows both systems to be productive. One system is designated as the primary, and an automatic switchover will occur if the designated primary system fails. The main functionality with Mode 3 (Oracle Parallel Server) is to provide transaction recovery support and transaction control. Mode 3 allows two systems to access the same database concurrently. The following compares the HACMP/6000 to SwitchOver/UX.

	HP SwitchOver/UX	IBM HACMP/6000 Mode 2	IBM HACMP/6000 Mode 3
Supports file-based applications	YES	YES	NO*
Databases supported	YES - All	YES - All	Oracle/Ingres
Number of primary systems supported	7 HP-FL 4 SCSI	No Limit	3
Application transparency	YES	YES**	YES
Performance scalability	NO	NO	LIMITED***
Time to switchover	10 - 25 min	Application recovery time	Time for user to log onto the system
Network address switchover	YES	YES	YES
Data loss at switchover	Data committed to disk is OK	Data committed to disk is OK	Data committed to disk is OK
Availability	NOW	NOW	3/93

NOTES: * Will probably support file-based application some time in 1993.
 ** The developer must take responsibility for startup and recovering the application after the standby system has mounted the failed primary's disk(s).
 *** Some capacity increase possible for a number of supported users. Both systems cannot access the same record at the same time. During normal operation, the best performance is obtained when records are in different tables.

IBM's Mode 1 is similar in operation to SwitchOver/UX except that the second system is not running any applications (i.e. non-productive standby). Mode 2 is similar in operation to SwitchOver/UX with the exception that the second system will assume the network address of the failed system in addition to its own network address. Also, the disks will be assumed by the second system, in addition to its own disks, thus increasing the workload and degrading overall performance. HP will provide a new implementation of SwitchOver/UX which will have improved recovery time similar to IBM's Mode 2, and we are investigating providing Mode 3 (Oracle Parallel Server) functionality both by HP-UX Release 10.0.

When competing with IBM, HP's High Availability product offering now supports SCSI devices, which provides a very cost-effective solution. SCSI disks and interface cards are a lot less expensive than HP-FL disks and interface cards. SwitchOver/UX is application transparent and very easy to install and use. IBM's Modes 2 and 3 are application transparent but require several days to several weeks of consulting to customize the shell scripts required to make the solution operational. Also, HP is able to provide Fault Management solutions with Support Wave and Support Watch.

Ordering Information

92668A SwitchOver/UX Software

For More Information

For more information, order the HP 9000 Series 800 High Availability Computing Products Technical Data Sheet (p/n 5091-1633E), HP 9000 Series 800 Business Servers Configuration Guide (p/n 5091-4367E), or Managing SwitchOver/UX Manual (p/n 92668-90005).

Third-Party High Availability Solutions

HP has been working with several third parties to provide complimentary high availability solutions for LAN as well as WAN environments. HP's wide range of applications gives us the ability to meet customer requirements and successfully address their high availability business needs. The following are profiles of high availability applications available on the HP 9000 Series 800 Business Servers.

AFIC

Product Description:

AFIC's Multi Server Option (MSO) product provides LAN and/or WAN-based high availability solution for very fast system failover on HP-UX systems running Sybase applications. MSO can replicate transactions to one or more duplicate Sybase databases so if one system fails, processing can be switched to an alternate system. MSO is transparent to applications and runs on both the Series 700 and 800. MSO is currently supported on HP-UX 8.0 and will be migrated to HP-UX 9.0 shortly.

Customer Profile:

AFIC primarily targets financial service and trading companies although the application is not specific to any industry.

For More Information:

David Harriman, HP VAB Representative, T-971-6825 or (212) 330-6825
Yaacov Ankori, AFIC Marketing Manager, (212) 406-2503

FD Consulting, Inc.

Product Description:

FD Consulting offers a replicated, in-memory database that is ideal as a front-end for large-scale high data input situations. FD Consulting has provided expertise in real-time trading technology for some time. The company's real-time MiPS (not related to the MIPS processor in any way) cascaded client/server architecture provides the software environment for market data distribution and recovery services, high-speed data delivery to workstations, PC's and terminals, and data presentation and display. With its replication capability, data availability can be assured as data is distributed from its initial entry point in the organization until it is used or stored in a database. MiPS is supported on the Series 700 and 800 today with HP-UX 8.0X and will be migrated to HP-UX 9.0 shortly.

Customer Profile:

The MiPS client/server architecture has been available for two years and has been used extensively in financial services and trading situations.

For More Information:

David Harriman, HP VAB Representative, T-971-6825 or (212) 330-6825
William Cline, VP Sales and Marketing, (212) 766-1420

Quest Software

Product Description:

Quest offers Netbase for database shadowing across systems and sites. It currently runs on MPE with ALLBASE. Quest has extensive experience in the areas of spooling, backup, and database shadowing capabilities. With shadowing, processing can be switched to a replicated database on another system if a system or site fails. Users can also be rerouted to another replicated system for performance load balancing. Shadowing will be supported on HP-UX 9.0 with Oracle and Informix in Q3 FY93.

Customer Profile:

Quest has a large installed base, which includes the HP Response Center for NetBase shadowing. Shadowing is best suited for database environments where system or site disaster recovery must be covered.

For More Information:

Sue Harvey, HP VAB Representative, T-472-3059 or (714) 472-3059
Ronald Vangell, Quest VP Sales and Marketing, (714) 720-1434

SDA Enterprises, Inc.

Product Description:

SDA currently offers DataSafe that provides file replication across sites using Stratus systems. SDA's UNIX implementation of DataSafe will replicate data at the file level across systems and/or sites. The phased product rollout will first provide replication with later phases ensuring no loss of client session through the use of a distributed file system between clients and servers. SDA will provide DataSafe on HP-UX 9.0 in Q3 FY93.

Customer Profile:

SDA's current customers use Stratus systems in mission critical distributed environments. The UNIX implementation will be suitable for similar environments.

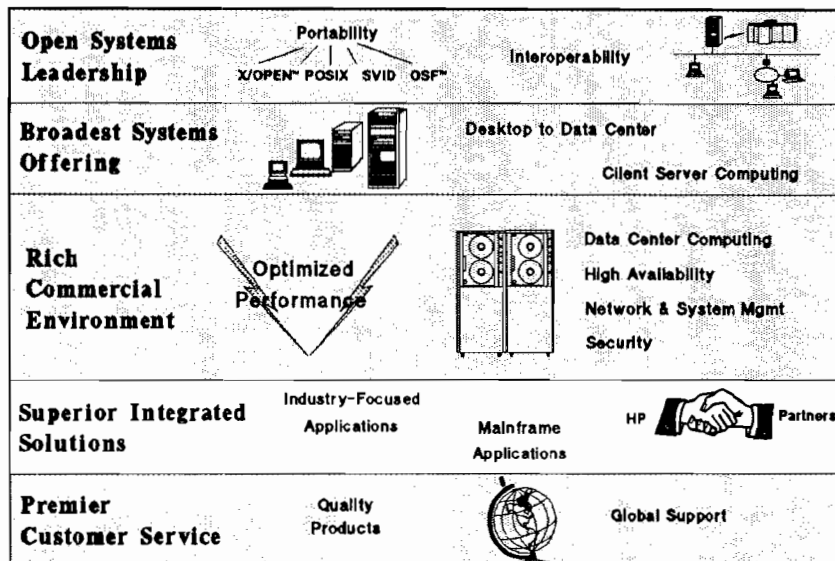
For More Information:

Len Giacose, HP VAB Representative, T-599-5248 or (201) 599-5248
Dr. Robert Gottfried, President of SDA, (908) 730-7677

Chapter 5.

Superior Integrated Solutions

Figure 5.1 HP 9000 Open for Business Framework



Introduction

This section provides additional detail on our number one rated VAR program* and channel partner solutions available on the HP 9000 Series 800 Business Server family.

Continuing additions to our highly rated Channel Partner program ensure that our portfolio of business UNIX solutions leads the industry. Our wide range of industry-focused applications gives us the ability to meet customer requirements and successfully address their business problems.

* VARBUSINESS Magazine, October 1992

Corporate Financial Management Solutions

The following is a reference guide to the top ISVs of financial management software that currently sell their products on the HP 9000 Series 800 Business Servers. Included are profiles on the top tier companies that offer standalone solutions appropriate for HP major accounts, and also included is a list of other vendors who offer solutions for the HP 9000 Series 800 server platform. This is the best portfolio of UNIX-based financial management solutions in the industry and continues to be a differentiator for HP's UNIX systems.

Collier-Jackson

Company Information

Market Position: First provider of financial management applications that can run in MPE/iX and HP-UX environments, simultaneously.

Headquartered: Tampa, Florida

Annual Revenues: subsidiary of CompuServe

Installed Base: 3,300 sites

Sales Offices: throughout U.S. and in Canada

Product/Service

Collier-Jackson's product is the World Class Series, including integrated accounting, human resource and payroll applications. CJ has adopted Microsoft® Windows and OSF/Motif across its platforms. Additionally CJ is building client/server versions of its products to allow customers to add workstations to their existing terminal/host environment. Financial modules are being released throughout Q4'92 and early 1993. CJ also offers a newspaper management application on the HP 9000.

Target Environment

CJ targets decentralized, multi-site, mid-sized companies in the \$50-\$500 million revenue range. Recent sales successes have been in manufacturing, non-bank services, and retail industries.

For More Information

Eric Hammersand, HP VAB Account Representative, (813) 889-4421
Gary Vigneau, CJ VP Sales & Marketing, (813) 872-9990

Computer Associates

Company Information

Market Position:	Largest worldwide vendor of mainframe, midrange and desktop software.
Headquartered:	Islandia, New York
Annual Revenues:	\$1.5 billion
Installed Base:	5,000 sites
Sales Offices:	throughout Americas, Europe & Asia/Pacific

Product/Service

Computer Associates' product is CA-Masterpiece, an integrated financial management application. Masterpiece is positioned as an enterprisewide financial control solution. Related products include CA-MasterStation allowing data entry from a PC or PC-LAN, CA-MasterVision providing graphical financial analysis, and CA-MasterEDI providing EDI capabilities. CA also offers human resource and data management solutions on the HP 9000.

Target Environment

CA-Masterpiece is ideal for customers with comprehensive accounting and analysis needs. Additionally CA has over 5,000 customers currently running CA products on mainframes who could downsize to HP-UX and still have access to the same functionality.

For More Information

Don Marchon, HP VAB Account Representative, (516) 753-3361

Computron

Company Information

Market Position:	Leading provider of integrated financial management, imaging and workflow.
Headquartered:	Rutherford, New Jersey
Annual Revenues:	\$30 million
Installed Base:	1,600
Sales Offices:	throughout North America

Product/Service

Computron's product is N-Dimensions including financial management and integrated imaging applications. Computron's integrated imaging converts paper documents into online, scanned images to increase efficiency and automate the flow of work through an organization.

Target Environment

Computron targets customers who are "re-engineering" their business processes, particularly with regard to workflow. Many Fortune 500 accounts use Computron's technology in areas like accounts payable, claims processing or records management. Recent successes have been in financial services and healthcare industries.

For More Information

Brad Wagaman, HP VAB Account Representative, (201) 599-5498
Bob Koffler, Computron VP Field Sales, (201) 935-7660

D&B Software

Company Information

Market Position:	Largest worldwide provider of financial management applications.
Headquartered:	Atlanta, Georgia
Annual Revenues	\$550 million
Installed Base:	12,000 mainframe sites
Sales Offices:	throughout Americas, Europe & Asia/Pacific

Product/Service

D&B Software's financial applications for the HP 9000 are Millennium UNIX, a financial management solution; Smart Stream Analyzer, a client/server decision-support tool; Financial Stream, and a new client/server-based financial management software. The DBS strategy is to offer fully-integrated financial management applications on a range of platforms including both UNIX and client/server. Current DBS products run on IBM mainframes.

Target Environment

DBS has a large installed base on mainframes, many of which may be interested in downsizing. DBS software is used by 75% of the Fortune 500 in a wide range of industries. Target customers operate globally, run on multiple platforms including mainframes, and have sophisticated functionality requirements.

For More Information

Lynn Sauder, HP VAB Account Representative, (404) 246-5230

Lawson Software

Company Information

Market Position:	Leading provider of mainframe-class financial management software on UNIX.
Headquartered:	Minneapolis, Minnesota
Annual Revenues:	\$40 million
Installed Base:	1,200; some on Unisys mainframe
Sales Offices:	throughout U.S. and in London; distributors in Canada and Australia

Product/Service

Lawson Software's Accounting System can be integrated with their human resource and distribution solutions. Lawson solutions on UNIX offer the same high-end functionality as Lawson solutions on the mainframe. Lawson has designated HP as their "Preferred Hardware Platform" for UNIX deals.

Target Environment

Lawson focuses on growing multinational, multi-site companies with sophisticated functionality requirements, in a wide variety of industries. These companies typically have at least \$50 million in revenues and employ at least 300 people. Best fits are organizations looking for open systems or those that are looking for a mainframe alternative. HP has had several successes in transferring applications that were running on Unisys mainframes over to the HP 9000.

For More Information

Mike Stringer, HP VAB Account Representative, (612) 641-9774
Ed Mielech, Lawson's HP Alliance Manager, (612) 379-2633 x3349

Oracle**Company Information**

Market Position: Largest worldwide database vendor offering integrated financial management solutions.

Headquartered: Redwood Shores, California

Annual Revenues: \$1.1 billion; \$40 million in applications

Installed Base: 1,200 application customers

Sales Offices: throughout U.S., Europe and Asia/Pacific

Product/Service

Oracle Financials can be integrated with their human resource and manufacturing solutions. Oracle also offers specialized Government Financials. Oracle has localized its financials for eleven foreign markets including German, French and Spanish.

Target Environment

Oracle Financials are used by Fortune 500 companies in a wide range of industries. The solution is particularly well-suited for those companies who have standardized on the Oracle database.

For More Information

Bill Pate, HP VAB Account Representative, (415) 882-6896

Ross Systems**Company Information**

Market Position: Leading supplier of business application software to the midrange computing market. Ross Systems has been available exclusively on the DEC VAX Systems in previous years.

Headquartered: Redwood City, California

Annual Revenues: \$70 million

Installed Base: 2,000

Sales Offices: throughout U.S., Europe and Asia/Pacific

Product/Service

Ross's financial management products are part of an entire line of integrated business software including human resources, distribution, manufacturing, and public sector applications created with a 4GL language.

Target Environment

Customer base is cross-industry focused with a particularly strong focus in manufacturing, and strong growth in healthcare and non-profit.

For More Information

Peter Yung, HP VAB Account Representative, (617) 221-5181
Gene Lopez, Ross-HP Business Relations Director, (415) 593-2500

SAP**Company Information**

Market Position:	International leader in providing enterprisewide information processing.
Headquartered:	Walldorf, Germany; Philadelphia, Pennsylvania (U.S. headquarters)
Annual Revenues:	\$286 million
Installed Base:	1,600
Sales Offices:	throughout Europe and the U.S.

Product/Service

SAP specializes in enterprisewide software solutions incorporating financial, manufacturing, personnel and logistics management in a totally integrated, real-time system. R/2 is its mainframe solution and R/3 is the newly-introduced client/server version which is available on the HP 9000.

Target Environment

Very large multinational companies with a need for enterprisewide computing solutions. R/3 is particularly well-suited to divisions and subsidiaries wanting the benefits of a client/server environment.

For More Information

Rich Roe, HP VAB Account Representative, (410) 258-2041
Peter van der Fluit, HP Europe Account Manager, (49 7031)14-3081

Other Leading Solutions:

ASK Computer Systems	Joanne Parker, HP VAB Representative, 415/694-2018
Concepts Dynamic	John Nothelfer, HP VAB Representative, 708/255-2818
FourGen Software	Tamae Moriyasu, HP VAB Representative, 206/644-3363
MAI Systems	Glenn Kean, HP VAB Representative, 714/758-5722
MCBA	Paul Swift, MCBA Market Developmt Mgr, 818/242-9600
Mitchell-Humphrey	Gary Petersen, HP VAB Representative, 816/737-4633
PeopleSoft	Bill Pate, HP VAB Representative, 415/882-6896
SOTAS	Todd Palmer, HP VAB Representative, 301/670-4509

Conversion Tool Solutions

HP has been working closely with several third parties to provide software conversion tools for mainframes as well as competitor's midrange systems. A profile of our new partners is listed below. For a complete list, please refer to GSY Hotline, subject "CONVERT."

Emphasys Software

Company Information

Market Position: One of the leaders in IBM System/36 migration to open systems

Headquartered: Eden Prairie, MN (Minneapolis)

Sales Offices: Eden Prairie; U.S. distributors/resellers

Product/Service

Cross/36 - RPG II development system; RPG III development system written in ASNA RPG III; runtime versions for both development systems, and a data conversion utility for converting data either from or to System/36 format.

Target Environment

IBM System/36 installations in large, medium and small businesses

For More Information

Tom Kolbo, President, at (612) 941-9337 Fax (612) 941-9750

Jacksonville Software

Company Information

Market Position: First provider of XGEN 4GL and UNISYS "A" and "V" Series (Burroughs) Conversion Software to open systems

Headquartered: Jacksonville, FL

Installed Base: 750 sites in 20 countries

Sales Offices: Jacksonville, FL; worldwide distributors

Product/Service

XGEN 4GL and MicroXGEN Conversion Software that allows UNISYS XGEN 4GL, LINC 4GL and COBOL applications to be converted to HP-UX.

Target Environment

UNISYS MIS shops in large banks and insurance companies, state & local governments, and manufacturing (process & discrete) companies.

For More Information

Jaime Ellertson, President, (408) 725-7187 Fax (904) 723-3370

Netron, Inc.

Company Information	Market Position:	First provider of "frame" technology to move IBM mainframe application environments to open systems
	Headquartered:	Toronto, Canada subsidiary of Noma Industries
	Sales Offices:	U.S. - Blue Bell, PA
Product/Service		Netron/CAP consists of a library of re-usable model solution COBOL "frames," and an integrated toolset supporting rapid prototyping, interface and logic design, and code assembly and utility functions. NETRON/CAP supports more than 25 database technologies including DB2, SQL/DS, IMS/DB, Oracle, OS/2 Database Manager, XDB, and VSAM files.
Target Environment		MIS shops in large banks and insurance companies, aerospace companies, government, and a wide range of other organizations.
For More Information		Rick Strosberg, Director of Business Development, at (416) 636-8333 Fax (416) 636-4847

Open Systems Group

Company Information	Market Position:	One of the leaders in Bull 8000 and Honeywell/Bull DPS/6 migration to open systems
	Headquartered:	Dallas, TX (Infomart Building)
	Installed Base:	2,050 applications migrated
	Sales Offices:	Dallas, TX
Product/Service		Using the "C" language, 4GLs, COBOL, and relational databases to migrate applications to HP-UX.
Target Environment		Bull 8000 mainframes and Honeywell Bull DPS/6 midrange systems across all industries.
For More Information		John D. Marx, at (214) 746-4711 Fax (214) 746-5852

Software Business Applications, Inc.

Company Information

Market Position: Leader in Wang tools and utilities software with large customer base

Headquartered: Chicago, IL

Installed Base: 15,000 (utility software) customer list

Sales Offices: Chicago, IL

Product/Service

VS-ACUPOINT - a conversion tool designed to process Wang VS COBOL sources, turning them into AcuCOBOL-85 code with the same functionality as the original application

Target Environment

Wang VS low end, midrange, and high end systems.

For More Information

Jim Niquette, President, at (708) 863-4020 Fax (708) 863-0044

The Systems House, Inc.

Company Information

Market Position: One of the leaders in Honeywell/Bull DPS/6 migration to open systems

Headquartered: Clifton, New Jersey

Sales Offices: Dallas, TX

Product/Service

Liberator/6 - migration tools, software development tools, and runtime routines to convert Honeywell/Bull DPS/6 COBOL source code to MicroFocus COBOL running on UNIX

Target Environment

Honeywell/Bull DPS/6 midrange systems

For More Information

Al Lanza, at (201) 777-8050 Fax (201) 777-3063

Mainframe Alternative and Midrange Systems Conversion Tools Update

Mainframe Alternative Tools

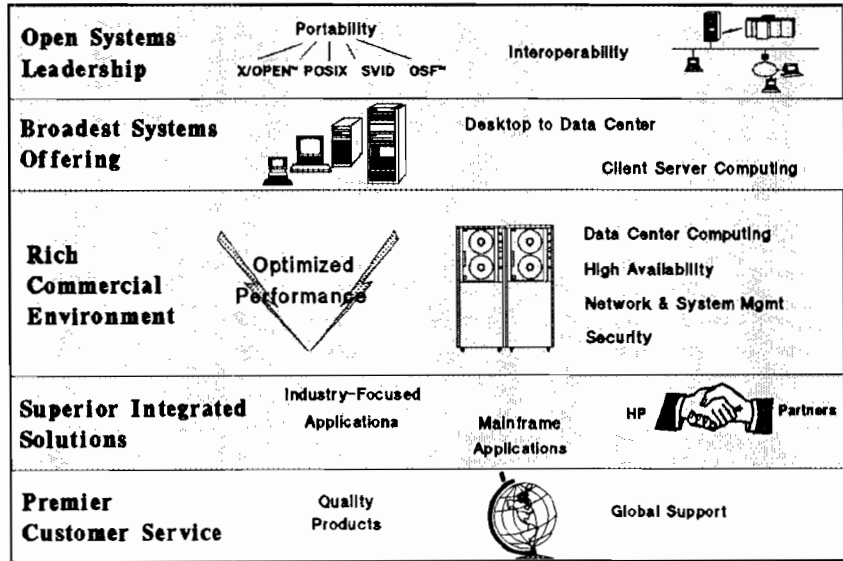
Company/Product	Platform	Tools/Languages	Positioning	Company Contacts
Integriss Unikix	IBM	CICS/COBOL/VSAM ---> CICS/MFCOBOL/VSAM	Excellent Development Tool Strong IBM 3270 Terminal SNA Comms	Bill Silverthorn Tel. (602) 862-7042
Visystems VIS/TP	IBM	CICS/COBOL/VSAM ---> CICS/VISCOBOL/VISVSAM	CICS Appls. Duplication Strong TP Monitor	Don Wooten Tel. (214) 960-8649
Infosoft Conveyor	IBM	CICS/COBOL/VSAM ---> Curses/MFCOBOL/Informix SQL	Excellent Development Tool HP 9000/3000 Support	Harve Wells, WTW Tel. (803) 699-5781 Dave Rubenstein, IISI Tel. (617) 769-7511
Netron Netron/CAP	IBM	CICS/COBOL/VSAM ---> CICS/MFCOBOL/Multiple DBMS	Frame Library Technology Supports VSAM, IMS/DB, DB2, Oracle, IDMS, XDB, SQL/DS	Rick Strosberg Tel. (416) 636-8333
Jacksonville S/W XGEN MicroXGEN	UNISYS A and V Series	LINC, XGEN (4GLS) and COBOL ---> MFCOBOL	Excellent Mkt Awareness Ease of Conversion	Jaime Ellertson Tel. (904) 725-7187
Zortec System Z	UNISYS Sys 1100 Sys 2200	Mapper, COBOL ---> System Z 4GL	Sys Z - Robust 4GL With COBOL Features	Gary Fitzhugh Tel. (615) 361-7000
Allison-Ross TIP/ix	UNISYS Sys 80	TIP/30 ---> TIP/ix	Good TIP/ix Awareness Focused Market	Jim Carrothers Tel. (416) 848-2030
Infosoft Conveyor	UNISYS Sys 1100 Sys 2200	COBOL ---> MFCOBOL	MFCOBOL HP 3000/9000 Support	Harve Wells, WTW Tel. (803) 699-5781 Dave Rubenstein, IISI Tel. (617) 769-7511

Midrange Systems Replacement Tools: (Update)

Company/Product	Platform	Tools/Languages	Positioning	Contacts
Unibol, Inc. - UNIBOL	IBM Sys 36	RPG II, COBOL	Emulation Mode	Patrick Henry Tel. (404) 424-5345
Morada Corp. (Parkside)	IBM Sys 36	RPG II, COBOL	Native "C" On HP-UX	Doug Dowden Tel. (209) 333-1196 Jim Lubniewski Parkside Tel. (214) 553-2839
Raconix U/36	IBM Sys 36	RPG II, COBOL	Native "C" On HP-UX	Ron Content Tel. (416) 858-8660
Universal Software Open/36	IBM Sys 36	RPG II, COBOL	Emulation Mode	Al Saavedra Tel. (310) 575-4873
Emphasys Software Cross/36	IBM Sys 36	RPG II, COBOL	Emulation Mode	Tom Kolbo Tel. (612) 941-9337
Sector 7 (STI) B-TRAN/VX	DEC VAX/VMS	Fortran, COBOL, Basic	Support of Basic, MFCOBOL	Jon Power Tel. (512) 451-8643
Accel8 LIBR8, ACCLIM8	DEC VAX/VMS	Fortran, COBOL, "C"	Support of AcuCOBOL	Tim Fitzpatrick Tel. (303) 863-8088
Zortec System Z	Wang	Wang VS COBOL	System Z 4GL	Gary Fitzhugh Tel. (615) 361-7000
SBA (SoftwareBusiness Applications, Inc.) VS Acuport	Wang	Wang VS COBOL	Support of AcuCOBOL	Jim Niquette Tel. (708) 863-4020
Sansoft, Inc. VUpport	Wang	Wang VS COBOL	Support of MFCOBOL	Jan Vicak Tel. (310) 787-8900
Unicon Conversion Technology	Wang	Wang VS COBOL, RPG	Support of RPG	Masoud Entezari Tel. (714) 457-9855
Capricorn Data Systems Sourcery	Wang	Wang VS COBOL	Support of AcuCOBOL	Tony Zizza Tel. (617) 320-0292
IDS	Wang	Wang VS COBOL	Support of MFCOBOL, AcuCOBOL	Ed Offstein Tel. (805) 295-1155
Corporate Information Systems	Wang	Wang VS Basic Wang VS COBOL	Support of Basic	Jim Olerich Tel (818) 591-0934

Premier Customer Service

Figure 6.1 HP 9000 Open for Business Framework



Series 800 Products Move to One-Year Warranty with System Support Options

One-Minute Sale

Effective November 1, Series 800 computer system products come standard with a one-year warranty. This replaces the current 90-day warranty period. In addition, the base warranty for computer systems products will have options for faster repair response and telephone software support.

HP customers and channel partners have increasingly expressed the desire for a one-year warranty. They have also asked for a choice of warranty terms to address different application requirements, classes of systems, and channels of distribution. By offering a 1-year warranty and choice of System Support Options, we will meet those needs better than any other major computer vendor.

Program Description

The base warranty for actively marketed Series 800 products will provide for 1-year, on-site repair with a guaranteed response time of 72 hours. Customers who need faster assured response time, such as in the case of mission-critical applications, should order a System Support Option. These System Support Options will upgrade the assured response time to either next day or 4 hours. They also include telephone support for software and software updates.

The System Support Options are ordered in conjunction with the associated systems products. They are discountable at the same rate as the systems products. In addition, sales representatives will receive quota credit and commissions for the Systems Support Options.

Features and Benefits

Feature	Benefit
System Support Options orderable as options to systems	Ease of ordering
System Support Options are priced more attractively than hardware maintenance prices	Lower first year cost of ownership
System Support Options are discountable at the same level as systems products	Lower first year cost of ownership

Beating the Competition

Both DEC and IBM offer one-year warranty, whereas SUN only offers 90-day warranty. The one-year base warranty, together with the System Support Options, provides competitive parity with DEC and IBM and a competitive advantage relative to SUN.

In most cases, it will be necessary to bid one of the System Support Options in conjunction with the base one-year warranty. Unlike our competitors, the choice of one of the System Support Options provides maximum flexibility in delivering the appropriate level of responsiveness required by the customer. In many cases, we can provide for a lower cost of ownership by bidding a lower level of response time at a lower price.

Ordering Information

System Support Options are ordered in conjunction with the system purchase. These appear in a manner similar to product options through the quotation systems. The various System Support Options are listed below.

Option #	Description
Opt. 0S0	<ul style="list-style-type: none"> • License to use Software updates • Software and documentation updates • Electronic Access (HP Supportline) • Warranty upgrade from base warranty to One-year, Next-day on-site repair
Opt. 0S1	<ul style="list-style-type: none"> • License to use Software updates • Software and documentation updates • Electronic Access (HP Supportline) • Warranty upgrade from base warranty to One-year, four-hour on-site repair
Opt. 0S2	<ul style="list-style-type: none"> • Telephone Support • License to use Software updates • Software and documentation updates • Electronic Access (HP Supportline) • Warranty upgrade from base warranty to One-year, Next-day on-site repair
Opt. 0S3	<ul style="list-style-type: none"> • Telephone Support • License to use Software updates • Software and documentation updates • Electronic Access (HP Supportline) • Warranty upgrade from base warranty to One-year, four-hour on-site repair
Opt. 0S4	<ul style="list-style-type: none"> • System and network installation for customer installable systems
Opt. 0SZ	<ul style="list-style-type: none"> • Network configuration for HP-installed systems

For More Information

Contact the Sales Response Center.

Mainframe Alternative Program Update

What do GTE, Timex, Citibank, Playtex and Paccar have in common? Each of these companies has realized the benefits of GSY's Mainframe Alternative Program and have purchased HP 9000 Series 800s as their platform of choice. Since the conception of the Mainframe Alternative Program 18 months ago, we have had over 100 customer successes in helping mainframe customers migrate to HP 9000 Series 800 Business Servers. You can read about these successes on the MFA Hotline (Subject: MFWINS).

What's New

Over the last 18 months, GSY has been aggressively recruiting the leading mainframe third party vendors and conversion partners to port their applications to HP-UX. The following vendors have recently ported or are in the process of porting their applications to HP-UX. A complete list of all mainframe third party software is located on the MFA hotline—Subject: MFVABS & CONVERT.



American Software
ManuGistics (STSC)
Sterling
Netron
Allinson-Ross
Jacksonville Software

Manufacturing, Financial and Distribution
Logistics/Distribution
EDI Management
CICS/COBOL Migration tools
Unisys to HP Migration tools
Bull to HP Migration tools

HP and IBM have made a joint announcement, that IBM's Customer Information Control System (CICS) software products will be available on HP 9000 Series 800 Business Servers. CICS is IBM's premier transaction monitor that is used in most mainframe environments. CICS on HP systems will provide a smooth migration of IBM CICS applications. Applications that are written to the CICS API on IBM mainframes should run unchanged on HP systems, after simple recompilation. Availability is expected for the second half of 1993. For more information regarding this announcement, refer to the MFA hotline—Subject: MFCICS.

Beating the Competition**The AS/400 Challenge**

With all the press about "downsizing," IBM has begun an aggressive campaign positioning the AS/400 as the ideal replacement or off-load system for the mainframe; specifically for Models 43x1, 303X and 308X running the VSE operating system. IBM is positioning the AS/400 as an alternative if an organization has a relatively high IS budget, weak installed applications, frustrated users, and a management team ready to take action. IBM's initial strategy will be to convince the customer to stay with the mainframe. If the customer is convinced "rightsizing" (as IBM calls it) is the alternative of choice, IBM tends to lead with the proprietary AS/400 and points out the following points against HP.

Migrating away from the mainframe can be perceived as a risky move. IBM will try to convince the customer that they are the "safe choice."

If IBM was such a "safe choice" chances are your customer wouldn't be

looking to migrate in the first place. The HP 9000 Series 800s provide better growth path, better price/performance, best-in-class applications and premier customer support and integration services. HP is the safe choice. Provide references to your customer that show how HP has helped other customers successfully migrate to HP 9000s.

IBM will raise the concern as to whether UNIX is mature enough to handle business critical applications common in the data center.

HP has been shipping HP-UX for over ten years, much longer than IBM has been shipping OS/400. We have hundreds of customers who are running mission critical applications on UNIX. HP-UX is a very robust, feature rich operating system providing greater commercial functionality than most proprietary operating systems. We also have worked with leading third party providers to port their industrial strength applications and tools to HP-UX. More companies today run their businesses on UNIX than AS/400s. The multiuser UNIX market is over \$18B while the AS/400 revenue is only \$14B. The UNIX market is growing 15% annually. AS/400 sales have peaked and orders are now in a decline.

Mainframe customers are used to a wide range of applications. IBM may state that there are over 15,000 applications available on the AS/400.

The number 15,000 was probably obtained by splitting each solution supplier's modules and counting them as separate applications. Furthermore, many of the AS/400 applications are simple and inflexible RPG programs which were ported to the AS/400 from the IBM System/36. HP has taken the strategic approach of providing best-in-class solutions on HP-UX. We have thousands of leading application solutions available. Most mainframe software providers have ported their applications to HP-UX, i.e., Dun & Bradstreet, Lawson Associates, SAS, Cincom Software AG, IBI/Focus, Computer Associates and American Software, etc. For a complete list of mainframe applications available on HP 9000 Series 800s refer to the MFA hotline—Subject MFVABS.

Many mainframe customers are "gun shy" about getting locked into a vendor dependent relationship and are looking for an open system solution. IBM will lead your customer to believe the AS/400 is an open system.

The AS/400 is moving in that direction (so IBM states), but it will be years before this is true. Software written today specifically for the AS/400 cannot be migrated to other computers without significant effort. The AS/400 does not comply with Posix or X/Open standards. The HP 9000 Series 800 Servers comply with all industry *and de facto* standards, making software portability and interoperability a reality. The AS/400 is a closed, vendor-dependent system that lacks the benefits open systems provide. For a complete list of industry standards missing from the AS/400 refer to the Competitive hotline—Subject: IBMADM.

Words from the wise...

"The AS/400 is the most proprietary computer system in the world"
ComputerWorld, 9/91

"... only IBM lemmings downsize and deploy AS/400s"
Forrester Research, 2/92

Open Systems and Client/Server Solutions

One-Minute Sale

Client/Server computing is one of the latest buzzwords in the industry. Simply stated, the term client/server is used to describe computing that takes place by splitting application processing between a client, the system that makes requests, and a server, the system that fulfills the requests.

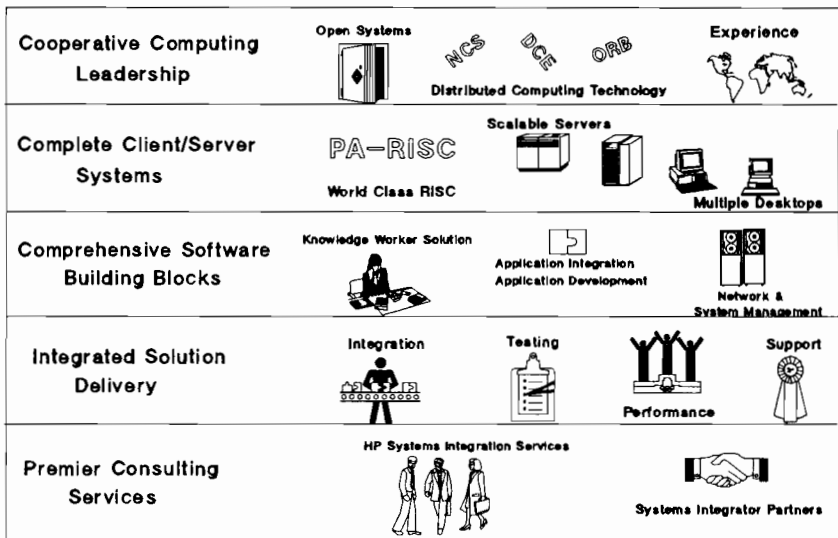
Client/Server computing offers companies significant advantages over traditional computing methods of the past. Graphical user interfaces and better access to data increase user's productivity. Faster response times can be achieved for all users when parts of an application are processed locally. IS groups also receive advantages such as productivity boosts in application development because of the modularity of client/server applications and better control of data that is centralized on a server rather than duplicated on numerous PCs.

HP offers customers these benefits with client/server solutions that build on their existing IT environments. Support of NetWare, Banyan Vines and LanManager enables the Series 800 to be added to PC LANs as a server with robust systems management and transaction processing capabilities. The Series 800 can also be added as a front-end, or client to a mainframe system giving end-users easier access to data and/or applications that reside there.

Delivering on the Promise

HP is delivering on the promise of client/server with a marketing program from GSY, and the HP Cooperative Computing Solutions from CCSY. The Cooperative Computing Systems Division has the following focused strategy and a program to complement the HP 9000 Open for Business framework.

Figure 7.1 HP Cooperative Computing Solutions Strategy



Leadership in Cooperative Computing

HP is leading the trend towards distributed and cooperative computing—our work has led directly to the OSF Distributed Computing Environment (DCE), the OMG Object Request Broker (ORB), and OSF's Distributed Management Environment (DME) standards. Equally important to our leadership in open systems and client/server technology is our excellent track record for developing and implementing client/server technology. Our experience has led to major installations with customers such as Unilever, McNeil Consumer Products, British Telecom, American Airlines, and others.

Complete Client/Server Systems

HP's first release of complete client/server systems is based around the powerful combination of the HP 9000 integrated business servers and MS-DOS®, UNIX and Macintosh clients. The HP Enterprise Information Server, (A2324A) and the HP Enterprise Information Client A2322A include the networking and software infrastructure to enable client/server applications throughout the enterprise. We help our customers to rapidly install and deploy these systems by factory pre-loading the software modules, as well as providing software configuration, distribution and management services. The customer receives an integrated delivery of a client/server system!

Comprehensive Software Building Blocks

There are four software building blocks for the integrated client/server system. These building blocks are focused on the needs of end-users of IT, builders of applications, and administrators of enterprisewide systems and networks. In addition, customers have more flexibility with our new, value-based, user pricing approach for our software. Together with the consulting services described later, HP can provide the solution for knowledge workers, application integration, application development, and network and systems management.



For Users

The HP Knowledge Worker Solution (A2323A) focuses on end users, providing them with access to, manipulation of, and communication of information for clients of choice across the enterprise. Key applications include information access, document and text management, electronic mail and workflow automation.

The need to access and share information among functional areas increases, as companies flatten their management structures and seek to maximize the return on information technology, while empowering users. HP's knowledge worker applications provide the tools to address this requirement.

For Builders

The application builder today faces the challenge of both leveraging the existing, reliable applications, while taking advantage of new client/server technologies to meet their business goals. Application integration is essential since re-writing these existing applications may not be cost effective. HP Software Integration Sockets is a development tool that facilitates integration of non-cooperating applications with new client/server based applications. For customers developing new or re-writing existing applications to take advantage of client/server technology, there are a variety of CASE solutions. (See Commercial CASE Update.)

For Administrators

Managing the diversity of computing systems and networks is a big challenge for network and systems administrators. HP offers significant benefits to these managers through its leadership technology in OpenView, and a robust set of tools for managing a diverse client environment.

Integrated Solution Delivery

At first release, the building blocks in HP's Cooperative Computing Solutions are comprised of 35 component products, supplied by HP and third parties, which have been welded together, tested and certified into an integrated release that can be shipped on one CD-ROM, fully supported by HP. These modular integrated solutions can be pre-loaded on the system, and updates are retested and released again on one CD-ROM. We will characterize these integrated releases in terms of client/server performance in early 1993.

Premier Consulting Services

In addition to offering excellent, highly integrated hardware and software solutions, HP helps customers with their implementation through business consulting and selected systems integration services from our Professional Services Organization (PSO). Also, HP has selected a small number of systems integrators to provide services to complement the PSOs. With either approach, you have increases sales opportunities and ensured customer satisfaction.

For More Information

GSY is creating a number of sales tools to help you promote the HP 9000 Series 800's strong server capabilities. You should have already received the HP 9000 Client/Server Sales Guide distributed in the October SalesLink mailing. The guide describes the benefits that client/server computing offers to our customers and outlines HP's UNIX-based client/server strategy and advantages. (The Client/Server Sales Guide is also available on the GSY Hotline, Subject: CL/SRVR.)

Also available on the Hotline in the coming months will be a Client/Server customer presentation and a Client/Server Application Note suitable for distribution to customers. If you have suggestions for additional materials to help you promote HP's strong client/server offering please contact Patty O'Brien at HPDesk node OBRIEN/4700 G16.

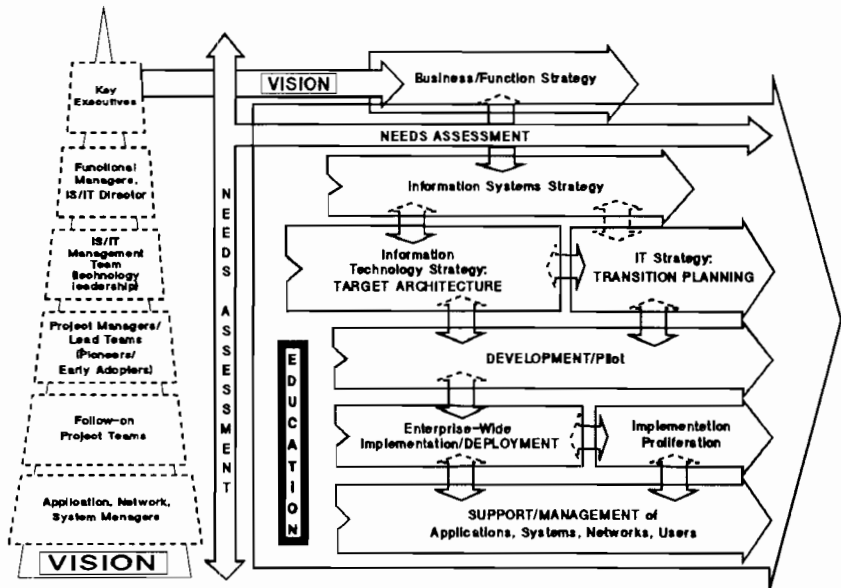
Refer to the HP Cooperative Competing Sales Guide, October 1992, (P/N 5091-5659E) or access the CCSY Hotline for more information on the HP Cooperative Computing Solutions.

Open System Services

One-Minute Sale

The HP Open Systems Roadmap is a methodology that makes selling Open System services and capabilities easier. It enables you to describe a systematic approach (reflecting customer process and needs) and a consistent service methodology (HP's strategy) for implementing IT solutions. The Open System Roadmap is a framework for describing HP's capabilities, services, practice and products, providing a way to map HP expertise and capabilities to customer needs. The Roadmap addresses planning, development, implementation and support of the IT process and solutions. It delivers an open, flexible, modular and customized solution for every HP 9000 Series 800 customer.

Figure 7.2 The HP Way to a More Open Environment



Product Description

Each of the roadmap steps breaks out into HP services. There are multiple services for each step. There are also focused programs that include services which span across all or a subset of the roadmap. The following are some of the key programs:

- Knowledge Worker Professional Services
- Mainframe Alternative Services
- Networking Services
- Open Software Environment Services



Features and Benefits

The following services are delivered in the roadmap steps:

Roadmap Step	Services
Information System Strategy	<ul style="list-style-type: none"> • Benefits Analysis (COACH) • Industry Centers of Expertise solution planning • Information systems strategy
Information Technology Strategy	<ul style="list-style-type: none"> • Open Software Environment Architecture Workshop • Information Technology Planning • Network Planning and Design
Transaction Planning	<ul style="list-style-type: none"> • Migration Planning • Application Assist services • Project Planning
Development/Pilot	<ul style="list-style-type: none"> • Open Software Architecture Pilots • Database Planning and Design • Custom Project Life Cycle solutions
Enterprise-Wide Implementation/deployment	<ul style="list-style-type: none"> • Site Design and Implementation services • Network Implementation services • Education on managing software, systems and networks
Implementation and Proliferation	<ul style="list-style-type: none"> • Education for users, managers and developers
Support/Management	<ul style="list-style-type: none"> • Disaster Recovery Services • Performance Assessment Services • Database Review • System Management: Audits, Optimizations, Security • User Support Services

For More Information

For more information, contact your local PSO manager.

Customer Education Courses

One-Minute Sale

Education is essential to the success of any technology undertaking. This is especially true for customers who are adopting new technologies (i.e. client/server). Training creates the skills needed to be successful in a new environment. It also helps increase the acceptance of these new technologies. Without adequate training, customers face a serious risk of failure.

HP offers a wide array of high-quality courses that meet all customer needs, from educating on what Open Systems are to implementing client/server technologies.

Product Description

Lecture/lab courses are offered in HP classrooms or customized at your customer's site. There are also computer-based courses for cost-conscious customers who want the most in flexibility.

HP has a large offering, including courses in the areas of Open Systems, UNIX, OSF, and Networking. The following section highlights only a few of HP's hottest courses.



Hands-on with Open Client/Server Technologies (H5286S)

A 3.5 day workshop for customers who are on the leading-edge of technology. This workshop takes customers through the steps of creating a distributed application, and it explores a wide range of key open systems technologies, including OSF/Motif, OSF/DCE, OSF/DME.



Open Systems Management Seminars

A collection of 1-day seminars that help managers make decisions about open systems technologies. Seminars provide overviews of key topics in open systems, including:

- Open Systems Concepts and Capabilities (H5125S)
- Client/Server Concepts and Capabilities (B2958S)
- Information Technology Standards in Open Systems (H5275S)
- Security in Open Systems (B2959S)



HP Multimedia Learning Library

An ever-growing collection of self-paced UNIX courses that combine computer-based training with the power of audio on CD-ROM technology. Low-cost and flexible way for customers to become familiar with the UNIX system.

For More Information

For more information in the U.S., call 1-800-HPCLASS (1-800-472-5277). Outside the U.S., contact your nearest HP Customer Education Center.

HP Financing Solutions

One-Minute Sale

Which is easier to afford? A solution that costs: (a) \$100,000 or (b) \$2,100/month—and the flexibility to replace the equipment when it's time to upgrade. HP offers both, of course. But answer (b) is often a superior solution because it lets technology “pay for itself.”

HP Financing offers low-cost, flexible financing plans for all HP products, qualified software, and complementary hardware. With over \$1 billion in assets, HP Financing is one of the largest computer lessors in the world.

Program Description

HP Financing plans include HP Leases and HP Installment Plans. All plans include HP's competitive rates and excellent flexibility. Terms range from 12–60 months. Flexibility includes:

- bundled financing, i.e., non-HP software can be included
- customized payments, i.e. the ability to match payments with income
- easy add-ons and upgrades
- the ability to pay monthly, quarterly, semi-annually, or annually

HP Financing is worldwide and specializes in “umbrella” contracts.

Selling Financing

HP makes financing easy for you. Experienced financial consultants can handle all the details, once you've presented the idea of financing to your customer. The bottom line is that you'll sell more in four ways:

1. *Larger orders.* Financing lets you sell top-of-the-line and move away from cost and discount negotiations. Experienced sales people even use HP's lower rate as an alternative form of discount. To the customer, a lower rate looks like a discount. You've reduced a cost for them.
2. *Faster sales.* Financing eliminates the need for lengthy capital appropriation approvals or for a new budget cycle to begin. Many customers simply use their operating budget to make lease payments.
3. *More Business.* You can move on to the next customer, while your HP Financing representative closes the sale. HP Financing representatives are financial experts who close financial sales every day.
4. *“Built-in” repeat business.* HP makes it easy for customers to add to and/or upgrade their equipment. Once you've made the initial sale, customers tend to view their financial plan as a “credit line.”

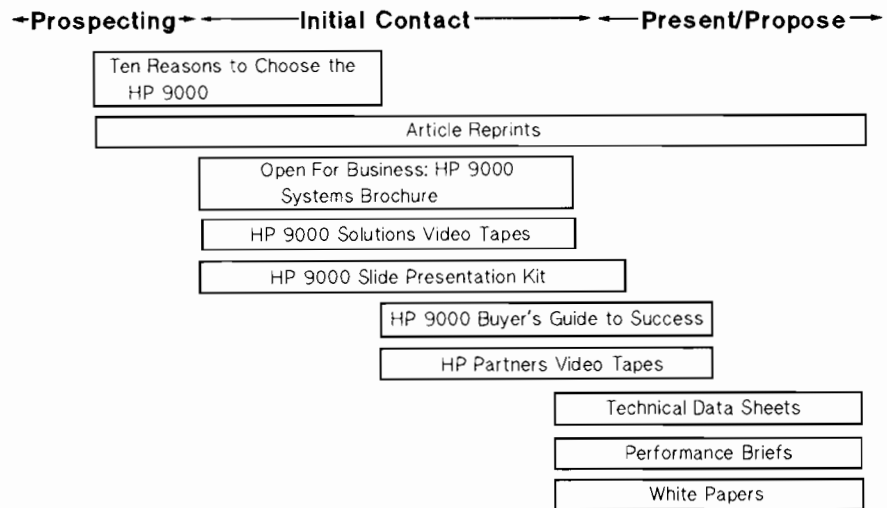
For More Information

HP Representatives are located around the globe. For more information, contact your local HP sales office.

Sales Tools Summary

The goal of HP 9000 Series 800 Business Server sales tools is to effectively and concisely convey our “Open for Business” message. In addition, we have targeted our sales tools at different parts of the sales process to help you provide the appropriate amount of information to your customers at the right time. Below is a chart which can be used as a guideline for when to use what sales tool.

Figure 8.1 HP 9000 Sales Tools—When to Use What



Note that Sales, Price, and Configuration Guides do not appear on the above chart. Sales, Price, and Configuration Guides are intended for internal and Channel Partners use only.

The table following lists publication numbers for currently available HP 9000 Series 800 literature.

Table 8.1 Sales Tools and Guides Currently Available

Description	Pub. No	Available From
Brochures		
Open for Business: HP 9000 Systems Brochure	5091-5746E	UPDATED 12/92 LDC
HP 9000 Buyer's Guide to Success	5091-5745E	UPDATED 12/92 LDC
HP 9000 Computer Family (HP 9000 Series 400/ 700/800) Brochure	5091-1507E	LDC
The Bigger the Better System Brochure	5091-4019E	NEW! LDC
HP 9000 folder	5091-5948E	NEW! LDC
Hammersly Iron dares to downsize	5091-4635E	NEW! LDC
Technical data sheets		
Models F10 F20 F30 G30 G40 G50 H20 H30 H40 H50 I30 I40 I50 Technical Data Sheet	5091-5744E	NEW! LDC
Model 890 Technical Data Sheet	5091-3609E	LDC
HP-UX 9.0 Operating System Data Sheet	5091-3626E	LDC
HP 9000 High Availability Computing Products Data Sheet	5091-1633E	UPDATED 9/92 LDC
Price and configuration guides		
HP 9000 Series 800/1200 Price Guide (U.S. only)	5091-5686E	UPDATED 12/92 LDC
HP 9000 Series 800 Configuration Guide	5091-5739E	UPDATED 12/92 LDC
Presentation tools		
HP 9000 Slide Presentation Kit	9000-1, 9000-2	UPDATED 12/92 GSY HOTLINE
HP-UX Transaction Processing Performance Brief	PERFBRF2	UPDATED 12/92 GSY HOTLINE
Ten Reasons to Choose the HP 9000 High Level mainframe alternative	REASONS HILEVEL	UPDATED 2/92 GSY HOTLINE MFA HOTLINE
MIS Mainframe Alternative	MFMS	MFA HOTLINE
Videotapes (available from HP TV)		
HP and Oracle	90394T	HP TV
HP and Informix	90395T	HP TV
HP and Sybase	90424T	HP TV
HP 9000 Database Partners	90396T	HP TV
HP: Your Open Systems Partner	90462T	HP TV
Powershift: HP Business Computing	S-1665	HP TV
Skadnet - Technology for the 90's and Beyond	I-305	HP TV
Article reprints		
Aberdeen Group article "Gartner Catches Up with Trends"	5091-2395E	LDC
Information Week article "Trucking Firm Seeks Faster Dispatching"	5091-3705E	LDC
ComputerWorld article "UNIX Serves Eatery's MIS Unit" UNIX	5091-2405E	LDC
Today! article "The Mainframe Alternative" InfoWeek Article	5091-4205E	LDC
Gartner Group article, "System Evaluation: HP vs. Sun"	5091-5772E	NEW! LDC

Ordering Information**To order from Literature Distribution Center (LDC):**

Send an HPDesk message to Literature Order/HP 0000/53 stating the part number and quantity required.

To order from GSY Hotline:

Send an HPDesk message to the GSY HOTLINE using the subject from Table 8.1.

For example:

Intray > send
Subject: INDEX
TO: GSY HOTLINE
Text: //
MESSAGE > mail

To order from HP TV:

Send an HPDesk message to CAROL GRANT and include the part number, description, quantity, format, shipping address, and location code.

Figure 8.2 Series 800 Low-End Performance Positioning

Low End Systems Performance Positioning

Through 10-23-92

HP 9000 Series 800	F10		F20 H20		F30,G30 H30,I30		G40 I40	G50 H50 I50	
IBM RS/6000	320 520	320H 520H	340 530H 930	350 550	560 950		970	580 980	
Sun SPARCserver	SPARC 2				630/120(2) 630/140(4) 670/120(2) 670/140(4) 690/120(2) 690/140(4)		10/30 10/41 630/41 670/41 690/41	10/52(2) 630/52(2) 670/52(2) 690/52(2)	10/54(4) 630/54(4) 670/54(4)
DECSystem (RISC/Unix)	5500	5900							
Compaq SystemPro	486/33	486/33(2)	486/50						
Sequent					S2000/250(2) S2000/450(2)		S2000/250(4) S2000/450(4)	S2000/250(6) S2000/450(8) S2000/750(6)	
Pyramid	MIS-1S		MIS-2S(2) MIS-1ES(2)			MIS-6S(4) MIS-2ES(4)			
IBM AS/400	E50	E60	E70		E80(2)				
Data General AVIIION	4100 4300 5200 6200	4600 4120	4620	4320 5225 6225	5240 6240 7000 8000				
AT&T/NCR	3445						3450(2)	3450(4)	
DEC VAX (VMS)	4300	6410	4400	4100	4500	6510	6610 4600	6620 7610	

Note: Transaction performance based on published benchmarks and OLTP estimates

Note: Number in parentheses is number of processors

Series 800 Product Positioning Versus the Competition

Figure 8.3 Series 800 High-End Systems Performance Positioning

High End Systems Performance Positioning

Through 10-23-92

HP 9000 Series 800	890(1)		890(2)		890(3)		890(4)	
DEC VAX (VMS)	6640 7620 10000-620		6660		7640 10000-640			
Sun SPARC- server	690/54(4)							
Sequent	S2000/750(8)		S2000/750(16)		S2000/750(22)		S2000/750 (26)	
Pyramld	MIS-12S(6) MIS-4ES(6)		MIS-12S(12) MIS-4ES(8)		MIS-12ES(16)		MIS-12ES(20)	
IBM AS/400	E90(3) E95(4)							
Data General AVIION	6280							
AT&T/NCR	3550(4) 3600(3 Quad)		3550(8) 3600(4 Quad)		3600(8 Quad)			
IBM Mainframes	9121-440	9121-480	9121-570	9121-610	9021-620	9021-660	9021-720	9021-720
		9021-500	9021-580	9021-580	9021-620	9021-660	9021-720	9021-720
		3090-200J	3090-300J	3090-300J	3090-400J	3090-500J	3090-600J	3090-600J

Note: Transaction performance based on published benchmarks and OLTP estimates

Note: Number in parenthesis is number of processors

GSY Hotline Index

Attached is the index you requested from the GSY HOLTINE. To request one of the items listed below, send an HP Desk message to this hotline, and at the SUBJECT prompt type in any of the subjects listed below (separate message for each item requested). To contact the GSY administrator, send an HP Desk message to: GSY HOTLINE, Subject: REMARK.

Subject	Content/Description	Text/Slides # Slides # Pages	Last Revision
General Information:			
INDEX	Up-to-date version of this index.		10/07/92
DOWNLOAD	How to download files from HP Desk.		
REMARK	Send your comments to this subject to contact hotline administrator.		
HP 9000 Series 800 Solutions: General			
9000-1	Part I of the HP 9000 Sales Kit Includes all solutions under GSY's "Open for Business" message, and has been updated for the May intro. Kit includes slides and script.	80 Pages 29 Slides	12/92
9000-2	Part II of the HP 9000 Sales Kit	28 Slides	12/92
COMPRO	Competitive profile information on DEC, IBM, and Sun compared to the Series 8X7 systems.	25 Pages	9/2/92
DBFEAT	Matrices with detailed feature descriptions of Oracle, Sybase, Ingres, Informix and Software AG	45 Pages	10/19/92
DBPARTNR	Slides and script on the relationship HP has with its Database partners.	6 Pages 6 Slides	1/28/92
DESTINY	HP's response to the SVR4.2 (Destiny) announcement to be shared with your customers	4 Pages	6/29/92
GENESIS	Package contains Lotus® 1-2-3® Spread- sheet that, based on information specified, creates 8X7 configurations and quotes. Also, contains QuickStart guide for more information	4T	8/6/92
ISVPROG	Information about the Corporate Business Server ISV program.	1 Page	6/10/92
PICKPERF	Cover the basics of Pick system tuning kernel tuning for VMARK's uniVerse and Ultimate's Ultix product. This paper does not cover Ultimate Plus.	3 Pages	5/14/92
QATELE	Questions and answers from the 700/800 teleconference in July.	5 Page	8/21/92
QUOTES	Current consultant and press quotes on the HP 9000 Series 800.	3 Pages	9/21/92

STDWP	Slides and text from the "HP-UX AND Standards White Paper Movement." Also includes a "Standards" appendix.	4 Pages 4 Slides	6/10/92
TIHPTRY	HP and Texas Instruments Try and Buy Program announced at the teleconference.	2 Pages	8/12/92
UNIXTELE	Slides from the July Unified UNIX Teleconference.	28 Slides	8/25/92
HP 9000 Series 800 Solutions: CASE			
CASECUS	CASE slide set	17 Slides	6/10/92
CASEWP	White paper on CASE for HP 9000 Business Applications. Includes supplement on case and slides.	5 Pages 7 Slides	3/25/92
HP 9000 Series 800 Solutions: High Availability/Security			
800QUAL	MONTHLY MTBF/MTTR QUALITY REPORT.	1 Pages	9/28/92
CICSPR	Press release from IBM and HP announcing CICS availability on the HP 9000.	2 Pages	10/07/92
HAWHITE	High Availability white paper	21 Slides 32 Pages	12/23/91
SECWP	Series 800 system security white paper which describes HP's security strategy and vision product implementation plans, product features, and benefits.	9 Pages	5/27/92
HP 9000 Series 800 Solutions: Information Management			
SMWHITE	SYSTEMS MANAGEMENT WHITE PAPER		11/15/92
WAREHS	White paper on Data Warehousing and Information Architecture for Business Intelligence.	20 Pages	1/15/92
HP 9000 Solutions: Languages			
PARISC	Monthly newsletter from Precision RISC Organization.	5 Pages	8/25/92
RVSR	HP's PA-RISC advantage versus other competitive RISC architectures white paper.	21 Pages 8 Slides	5/27/92
HP 9000 Series 800 Solutions: Open Systems			
OPSPPOOL	THE MOST CURRENT SLIDES PLUS STORY board supporting your selling efforts (1-minute sale) of HP OpenSpool/UX.	2 Pages 4 Slides	5/27/92
OSE	Overview of the Open Software Environment	10 Slides	3/23/92
OSFPOST	This document is the latest update regarding HP's position on OSF technologies. Please also see OSFSTRAT for further info.	10 Pages	6/29/92
OSFSTRAT	Open Systems Foundation Strategy White Paper	32 Pages 26 Slides	9/11/92
HP 9000 Series 800 Solutions: Networking			
M45PLUS	Information on the new HP Model 45 Plus	11 Pages 10 Slides	10/16/92
NETPITCH	Series 800 networking pitch. Package contains slides and script.	24 Slides 40 Pages	8/06/92

NETUX90	HP-UX 9.0 Networking	3 Text	9/09/92
NWARE	Information on the Novell Opportunity and the HP9000 Series 800 benefits and positioning	3 Text	10/16/92
HP 9000 Series 800 Solutions: Sales Tools			
REASONS	Slides providing "10 Reasons Why to Choose HP 9000" for customer presentations.	10 Slides	3/30/92
HP 9000 Series 800 Solutions: VABS			
CAINFO	Information on HP/CA relationship, products, and programs.	13 Pages	10/5/92
CONVERT	Conversion tool matrix	2 Pages	8/25/92
HP 9000 Series 800 Solutions: Performance			
NETWARE	Summary of the results of a benchmark comparing Novell NetWare on HP 9000 Series 800.	3 Pages 1 Slide	5/4/92
NFSPERF	Current results of the NFS benchmarking on the Series 800.	2 Pages	6/9/92
LMX8X7	HP LAN Manager/XL performance & capacity planning brief for the HP 9000 Series 800 Models.	30 Pages 20 Slides	6/15/92
PERFBRF2	HP-UX Transaction Processing Performance Brief with details on Series 800 and competitive TPC-A results.	14 Pages 9 slides	9/21/92
RXPERF	Series 800 general performance brief with X stations.	5 Pages	6/04/92
RXIGPERF	Series 800 Island Graphics performance brief with X stations.	5 Pages	6/04/92
RXWZPERF	Series 800 Informix Wingz performance brief with X stations.	5 Pages	6/04/92
RXDBPERF	Series 800 Informix 4GS database performance brief with X stations.	5 Pages	6/04/92
TPCA800	Summary and updated slides covering latest TPC-A results for the Series 800.	2 Pages 8 Slides	6/24/92
HP 9000 Series 800 Solutions: Sales Tools			
HISTRAT	HP 9000 Corporate Business Server Strategy Brief.	13 Slides 23 Pages	9/29/92
SGGRAPH	Slides from the December issue of the Series 800 Sales Guide.	24 Slides	12/1/92
MPETOUX	Description of special program to crossgrade HP 3000 MPE systems to HP 9000 HP-UX systems.	5 Pages	5/5/92

Training Update

CSO Field Education and Development continues to provide training courses to help you more effectively sell HP 9000 Series 800 Business Server solutions:

Training Courses

- SR187: UNIX Basics (P/N 5960-1620) introduces the UNIX market, standards organizations, common terms and concepts, and major versions.
- SR188: HP 9000 Business Server Solutions (P/N 5960-1621) presents an overview of HP's Series 800 Business Server solutions strategy, hardware, and software. This includes HP's systems management, high availability, information management, CASE, and client/server computing offerings.
- SR289: Winning in the Mainframe World (P/N 5960-7842) presents the business, technical, and personal issues faced by CIOs and MIS directors who are candidates for mainframe downsizing.
- SR1801: Mainframe Environment Solutions (P/N 5960-7801) provides the background information needed to take advantage of opportunities to sell Series 800 Business Servers as mainframe alternatives.
- SR1803: The MIS Environment (P/N 5960-1623) provides a comprehensive look at the MIS organization found in Fortune 500 companies.
- SR2801: Beating the Competition provides a comprehensive look at DEC and IBM's strengths and weaknesses, and HP responses to competitive objections. Videotapes of this teleclass are available from HP-TV. Send an HPDesk message to Carol Grant requesting program S1584. Specify VHS or UMATIC format, NTSC, or PAL standard, and billing location code.
- New industry training is available to help you address the needs of your customers in the electronics, retail, state and local government, or automotive industries.

Ordering Information

All courses except SR2801 may be ordered from the Support Materials Organization (SMO) in Roseville. Instruct your purchasing department to submit a HEART I2 order for the part numbers shown.

For More Information

For more information on all CSO Field Education and Development courses, contact your Field Development Manager.

HP 9000 Series 800 Systems Matrix

Figure 8.4 HP 9000 Series 800 Systems Matrix

SPU Model No.	SPU Product No.	S/W Tier	Single High Slots	Clk Spd MHz	Instr/Data Cache (KB)	TLB Size (Entries)	Base Memory (MB)	Base Internal Disk (MB)	Relative OLTP Performance to F10	SPEC int92	SPEC fp92	SPEC rate int92	SPEC rate fp92	SPU Model No.
F10	A2466A	1	2	32	32/64	192	16	566	1	22.0	36.7	523	876	F10
F20	A2467A	1	2	48	64/64	192	16	566	1.7	33.6	56.1	816	1335	F20
F30	A2468A	1	2	48	256/256	192	16	566	2.0	37.8	62.4	890	1483	F30
G30	A2465A	1	4	48	256/256	192	32	566	2.0	37.8	62.4	890	1483	G30
G40	A2469A	1	4	64	256/256	192	32	566	3.0	50.5	81.6	1201	1949	G40
G50	A2470A	1	4	96	256/256	192	32	566	4.9	78.2	141.6	1854	3374	G50
H20	A2471A	3	8	48	64/64	192	64	1 GB	1.7	33.6	56.1	816	1335	H20
H30	A2472A	3	8	48	256/256	192	64	1 GB	2.0	37.8	62.4	890	1483	H30
H40	A2473A	3	8	64	256/256	192	64	1 GB	3.0	50.5	81.6	1201	1949	H40
H50	A2474A	3	8	96	256/256	192	64	1 GB	4.9	78.3	141.6	1854	3374	H50
I30	A2475A	3	12	48	256/256	192	64	2 GB	2.0	37.8	62.4	890	1483	I30
I40	A2476A	3	12	64	256/256	192	64	2 GB	3.0	50.5	81.6	1201	1949	I40
I50	A2477A	3	12	96	256/256	192	64	2 GB	4.9	78.3	141.6	1854	3374	I50
807S	A1751B	1	2	32	32/64	192	16	328	1	22.0	36.7	523	876	807S
817S	A1703A	1	2	48	64/64	192	16	328	1.7	33.6	56.1	816	1335	817S
827S	A1765A	2	6	48	64/64	192	16	328	1.7	33.6	56.1	816	1335	827S
837S	A1704B	2	2	48	256/256	192	32	677	2.0	37.8	62.4	890	1483	837S
847S	A1766A	3	6	48	256/256	192	32	677	2.0	37.8	62.4	890	1483	847S
857S	A1706A	3	12	48	256/256	192	64	677	2.0	37.8	62.4	890	1483	857S
867S	A1768A	4	6	64	256/256	192	64	1380	3.0	50.5	81.6	1201	1949	867S
877S	A1769A	4	12	64	256/256	192	64	1360	3.0	50.5	81.6	1201	1949	877S
887S	A2307A	5	6	96	256/256	120	64	1360	4.9	78.3	141.6	1854	3374	887S
897S	A2306A	5	12	96	256/256	120	64	1360	4.9	78.3	141.6	1854	3374	897S
808S	A1625A	1	3	16	64	64+256	8	152	0.17					808S
815B	A1071A	2	8	16	64	64+256	8	335	0.17					815B
822S	A1716A	2	12	25	32	4K	8	335	0.35					822S
832S	A1044A	3	12	30	128	4K	16	335	0.6					832S
842S	A1154A	4	12	32	1024	8K+128	28	670	1.5					842S
852S	A1155A	5	11	50	1024	8K+128	64	670	2.17					852S
825S	A1004A	3	6	25	16	2K	8	n/a	0.28					825S
835S	A1035A	4	6	30	128	4K	8	n/a	0.64					835S
840S	9741A		28	8	128	4K	8	n/a	0.41					840S
845S	A1608A	5	5	30	256	16K	32	n/a	0.96					845S
850S	9742A	6	10	27.5	128	4K	48	n/a	0.71					850S
855S	A1114A	6	10	27.5	256	16K	48	n/a	1.17					855S
860S	A1843A	6	10	27.5	1024	16K	48	n/a	1.46					860S
865S	A1845A	6	10	50	768	8K+128	64	n/a	2.14					865S
870S/100	A1135A	7	10	50	1024	8K+128	96	n/a	2.82					870S/100
870S/200	A1146A	7	10	50/CPU	2x1024	2X 8K+128	128	n/a	4.2					870S/200
870S/300	A1147A	7	10	50/CPU	3x1024	3X 8K+128	160	n/a	5.6					870S/300
870S/400	A1148A	7	10	50/CPU	4x1024	4X 8K+128	192	n/a	6.8					870S/400
890/1	A1826A	6,7	14-112	60	2048/CPU	32K/CPU	128	n/a	5.3	51.0	49.6	1215	1180	890/1
890/2	A1826A	6,7	14-112	60	2048/CPU	32K/CPU	128	n/a	8.9	n/a	n/a	2253	2360	890/2
890/3	A1826A	6,7	14-112	60	2048/CPU	32K/CPU	128	n/a	13.2	n/a	n/a	3306	3529	890/3
890/4	A1826A	6,7	14-112	60	2048/CPU	32K/CPU	128	n/a	16.4	n/a	n/a	4301	4685	890/4

Note: Relative OLTP performance is a general guideline since the factors influencing the performance of an application vary widely. This is especially true with the multiprocessing 890 systems. Ratios will not always perfectly correspond to published TPC-A results since other benchmarks are taken into consideration. These ratios aid in setting performance expectations for any Series 800 when the performance of an application is understood on other Series 800 systems.

Figure 8.5 HP 9000 Series 800 Systems Matrix

SPU Model Number	Ports Included On Personality				Max. Memory (MB)	Max. Internal SCSI (GB)	Max. External SCSI (GB)	Max. Total HP-IB (GB)	Max. Disk Storage			Max. Suppt'd Disk (GB)	Int. Tape Capacity (GB)	Max. MUX Ports	SPU Model Number
	Card or Included	With SPU	Centr-onics	LAN					External FiberLink	External FL Disk Array					
F10	1	2	1	1	384	2	42	2.7	n/a	n/a	42	4-8DDS	48	F10	
F20	1	2	1	1	384	2	42	2.7	n/a	n/a	42	4-8DDS	48	F20	
F30	1	2	1	1	384	2	42	2.7	n/a	n/a	42	4-8DDS	48	F30	
G30	1	2	1	1	512	6	70	5.4	21.4	86.4	100.4	4-8DDS	80	G30	
G40	1	2	1	1	512	6	42	5.4	21.4	86.4	100.4	4-8DDS	80	G40	
G50	1	2	1	1	512	6	42	5.4	21.4	86.4	100.4	4-8DDS	80	G50	
H20	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	144	H20	
H30	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	144	H30	
H40	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	144	H40	
H50	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	144	H50	
I30	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	208	I30	
I40	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	208	I40	
I50	1	2	1	1	768	6	70	5.4	42.8	172.8	178.8	4-8DDS	208	I50	
807S	DDS+1or2	8	no	0	128	1.36	42	2.7	n/a	n/a	42	4-8/DDS	40	807S	
817S	DDS+1or2	8	yes	0	192	1.36	42	2.7	n/a	n/a	42	4-8/DDS	48	817S	
827S	DDS+3or4	8	yes	0	384	4.08	70	5.4	21.4	129.6	151.6	4-8/DDS	112	827S	
837S	DDS+1or2	8	yes	0	192	1.36	42	2.7	n/a	n/a	42	4-8/DDS	48	837S	
847S	DDS+3or4	8	yes	0	384	4.08	70	5.4	21.4	129.6	151.6	4-8/DDS	112	847S	
857S	DDS+3or4	8	yes	0	384	4.08	70	5.4	42.8	172.8	178.8	4-8/DDS	208	857S	
867S	DDS+3or4	8	yes	0	384	4.08	70	5.4	32.1	129.6	151.6	4-8/DDS	112	867S	
877S	DDS+3or4	8	yes	0	384	4.08	70	5.4	42.8	172.8	178.8	4-8/DDS	208	877S	
887S	DDS+3or4	8	yes	0	768	4.08	70	5.4	32.1	129.6	151.6	4-8/DDS	12	887S	
897S	DDS+3or4	8	yes	0	768	4.08	70	5.4	42.8	172.8	178.8	4-8/DDS	208	897S	
808S	n/a	8+2	n/a		32	n/a	8.0	8.0	n/a	n/a	8.0	CTD	16	808S	
815B	n/a	8+2	n/a		56	n/a	8.0	8.0	n/a	n/a	8.0	CTD	48	815B	
822S	n/a	8	n/a		128	n/a	10.6	8.0	21.4	82.3	82.3	DDS	48	822S	
832S	n/a	8	n/a		128	n/a	10.6	8.0	21.4	82.3	82.3	DDS	80	832S	
842S	n/a	8	n/a		256	n/a	21.2	8.0	42.8	168.7	168.7	DDS	80	842S	
852S	n/a	8	n/a		256	r/a	21.2	8.0	42.8	168.7	168.7	DDS	80	852S	
825S	n/a	6	n/a		192	r/a	10.6	8.0	21.4	82.3	82.3	n/a	198	825S	
835S	n/a	6	n/a		192	r/a	10.6	8.0	21.4	82.3	82.3	n/a	86	835S	
840S	n/a	n/a	n/a		96	r/a	n/a	8.0	n/a	n/a	6.9	n/a	128	840S	
845S	n/a	6	n/a		192	r/a	10.6	8.0	21.4	82.3	82.3	n/a	70	845S	
850S	n/a	6	n/a		256	n/a	21.2	8.0	42.8	168.7	168.7	n/a	300	850S	
855S	n/a	6	n/a		256	n/a	21.2	8.0	42.8	168.7	168.7	n/a	400	855S	
860S	n/a	6	n/a		256	n/a	21.2	8.0	42.8	168.7	168.7	n/a	400	860S	
865S	n/a	6	n/a		512	n/a	21.2	8.0	85.8	341.5	341.5	n/a	512	865S	
870S/100	n/a	6	n/a		768	n/a	21.2	8.0	85.8	341.5	341.5	n/a	600	870S/100	
870S/200	n/a	6	n/a		768	n/a	21.2	8.0	128	514.3	514.3	n/a	600	870S/200	
870S/300	n/a	6	n/a		768	n/a	21.2	8.0	128	514.3	514.3	n/a	600	870S/300	
870S/400	n/a	6	n/a		768	n/a	21.2	8.0	128	514.3	514.3	n/a	600	870S/400	
890/1	n/a	16	yes		2,048	n/a	100	8.0	330	1300	1300	n/a	1,024	890/1	
890/2	n/a	16	yes		2,048	n/a	100	8.0	330	1300	1300	n/a	1,024	890/2	
890/3	n/a	16	yes		2,048	n/a	100	8.0	330	1300	1300	n/a	1,024	890/3	
890/4	n/a	16	yes		2,048	n/a	100	8.0	330	1300	1300	n/a	1,024	890/4	

* Please contact your sales center if customer requires more than 3,000 terminal connections.

Figure 8.6 HP 9000 Series 800 Systems Matrix

SPU Model Number	Max. SCSI Tape Drives	Max. HP-IB Tape Drives	Max. Centronic Printers	Max. Serial Printers	Max. HP-IB Printers	Max. HP-IB Plotters	Max. LAN Cards	Max. PSI Cards X.25, SNA	Max. SNAplus Cards***	Max. HP-FL Cards	Max. SCSI Cards	Max. HP-IB Cards	SPU Model Number
F10	8	4	3	20	n/a	8**	2	2	2	0	2	1	F10
F20	8	4	3	40	n/a	8**	2	2	2	0	2	1	F20
F30	8	4	3	40	n/a	8**	2	2	2	0	2	1	F30
G30	8	8**	5	40	n/a	8**	4	4	4	2	4	2	G30
G40	8	8**	5	40	n/a	8**	4	4	4	2	4	2	G40
G50	8	8**	7	50	8	8**	4	4	4	2	4	2	G50
H20	8	8**	5	40	n/a	8**	4	6	6	3	8	2	H20
H30	8	8**	5	40	n/a	8**	4	6	6	3	8	2	H30
H40	8	8**	5	40	n/a	8**	4	6	6	3	8	2	H40
H50	8	8**	7	50	8	8**	4	6	6	3	8	2	H50
I30	8	8**	5	50	n/a	8**	7	7	7	3	12	2	I30
I40	8	8**	5	50	8	8**	7	7	7	3	12	2	I40
I50	8	8**	13	50	8	8**	7	7	7	3	12	2	I50
807S	8	4	3	20	n/a	8**	2	2	2	0	2	1	807S
817S	8	4	3	40	n/a	8**	2	2	2	0	2	1	817S
827S	8	8**	7	40	n/a	8**	5	6	6	3	6	2	827S
837S	8	4	3	40	n/a	8**	2	2	2	0	2	1	837S
847S	8	8**	7	40	n/a	8**	5	6	6	3	6	2	847S
857S	8	8**	13	50	n/a	8**	5	7	10	4	12	2	857S
867S	8	8**	7	40	n/a	8**	5	6	6	3	6	2	867S
877S	8	8**	13	50	8	8**	5	7	10	4	12	2	877S
887S	8	8**	7	50	8	8**	5	6	6	3	6	2	887S
897S	8	8**	13	50	8	8**	5	7	10	4	12	2	897S
808S	8*	12	3	8	n/a	8**	1	1	1	0	1	3	808S
815B	8*	12	3	8	n/a	8**	1	1	1	0	3	3	815B
822S	4	12	4	20	n/a	8**	2	2	1	2	6	3	822S
832S	4	12	4	20	n/a	8**	2	2	1	2	6	3	832S
842S	8*	12	6	20	n/a	8**	4	5	2	4	6	3	842S
852S	8*	12	6	20	n/a	8**	4	5	2	4	6	3	852S
825S	8*	8	n/a	20	8	8**	5	5	n/a	2	5	6	825S
835S	8*	8	n/a	20	8	8**	5	5	n/a	2	5	6	835S
840S	n/a	8	n/a	20	8	8**	28	n/a	n/a	0	n/a	28	840S
845S	8*	8	n/a	20	8	8**	5	5	n/a	2	5	6	845S
850S	8*	8	n/a	20	8	8**	4	7	1	4	10	4	850S
855S	8*	8	n/a	20	8	8**	4	7	1	4	10	4	855S
860S	8*	8	n/a	20	8	8**	4	7	1	4	10	4	860S
865S	8*	8	n/a	20	8	8**	4	7	1	8	10	4	865S
870S/100	8*	8	n/a	20	8	8**	4	7	1	8	10	4	870S/100
870S/200	8*	8	n/a	20	8	8**	4	7	1	12	10	4	870S/200
870S/300	8*	8	n/a	20	8	8**	4	7	1	12	10	4	870S/300
870S/400	8*	8	n/a	20	8	8**	4	7	1	12	10	4	870S/400
890	16	8**	20	50	8	8**	5	12	12	14	20	9	890
890/1	16	8**	20	50	8	8**	5	12	12	14	20	9	890/1
890/2	16	8**	20	50	8	8**	5	12	12	14	20	9	890/2
890/3	16	8**	20	50	8	8**	5	12	12	14	20	9	890/3
890/4	16	8**	20	50	8	8**	5	12	12	14	20	9	890/4

* with 2 SCSI interface cards

** with 2 HP-IB interface cards

*** only 1 card is supported until the first calendar quarter of 1993

Figure 8.7 HP 9000 Series 800 Systems Matrix

SPU Model Number	Depth in mm	Width in mm	Height in mm	Weight in Kg	Power Reqmnt. Watts	Heat Diss BTUs Per Hr.	First CPL Date	First Ship Date	SPU Model Number
F10	533	222	430	32	400	1385	12/92	1/93	F10
F20	533	222	430	32	400	1385	12/92	1/93	F20
F30	533	222	430	32	400	1385	12/92	1/93	F30
G30	533	444	430	50	800	2770	12/92	1/93	G30
G40	533	444	430	50	800	2770	12/92	1/93	G40
G50	533	444	430	50	800	2770	12/92	1/93	G50
H20	533	444	430	50	800	2770	12/92	1/93	H20
H30	533	444	430	50	800	2770	12/92	1/93	H30
H40	533	444	430	50	800	2770	12/92	1/93	H40
H50	533	444	430	50	800	2770	12/92	1/93	H50
I30	533	444	430	50	800	2770	12/92	1/93	I30
I40	533	444	430	50	800	2770	12/92	1/93	I40
I50	533	444	430	50	800	2770	12/92	1/93	I50
807S	533	222	430	32	400	1385	6/91	8/91	807S
817S	533	222	430	32	400	1385	6/91	8/91	817S
827S	533	444	430	50	800	2770	6/91	9/91	827S
837S	533	222	430	32	400	1385	6/91	8/91	837S
847S	533	444	430	50	800	2770	6/91	9/91	847S
857S	533	444	430	50	800	2770	6/91	9/91	857S
867S	533	444	430	50	800	2770	12/91	12/91	867S
877S	533	444	430	50	800	2770	12/91	12/91	877S
887S	533	444	430	50	800	2770	6/925	10/92	887S
897S	533	444	430	50	800	2770	6/92	10/92	897S
808S	435	325	312	27	400	1364	11/89	11/89	808S
815B	401	325	312	20	400	1364	7/89	11/89	815B
822S	710	375	750	110	1000	3410	5/90	5/90	822S
832S	710	375	750	110	1000	3410	1/90	4/90	832S
842S	710	375	750	110	1000	3410	12/90	1/91	842S
852S	710	375	750	110	1000	3410	12/90	1/91	852S
825S	500	325	234	23	600	2000	5/87	8/87	825S
835S	500	325	234	23	600	2000	4/88	8/88	835S
840S	965	600	1000	160	1350	4600	5/86	11/86	840S
845S	500	325	234	23	600	2000	1/90	1/90	845S
850S	710	1300	1000	400	1783	6086	5/87	12/87	850S
855S	710	1300	1000	400	2056	7016	8/88	3/89	855S
860S	710	1300	1000	400	2056	7016	10/90	10/90	860S
865S	710	1300	1000	400	2569	8768	12/90	4/91	865S
870S/100	710	1300	1000	400	2569	8768	1/90	9/90	870S/100
870S/200	710	1300	1000	400	2569	8768	1/90	6/91	870S/200
870S/300	710	1300	1000	400	2569	8768	12/91	12/91	870S/300
870S/400	710	1300	1000	400	2569	8768	12/91	12/91	870S/400
890	905	750	1620	375	4260	14750	5/92	10/92	890
890/1	905	750	1620	375	4260	14750	5/92	10/92	890/1
890/2	905	750	1620	375	4260	14750	5/92	10/92	890/2
890/3	905	750	1620	375	4260	14750	5/92	10/92	890/3
890/4	905	750	1620	375	4260	14750	5/92	10/92	890/4



**HP 9000 Series 800 Business Servers Sales Guide
(December 1992)**

Please take a few minutes to complete and return this survey.

To: General Systems Division (GSY) Delivery Product Marketing
Fax Number: (408) 447-5730

From: _____

Region: _____

Title: _____

1. Was the HP 9000 Series 800 Sales Guide information useful?

2. Which part of the HP 9000 Series 800 Sales Guide was the most useful?

3. Would you change anything in the HP 9000 Series 800 Sales Guide?

4. Would you add anything to the HP 9000 Series 800 Sales Guide?

