### **Product Enhancement**

Hewlett-Packard significantly enhanced HP 9000 Series 800 superminicomputing over the last few business quarters with the introduction of several products and features. The most significant introductions are:

- The HP 9000 Series 800 Model 855, a new high-end, UNIX, RISC-architecture superminicomputer.
- DEC-to-HP Conversion Program, a migration program which helps customers move applications from Digital VAX platforms to the Series 800 superminicomputer.
- New service and customer support programs that include:
  - —HP TeamLine, HP ResponseLine, and HP BasicLine, a series of software support programs.
  - —HP SupportLine, an online information service.
  - —New software support contracting.
  - —HP LaserRom, a CD-ROM-based service for documentation and subscription materials.
  - -Multivendor Support Operation, a service and support program which maintains, services, and supports computer equipment from other manufacturers and vendors.
  - —Network Support Program, a consulting service for network support.

# New High-End HP 9000 Series 800 Model

HP expands the capabilities of its HP 9000 Series 800 at the high end with the release of the HP 9000 Series 800 Model 855. Positioned above the Model 850—the previous top of the line—the Model 855 is now HP's UNIX, RISC-architecture Series 800 superminicomputer. It provides more resources to accommodate heavy computing demands and larger user communities, and also effectively meets the growth requirements of users of the large-scale Model 850 or midrange Model 835 while preserving compatibility. The Model 855 provides approximately 1.5 times the performance and accommodates up to 1.3 times more terminal I/O devices than the Model 850.

The HP 9000 Series 800 Model 855 features:

- A performance rating of 10 to 12 MIPS.
- A Series 850 CPU which has been dramatically tuned and enhanced. The new CPU has a faster clock speed, larger instruction pipeline, and new VLSI technologies.
- · A floating point co-processor.
- · A large cache.
- 32M to 128M bytes of main memory.
- I/O connections to support from 6.8G to 18.3G bytes of on-line disk storage.
- Physical connections for 400 workstations and terminal I/O devices.
- The HP-UX applications and distributed communications environment of the Series 800 superminicomputers.
- The same system packaging as the Model 850.

The basic Model 855 costs \$308,500 and includes the central system cabinet with a system processor, the battery backup system, and the UNIX HP-UX operating system. The basic system processor contains the CPU, cache, floating point processor, 32M bytes of main memory, an HP-IB I/O channel, two channel I/O adapters, and a six-channel multiplexer. The base package for HP-UX features a 64-user license, the C programming language, a symbolic debugger, an assembler, and the device I/O library.

A field upgrade for the Model 850 allows customers to obtain a Model 855 without the need to reinvest in an entire new platform or central system. Included with the field upgrade is the exchange of CPU boards.



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#### Conversion Software

HP's DEC-to-HP Conversion Program enables HP to better position HP 9000 Series 800 computing within the Digital VAX environment.

The DEC-to-HP Conversion Program assists end users and independent software vendors in moving their applications from Digital's proprietary VAX/VMS systems to UNIX-based HP 9000 Series 800 superminicomputers. The program includes:

- A free trial. Under this offer, HP will loan a Model 825, 835, 840, 850, or a Model 855 to a direct or indirect customer at no charge for a maximum of three months while the conversion takes place. Customers also are given training courses on how to implement, program, and operate the HP 9000 Series 800 systems.
- Port/VX. To assist with the conversion of Fortran programs on the VAX/VMS platform into Fortran programs for the HP-UX environment on the Series 800, HP provides a set of software tools bundled with consulting services.
- Use of one of HP's field migration centers. Under this element, trained field-systems engineers will analyze customer needs and assist in the conversion.
- A full range of financing programs for the lease, rent, or purchase of a Series 800 system.

### **New Software Support Program**

HP increased the level of software service and support for its UNIX, RISC-architecture HP 9000 Series 800 superminicomputers with the release of its HP TeamLine, HP ResponseLine, and HP BasicLine. These new software support services effectively replace existing support services, adding more problem resolution, software maintenance, and usage assistance. They consist of entirely new features, extensions to present features, and a repackaging of present services. Because the new support services are based upon present offerings, all existing software support contracts can be upgraded to the new support program. In fact, all new features available with HP TeamLine or HP Response Line are provided at no additional charge to current, applicable contract holders. HP BasicLine will be available when current contracts are renewed and to new customers at time of purchase.

HP TeamLine. This service provides premium software consulting and a comprehensive set of software maintenance services. Customers using HP TeamLine have access to a team of HP engineers which examines a customer's business goals, operating environment and applications, and recommends methods to improve system utilization. Customers can have HP engineers conduct management and technical reviews to determine if further changes are necessary to meet objectives. Consultations cover system performance, application design, operating procedures, and system administration. The team also provides application guidance and a review of open computing issues and follow-up actions. In addition, customers can receive assistance from HP consultants for system growth planning, personnel development, and implementing software updates. As the highest level of HP's software support services, HP TeamLine gives customers an account-assigned consultant to ensure they have access to all the standard and contractual services needed to support their computer infrastructure. In addition, HP TeamLine provides all of the software maintenance and support services included within HP ResponseLine and HP BasicLine. These services include unlimited telephone access to the remote support center, on-line access to an electronic database of HP product and support information, and on-site assistance for critical situations.

HP ResponseLine. This service provides problem resolution, user assistance, and software maintenance out of HP's 32 worldwide response centers (remote support centers). Based on HP's proven telephone assistance and remote diagnostics systems, it includes extensions to existing problem resolution, user assistance, and software maintenance offerings.

With the release of HP ResponseLine, HP has significantly expanded the time its response centers are available. Customers now can receive on-the-spot assistance from HP professionals any time on any day.

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> Telephone consulting and remote diagnostics for software troubleshooting and user assistance are available 24 hours a day, 365 days a year to all customers with account management or HP Response Level support. This availability is extremely beneficial to customers who need assistance outside of HP's normal business hours.

In addition, customers now have three methods for resolving a problem or researching an inquiry. Customers can:

- Remotely enter a question or a description of a problem. An HP engineer will respond by telephone within two hours.
- Gain remote access to databases containing information on problems and resolutions. With this information, customers can approach a problem or question independently.
- Call the HP response center and leave all relevant information with support personnel. An HP engineer will return the call within two hours.

A problem escalation management program is integral to HP ResponseLine. If a remote support center cannot solve a problem, HP personnel seek a solution in worldwide information databases, consult product development personnel, model the customer's system and run a simulation, and, if necessary, go to the customer's site.

HP ResponseLine also provides all of the maintenance and support of HP BasicLine, including software updates, documentation updates, subscription services, and on-line access to a database of HP product and support information.

HP BasicLine. This basic service is aimed at customers who opt to support their own systems and provides the following:

- Right to use software updates.
- Documentation and related updates to reference information.
- Product bulletins, newsletters, and periodicals.
- On-line access to the HP SupportLine electronic database.

#### **Electronic Information Distribution Service**

Ongoing success with computer systems requires that customers receive up-to-date, comprehensive product and support information in a timely manner and in an easily accessible and easy-to-use format. HP meets this requirement with HP SupportLine, a new method of distributing direct-support information to customers. It differs from HP's printed reference information and news subscription services.

HP SupportLine is a remote, on-line information service that customers access via terminals and modems. Through this electronic service, customers can rapidly and easily access up-to-date information on product developments, get usage assistance, and resolve problems. The on-line NewsPage publication contains assorted HP news, new product announcements, training schedules, and newly developed workarounds. The Software Status Bulletin lists all reported defects in software and manuals and provides information for repair and workaround. Engineering Notes contains the most current problem resolutions prepared by HP service personnel. HP's Application Notes presents usage assistance and configuration information. Search and browse mechanisms for publications allow queries to be answered quickly.

In addition to the electronic publications, HP SupportLine contains a broadcast service and electronic call submittal. The broadcast service alerts customers to critical news. Electronic call submittal permits customers to place calls to the remote support center by electronic mail when they can't find the information



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> needed to answer questions or solve problems. Customers also can receive responses from the remote support center by electronic mail instead of telephone.

### **CD-ROM Subscription Service**

HP LaserROM, a new information service, speeds referencing and simplifies technical publication use. LaserRom uses compact disk read-only memory (CD-ROM) technology coupled with information retrieval software to deliver manuals, bulletins, catalogs, and other technical publications. Each HP LaserRom disk contains up to 200,000 pages of support information. The full-text retrieval software instantly pinpoints requested information. Customers have direct access to information and do not have to work with numerous physical manuals and publications.

#### **Multivendor Support**

Fortune 1000 companies, large public services, and an array of smaller enterprises and government agencies often employ computers, peripheral equipment, and workstations from multiple manufacturers. Servicing such a broad range of computers and related devices is difficult. The customer must maintain a separate service contract with each manufacturer or vendor. This situation leads to a logistical nightmare of managing multiple maintenance support contracts, inconsistent servicing, overlapping service calls, and delays in troubleshooting problems when more than one vendor's product must be examined. Today's customer would rather work with one service provider that can solve any computer maintenance or repair problem, regardless of manufacturer. By using a single-source supplier, customers reduce total maintenance costs, simplify maintenance support administration, receive timely and consistent servicing, and eliminate conflicts in troubleshooting.

To address this need for one-source service, HP released its Multivendor Support Operation (MSO). MSO will maintain, service, and support all of the site's computers, peripherals, and workstations, regardless of brand.

Presently, MSO provides direct support for:

- · Industry-standard PCs.
- UNIX-based PCs.
- · Apple PCs.
- Industry-standard ASCII and EBCDIC terminals.
- Various mass storage peripherals.
- · Popular printers.
- · Local area networks.

Some of the services provided by MSO include:

- Single-source support. One toll-free telephone number is available to MSO customers for hardware, software, and network support.
- Repair and restoration. HP provides all labor, parts, and materials necessary to maintain the multivendor
  equipment and devices covered in the agreement.
- PC hardware and software diagnosis. HP provides answers to common PC hardware and software questions through on-site or off-site help.

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- ▶ LAN support. HP assists with the design, installation, integration, and maintenance of a customer's multivendor network.
  - Flexible coverage periods and response times.
  - Loaner equipment. In the event a system cannot be fixed within a specified amount of time, HP provides loaner equipment capable of running the customer's applications while the original unit is repaired.
  - · Preventive maintenance. Activities such as cleaning, adjusting, lubricating, inspecting, and testing are performed on a regular basis.
  - Repair reporting. A variety of customer-specified reports on product failures and downtime, parts inventory, support activity, and customer product history will be provided as a management tool for future product acquisition.
  - Installation and relocation management. HP provides all labor, parts, and materials necessary to maintain the multivendor equipment and devices during installation and relocation.

MSO allows customers to receive single-source support for minicomputer and mainframe systems. However, MSO does not provide service directly. MSO manages the customer's contract but assigns the maintenance, repair, and other support work to subcontractors, including third-party maintenance affiliates and vendors who sign joint maintenance agreements with HP.

#### **Multivendor Network Support**

Supporting multivendor networks is complex. Customers must deal with an array of diverse equipment from multiple vendors, making network configuration and management time-consuming, complicated, and expensive. To address the need for specialized support in the network environment, HP released its Network Support Program.

HP's Network Support Program helps customers plan, design, and install networks comprised of heterogeneous computers, equipment, and devices. It also assists in operating, administering, and programming the network. Furthermore, it helps customers diagnose network problems and contact the appropriate party for service and repair. In some cases, HP will run the network remotely for the customer.

HP's Network Support Program addresses network planning, design, installation, and operations through seven services. Included are:

- HP Network Planning and Design. This service helps customers analyze data communications requirements and create a detailed network design.
- HP Network Prepare. This service helps customers develop a network implementation plan to provide a smooth migration of the network into the business.
- HP Wiretest. This service evaluates the suitability of existing twisted-pair cable for use with HP's StarLAN local area network. Its objective is to help customers avoid additional wiring costs whenever possible.
- HP Network Startup. This service helps customers plan and coordinate the configuration and installation of network components.
- HP NetAssure. This service helps customers isolate problems to a specific component of the network, whether its HP's equipment or another vendor's. It also enables HP to directly work with the party responsible for service and repair if the failed device is not an HP model.
- HP Private Packet Network Operations Support. This service enables HP to remotely manage and operate a customer's HP private packet network. Through this service, HP monitors the network, detects



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- faults, and resolves problems on a full- or part-time basis. Furthermore, HP can provide 24-hour technical support assistance through the HP Customer Network Center. Change management, performance analysis, and growth planning are included.
  - HP Customer Education Program. This service trains network manager, and their programmers in network management, administrations, and programming.

The Network Support Program is modular and customizable. HP and customers select only those services required and tailor a support solution that meets specific needs. In addition, the program is broad in scale, encompassing a variety of network technologies and standards. Although it is primarily designed for customers with multivendor equipment, it can be used to address an environment composed of homogeneous or heterogeneous HP computers.  $\Box$