HP 3000 Computer Systems

HEWLETT hp PACKARD

A powerful management tool for today's business data processing

HP 3000 Systems

Put computer power where your work is

Until now, many business firms found their data processing needs could be met only by large computer systems.

Not anymore.

Now, large corporations as well as small businesses are discovering how the capabilities of the HP 3000 can help them solve data handling problems, and do it economically.

Capabilities like a powerful commercial operating system which lets you do batch jobs and interactive processing at the same time, full data management facilities, processing in six languages, and distributed system networking—they're all yours with an HP 3000 system.

The HP 3000 takes the mystique out of data processing and puts the computer power where it's needed—in your warehouse, sales order department, accounting, engineering, manufacturing, or any other location. Via interactive terminals scattered throughout your company, employees can enter data pertaining to their work directly into the computer or immediately retrieve information they need for a project. The result? Data is more accurate and there's no waiting for a report to be produced by someone else.

In the meantime, major financial control and accounting functions, software development, and overall system management remain the province of the data processing department.

This versatile, powerful system is the result of Hewlett-Packard's longtime commitment to advancing computer technology—a commitment typified by several significant industry firsts:

Nov. 1972 — A commercially-oriented multiprogramming operating system on a small computer.

Oct. 1973 — High-level COBOL implementation on a small system.

May 1974 — IMAGE/3000 data base management system with QUERY facility.

May 1977 — DS/3000 software for transparent access to multiple HP 3000 Series II Systems in a distributed network.

But the real importance of all the expertise that has gone into producing the HP 3000 is that it's an easy-to-use system capable of meeting the processing needs of a wide variety of business applications.

How the HP 3000 can help your company

The HP 3000 lets you reach out to every department or corporate division to help in the business of running your business. Depending on your requirements, the HP 3000 can function as a stand-alone system or be tied to another computer.

For small companies: If yours is a small-to-medium size firm, the HP 3000 can fill all your data processing needs.

General business functions such as accounting, payroll, and personnel records are performed in the traditional centralized environment. And while the HP 3000 is doing these jobs, it will also accept inventory data via a remote terminal, generate exception reports, process an order, or help you with sales projections —all this and more without keeping anyone waiting.

For large companies: Here again, the HP 3000 is an intelligent solution to your data processing problems. Using multiple HP 3000s, you can form a network to distribute computer power to every department or division, wherever the work originates. Such a network offers the flexibility to decentralize as much or as little of your data processing load as you desire and still maintain central control. For autonomous divisions of larger corporations the HP 3000 can perform all the data processing, just as in a small independent firm.

Either way—small or large company—you'll find the HP 3000 is the powerful, economical answer to your data handling questions.

HP 3000 systems can be tailored to your company's applications. This typical Model 8 is enhanced with the addition of an extra disc and other peripherals.

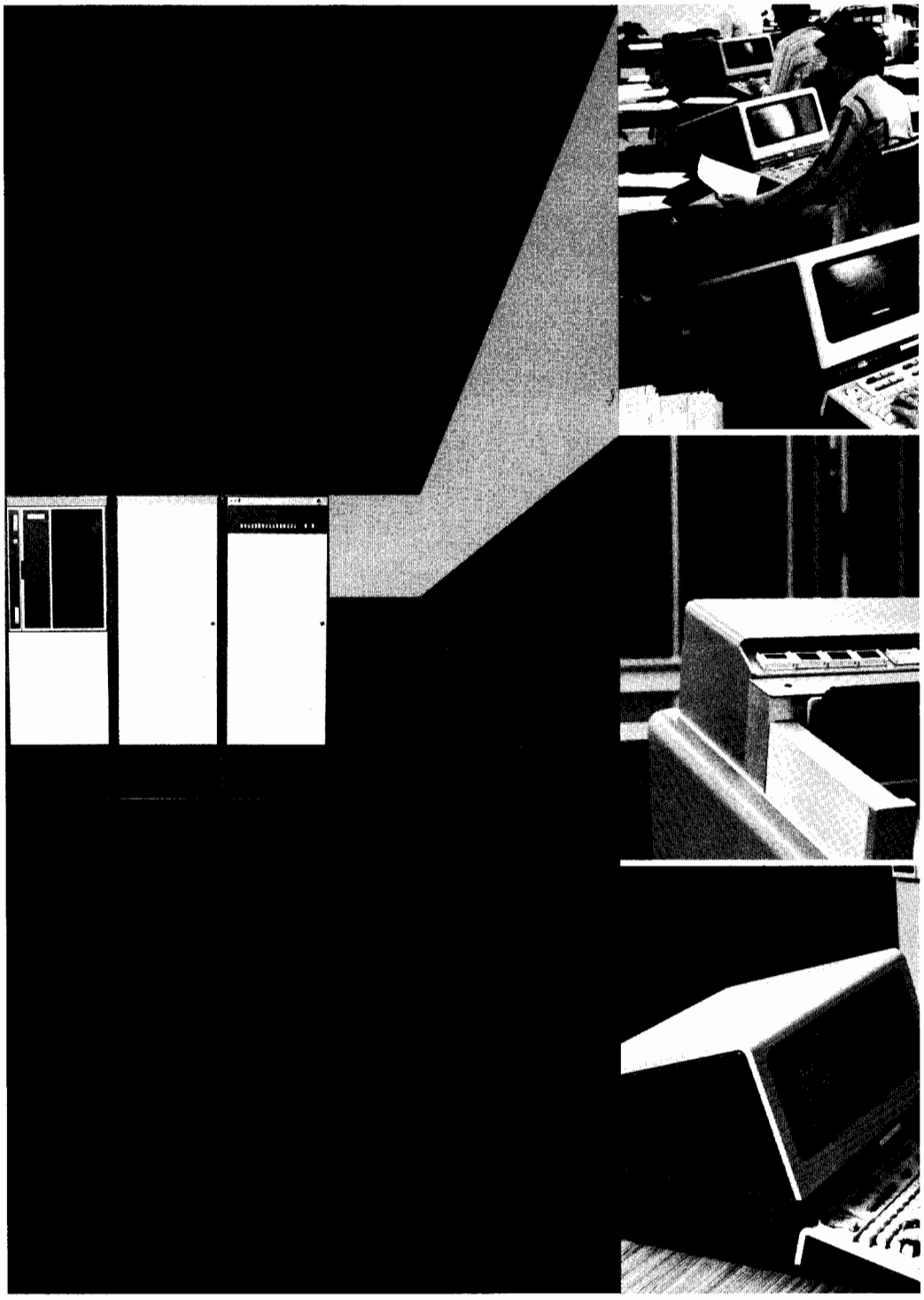
Proven commercial operating system

The secret to managing system resources

The HP 3000's versatility results from the design of its Multiprogramming Executive operating system, MPE, which has been thoroughly proven in commercial environments around the world. Simply stated, the disc-based MPE allocates system resources such as main memory and peripheral devices to each user as required to achieve optimum performance.

Inputs from card readers, tape, or other batch devices are fed into the computer right along with data from interactive terminals. MPE takes all this information and insures that the system responds to every user in an efficient manner. You can operate as many as 63 terminals simultaneously.

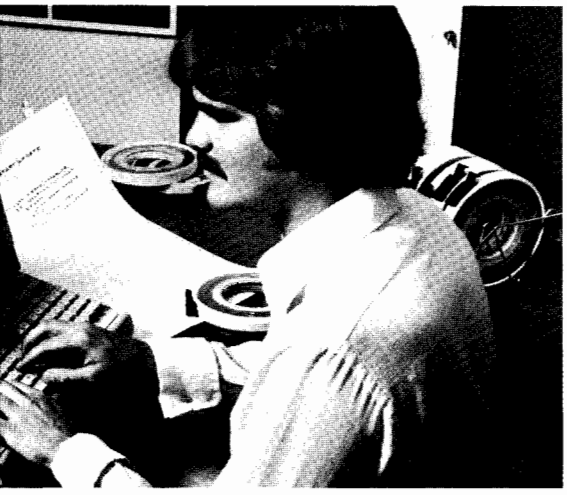
This ability to handle both batch processing and interactive terminals is key to the HP 3000's success in business applications. What it means in practical terms is that, for example, accounting could run the payroll, personnel update employee records, manufacturing revise a parts inventory, the warehouse prepare packing lists, and a programmer develop applications software all at the same time.



Under control of its powerful operating system the HP 3000 processes on-line transactions, runs batch jobs, and handles interactive problem solving and program development at the same time. System resources are shared by all users in an efficient manner, as determined by the operating system.

Full data management

Turning raw facts into meaningful information



A complete family of Hewlett-Packard software products helps you manage your data: MPE file system, KSAM/3000, IMAGE/3000, and QUERY/3000. With these software tools it's easy to convert your company's data into useful statistics and reports, control company records, and retrieve information quickly.

KSAM and MPE files or an IMAGE data base may be addressed through any of five high-level languages including COBOL, RPG II, FORTRAN, BASIC, and SPL.

MPE file system: This portion of MPE provides full, automatic management services for all peripheral devices and files in the system. From the user's point of view it's a device-independent file method which reduces program complexity.

KSAM/3000: An extension to the MPE file system, KSAM lets the programmer create and maintain disc files whose records can be accessed by the value of one or more key fields within the data records.

IMAGE/3000: Through this software the user can describe data base structures, build a data base, access the data, and logically restructure and back it up. Storing information in a data base simplifies its maintenance and manipulation and makes it easy to relate information for retrieval. An IMAGE data base is an information network with records having common attributes chained together to form lists. With IMAGE, the user has centralized control of data and a high degree of security.

IMAGE has proven so popular that it was recently named to the Datapro Software Honor Roll.

QUERY/3000: A self-contained language, QUERY lets the non-programmer search through data bases by using ordinary English key words. By means of an interactive CRT terminal, the user can quickly retrieve and update information, such as an inventory listing or a sales order, and generate exception reports. QUERY speeds program development by making it convenient to manipulate data base information with a new program then test the results immediately.

Distributed system networks

A new concept for expanding processing power economically

HP 3000 computers offer sophisticated systems software and advanced data communications networking capabilities that make it possible to conveniently transfer information from one computer to another across the country or around the world. With such power, the HP 3000 can expand your corporate computing capabilities by adding distributed processing to existing centralized DP facilities. Your central computer handles the large, complex jobs while one or more HP 3000s linked to the central host and to each other process data for specific departments or divisions.

A distributed processing network fully integrates a large computer and HP 3000s to give you the best of both. You get the computing power you need at a cost you can afford. And as a bonus, your data, by being closer to the source, will be more accurate and more accessible.

Further, any user has the resources of the entire network at his disposal. He can remotely access files and data bases or execute commands and programs on other HP 3000s connected to his local system. Of course, the accounting structure and security features of the HP 3000 operating system provide protection against unauthorized use.

The ultimate benefit of a distributed system network is that the information flow within your company is faster and smoother, which, in turn, helps you manage the company better.

The distributed processing concept lets you spread computer power throughout the corporation—wherever it's needed—yet retain central control.

Hardware and software

A path for future system growth

For any organization, future change and growth often bring a need to expand the computer system. HP 3000 systems offer a clear path for growth. A complete selection of hardware and software options is available for incorporation in your system immediately or at a later time.

Hardware options include several line printers, CRT and printer consoles, discs, magnetic tape drives, card readers, and various CRT and hard copy terminals.

Software includes six high-level programming languages (COBOL, RPG II, FORTRAN, BASIC, SPL, and APL); the DEL/3000 data entry package; IMAGE, QUERY, and KSAM for data management; DS/3000 for direct communications between HP 3000 Series II systems; and an IBM 2780/3780 emulator to transfer data to remote processors. For educational institutions, SIS/3000, a special application package is offered.

Using these hardware and software tools, your HP 3000 system can grow as your business needs grow. Owners of Hewlett-Packard systems may upgrade their computer at any time in the future to increase performance. And, this can be accomplished without obsoleting your hardware or software.

Hewlett-Packard support services

A continuing commitment to you

At Hewlett-Packard we want you to get the best possible performance from your HP 3000 system. That's why we provide a full program of support services ranging from site preparation consultation to long-term maintenance. The objective is to get your system installed and operational quickly, and keep it running smoothly.

System installation: A Hewlett-Packard Customer Engineer visits your site prior to delivery of the system to advise you on how to prepare the area where the computer is to be located. After delivery, he will supervise the installation and make certain the system functions properly.

Training classes: To obtain the best performance from the HP 3000, it is essential that your data processing people be adequately trained. For this purpose we provide a comprehensive series of courses to help your staff learn system operation and management. You may elect to send key personnel to the formal courses at one of our training centers or have classes conducted on site by a Systems Engineer.

Software support: The HP 3000 software is fully supported to insure your success. As software improvements are made, you automatically receive updates. To assist you in solving software problems, we offer phone-in service for minor questions and on-site consulting for more complex problems.

Service and maintenance: With a view to keeping your system up and running, Hewlett-Packard employs a worldwide field service organization. By purchasing a maintenance agreement, you are assured of timely response to emergency service needs in conjunction with regular preventive maintenance visits by a Customer Engineer.

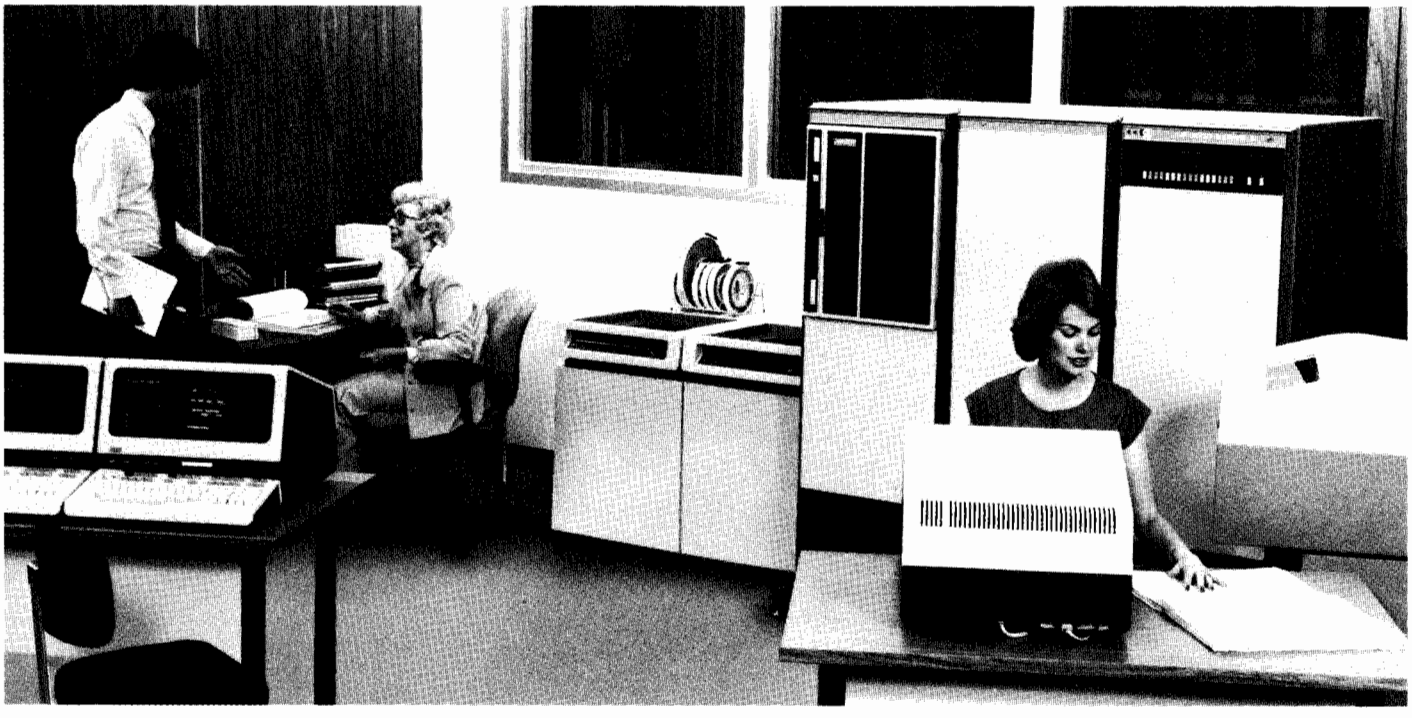
HP 3000 System configurations

Choose the system that fits your applications

To satisfy the data processing and budgeting requirements of a broad spectrum of users, two standard HP 3000 configurations are offered. These standard models can be further enhanced simply by adding hardware from a wide selection of peripherals, software from any of the six programming languages and three data base management packages, or hardware/software options for data communications.

Model 6: Configured to handle small-to-medium scale business data processing jobs, the Model 6 is an excellent choice for dedicated, stand-alone applications or for a satellite processing system tied into a central EDP operation, Concurrent batch and interactive terminal processing capabilities give this system the flexibility and performance to adapt to a variety of tasks. Model 6 includes a 128 kilobyte semiconductor fault control memory, 50-megabyte disc and controller, 1600 bpi magnetic tape unit, 16-port asynchronous terminal controller, system CRT console, system desk, MPE operating system, and fundamental operating software. The main memory of this configuration may be expanded to 256 kilobytes; seven more 50-megabyte discs may also be added.

Model 8: A large memory gives this configuration the power to fulfill the data processing demands of most users for a wide range of applications. Many organizations use the Model 8 to handle their entire data processing load. Larger companies could link it to a central host or other Hewlett-Packard computers to form a network. The standard Model 8 includes a 320 kilobyte semiconductor fault control memory (expandable to 512 kilobytes), 50 megabyte disc and controller, 1600 bpi magnetic tape unit, 16-port asynchronous terminal controller, CRT console, desk, MPE operating system, and fundamental operating software. As with the Model 6, seven 50-megabyte discs may also be added to the system.



Hewlett-Packard Computer Systems Group

An integrated approach to building computer systems

As a leading high-technology corporation, Hewlett-Packard has earned an enviable reputation as a manufacturer of computers for technical, educational, and commercial applications. To implement our goal of offering an exceptional computer system at reasonable cost, we design and produce most system peripherals in-house. Hewlett-Packard computer systems and peripherals are produced and serviced by seven divisions with over 3700 employees in the U.S. and Europe. These seven divisions comprise the Computer Systems Group.

General Systems Division
Santa Clara, California
HP 3000 Series I and Series II business data processing systems, HP 2026 source data entry and communications systems, HP 2000 multi-terminal/RJE computer systems.

Data Systems Division
Cupertino, California
General purpose minicomputers, measurement control and computational systems, automated test systems.

Data Terminals Division
Cupertino, California
HP 2640 family of intelligent interactive display terminals.

Disc Memory Division
Boise, Idaho
Disc drives for Hewlett-Packard computer systems.

Boise Division
Boise, Idaho
Line printers, magnetic tape drives, hard copy terminals.

Grenoble Division
Grenoble, France
Data collection devices for real-time factory data collection and other applications.

Computer Service Division
Cupertino, California
Maintenance and service on Hewlett-Packard computers.

For more information on HP 3000 Computer Systems, contact your local Hewlett-Packard representative, or write

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