

---

# IBM ES/9370 Information System

## Product Enhancement

IBM's announcement of new entry-level Enterprise System/9370 Models 10, 12, and 14 offers users more affordable ways to distribute System/370 applications to dispersed sites.

### Networked or Standalone

Users can manage the System/370 capabilities of the new models from a central System/370 host or they can run them as standalone systems in, for example, computer-aided design and engineering environments.

IBM also announced new terms and conditions on the pricing of System/370 software, under a new category called Entry End-User/370. This category applies to the Models 10, 12, and 14 because of the unique cost advantages of the centrally supported applications that the new systems serve.

Users gain other price benefits through the innovation adaptation of certain Personal System/2 technologies in the new models. For example, the Models 10, 12, and 14 employ Micro Channel Architecture, IBM's microcomputing technology for data pathways, and an Intel 80386 input/output (I/O) processor for control of selected I/O devices, such as storage facilities and printers.

### DOS and OS/2 Support

On the Model 14, users have the additional option of running DOS or OS/2 applications, because the Model 14 includes, in the same enclosure, a PS/2 processor as well as a System/370 processor.

With an optional Data Exchange Adapter and its interfaces, this Bi-Processor capability in the Model 14 enables users and IBM Business Partners to develop programs for cooperative processing between System/370 and PS/2 applications. Software and device support available for the PS/2 can be combined with functions and applications available on the System/370.

### Communications Flexibility

With all of the new models, users can custom-program the communications subsystem for specialized, non-standard communications protocols.

Customers and third-party vendors can, therefore, develop highly specific and innovative solutions for the plant-floor, point-of-sale data collection, or laboratories that use diverse kinds of equipment.

More basically, the new models also support lower price entry points into

SNA networks and a variety of local and wide area networks.

The new models are designed for installation in the office environment, with low electrical power requirements, low noise levels, and small floor space requirements.

The System/370 main memory in each model starts at 4M bytes and is expandable in 4M-byte increments up to 16M bytes. Two System/370 direct-access storage devices (DASD), each with a capacity of 295M bytes, are standard. Up to four more DASD units can be added in the same cabinet.

### Connectivity Features

Integrated connectivity facilities include support for Token-Ring, Ethernet, X.25, HDLC, SDLC, and bisynchronous or asynchronous communications. For high-performance graphics requirements, an optional integrated adapter is also offered for connecting up to four IBM 5080 graphics terminals.

The new models are eligible, at no additional charge, for IBM's Software Preload Service. This offers users the convenience of having their System/370 operating system and System/370 applications—as supplied by them or IBM Business Partners—loaded onto the system prior to shipment from IBM.

Prices, with basic configurations of 4M bytes of memory and two DASD units, are \$29,900 for the Model 10, \$36,900 for the Model 12, and \$35,900 for the Model 14.

---

## Product Family Enhancement—April 1989

In an earlier overhaul of the ES/9370 line, IBM Corporation introduced a low-end 9370 model; enhanced the Model 50; and discontinued the Models 20 and 40. Additionally, the Model 60 will only be available on a limited basis. The Models 20 and 40 were withdrawn from marketing in July 1989.

IBM further announced improvements involving 9370 communications, system availability, and

system management capabilities. Additionally, IBM enhanced the DPPX/370 operating system, one of several operating systems that run on the 9370. The new, more powerful low-end model, together with DPPX/370 improvements, is partly directed towards IBM 8100 users. The company has been encouraging 8100 users to migrate to IBM 370 architecture using DPPX/370 as a migration tool.

The Model 25, the new entry-level model until the recent announcements, replaced the Model 20, the previous entry-level machine. The Model 25 represents a 150 percent increase in relative performance compared to the Model 20, IBM said. Performance gains depend on work load mix. The company also expanded I/O attachment capability and aggregate data rate. Model 25 users will be charged for software at Processor Group 10 rates. The Model 25 sells for \$26,250 and carries a \$231 minimum monthly maintenance charge. The monthly rental charge is \$3,650.

The Model 25 can be configured with 4, 8, or 16 megabytes of main memory. The machine contains two internal I/O buses and can accommodate 9 to 39 card slots, if the I/O Expansion Unit (feature 5030) is included in the configuration. Users can attach up to two System/370 channels, up to four DASD/tape attachments, up to 12 Workstation Subsystem Controllers, and up to 15 Communication Processors. The machine also provides support for ACRITH instructions.

The enhanced Model 50 provides up to 26 percent greater processor performance than the previous Model 50 version. Installed Model 50 machines will be upgraded to enhanced Model 50 performance at no charge. Model 50 purchase price remains unchanged.

The Model 50 features 8 and 16 megabytes of main memory, two to four I/O buses, and expanded I/O bus and I/O slot capabilities. Eight I/O slots, split across two buses, are standard. I/O Card Units and I/O Expansion Units permit the number of I/O slots to be expanded to a maximum of 100.

Users can attach up to four System/370 channels, up to eight DASD/tape attachments, up to 12 Workstation Subsystem Controllers, and up to 15

Communication Processors. The Model 50 also supports ACRITH instructions.

IBM announced the following upgrades and purchase prices:

- 9373-25 to 9373-30—\$14,000
- 9373-25 to enhanced 9375-50—\$30,000
- 9373-25 to 9377-80—\$120,000
- 9373-25 to 9377-90—\$180,000

An upgrade of a Model 20 or 30 to an enhanced Model 50 became available in May 1989. All other upgrades became available in August 1989.

IBM also enhanced the DPPX/370 operating system. DPPX/370 Release 2 includes a new CICS command-level interface, Cobol II Debug Facility, and other Cobol II enhancements. Additionally, it features a new Personal Services/DPPX and DisplayWrite/DPPX, and enhanced communications support, serviceability, and network management.

For communications, IBM announced the Workstation Subsystem Controller (feature 6120), a single card that combines the functions and performance of the I/O Processor (feature 6020) and the I/O Adapter (feature 6021), which were

withdrawn. The enhanced ASCII Subsystem Controller (features 6130 and 6033) comes with additional functions that became available in May. These include Extended Data Stream support for ASCII terminals and printers and the Token-Ring 16/4M bps Adapter feature (feature 6134) for the IBM Token-Ring Subsystem.

To enhance system availability, IBM announced improvements for Problem Analysis, a Secondary Load Source, and a Shared Power Controller. The Secondary Load Source improvement lets users back up the primary 9370 system IML data to a secondary DASD. The backup would be used should the primary load source fail.

The new 9370 Shared Power Controller (feature 9402) allows multiple power paths between attached systems and an IBM 9309 Model 2 Rack Enclosure. The enclosure contains IBM 9332 DASD devices or other devices capable of a shared interface. The feature permits up to eight systems to power up an IBM 9309-2 rack containing shared devices.

The Dual Copy feature automatically provides a duplicate copy of a 9332/9335 DASD volume. The Dual Copy feature is available as a nonstandard RPQ. All other features became available in May 1989. ■