Virtual Machine/System Product
Release 3
Program Number 5664-167

Virtual Machine/System Product (VM/SP) Release 3 contains the functions available in Release 2 plus the following:

- Support of Structured Query Language/Data System (SQL/DS), a relational data base program (5748-XXJ). SQL/DS Release 2 operates on VM/SP Release 3 without a guest VSE operating system and without VSE/VSAM.

- System Product interpreter, a command and macro processor.

- Enhanced programmable operator functions:
  - Message routing with nicknames
  - Remote node availability
  - Enhanced text comparison
  - EXEC action routines

- Enhanced serviceability:
  - Symptom records: The VM Interactive Problem Control Program System Extension (VM IPCS/E, 5748-SA1) Release 2 is required to implement this enhancement.
  - System/370 program event recording (PER) support: Uses the System/370 hardware program event recording (PER) feature to monitor VM system branches, instruction fetches, and storage or register alterations.

- CP extensions for application programs:
  - DASD block I/O system service: Allows virtual machine access to fixed blocks on CMS-formatted virtual DASD I/O devices.
  - Inter-user communication vehicle (IUCV) extensions:
    - Fast communications through data specifications in a parameter list

- Extended mask capability for individual IUCV control interrupts

- Expanded trace capability

- Diagnose support of time zone differential from Greenwich Mean Time.

- CMS extensions for application programs:
  - CMS file system extensions:
    - A block size of 512 bytes is supported
    - Additional or extended CMS commands and functions are provided
  - IUCV support: CMS now supports IUCV communications.
  - CMS wait on ECB: Allows the ability to wait on an Event Control Block (ECB) or a list of ECBs.
  - CMS ABEND exits: Allows programs to specify the address of a routine that will receive control before CMS abend recovery begins.
  - RDTERM direct capability: Allows a line to be read directly to a virtual machine console.
  - Enhanced immediate command support: Allows users to define their own immediate commands.

- VSE/VSAM Release 3 is supported by VM/SP Release 3. VSE/VSAM Release 2 is not supported by VM/SP Release 3.

- Additional or improved System Product editor functions:
- Prefix macro support
- Selective line editing
- Screen control
- Extended data stream (color)
- Vertical screen split
- Additional data manipulating capabilities

The Display Editing System 5796-PJP (EDGAR) compatibility/migration functions are not available with VM/SP Release 3.

- Missing Interrupt Handler support monitors system I/O activity for interrupts not completing within a certain period.

- Speed Matching Buffer support for the IBM 3375 allows use of the IBM 3375 when connected to a 1.5 megabyte channel.

**Specified Operating Environment**

**Hardware Requirements**

VM/SP is designed to run on:

- IBM System/370 Model 135, 135-3
- IBM System/370 Model 138
- IBM System/370 Model 145, 145-3
- IBM System/370 Model 148
- IBM System/370 Model 155II
- IBM System/370 Model 158, 158-3, 158AP, 158MP
- IBM System/370 Model 165II
- IBM System/370 Model 168, 168-3, 168AP, 168MP
- IBM 3031, 3031AP
- IBM 3032
- IBM 3033, 3033AP, 3033AP-2, 3033MP
- IBM 3033 Model Group N
- IBM 3033 Model Group S

- IBM 3081 Processor Unit Model D16
- IBM 4300 processors

VM/SP Release 3 support of AP/MP and 3081 Processor Unit Model D16 will be available in first quarter 1984.

**Real Storage Requirement**

VM/SP Release 3 requires a minimum user-accessible storage of 512K.

**Programming Requirements**

The VM/System Product is designed to operate with VM/370 Release 6 as a base. VSE/VSAM Release 3 program product support and CMS/DOS services for VSE/Advanced Functions Release 3 are supported by VM/SP Release 3.

MVS support for data exchange between VM/SP Release 3 and MVS is provided by the TSO Extensions (TSO/E) licensed program.

**Warranty**

VM/SP is warranted to conform to its Licensed Program Specifications when shipped to the customer if properly used in the Specified Operating Environment.

Licensed Program Specifications may be updated from time to time and such updates may constitute a change in the specifications.

Following the discontinuance of all program services, this program will be distributed on an 'As Is' basis without warranty of any kind either express or implied.