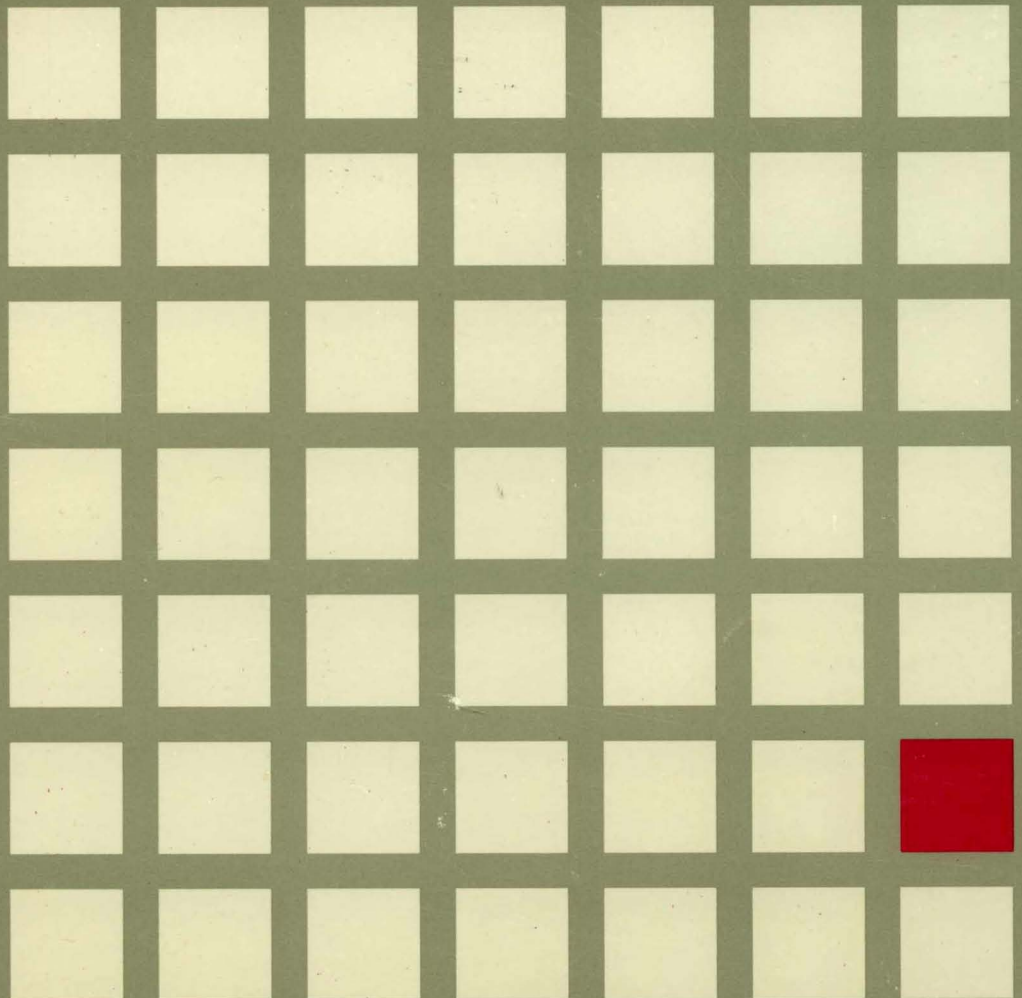




Virtual Machine/System Product
Library Guide and Master Index
Release 6

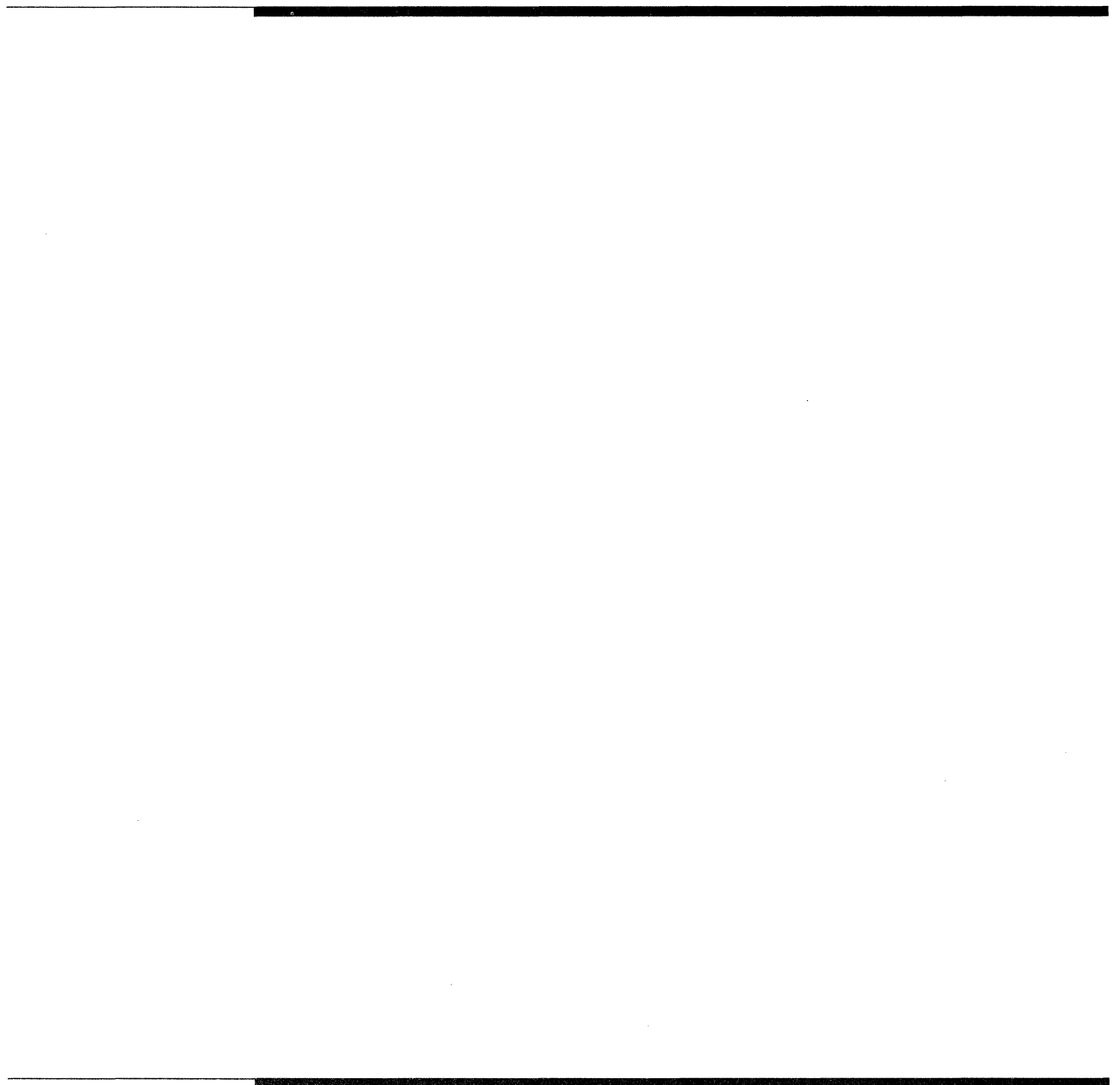
GC19-6207-05





Virtual Machine/System Product
Library Guide and Master Index
Release 6

GC19-6207-05



Sixth Edition (August 1988)

This edition, GC19-6207-05, is a major revision of GC19-6207-04, and applies to Release 6 of the IBM Virtual Machine/System Product (5664-167) and to all subsequent releases until otherwise indicated in new editions or Technical Newsletters. Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest *IBM System/370, 30xx, 4300, and 9370 Processors Bibliography*, GC20-0001, for the editions that are applicable and current.

Summary of Changes

For a list of changes, see "Summary of Changes" on page 377.

Changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

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Preface

This manual explains the organization of the VM/SP publications library. It also provides a master index to the contents of the library, and a directory of the programming interfaces that customers can use which are documented in the library.

Who This Book Is For

The audience for this manual is anyone who uses the VM/SP library.

System Programmers
System Analysts
System Support

System Operators
Application Programmers
Installation Managers

System Planners
Program Developers
System Administration

How This Book Is Organized

“Chapter 1. The VM/SP Library Guide” describes how the library is organized and helps you decide which manual to read first. It explains the tasks the library is designed to help a user do, and how the cover design and color relate to these tasks. It also provides short descriptions of the contents of each manual in the library. The “Guide” also tells how to order the manuals and coordinating binders, and describes library-related services, such as the System Library Subscription Service (SLSS).

“Chapter 2. Master Index” provides index references to the VM/SP library, plus instructions on how to use the Index and understand the format of the index entries.

The “Master Index Code Table” helps you translate the book codes found in the index entries, and find which binders the books are located in. This table also appears on a foldout sheet at the end of the manual.

The Master Index directs you to the publication(s) that contains the specific information you are looking for.

How To Use This Book

To effectively use this book, you should:

- Refer to Chapter 1 to learn about the organization of the VM/SP library and the contents of the individual manuals in the library. Use this chapter to determine which manual is really the correct one for your needs.
- Refer to Chapter 3, the Master Index, to find the location of a specific piece of information, or to quickly point you to the book(s) containing information on a general topic which you are interested in.

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Chapter 1. The VM/SP Library Guide

In this chapter you can learn about the organization of the entire library, as well as the contents of the individual manuals. This information will help you determine the proper VM/SP manuals for your needs. This chapter also describes library related services, such as methods for ordering, updating, and commenting on library manuals.

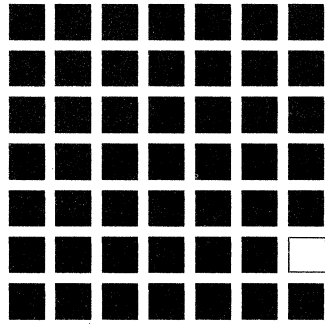
Explaining the VM/SP Library

Task Organization

The VM/SP library is organized according to the nine major tasks that computer users perform. The tasks are:

Evaluation	Examining and judging the applicability of an IBM product to an installation's needs.
Planning	Making fundamental decisions about the options a program offers. Planning is an iterative task in that many of the decisions are made before installation, continually evaluated after installation, and revised as appropriate.
Installation	Making a program ready for use.
Administration	Defining the characteristics of data processing resources to a program. The resources may be data files, data bases, programs, users, etc.
Customization	Enhancing, extending, and otherwise altering an IBM program to meet an installation's special requirements.
Operation	Getting a program running, monitoring it to keep it operating, and shutting it down when no longer needed.
Application Development	Designing, coding, compiling, executing, debugging, and maintaining application programs to perform specific functions.
End Use	Directing use of an IBM program for the purpose for which it was provided.
Diagnosis	Identifying the IBM program that is the source of a programming problem, describing the problem, comparing it to similar known problems, reporting a new problem, and correcting the problem.

The Cover Design



The cover design of the VM/SP library is a graphic representation of the VM system image, variations of which appear on other VM system libraries. The grid symbolizes the multiple virtual machines within the real machine of a VM system. In the VM/SP library, the colored square in the grid represents the task which that particular book help you to perform. There are nine basic task categories performed by users in a VM environment, each represented by a different color:

Blue	Evaluation
Green	Planning
Red	Installation
Purple	Diagnosis
Orange	Customization
Yellow	Operation
Cranberry	End Use
Turquoise	Administration
Pink	Application Development

Binders and Binder Labels

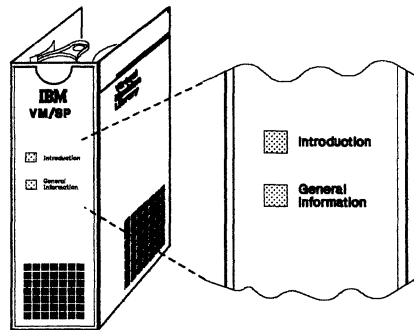


Figure 1. A Binder Label

Binders customized for VM/SP are available to help you organize and store your library. Binder label inserts, which fit into the sleeves on the binder's front and spine, indicate which books each binder contains and which task they support.

The binder shown in Figure 1 contains these manuals:

VM/SP Introduction
VM/SP General Information

Manuals are grouped by task into one or more binders. The spine of each binder lists the manuals included in that binder, with a small square next to each title indicating the task color of that manual. Figure 2 on page 4 shows the arrangement of the library in binders.

Note: The publications *CMS Primer*, *CMS Primer for Line-Oriented Terminals*, *Using Release 6 Enhancements*, *Glossary*, and *Licensed Program Specifications* are also part of the VM/SP library, but are not shown in the binders.

VM/SP Library in Binders

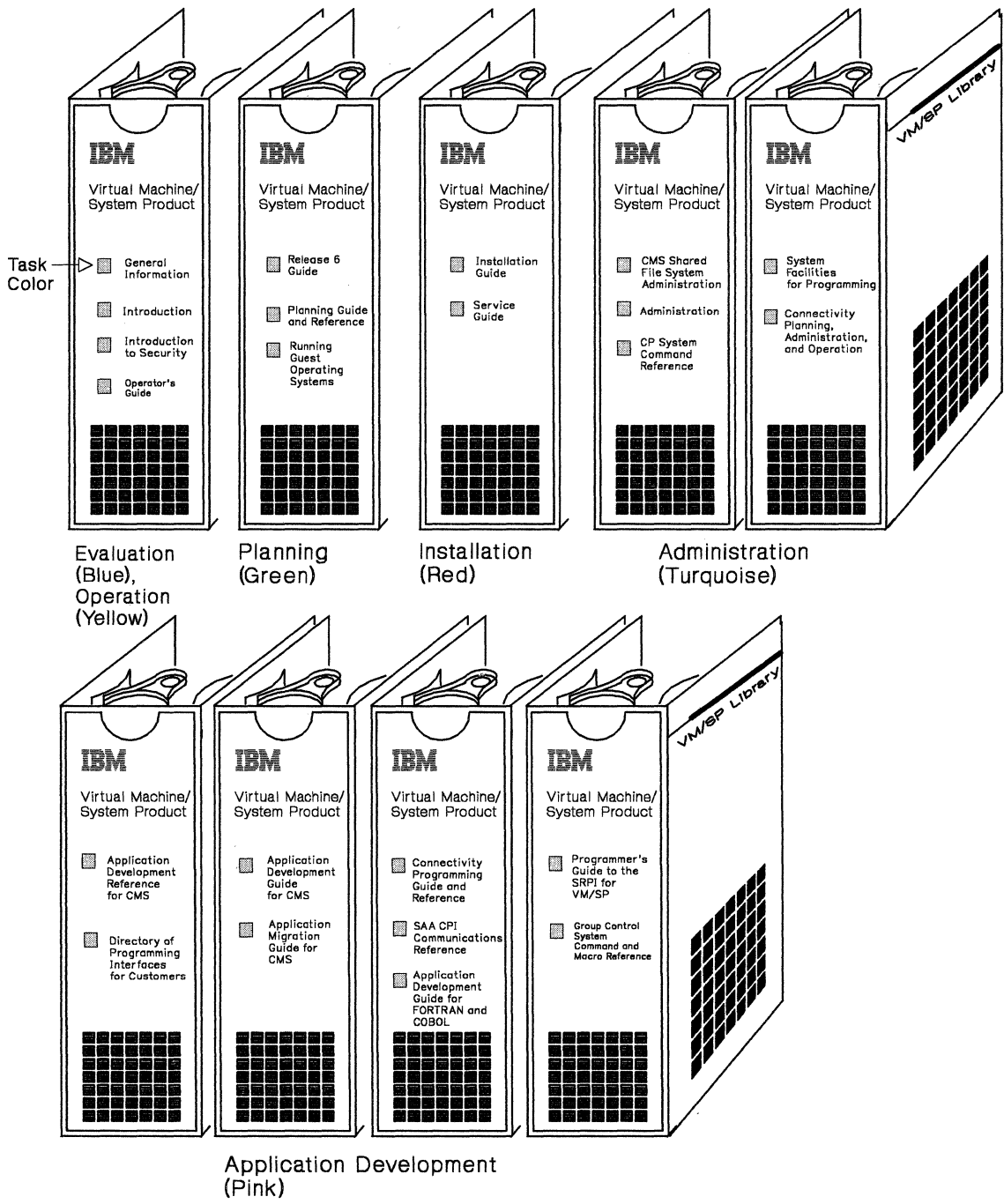
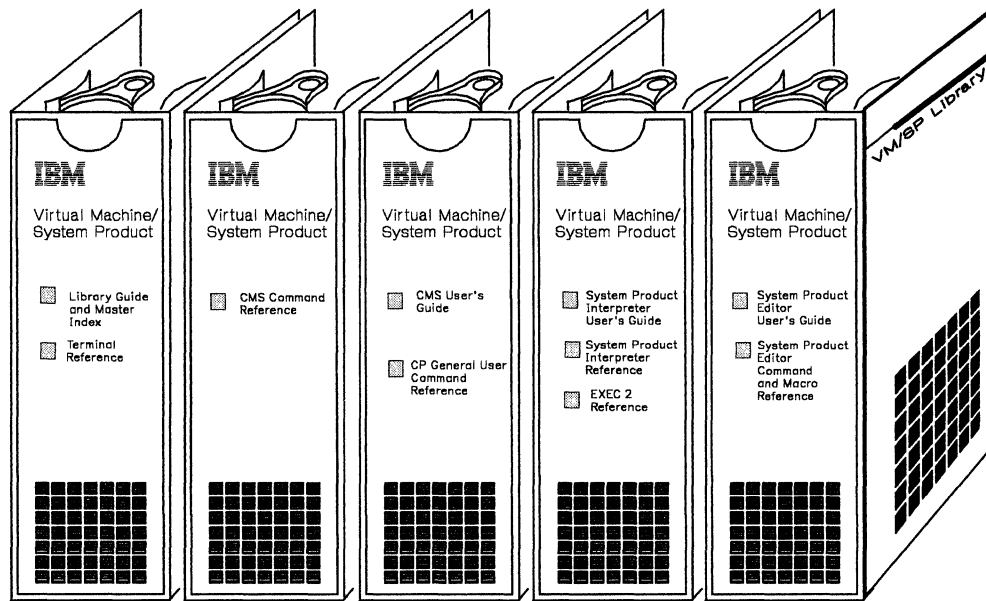
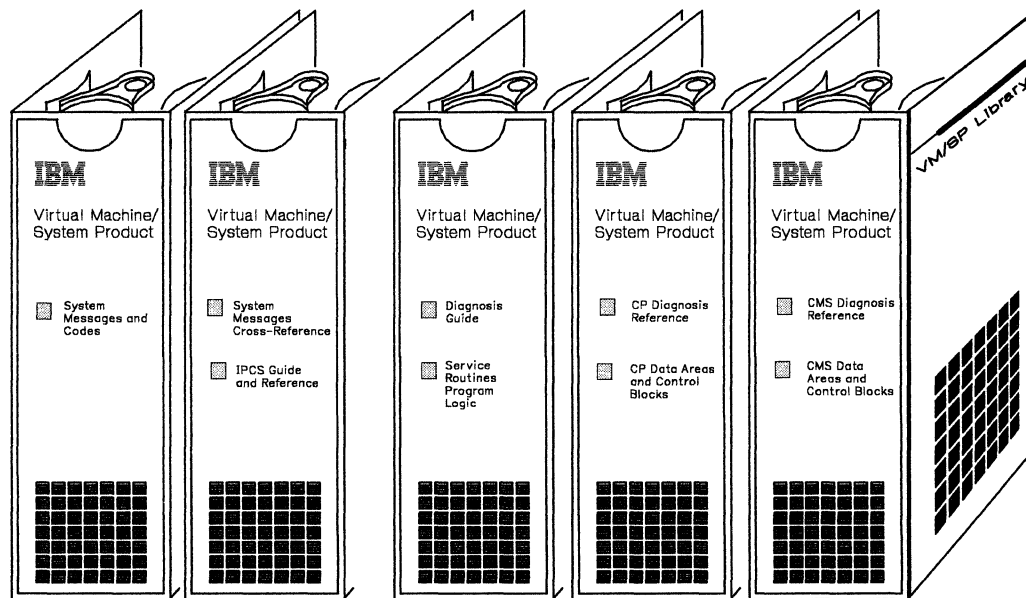


Figure 2 (Part 1 of 2). Library Organization in Binders

VM/SP Library in Binders



End Use (Cranberry)



Diagnosis (Purple)

Diagnosis (Licensed)

Figure 2 (Part 2 of 2). Library Organization in Binders

Explaining VM/SP Publications

What Do the Titles Mean?

The first part of the title of a manual identifies the program product that the manual applies to; the subsequent parts more specifically identify the task that the manual helps you perform. For example, the first part of the title *Virtual Machine/System Product Installation Guide* identifies the product as a Virtual Machine/System Product, and the second part identifies the task that the manual describes, installation.

Certain key words in the title indicate the level or kind of information that the manual contains, and are standard in VM system libraries. For example, the words *introduction* and *general information* in a title indicate general and conceptual material. These introductory manuals contain basic information and develop the vocabulary used by more detailed manuals.

A *guide* generally contains procedural information or step-by-step instructions on how to do something; for example, the *Virtual Machine/System Product System Product Editor User's Guide* explains how to use the Editor to perform different tasks.

A *reference* manual is a source of information usually arranged alphabetically, such as the *Virtual Machine/System Product CMS Command Reference*.

A *logic* manual is a kind of reference manual that describes the internal structure of a product; for example, *Virtual Machine/ System Product Service Routines Program Logic*.

A *messages* manual is a kind of reference manual that lists and explains the communications that the system makes to the user and suggests appropriate responses or actions. *Virtual Machine/System Product System Messages and Codes* is an example of a title for a messages manual.

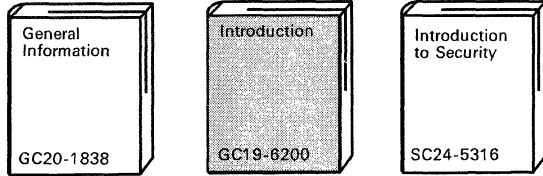
What Manual Should I Read First?

We suggest that you read the *VM/SP General Information* manual first. It gives an overview of VM/SP and describes how to use it. Once you have read this manual, you can more easily decide what other manuals you will need to use. The manuals you choose will depend on the task you want to perform. Each VM/SP manual focuses on one major task (like installation). Within each major task are smaller subtasks (like installing hardware or installing an optional program). The library chart on the next two pages shows you the task-oriented design of the VM/SP library.

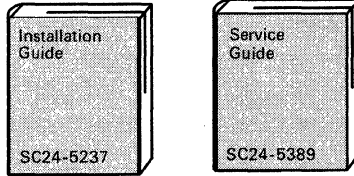
If you are already familiar with the library and are only interested in how it has changed from the previous release, we suggest that you read the *Release Guide* published for that release. It explains the changes and cites references that contain additional information about a particular change.

VM/SP RELEASE 6 LIBRARY

Evaluation



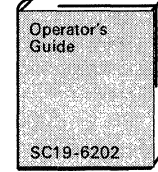
Installation and Service



Planning



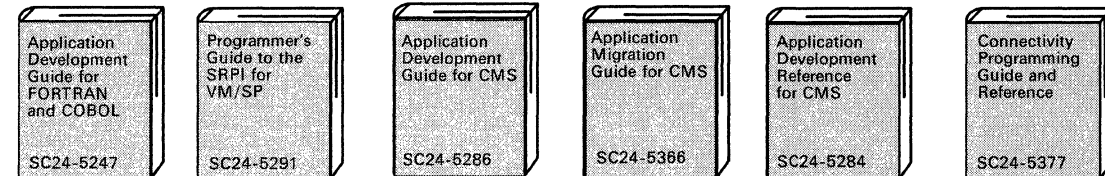
Operation



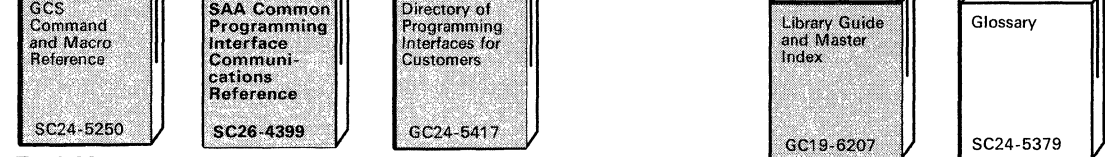
Administration



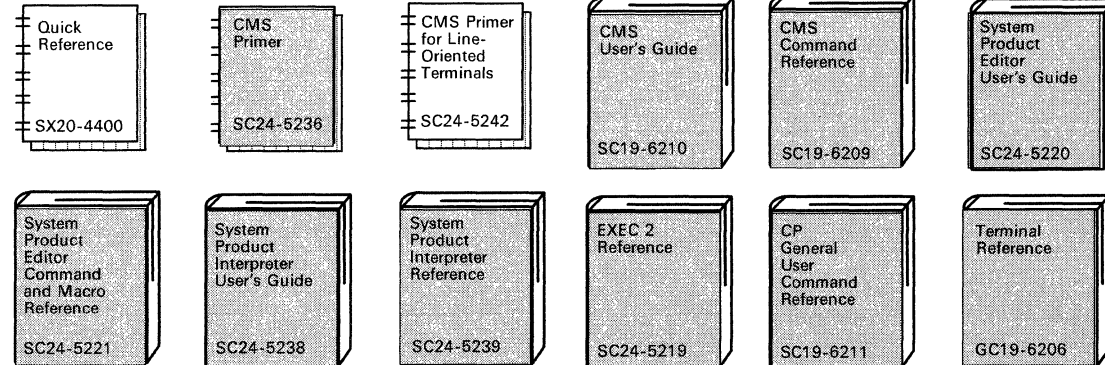
Application Development



Index/Glossary



End Use




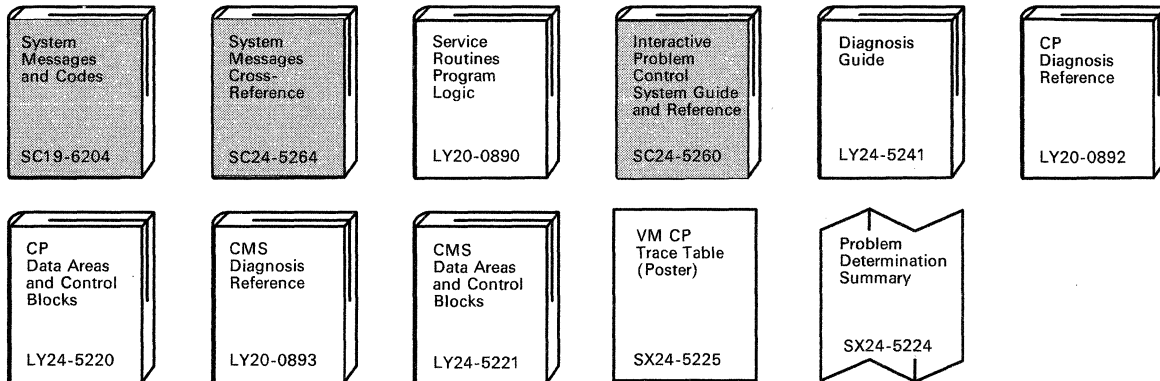
 one copy of each shaded manual automatically received with product tape

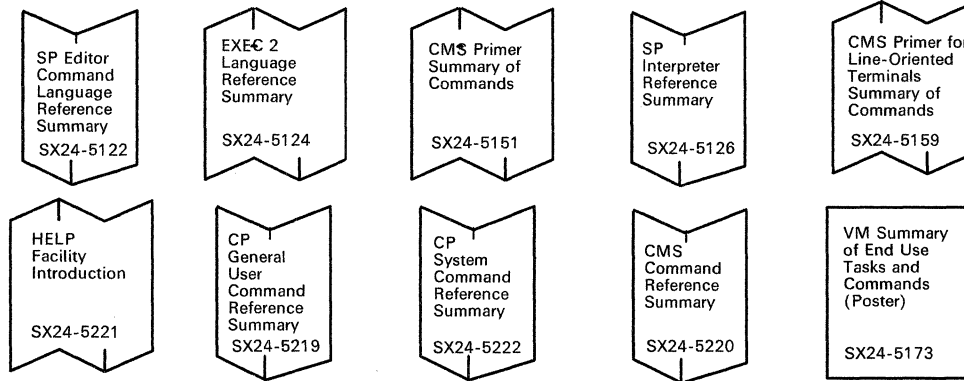
Figure 3 (Part 1 of 2). The VM/SP Release 6 Library

VM/SP RELEASE 6 LIBRARY

Diagnosis



Reference Summaries



Auxiliary Communication Support

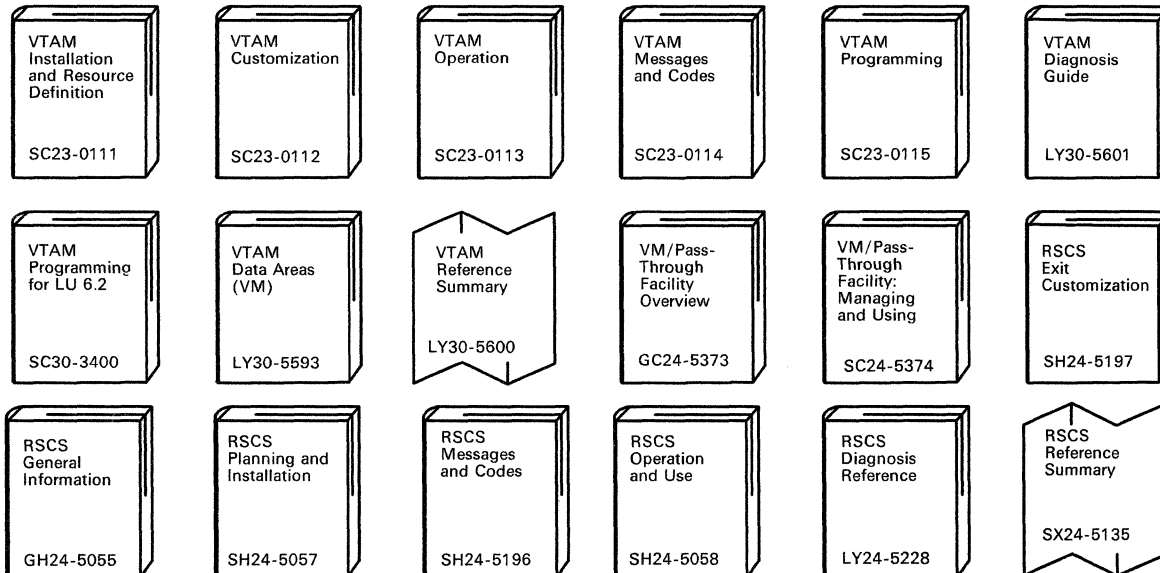


Figure 3 (Part 2 of 2). The VM/SP Release 6 Library

Using a Manual

The first time you use a manual, start with its **Preface**. This will introduce you to the manual's:

- Purpose
- Audience
- Main subject
- Major topics.

It will also tell you if you need any previous knowledge of (or need to have read any specific books about) the subject matter in order to use the book effectively.

Whenever you want to locate a subtask in a manual:

- Look at the **Table of Contents** in the front. It tells what each chapter and appendix contains, and is a quick way to get an overview of the information in the manual.
- Look at the **Index** in the back. It contains detailed references to the manual's contents.

What Are Revision Bars?

The entire content of a manual does not usually change when it is revised, or when a TNL is issued. New or changed information is marked with vertical "revision bars" to the left of the text.

Look to the left of this sentence to see a revision bar.

Abstracts of Manuals

The following *abstracts* briefly describe the contents of the various manuals; they should help you identify which is best suited to your task. The titles are listed alphabetically.

Administration, SC24-5285

This is a reference book for the system administrator and others who carry out and extend the functions of IBM's Virtual Machine/System Product (VM/SP). It assumes some experience with programming concepts and techniques. This reference consists of three parts and an appendix:

Part 1: Tailoring Your VM/SP (Chapters 1-9) describes some functions of VM/SP and provides guidance to the system administrator in tailoring those functions.

Part 2: Performance (Chapters 10-11) describes options available in VM/SP to analyze and improve the performance of virtual machines and operating systems.

Part 3: Printer Information (Chapters 12-13) provides information about various types of printers.

Appendix, "VM/SP Monitor Tape Format and Content" describes the format and contents of data records for classes and codes of MONITOR CALL.

This book contains information previously found in the Release 5 book *CP for System Programming*.

VM Application Migration Guide for CMS, SC24-5366

The *VM/SP Application Migration Guide for CMS* provides application program migration information for application programmers and system programmers who are migrating programs to VM/SP Release 6. It summarizes some of the new and changed features of CMS, including Shared File System compatibility and exploitation, Callable Services Library features, the CMS formalized programming interface, Extended Architecture support in CMS, and CMS functional changes for calling and handling programs, handling interrupts, managing storage and saved segments, and using OS/MVS simulation.

Application Development Guide for FORTRAN and COBOL, SC24-5247

The *Application Development Guide for FORTRAN AND COBOL* tells FORTRAN and COBOL application programmers how to compile, link, load, run, test, and debug programs using CMS. It also contains information on using the Interactive System Productivity Facility (ISPF) for dialog management and the Structured Query Language/Data System (SQL/DS) for data base management.

Application Development Guide for CMS, SC24-5286

The *VM/SP Application Development Guide for CMS* provides application programmers and system programmers with information about CMS. This information includes details on the CMS programming interface and CMS architecture, using CMS native services (to handle interrupts, obtain free storage, perform I/O, and process abends), and managing CMS programs (using CMS services to build, load, execute, and update programs and program packages). It also includes information on developing OS/MVS and VSE programs under CMS, and using Access Method Services and VSAM under CMS and CMS/DOS. Much of the information in this book was formerly found in *CMS for System Programming*.

Application Development Reference for CMS, SC24-5284

All of the information contained in the Release 5 CMS Macros and Functions Reference is now in this manual. New CMS macros are also incorporated. In addition to detailed reference information about CMS assembler language macro instructions and CMS functions, a callable services library (CSL) is described. The routines in this library can be called from assembler, COBOL, VS Fortran, PL/I, VS Pascal, and REXX languages. Many of these routines facilitate the use of the CMS Shared File System.

The manual is intended for application programmers, system programmers, and IBM system support personnel.

CMS Command Reference, SC19-6209

This publication provides users of the Conversational Monitor System (CMS) component of VM/SP with detailed reference information about command syntax and usage for: CMS commands, EDIT subcommands, HELP format words, DEBUG commands, EXEC control statements, special variables, and built-in functions.

CMS Primer, SC24-5236

This manual teaches you, as a new user, how to do your work using VM/SP and a video display terminal. The primer presents only a subset of all the functions and commands available with VM/SP. The material is presented in an interesting manner with suggested exercises included in the text.

CMS Primer for Line-Oriented Terminals, SC24-5242

This manual is an interactive tutorial for VM/SP users of line-oriented (line mode) video display terminals. The manual, which is similar in scope and content to the *VM/SP CMS Primer*, is designed to quickly give the reader a working knowledge of VM/SP. Topics include logging on, editing, managing, and printing files, using the Document Composition Facility (SCRIPT/VS) to format files, and writing EXECs.

CMS Shared File System Administration, SC24-5367

This book helps system administrators and programmers administrate file sharing in CMS. It includes information about managing users and storage, protecting and securing data, creating and managing file pools and file pool catalogs, monitoring performance, accounting and tracing the system.

CMS User's Guide, SC19-6210

This manual contains general information on the Conversational Monitor System (CMS) component of VM/SP. It provides information and examples regarding the CMS Shared File System, the CMS batch facility, the HELP facility, and windowing support. Also included are examples on using the System Product Editor to create and edit CMS files, and to create and use EXECs which can be executed by the System Product Interpreter.

Connectivity Planning, Administration, and Operation, SC24-5378

This manual provides an overview of the products and the VM/SP components related to connectivity and an overview of the programming interface, Advanced Program-to-Program/Virtual Machine (APPC/VM) and the Common Programming Interface (CPI) for Communications of System Application Architecture (SAA). This manual contains all of the reference material needed to use the Transparent Services Access Facility (TSAF) and APPC/VM VTAM Support (AVS). It includes information for the system programmer and system operator to run the TSAF virtual machine, to run the AVS virtual machine, to use the CP System Services, and to use the service tools that are provided with TSAF and AVS. Contains information formerly found in the *TSAF Reference, SC24-5287*

Connectivity Programming Guide and Reference, SC24-5377

This book is intended for someone writing an application program to communicate with another application program using APPC protocol. The communication can occur within a single TSAF collection, across multiple TSAF collections, or between a TSAF collection and an SNA network.

This book introduces the two kinds of APPC/VM communications programming interfaces:

1. Systems Application Architecture™ (SAA) Common Programming Interface (CPI) Communications, intended for programs written in high-level languages (such as COBOL) and procedures languages (REXX).
2. The APPC/VM macro interface, for programs written in assembler language.

This book provides complete details on the APPC/VM assembler interface; readers are referred to the *SAA Common Programming Interface Communications Reference*, SC26-4399, for details on CPI Communications.

CP General User Command Reference, SC19-6211

This publication is a reference manual for class G and class Any users who are running systems such as OS, OS/VS, DOS, DOS/VS, and VSE systems, CMS, and networking systems in a virtual machine under VM/SP. Control Program (CP) commands available to privilege classes G and Any are listed alphabetically. Each command description contains general usage information, the command line format, descriptions of all allowable operands, and default values for operands.

CP System Command Reference, SC24-5402

This publication is a reference manual for class A, B, C, D, E, and F users who are running systems such as OS, OS/VS, DOS, DOS/VS, and VSE systems, CMS, and networking systems in a virtual machine under VM/SP. Control Program (CP) commands available to privilege classes A, B, C, D, E, and F are listed alphabetically. Each command description contains general usage information, the command line format, descriptions of all allowable operands, and default values for operands.

Directory of Programming Interfaces for Customers, SC24-5417

This publication lists all the programming interfaces that are available in VM/SP for programmers to use in writing programs. It identifies each interface and tells where it is documented in the VM/SP library. This publication also specifies which interfaces IBM prefers programmers to use, and which should be used with caution.

EXEC 2 Reference, SC24-5219

This is a reference manual that defines the EXEC 2 language. It contains all the formats, syntax rules, and descriptions of the arguments for EXEC 2 statements. An EXEC 2 primer for new users is included. It summarizes the language and its capabilities. A detailed discussion of the different types of EXEC 2 statements is followed by examples. It lists the error messages and return codes issued by the EXEC 2 interpreter.

General Information, GC20-1838

This manual introduces and describes the features and facilities of VM/SP and provides customer management and technical staffs with information needed to evaluate the applicability of VM/SP to their installations. It contains information needed for a basic understanding of the environments and functions that are supported by VM/SP.

Systems Application Architecture is a trademark of the International Business Machines Corporation.

Group Control System Command and Macro Reference, SC24-5250

This manual provides detailed reference material that describes the functions and use of all macros supported in the Group Control System. Each macro description contains information on general usage, format, all available parameters, messages, and return codes. The manual is intended for personnel who are developing application programs to run on the Group Control System.

HELP Facility Introduction, SX24-5221

This reference card shows the menu structure of the online HELP facility, the format of HELP panels and the syntax of the command formats in HELP. It also shows how to get HELP for system messages, and lists the filetypes reserved by the system for use by the HELP facility.

Programmer's Guide to the Server-Requester Programming Interface for VM/SP, SC24-5291

This manual provides an application programmer with information on how to write and install IBM Enhanced Connectivity Facilities servers in a VM/SP system. For the work station (for example, IBM Personal Computer or Personal System/2) user, the manual also gives information on how to start IBM Enhanced Connectivity Facilities communications on VM/SP.

Installation Guide, SC24-5237

This book is for system programmers and anyone responsible for installing VM/SP. It contains step-by-step procedures for using the Starter System or an existing VM/SP system to install VM/SP. In addition, there are procedures for verifying an installed system, installing saved segments, and installing a new system national language.

Interactive Problem Control System Guide and Reference, SC24-5260

This manual contains an overview of IPCS functions, data flow, and files. It describes preliminary and repetitive IPCS operations, and gives insight into using IPCS in different programming environments. It is also a reference manual that contains a detailed description of all the IPCS commands and subcommands.

This book contains information previously found in the Release 5 book *VM Diagnosis Guide, LY24-5241*.

Introduction, GC19-6200

This manual is an extension of the *VM/SP General Information* manual. It describes, at an introductory level, what VM/SP is and what it can do for you. It is intended for anyone who wants basic information about VM/SP facilities and capabilities. This manual is useful for those who plan a VM/SP installation, use program products with VM/SP, or migrate to VM/SP from another operating system. This manual is suggested as a prerequisite before reading the more detailed reference manuals in the VM/SP library.

Introduction to Security, SC24-5316-01

This book is intended to introduce VM/SP system and application programmers to the topic of security. It acquaints the reader with the security challenges that might confront his or her organization, and the security tools and facilities provided by VM/SP to meet those challenges. It includes information on maintaining physical security and system integrity, controlling access to the VM/SP system, protecting data, and performing a risk analysis.

Operator's Guide, SC19-6202

This book is for those responsible for the operation and administration of a VM/SP system. This book describes the recovery features with VM/SP and how to initialize and terminate the system. It briefly introduces the various commands, CP and CMS, that an operator may find useful. It also includes some information about hardware considerations and spooling and Batch commands.

Planning Guide and Reference, SC19-6201

This book is a reference manual for all Virtual Machine/System Product (VM/SP) Release 6 users. It describes the enhanced functions and capabilities that improve VM/SP's performance and make it a more versatile product for a wide range of applications.

This publication includes information about:

- Planning for system generation
- Defining your VM/SP system
- Generating a 3704/3705/3725 control program that runs with VM/SP
- Updating VM/SP.

The intended audience is system programmers and anyone responsible for the planning, installation, and updating of a VM/SP system. The reader is expected to have a general understanding of data processing and teleprocessing techniques.

Release 6 Guide, SC24-5368

This manual provides current users of VM/SP with an overview of enhancements offered by the new release. It includes descriptions of each enhancement, and internal design changes; it also helps users migrate from VM/SP Release 5 to VM/SP Release 6. Enhancements to VM/SP Release 6 include the CMS Shared File System, and some Extended Architecture Support functions.

Running Guest Operating Systems, GC19-6212

This manual was previously titled *Operating Systems in a Virtual Machine*, GC19-6212. It has been restructured to include updated and practical examples. This publication is for people who are interested in running their operating system (VSE, MVS and VM/SP) under the VM/SP host system. With the included recommendations, experienced persons can improve the efficiency of their installation by running a guest system under VM/SP. The book presents the basic processes so that the working system can be set up quickly. The book assumes the audience is knowledgeable about their own system but new to VM/SP.

SAA Common Programming Interface Communications Reference, SC26-4399

This book describes SAA Common Programming Interface (CPI) Communications in detail, including scenarios and individual routines. It is intended for someone writing an application program that is to communicate with another application program using APPC protocol. The communications can occur within a single TSAF collection, across multiple TSAF collections, or between a TSAF collection and an SNA network.

Service Guide, SC24-5389

This book is for system programmers and anyone responsible for servicing VM/SP. It contains step-by-step procedures for program update (preventative) service, corrective service, and local service. It also contains descriptions of the various service tools and service files, including the product parameter file.

VM System Facilities for Programming, SC24-5288

This manual provides a system programmer with detailed information on facilities available in VM/SP. Included are the DIAGNOSE instruction, the Inter-User Communications Vehicle (IUCV) for CP and CMS, CP System Services, the Virtual Machine Communication Facility (VMCF), the programmable operator facility, and information on getting national languages on your system. Information on DASD Operations (including the Format/Allocate and DASD Dump Restore (DDR) programs), the CMS Batch Facility, the Collection Resource Management System Service, and the Identify System Service are now also contained in this book.

This information was extracted from the Release 5 books *CP for System Programming*, *CMS for System Programming*, and the *Transparent Services Access Facility (TSAF) Reference*, respectively.

System Messages and Codes, SC19-6204

This manual contains messages and codes, as well as restrictions, that may be encountered when using the Conversational Monitor System, Control Program, Interactive Problem Control System, Group Control System, and Transparent Services Access Facility. Conditions that generate these messages and codes are explained, the resulting action is described, and appropriate responses are suggested.

System Messages Cross-Reference, SC24-5264

This manual contains cross-reference information for the messages in the manual, *VM/SP Messages and Codes*, SC19-6204. The cross-reference information relates messages to the commands that caused them to be issued, lists messages alphanumerically by message identifier, relates messages to the module that issued them, and lists the messages in alphanumeric order by message text. The manual consists of five appendices, one for each of the VM/SP components: Conversational Monitor System (CMS), Control Program (CP), Interactive Problem Control System (IPCS), Group Control System (GCS), and Transparent Services Access Facility (TSAF).

System Product Editor Command and Macro Reference, SC24-5221

This publication is a reference manual that contains all the command formats, syntax rules, and operand and option descriptions for the XEDIT subcommands and macros. It tells how to enter XEDIT commands, subcommands and macros. It contains the format description and operand and option list for the XEDIT command, which is used to invoke the editor. It lists EDIT subcommands and their XEDIT counterparts, and describes the relationship between XEDIT and the CMS

Session Services. You should be familiar with the information in the *System Product Editor User's Guide* before attempting to use this manual.

System Product Editor User's Guide, SC24-5220

This manual is intended for the individual who has limited data processing experience. It is designed to give the user a working knowledge of the System Product Editor (called by the XEDIT command). XEDIT provides a wide range of functions for text processing and programming development. Both a full screen and a line mode editor, it can be used on display and typewriter terminals.

System Product Interpreter Reference, SC24-5239

This manual provides reference information about System Product Interpreter statements and their use. It is suitable for experienced programmers, particularly those who have used another high-level language (e.g., PL/I, Algol, or Pascal). It includes error messages and describes syntax, instructions, functions, debugging aids, and parsing.

System Product Interpreter User's Guide, SC24-5238

This manual is a step-by-step guide to using the System Product Interpreter, the powerful interpretive command and macro language. It is intended for a user with some knowledge of terminals, editors, and VM/SP, but the user need not have any previous programming experience.

The novice should read the System Product Interpreter chapter in the *VM/SP CMS Primer* for prerequisite knowledge.

Terminal Reference, GC19-6206

This manual is intended for those users who plan to use terminals with VM/SP in their operations. It discusses the characteristics of terminals in general and the physical characteristics of some terminals and consoles supported by VM/SP. It discusses how to use terminals to access and control VM/SP, and contains an example of a typical session from logon to logoff.

Abstract of Reference Posters and Table

Summary of End Use Tasks and Commands, SX24-5173

The *VM Summary of End Use Tasks and Commands SX24-5173*, is a poster listing the nine major tasks and the associated commands most frequently used by end users. This poster contains excerpts of command information found in various CP, CMS, and XEDIT books. The *Summary* poster is helpful for general users who need a reminder list of the commands used to perform routine daily tasks.

VM CP Trace Table (Poster), SX24-5225

This table shows the format (type of event, module, and hex value) of the entries in the CP internal trace table. This table records events that occur in the real machine (such as interrupts, communications, and instructions).

Problem Determination Summary, SX24-5224

This publication summarizes commands useful for problem determination.

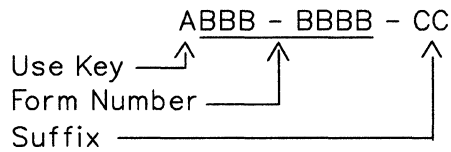
Ordering VM/SP Publications

Identifying Manuals: Order Numbers and File Numbers

Each VM/SP manual is identified by both a unique order number, and a file number which it shares with other manuals about the same system.

Order Numbers

Order numbers appear on the covers of manuals below the title and release level. They consist of three parts: the use key, the form number, and the suffix.



The use key (A) indicates the conditions of availability of the manual.

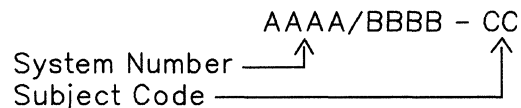
- *G* for *general*, means that the manual is available without charge to users of IBM systems.
- *S* means that the manual is for *sale*.
- *L* means that the manual is available only to *licensed* users of a particular program product.

The unique form number (BBB-BBBB) identifies the manual.

The suffix (CC) identifies the edition of the manual (**not** necessarily the same as the release level). The first edition of a manual has a suffix of 00. You can use the order number, **without** the suffix, to order the most current edition of any manual. To order previous editions, see page 21

File numbers

File numbers appear on the spines of manuals. They have three parts: a four-digit system number (AAAA), a four-digit processor number (BBBB) and a two-digit subject code (CC).



The system number for the VM/SP library is S370. The subject code of this book is 20.

VM/SP library subject codes are:

Code	Type of Book
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20	General Information, Evaluation, Flyers
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- 34 System Planning, Management, Installation, Generation, Administration, Performance, Customization, Resource Definition
- 36 Control Program (Supervisor, JCL, IPL, Job Management, Data Areas, Checkpoint/Restart)
- 37 Diagnosis, Problem Determination, Auditing, Service Aids
- 39 Time Sharing, Interactive System
- 40 Operations (messages, codes, application development)
- 50 Data Base/Data Communications (DB/DC): CICS, IMS, ACF, GIS, DL/I

File numbers can be used to locate books in the *IBM System/370, 30xx, 4300, and 9370 Processors Bibliography*, which also contains a complete list of subject codes.

Ordering Release 6 Publications

Starting with Release 6 of VM/SP, certain manuals in the library will be shipped with the product tape, and automatic updates (new releases, technical newsletters and revisions between releases) will be sent automatically. These use-key G and S manuals are shaded on the two-page library organization chart beginning on page 7.

The manuals in the *Diagnosis* category of the library diagram whose order numbers begin with an L use-key are not shipped automatically, because they are only available to licensed users. If you have a product license, you can have a complete set of these manuals shipped along with the product, free of charge, by specifying feature code 7045 with your original order. You can also specify individual use-key L manuals to be shipped with the product by ordering their individual feature codes. However, these will be charged for.

The set which you will receive automatically is a basic library; it does not include all the books that are available. You can order the other manuals in the Release 6 VM/SP library, or multiple copies of any manual, through your IBM marketing representative. Use the order number, **without** the suffix, of the book(s) you need. This will ensure that you get the most current version.

You can also *subscribe* to these other manuals, or to multiple copies of any manual, by using the System Library Subscription Service (SLSS) (see page 28).

Ordering Sets of Manuals, Binders and Labels

There are special order numbers for ordering sets of books, binders, label inserts, and reference summaries.

Order:	To Receive:
SBOF-3254	One set of 40 publications, 16 binders, and one set of label inserts
SBOF-3258	The same set of manuals without binders and label inserts
SX24-5226	one binder
SX24-5227	one set of binder label inserts
SBOF-3255	One set of 11 reference summaries and 2 wall posters

Other Release 6 Items You Can Order

Order:	To Receive:
SX24-5139	Publication Storage Box (to store books of different sizes and bindings)
SX24-5123	Editor Program Function Key Template (for use with the VM/SP System Product Editor)

For additional information on ordering see "System Library Subscription Service (SLSS)" on page 28.

What Do the Sets Include?

The set of manuals you receive when you use **SBOF-3254** or **SBOF-3258** includes:

1. GC19-6200-05 - *VM/SP Introduction*
2. SC19-6201-06 - *VM/SP Planning Guide and Reference*
3. SC19-6202-05 - *VM/SP Operator's Guide*
4. SC19-6204-05 - *VM/SP System Messages and Codes*
5. GC19-6206-05 - *VM/SP Terminal Reference*
6. GC19-6207-05 - *VM/SP Library Guide and Master Index*
7. SC19-6209-05 - *VM/SP CMS Command Reference*
8. SC19-6210-05 - *VM/SP CMS User's Guide*
9. SC19-6211-05 - *VM/SP CP General User Command Reference*
10. GC19-6212-05 - *VM Running Guest Operating Systems*
11. GC20-1838-07 - *VM/SP General Information*
12. SC24-5219-04 - *VM/SP EXEC 2 Reference*
13. SC24-5220-04 - *VM/SP System Product Editor User's Guide*
14. SC24-5221-05 - *VM/SP System Product Editor Command and Macro Reference*
15. SC24-5236-04 - *VM/SP CMS Primer*
16. SC24-5237-04 - *VM/SP Installation Guide*
17. SC24-5238-04 - *VM/SP System Product Interpreter User's Guide*
18. SC24-5239-03 - *VM/SP System Product Interpreter Reference*
19. SC24-5242-03 - *VM/SP CMS Primer for Line-Oriented Terminals*
20. SC24-5247-03 - *VM/SP Application Development Guide for FORTRAN and COBOL*
21. SC24-5250-02 - *VM/SP Group Control System Command and Macro Reference*
22. SC24-5260-01 - *VM/SP Interactive Problem Control System Guide and Reference*
23. SC24-5264-02 - *VM/SP System Messages Cross-Reference*
24. SC24-5284-01 - *VM/SP Application Development Reference for CMS*
25. SC24-5285-01 - *VM/SP Administration*
26. SC24-5286-01 - *VM/SP Application Development Guide for CMS*
27. SC24-5288-01 - *VM/SP System Facilities for Programming*

28. SC24-5291-02 - *VM/SP Programmer's Guide to the Server-Requester Programming Interface for VM/SP*
29. SC24-5316-01 - *VM/SP Introduction to Security*
30. SC24-5366-00 - *VM Application Migration Guide for CMS*
31. SC24-5367-00 - *VM/SP CMS Shared File System Administration*
32. SC24-5368-00 - *VM/SP Release 6 Guide*
33. SC24-5377-00 - *VM/SP Connectivity Programming Guide and Reference*
34. SC24-5378-00 - *VM/SP Connectivity Planning, Administration, and Operation*
35. SC24-5389-00 - *VM/SP Service Guide*
36. SC24-5402-00 - *VM/SP CP System Command Reference*
37. GC24-5417-00 - *VM/SP Directory of Programming Interfaces for Customers*
38. SC26-4399-01 - *VM/SP SAA Common Programming Interface Communications Reference.*

You also receive the following when you use **SBOF-3254**:

1. SX24-5226-00 - *VM/SP Gray Library Binder*
2. SX24-5227-00 - *VM/SP Release 6 Binder Insert Set.*

The set of reference summaries and wall posters you receive when you use **SBOF-3255** includes:

1. SX20-4400-05 - *VM/SP Quick Reference*
2. SX24-5122-05 - *VM/SP System Product Editor Command Language Reference Summary*
3. SX24-5124-03 - *VM/SP EXEC 2 Language Reference Summary*
4. SX24-5126-03 - *VM/SP System Product Interpreter Reference Summary*
5. SX24-5151-02 - *VM/SP CMS Primer Summary of Commands*
6. SX24-5159-02 - *VM/SP CMS Primer for Line-Oriented Terminals Summary of Commands*
7. SX24-5173-02 - *VM Summary of End Use Tasks and Commands*
8. SX24-5219-00 - *VM/SP CP General User Command Reference Summary*
9. SX24-5220-00 - *VM/SP CMS Command Reference Summary*
10. SX24-5221-00 - *VM/SP HELP Facility Introduction*
11. SX24-5222-00 - *VM/SP CP System Command Reference Summary*
12. SX24-5224-00 - *VM/SP Problem Determination Reference Summary*
13. SX24-5225-00 - *VM CP Internal Trace Table.*

Ordering VM/SP Publications from Earlier Releases

If you request a publication by its order number you automatically receive the **latest edition** of the publication supporting the latest release of VM/SP (currently the Release 6 level). To order publications relating to an earlier release, you must use the **pseudo-number** assigned to the respective edition of the publication. Do *not* use the order number; it is listed only to help you identify the book you need.

Therefore, to order a Release 5 through a Release 1 edition, find the pseudo-number in the following lists that corresponds to the title and order number of the publication you want. Technical Newsletters (TNLs) for the edition are automatically sent with each pseudo-number ordered.

VM/SP Release 5 Publication Numbers

Pseudo No.	Order No.	Publication Title
GT00-1977	GC19-6200-4	VM/SP Introduction
ST00-1989	SC19-6201-5	VM/SP Planning Guide and Reference
ST00-1983	SC19-6202-4	VM/SP Operator's Guide
ST00-1991	SC19-6204-4	VM/SP System Messages and Codes
GT00-1979	GC19-6206-4	VM/SP Terminal Reference
GT00-1978	GC19-6207-4	VM/SP Library Guide, Glossary and Master Index
ST00-1981	SC19-6209-4	VM/SP CMS Command Reference
ST00-1980	SC19-6210-4	VM/SP CMS User's Guide
ST00-1982	SC19-6211-4	VM/SP CP Command Reference
GT00-2447	GC19-6212-4	VM Running Guest Operating Systems
GT00-1976	GC20-1838-5	VM/SP General Information
GT00-2431	GC20-1842-7	VM/SP Licensed Program Specifications
ST00-1984	SC24-5219-3	VM/SP EXEC 2 Reference
ST00-1985	SC24-5220-3	VM/SP System Product Editor User's Guide
ST00-1986	SC24-5221-4	VM/SP System Product Editor Command and Macro Reference
ST00-1992	SC24-5236-3	VM/SP CMS Primer
ST00-1990	SC24-5237-3	VM/SP Installation Guide
ST00-1987	SC24-5238-3	VM/SP System Product Interpreter User's Guide
ST00-1988	SC24-5239-2	VM/SP System Product Interpreter Reference
SQ24-5241	SC24-5241-1	VM/SP Distributed Data Processing Guide
ST00-1993	SC24-5242-2	VM/SP CMS Primer for Line-Oriented Terminals
ST00-2086	SC24-5247-2	VM/SP Application Development Guide
SQ24-5250	SC24-5250-1	VM/SP Group Control System Command and Macro Reference
SQ24-5264	SC24-5264-1	VM/SP System Messages Cross-Reference
ST00-2087	SC24-5282-2	VM/SP Problem Reporting Guide
ST24-5284	SC24-5284-0	VM/SP CMS Macros and Functions Reference

Pseudo No.	Order No.	Publication Title
ST24-5285	SC24-5285-0	VM/SP CP for System Programming
ST24-5286	SC24-5286-0	VM/SP CMS for System Programming
ST24-5287	SC24-5287-0	VM/SP Transparent Services Access Facility Reference
ST24-5288	SC24-5288-0	VM System Facilities for Programming
ST24-5290	SC24-5290-0	VM/SP Release 5 Guide
No Pseudo	SN24-5762	TNL to VM/SP Release 5 Guide
SQ24-5291	SC24-5291-1	Programmer's Guide to the Server-Requester Program Interface
GT24-5294	GT24-5294-0	A Growing Family of Solutions (brochure)
ST24-5316	SC24-5316-0	VM/SP Security Features
ST00-1994	SX20-4400-4	VM/SP Quick Reference
ST00-1995	SX20-4401-4	VM/SP Commands (General User) Reference Summary
ST00-1996	SX20-4402-4	VM/SP Commands (Other than General User) Reference Summary
ST00-1997	SX24-5122-4	VM/SP Editor Command Language Reference Summary
ST00-1371	SX24-5123-1	VM/SP System Product Editor PF Key Template
ST00-1372	SX24-5124-2	VM/SP EXEC 2 Language Reference Summary
ST00-1999	SX24-5126-2	VM/SP System Product Interpreter Language Reference Summary
ST00-2000	SX24-5129-1	VM/SP Library Binder
ST00-2451	SX24-5131-2	VM/SP Library Binder Label Set
ST00-2001	SX24-5151-1	VM/SP CMS Primer Summary of Commands
ST00-2002	SX24-5159-1	VM/SP CMS Primer for Line-Oriented Terminals Summary of Commands
ST00-2003	SX24-5171-1	VM/SP Problem Reporting Summary (poster)
ST00-2452	SX24-5173-1	VM Summary of End Use Tasks and Commands (poster)
LT00-2011	LX24-5202-0	VM Internal Trace Table (poster)
LT00-2005	LY20-0890-3	VM/SP Service Programs Logic
LT00-2006	LY20-0892-4	VM/SP System Logic and Problem Determination Guide Vol. 1 (CP)
LT00-2007	LY20-0893-4	VM/SP System Logic and Problem Determination Guide Vol. 2 (CMS)
LT00-2008	LY24-5220-3	VM/SP Data Areas and Control Block Logic Vol. 1 (CP)
LT00-2009	LY24-5221-2	VM/SP Data Areas and Control Block Logic Vol. 2 (CMS)
LT00-2012	LY24-5239-1	VM/SP Group Control System Diagnosis Reference
LT00-2010	LY24-5241-0	VM Diagnosis Guide
LT00-2375	LX23-0347-4	VM Problem Determination Reference Information

VM/SP Release 4 Publication Numbers

Pseudo No.	Order No.	Publication Title
GT00-1575	GC19-6200-3	VM/SP Introduction
GT00-1581	GC19-6206-3	VM/SP Terminal Reference
GT00-1582	GC19-6207-3	VM/SP Library Guide and Master Index
GT00-1586	GC19-6212-3	VM Running Guest Operating System
GT00-1587	GC20-1838-4	VM/SP General Information
GT00-1588	GC20-1842-5	VM/SP Licensed Program Specifications
ST00-1576	SC19-6201-4	VM/SP Planning Guide and Reference
ST00-1577	SC19-6202-3	VM/SP Operator's Guide
ST00-1578	SC19-6203-3	VM/SP System Programmer's Guide
ST00-1579	SC19-6204-3	VM/SP System Messages and Codes
ST00-1580	SC19-6205-3	VM/SP OLTSEP and Error Recording Guide
ST00-1583	SC19-6209-3	VM/SP CMS Command and Macro Reference
ST00-1584	SC19-6210-3	VM/SP CMS User's Guide
ST00-1585	SC19-6211-3	VM/SP CP Command Reference for General Users
ST00-1368	SC24-5219-3	VM/SP EXEC 2 Reference
ST00-1589	SC24-5220-2	VM/SP System Product Editor User's Guide
ST00-1590	SC24-5221-3	VM/SP System Product Editor Command and Macro Reference
ST00-1591	SC24-5236-2	VM/SP CMS Primer
ST00-1592	SC24-5237-2	VM/SP Installation Guide
ST00-1593	SC24-5238-1	VM/SP System Product Interpreter User's Guide
SQ24-5239	SC24-5239-1	VM/SP System Product Interpreter Reference
ST24-5248	SC24-5248-1	VM/SP Release 4 Guide
ST24-5249	SC24-5249-1	VM/SP Group Control System Guide
ST24-5250	SC24-5250-0	VM/SP Group Control System Macro Reference
ST24-5256	SC24-5256-0	VM/SP System Definition Files
ST24-5260	SC24-5260-0	VM/SP Interactive Problem Control System Guide and Reference
ST24-5264	SC24-5264-0	VM/SP System Messages Cross-Reference
SQ24-5282	SC24-5282-1	VM Problem Solving and Reporting Guide
ST24-5291	SC24-5291-0	IBM Programmer's Guide to the Server-Requester Program Interface
ST24-5241	ST24-5241-0	VM/SP Distributed Data Processing Guide
ST24-5242	SC24-5242-1	VM/SP CMS Primer for Line-Oriented Terminals
SQ24-5247	SC24-5247-1	VM/SP Application Development Guide
ST00-1594	SX20-4400-3	VM/SP Quick Reference Guide for Users
ST00-1595	SX20-4401-3	VM/SP Command Summary (General User)

Pseudo No.	Order No.	Publication Title
ST00-1596	SX20-4402-3	VM/SP Command Summary (Other than General User)
ST00-1597	SX24-5122-3	VM/SP System Product Editor Command Reference Summary
ST00-1371	SX24-5123-1	VM/SP System Product Editor PF Key Template
ST00-1372	SX24-5124-2	VM/SP EXEC 2 Language Reference Summary
ST00-1598	SX24-5126-1	VM/SP System Product Interpreter Reference Summary
ST00-1799	SX24-5129-1	Virtual Machine Library Binder
ST00-1600	SX24-5131-1	VM/SP Binder Label Set
ST00-1601	SX24-5138-0	VM/SP Interactive Problem Control System Reference Summary
ST00-2154	SX24-5150-0	VM/SP CMS Primer Summary of Commands
ST00-2122	SX24-5171-0	VM/SP Problem Solving and Reporting Summary
ST00-2153	SX24-5173-0	VM Summary of End Use Tasks and Commands (poster)
LT00-1602	LY20-0890-2	VM/SP Service Routines Program Logic
LT00-1818	LY20-0892-3	VM/SP System Logic and Problem Determination Guide, Volume 1 (CP)
LT00-1819	LY20-0893-3	VM/SP System Logic and Problem Determination Guide, Volume 2 (CMS)
LT00-1605	LY24-5220-2	VM/SP Data Areas and Control Block Logic, Volume 1 (CP)
LQ64-5221	LY24-5221-1	VM/SP Data Areas and Control Block Logic, Volume 2 (CMS)
LT64-5239	LY24-5239-1	VM/SP Group Control System Diagnosis Reference

VM/SP Release 3 Publication Numbers

Pseudo No.	Order No.	Publication Title
GT00-1349	GC19-6200-2	VM/SP Introduction
GT00-1355	GC19-6206-2	VM/SP Terminal Reference
GT00-1356	GC19-6207-2	VM/SP Library Guide and Master Index
GT00-1360	GC19-6212-2	VM/SP Operating Systems in a Virtual Machine
GT00-1361	GC20-1838-3	VM/SP General Information
GT00-1362	GC20-1842-4	VM/SP Licensed Program Specifications
ST00-1350	SC19-6201-3	VM/SP Planning Guide and Reference
ST00-1351	SC19-6202-2	VM/SP Operator's Guide
ST00-1352	SC19-6203-2	VM/SP System Programmer's Guide
ST00-1353	SC19-6204-2	VM/SP System Messages and Codes
ST00-1354	SC19-6205-2	VM/SP OLTSEP and Error Recording Guide
ST00-1357	SC19-6209-2	VM/SP CMS Command and Macro Reference
ST00-1358	SC19-6210-2	VM/SP CMS User's Guide

Pseudo No.	Order No.	Publication Title
ST00-1359	SC19-6211-2	VM/SP CP Command Reference for General Users
ST00-1368	SC24-5219-2	VM/SP EXEC 2 Reference
SQ24-5220	SC24-5220-1	VM/SP System Product Editor User's Guide
ST00-1369	SC24-5221-2	VM/SP System Product Editor Command and Macro Reference
SQ24-5236	SC24-5236-1	VM/SP CMS Primer
SQ24-5237	SC24-5237-1 ¹	VM/SP Installation Guide
ST24-5238	SC24-5238-0 ²	VM/SP System Product Interpreter User's Guide
ST24-5239	SC24-5239-0	VM/SP System Product Interpreter Reference
ST24-5240	SC24-5240-0	VM/SP Release 3 Guide
ST24-5241	SC24-5241-0	VM/SP Distributed Data Processing Guide
ST24-5242	SC24-5242-0	VM/SP CMS Primer for Line-Oriented Terminals
ST24-5247	SC24-5247-0	VM/SP Application Development Guide
ST00-1363	SX20-4400-2	VM/SP Quick Guide for Users
ST00-1364	SX20-4401-2	VM/SP Command Summary (General User)
ST00-1365	SX20-4402-2	VM/SP Command Summary (Other than General User)
ST00-1370	SX24-5122-2	VM/SP System Product Editor Command Reference Summary
ST00-1371	SX24-5123-1	VM/SP System Product Editor PF Key Template
ST00-1372	SX24-5124-2	VM/SP EXEC 2 Language Reference Summary
ST00-1435	SX24-5126-0	VM/SP System Product Interpreter Reference Summary
ST00-1779	SX24-5129-0	Virtual Machine Library Binder
ST00-1536	SX24-5131-0	VM/SP Binder Label Set
LQ60-0890	LY20-0890-1	VM/SP Service Routines Program Logic
LT00-1366	LY20-0892-2	VM/SP System Logic and Problem Determination Guide, Volume 1 (CP)
LT00-1367	LY20-0893-2	VM/SP System Logic and Problem Determination Guide, Volume 2 (CMS)
LT64-5220	LY24-5220-0	VM/SP Data Areas and Control Block Logic, Volume 1 (CP)
LT64-5221	LY24-5221-0	VM/SP Data Areas and Control Block Logic, Volume 2 (CMS)

Notes:

¹ SC24-5237-1 replaced SC24-5237-0 for Release 3, Modification Level 1 (Release 3.1). SC24-5237-0 is obsolete.

² SC24-5238-1 replaced SC24-5238-0 for Release 3, Modification Level 1 (Release 3.1). SC24-5238-0 is obsolete.

VM/SP Release 2 Publication Numbers

Pseudo No.	Order No.	Publication Title
GQ19-6200	GC19-6200-1	VM/SP Introduction
GQ19-6206	GC19-6206-1	VM/SP Terminal User's Guide
GQ19-6207	GC19-6207-1	VM/SP Library Guide and Master Index
GQ19-6212	GC19-6212-1	VM/SP Operating Systems in a Virtual Machine
GQ20-1838	GC20-1838-2 GN24-5733	VM/SP General Information Manual
GQ20-1842	GC20-1842-3	VM/SP Licensed Program Specifications
ST00-0916	SC19-6201-2 SN24-5734	VM/SP Planning and System Generation Guide
SQ19-6202	SC19-6202-1 SN24-5735	VM/SP Operator's Guide
SQ19-6203	SC19-6203-1 SN24-5736	VM/SP System Programmer's Guide
SQ19-6204	SC19-6204-1 SN24-5737	VM/SP System Messages and Codes
SQ19-6205	SC19-6205-1 SN24-5738	VM/SP OLTSEP and Error Recording Guide
SQ19-6209	SC19-6209-1	VM/SP CMS Command and Macro Reference
SQ19-6210	SC19-6210-1	VM/SP CMS User's Guide
SQ19-6211	SC19-6211-1	VM/SP CP Command Reference for General Users
SQ24-5219	SC24-5219-1	VM/SP EXEC 2 Reference
ST24-5220	SC24-5220-0	VM/SP System Product Editor User's Guide
SQ24-5221	SC24-5221-1 SN24-5715	VM/SP System Product Editor Command and Macro Reference
ST24-5236	SC24-5236-0	VM/SP CMS Primer
ST00-0913	SX20-4400-1	VM/SP Quick Guide for Users
ST00-0914	SX20-4401-1	VM/SP Command Summary (General User)
ST00-0915	SX20-4402-1	VM/SP Command Summary (Other than General User)
ST00-0918	SX24-5122-1	VM/SP System Product Editor Command Reference Summary
ST00-0919	SX24-5123-0	VM/SP System Product Editor PF Key Template
ST00-0917	SX24-5124-1	VM/SP EXEC 2 Language Reference Summary
LT60-0890	LY20-0890-0	VM/SP Service Routines Program Logic
LQ60-0891	LY20-0891-1 LN24-5717	VM/SP Data Areas and Control Block Logic
LQ60-0892	LY20-0892-1 LN24-5739	VM/SP System Logic and Problem Determination Guide, Volume 1 (CP)
LQ60-0893	LY20-0893-1	VM/SP System Logic and Problem Determination Guide, Volume 2 (CMS)

VM/SP Release 1 Publication Numbers

Pseudo No.	Order No.	Publication Title
GT19-6200	GC19-6200-0	VM/SP Introduction
GT19-6206	GC19-6206-0	VM/SP Terminal User's Guide
GT19-6207	GC19-6207-0	VM/SP Glossary and Master Index
GT19-6212	GC19-6212-0 GN25-0820	VM/SP Operating Systems in a Virtual Machine
GT20-1838	GC20-1838-1 GN25-0816 GN24-5721	VM/SP General Information Manual
GT20-1842	GC20-1842-2	VM/SP Licensed Program Specifications
SQ19-6201	SC19-6201-1 ¹ SN24-5701 SN24-5720	VM/SP Planning and System Generation Guide
ST19-6202	SC19-6202-0 SN25-0823 SN24-5702 SN24-5722	VM/SP Operator's Guide
ST19-6203	SC19-6203-0 SN25-0818 SN24-5698 SN24-5703 SN24-5724	VM/SP System Programmer's Guide
ST19-6204	SC19-6204-0 SN25-0822 SN24-5699 SN24-5704 SN24-5719	VM/SP System Messages and Codes
ST19-6205	SC19-6205-0 SN28-0824 SN24-5723 SN24-5700	VM/SP OLTSEP and Error Recording Guide
ST19-6209	SC19-6209-0	VM/SP CMS Command and Macro Reference
ST19-6210	SC19-6210-0	VM/SP CMS User's Guide
ST19-6211	SC19-6211-0	VM/SP CP Command Reference for General Users
ST24-5219	SC24-5219-0	VM/SP EXEC 2 Reference
ST24-5220	SC24-5220-0	VM/SP System Product Editor User's Guide
SQ24-5221	SC24-5221-1 ²	VM/SP System Product Editor Command and Macro Reference
ST00-0882	SX20-4400-0	VM/SP Quick Guide for Users
ST00-0883	SX20-4401-0	VM/SP Command Summary (General Users)
ST00-0884	SX20-4402-0	VM/SP Command Summary (Other than General Users)
ST00-0885	SX24-5122-0	VM/SP System Product Editor Command Reference Summary
ST00-0919	SX24-5123-0	VM/SP System Product Editor PF Key Template

Pseudo No.	Order No.	Publication Title
ST00-0886	SX24-5124-0	VM/SP EXEC 2 Language Reference Summary
LT60-0890	LY20-0890-0	VM/SP Service Routines Program Logic
LQ60-0891	LY20-0891-1 ³ LN24-5725	VM/SP Data Areas and Control Block Logic
LT60-0892	LY20-0892-1 LN25-0817 LN25-0821 LN24-5706 LN24-5718	VM/SP System Logic and Problem Determination Guide, Volume 1 (CP)
LT60-0893	LY20-0893-0	VM/SP System Logic and Problem Determination Guide, Volume 2 (CMS)

Notes:

- ¹ SC19-6201-1 replaced SC19-6201-0 and Technical Newsletter SN25-0819. SC19-6201-0 can be ordered by using the pseudo-number, ST19-6201.
- ² SC25-5221-1 replaced SC24-5221-0, which can be ordered by using the pseudo-number, ST24-5221.
- ³ LY20-0891-1 replaced LY20-0891-0 and Technical Newsletter LN25-0825. LY20-0891-0 can be ordered by using the pseudo-number, LT60-0891.

Even though earlier editions of these books are available, it is recommended that users of VM/System Product Release 1 order and use only the latest edition applicable to that release.

Library-Related Services

System Bibliography

The *IBM System/370, 30xx, 4300, and 9370 Processors Bibliography, GC20-0001*, lists by subject code and provides abstracts (by order number) of all the publications available which pertain to VM/SP. These abstracts are brief descriptions of the purpose, scope, and intended audience of each publication.

System Library Subscription Service (SLSS)

The System Library Subscription Service (SLSS) is an automatic updating service for technical documentation. If IBM releases a new or revised document which matches your SLSS subscription, you automatically receive the latest version or edition of the publication, and any applicable Technical Newsletters.

You can enter a subscription in two different ways: by creating an *interest profile*, or by listing the *order numbers* of the manuals you want. Both methods use the SLSS order form, G120-1816.

Order by *interest profile* when you need all the documents relating to your installation. Profiles are composed of specific information about your processor, program, communications needs, and special subjects of interest about your system.

You should subscribe by order number when you need multiple copies, when the publication was not part of the set automatically shipped with the software, or when it is not available through the profile service. For example, when you order VM/SP Release 6, an initial library is shipped with it, and you will automatically receive updates to these books without an SLSS subscription. Use SLSS when you want updating service for multiple copies of these books, or for any additional or optional books you want to order. You will be billed for any use-key S manuals which you receive from SLSS.

You can update your subscription at any time using the SLSS order form. For more information on SLSS see *Entering an SLSS Subscription, G320-1561*, or contact your IBM marketing representative.

Between-Release Publications

From time to time, IBM provides new VM/SP support between releases. Each support item may be described in a separate publication, one copy of which system owners will receive automatically. This publication describes the new support, hardware device, new or changed commands and messages, system generation considerations, and new and changed modules. It is to be used along with the regular library.

Technical Newsletters (TNLs)

TNLs are issued to update and correct existing manuals. They consist of a cover letter listing the changes, and either pages to add onto the existing manual or pages to substitute for the original pages.

A manual is revised when the current stock to which TNLs have been issued is exhausted, or when major changes are made in its content.

TNLs and major revisions are automatically sent to users who subscribe to the base document using the System Library Subscription Service.

Stand-Alone Guides

Stand-alone guides describe code updates to VM/SP between releases. Code updates are usually enhancements to hardware like processors, DASDs, tape drives or printers.

A stand-alone guide is a booklet containing all the information about the enhancement. It typically describes the support and explains how to invoke it, as well as listing any new or changed messages, return codes, DIAGNOSE codes, macros, modules and/or control blocks that the new support entails. These changes are then incorporated in the next release of the library.

Stand-alone guides vary in size depending on the enhancement; they are usually between one and thirty pages long.

Reader's Comment Forms

A postpaid reader's comment form is included at the back of most IBM manuals. This form:

1. Explains how to comment on a manual and provides space to do so,
2. Alerts readers that they cannot order manuals using this form,
3. Gathers general information about readers and their level of satisfaction with the manual.

The following figure is a sample reader's comment form:

VM/SP Library Guide and Master Index Order No. GC19-6207-5	READER'S COMMENT FORM
<p>Is there anything you especially like or dislike about this book? Feel free to comment on specific errors or omissions, accuracy, organization, or completeness of this book.</p> <p>If you use this form to comment on the online HELP facility, please copy the top line of the HELP screen.</p> <p>_____ Help Information line ___ of ___</p> <p>IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you, and all such information will be considered nonconfidential.</p> <p>Note: Do not use this form to report system problems or to request copies of publications. Instead, contact your IBM representative or the IBM branch office serving you.</p>	
<p>Would you like a reply? <u>YES</u> NO</p> <p>Please print your name, company name, and address:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>IBM Branch Office serving you: _____</p> <p>Thank you for your cooperation. You can either mail this form directly to us or give this form to an IBM representative who will forward it to us.</p>	

Figure 4. Reader's Comment Form

Users in countries other than the United States can submit their comments free by giving them to their IBM representative, who will forward them. Manuals that will not be updated or revised may not contain this form.

Online HELP Facility

Online HELP information, intended for both new and experienced users, contains information about commands, instructions, and messages. Online HELP provides menus of commands and tasks on which information is available, as well as several ways to display this information. HELP information is available for:

- Commands
 - APPC/VM VTAM Support (AVS), CMS, all CP, IPCS and RSCS
- Subcommands
 - EDIT, XEDIT, Servor-Requestor Programming Interface (SRPI), IPCSSCAN and IPCSPRT
- Macros
 - CMS assembler language
- Options
 - For the QUERY and SET commands of both CMS and CP
- Routines
 - From the VMLIB callable services library (CSL)
- Messages
 - CMS, CP, RSCS, TSAF, AVS, GCS, IPCS
- Statements
 - EXEC and EXEC2, REXX

New users can read the *VM/SP HELP Facility Introduction* and the HELP chapter in the *VM/SP CMS Primer* for information on how to use online HELP.



Chapter 2. Master Index

What is the Master Index?

The master index in this section of the book is created by merging the indexes of the individual books in the Virtual Machine/System Product library into a single index.

Types of Entries in the Master Index

There are three sections in the Master Index, each containing a specific type of index entry:

Alphabetics The first, and largest, section contains alphabetical entries:

AFFINITY directory option PLNGDE
areas of display screen TERMREF
C prefix subcommand XEDIT, XEDITUG
command and macro processor GIM
dump space DASD requirements PLNGDE

Numerics The second section contains numerical entries, listed in ascending order:

2311 coding RDEVICE macro PLNGDE
3262 operand of DEFINE command CPREFG
5550 Multi Station TERMREF
7412 supported models PLNGDE

Special Characters This last section contains entries which are, or begin with, symbols:

* (multiplication operator) SPIUG, SPIREF
? prefix on TRACE instruction SPIREF
as line end character XEDITUG
= command used in XEDIT CMSLOT
" prefix command PRIMER

Index Entry Format

Each index entry consists of an entry reference followed by a Master Index code, which is an abbreviation of a manual title. The following illustration shows the format of a sample entry:

logon procedure PRIMER

entry reference Master Index code

Use of Type Case in Master Index Entries

All Master Index entries follow a set of standard conventions about the use of type case (uppercase, mixed case, lowercase) for different kinds of entry references, and for Master Index codes.

Uppercase Index Entries: Uppercase type is reserved specifically for computer-related terminology, and for Master Index book codes. The following items, shown with examples, always appear in uppercase type in an entry:

abbreviations	CMS, CP, IBM, RSCS
acronyms	DASD, DOS, EREP, FIFO
Master Index book codes	APGDE, PRIMER, SPIREF, XEDIT
commands	ACNT, CHANGE, RESET, SENDFILE
computer languages	BASIC, COBOL, FORTRAN
control statements	&GOTO, &IF, &SKIP
EXECs	GENERATE, PRELOAD, RUN
functions	ABBREV, COMPARE, LEFT, SYMBOL
macros	LOCK, SIGNAL, UCB
operands	ADAPTER, OFF, PERFORM, QRY
options	ACTION, DECK, LIST, TERM
subcommands	ADD, ALTER, DEBUG, SYMP

When looking at an index entry, be sure to distinguish between the actual entry reference and the Master Index code following it. Entries such as the following can be confusing:

ENTER TERMREF
EXEC 2 in CMS EXEC2
PF8 key in XEDIT PRIMER
RECOVER XEDITUG
XEDIT OPGDE, TERMREF

Remember, the Master Index book code is always the **last** group of uppercase letters in any entry which is not a heading. Check the foldout Master Index Code Table on the last page of this book to familiarize yourself with them in order to avoid confusion.

Mixed Case Index Entries: Mixed-case type is generally used to spell out acronyms (including those referring to IBM products), and to name IBM products according to general grammatical convention.

Channel Status Word (CSW) APGDE
Structured Query Language (SQL) APGDE
Virtual Machine/System Product (VM/SP) APGDE, PRIMER

Lowercase Index Entries: Lowercase type is the most frequently used, in entries not containing specific names or terminology.

column formatting SPIUG
error codes SPIREF
indenting text CMSUG

How To Use the Master Index

The next four sections explain how to find information in the VM/SP library using the Master Index.

Choose a Keyword(s)

After you have chosen a topic that you want to look up, choose a keyword or words in the topic. For example, if you would like to find information on installing VM/SP, you might choose a keyword of “installing”.

Search for Keyword(s) in the Master Index

Look up the keyword in the index. If you do not find it in the first place you look, try thinking of another keyword for your topic. If you were to look up “installing” in the index you might find this entry (with its two subentries):

installing VM/SP INST
 starter system INTRO
 using existing system INTRO

Translate the Master Index Code(s) of the Entry into Book Name(s)

There are two books referred to by this entry. Their Master Index codes are **INST** and **INTRO**. Refer to the Table 1 to translate these codes. The table will tell you which book each code represents, and number of the binder the book is in. (There is also a foldout copy of this table located on the last page of this book.) The following excerpt from this table shows which manuals these abbreviations represent:

Book Code	Book Title	Order Number
INST	<i>Installation Guide</i>	SC24-5237
INTRO	<i>Introduction</i>	GC19-6200

You now know that you can look in the *Installation Guide* and/or the *Introduction* to find information about installing VM/SP. Locate these books in the library by referring to Figure 2 on page 4. Once you have found these books in the library, check their indexes (or tables of contents) to locate the specific chapter or page containing the information you need.

The Master Index Code Table

Book Code	Book Title	Order Number
ADGCMS	<i>Application Development Guide for CMS</i>	SC24-5286
ADMIN	<i>Administration</i>	SC24-5285
ADRCMS	<i>Application Development Reference for CMS</i>	SC24-5284
APGDE	<i>Application Development Guide for FORTRAN and COBOL</i>	SC24-5247
CMSMIG	<i>Application Migration Guide for CMS</i>	SC24-5366
CMSLOT	<i>CMS Primer for Line-Oriented Terminals</i>	SC24-5242
CMSREF	<i>CMS Command Reference</i>	SC19-6209
CMSUG	<i>CMS User's Guide</i>	SC19-6210
CONGREF	<i>Connectivity Programming Guide and Reference</i>	SC24-5377
CONPAO	<i>Connectivity Planning, Administration, and Operation</i>	SC24-5378
CPREFG	<i>CP General User Command Reference</i>	SC19-6211
CPSYST	<i>CP System Command Reference</i>	SC24-5402
DIAG	<i>Diagnosis Guide</i>	LY24-5241
EXEC2	<i>EXEC 2 Reference</i>	SC24-5219
GCSREF	<i>Group Control System Command and Macro Reference</i>	SC24-5250
GIM	<i>General Information</i>	GC20-1838
INST	<i>Installation Guide</i>	SC24-5237
INTRO	<i>Introduction</i>	GC19-6200
IPCSREF	<i>Interactive Problem Control System Guide and Reference</i>	SC24-5260
OPGDE	<i>Operator's Guide</i>	SC19-6202
PLNGDE	<i>Planning Guide and Reference</i>	SC19-6201
PRIMER	<i>CMS Primer</i>	SC24-5236
REL6GDE	<i>Release 6 Guide</i>	SC24-5368
SAACOM	<i>SAA Common Programming Interface Communications Reference</i>	SC26-4399
SECUR	<i>Introduction to Security</i>	SC24-5316
SERV	<i>Service Guide</i>	SC24-5389
SFPROG	<i>VM System Facilities for Programming</i>	SC24-5288
SFSAD	<i>CMS Shared File System Administration</i>	SC24-5367
SPIREF	<i>System Product Interpreter Reference</i>	SC24-5239
SPIUG	<i>System Product Interpreter User's Guide</i>	SC24-5238
SRPI	<i>Programmer's Guide to the Server-Requester Programming Interface for VM/SP</i>	SC24-5291
SYSMSG	<i>System Messages and Codes</i>	SC19-6204
TERMREF	<i>Terminal Reference</i>	SC19-6206
XEDIT	<i>System Product Editor Command and Macro Reference</i>	SC24-5221
XEDITUG	<i>System Product Editor User's Guide</i>	SC24-5220

Master Index

A

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 Application Development Guide for FORTRAN and

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 Application Development Reference for

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 CMS Command Reference INTRO

 CMS Primer INTRO

 CMS Primer for Line-Oriented Terminals INTRO

 CMS Shared File System Administration INTRO

 CMS User's Guide INTRO

 Connectivity Planning, Administration, and
 Operation INTRO

 Connectivity Programming Guide and

 Reference INTRO

 CP General User Command Reference INTRO

 CP System Command Reference INTRO

 Distributed Data Processing Guide INTRO

abstracts of VM/SP manuals (*continued*)
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 .FO (Format Mode) control word CMSUG
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 .IN (indent) control word CMSUG
 .MT (Menu Type) control word CMSUG
 .OF (Offset) control word CMSUG
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Summary of Changes

To obtain editions of this publication that pertain to earlier releases of VM/SP, you must order them using the pseudo-number assigned to the respective edition. For:

Release 5, order GT00-1978

Release 4, order GT00-1582

Release 3, order GT00-1356

Release 2, order GQ19-6207

Release 1, order GT19-6207.

Summary of Changes for VM/SP Release 6

This summary describes the major changes that have been made to this publication for Release 6. They are:

- Abstracts of the manuals that make up the VM/SP library have been added and changed as necessary.
- Pseudo numbers for the VM/SP Release 5 publications have been included.
- The Glossary, formerly Chapter 2, has been omitted from the book, and is now a separate publication, the *VM/SP Glossary*, SC24-5379-0.
- A new section in Chapter 1 entitled "Ordering VM/SP Release 6 Publications" has been added.
- The Master Index has been replaced by the new index entries compiled from the VM/SP Release 6 manuals.

Summary of Changes for VM/SP Release 5

This summary describes the major changes that have been made to this publication for Release 5. The major changes are:

- Drawings and cartoons have been added to enhance the usability and appearance of this manual.
- The index from a licensed publications, the *VM Diagnosis Guide*, LY24-5241, has been included in the Release 5 Master Index.
- Abstracts of the manuals that make up the VM/SP library have been added and changed as necessary.
- Pseudo numbers for the VM/SP Release 4 publications have been included.
- Glossary has been updated.
- Chapter 1 has been updated to include new information in the section entitled **Binders and Binder Labels are Available**.
- Chapter 3, the Master Index, has been replaced by the new index entries compiled from the VM/SP Release 5 manuals. Additional changes to Chapter 3 include the following new sections:
 - Index Entries
 - How to Use the Master Index
 - Choosing a Keyword(s)
 - Searching for Keyword(s) in the Master Index
 - Translating the Master Index Code Table
 - Finding the Manual You Need
 - Standard Conventions for Index Entries

- Using Uppercase in Index Entries
- Using Mixed Case in Index Entries
- Using Lowercase in Index Entries.

Summary of Changes for VM/SP Release 4

This summary describes the major changes that have been made to this publication for Release 4. The major changes are:

- The title has been changed from *Virtual Machine/System Product Library Guide and Master Index* to *Virtual Machine/System Product Library Guide, Glossary, and Master Index*.
- Abstracts of the manuals that make up the VM/SP library have been added and changed as necessary.
- Pseudo numbers for the VM/SP Release 3 publications have been included.
- Glossary has been updated.
- Chapter 1 has been updated to include new information in the following sections:
 - What Does the Cover Design Mean
 - Order numbers and File numbers
 - Bill-of-Forms Number for Easy Ordering
 - Reference Summaries
 - Reference Wall Posters
 - Release 4 Items Not Available in a Bill-of-Forms.
- Master Index (Chapter 3) has been replaced by the new index entries compiled from the VM/SP Release 4 manuals. The chapter has also been changed to include a definition of the master index and instructions for using the index.

Summary of Changes for VM/SP Release 3

This summary describes the changes that have been made to this publication for Release 3. The major changes and revisions are:

- Chapter 1 has been revised to describe the task-orientation of the library. It explains the cover design and the relationship between tasks and color. It tells how to order manuals and coordinating binders.
- Chapter 3, previously Chapter 5, contains the Master Index for the VM/SP library.
- The former Chapter 3, "Summary of VM/SP Operands for Commands," has been eliminated.
- The former Chapter 4, "Summary of VM/SP Commands with Options," has been eliminated.





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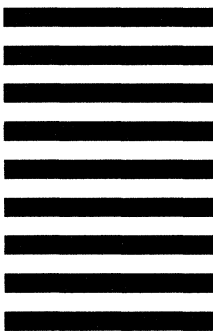
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