



**Program Directory for
z/VM
System Delivery Offering**

Version 6

Program Number 5741-A08

for Use with
z/VM SDO Version 6 Release 2.0

Document Date: March 2012

GI11-9853-01

Note!

Before using this information and the product it supports, be sure to read the general information under “Notices” on page xi.

This program directory, dated March 2012, applies to System Delivery Offering Version 6 (z/VM SDO) , Program Number 5741-A08.

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Summary of Changes

SDO Licensed Program Product changes (service, upgrade, additions or deletions) are identified in the following change history.

z/VM SDO March, 2012

Product Number	Product Abbreviation	VRM	Change
Feature of 5654-A22	XL C/C++ 130 for z/VM	V1R3.0	Documentation
5654-010	ACF/VTAM ESA	V4R2.0	Documentation
Feature of 5654-010	APPC APPL SUITE	V1R1.0	Documentation
5654-029	DITTO	V1R3.0	Documentation
5654-260	EREP	V3R5.0	Serviced
5684-042	ICKDSF	V1R17.0	Serviced
5684-043	ISPF	V3R2.0	Documentation
5684-123	ISPF/PDF	V3R2.0	Documentation
Feature of 5684-123	ISPF/PDF NLS	V3R2.0	Documentation
5695-013	REXX/370 Compiler	V1R4.0	Documentation
Feature of 5695-013	REXX/370 Compiler Kanji	V1R4.0	Documentation
5695-014	REXX/370 Library	V1R4.0	Documentation
Feature of 5695-014	REXX/370 Library Kanji	V1R4.0	Documentation
5696-234	HLASM	V1R6.0	Serviced
Feature of 5696-234	HLASM Toolkit	V1R6.0	Serviced
5697-F42	DB2 Server for VM	V7R5.0	Serviced
Feature of 5697-F42	DB2 Client for VM	V7R5.0	Serviced
5697-J05	Archive Manager for z/VM	V1R1.0	Documentation
5697-J06	Backup and Restore Manager for z/VM	V1R2.0	Documentation
5697-J08	Tape Manager for z/VM	V1R3.0	Serviced
5697-J10	Operations Manager for z/VM	V1R4.0	Documentation
5698-A36	IBM Tivoli Omegamon XE on z/VM	V4R2.0	Documentation
Feature of 5741-A07	DFSMS/VM	V2R2.1	Serviced

Preface

This document is intended for the system programmer responsible for installation of IBM Licensed Program Products (Licensed Products). This document contains the following sections:

- 1.0, “Introduction”

This contains a brief description of the System Delivery Offering (SDO), what is included in the package and an explanation of the different install formats for the Licensed Products.
- 2.0, “z/VM SDO Installation Instructions”

This section explains how to get started with your SDO order. It explains verifying your order, publications to have available, and provides a checklist for the initial installation steps. It describes how to install the z/VM System, the RSU (Recommended Service Update) and SDO Enabling Feature.
- 3.0, “VMSES/E Licensed Product Installation Instructions”

This section contains general installation instructions for the VMSES/E Licensed Products.
- 4.0, “Semi-VMSES/E Licensed Product Installation Instructions”

This section identifies the considerations for the installation of Semi-VMSES/E Licensed Products
- 5.0, “VMSES/E Licensed Product Technical Notes”

This section provides technical installation and verification instructions for each VMSES/E Licensed Product.
- 6.0, “Semi-VMSES/E Licensed Product Technical Notes”

This section provides technical installation and verification instructions for each Semi-VMSES/E Licensed Product.
- Appendix A, “z/VM SDO IBM Licensed Program Products”

This appendix lists the z/VM SDO Licensed Products by product abbreviation and provides the product description and install format.
- Appendix B, “IBM Licensed Program Products Interdependencies”

This appendix lists the Prerequisites, Co-requisites and If-requisites of the Licensed Products in z/VM SDO.
- Appendix C, “DASD Requirements”

This appendix provides recommended sizes of the minidisks associated with each of the Licensed Products in z/VM SDO.
- Appendix D, “Saved Segments”

This appendix provides recommended sizes, locations and names of the saved segments associated with each of the Licensed Products in z/VM SDO.

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- Appendix E, “Licensed Products Tapemaps”

This appendix provides tapemaps of stacked VMSES/E and Semi-VMSES/E tapes.

Contents

Summary of Changes	iii
Preface	v
Notices	xi
Trademarks and Service Marks	xiii
1.0 Introduction	1
1.1 z/VM System Delivery Offering	1
1.1.1 The z/VM System	1
1.1.2 Enabling Aid	2
1.1.3 z/VM SDO IBM Licensed Program Products	2
1.1.4 z/VM SDO Web Site	2
1.1.5 Basic Publications	3
1.1.6 Publications for Licensed Products	3
1.1.7 Optional Documentation	3
2.0 z/VM SDO Installation Instructions	5
2.1 Checklist of z/VM SDO Installation Steps	5
2.2 Before You Begin	5
2.2.1 Verify Your Order	6
2.3 Program Support	7
2.3.1 Preventive Service Planning	7
2.3.2 Statement of Support Procedures	7
2.4 Installation of the z/VM System and Stacked RSU	8
2.4.1 z/VM 6.2.0 Content	8
2.4.2 Tape Formats for Machine Readable Material	13
2.4.3 DASD Storage Requirements	14
2.4.4 Install the z/VM System	14
2.5 Install the SDO Optional Products Enabling Aid (Optional)	14
2.5.1 SDOZVM62 SAMPDIR	15
2.5.2 SDOZVM62 PRODPART	15
2.5.3 Installation Steps for the Enabling Aid	15
2.6 Plan for Licensed Product Interdependencies	19
2.7 Determine the Install Format of the Licensed Products	19
2.8 IBM Systems Director (Optional)	20
2.8.1 IBM Systems Director for Linux on System z, V6.3, 5648-SEZ	20
2.8.2 IBM Systems Director VMControl Image Manager for Linux on System z, V2.3.1	21
2.8.3 IBM Systems Director Active Energy Manager™ (AEM) for Linux on System z, V4.3	21
2.8.4 Additional Plug-ins (Extensions) for IBM Systems Director for Linux on System z, V6.2	22
3.0 VMSES/E Licensed Product Installation Instructions	23

3.1	Checklist of the VMSES/E Licensed Products Installation Process	23
3.2	Allocate DASD and Userids	23
3.3	Prepare the VMSES/E Order for Installation	24
3.3.1	Mount the VMSES/E Tape	24
3.3.2	Prepare the Product Envelope Delivered from Internet	24
3.4	Install the z/VM SDO VMSES/E Licensed Product	25
4.0	Semi-VMSES/E Licensed Product Installation Instructions	27
4.1	Checklist for the Semi-VMSES/E Licensed Products Installation Process	27
4.2	Semi-VMSES/E Licensed Product Definition	28
4.3	Semi-VMSES/E Installation Overview and Planning	28
4.3.1	Plan for the Installation of the Semi-VMSES/E Licensed Product	29
4.3.2	Prepare the Semi-VMSES/E Order for Installation	29
4.3.3	Load Installation-Related Files from Tape	30
4.3.4	Allocate Resources for the Semi-VMSES/E Licensed Product	33
4.4	Install the Semi-VMSES/E Licensed Product	36
4.4.1	Install Using the VMFINS EXEC	37
4.4.2	Place IBM Licensed Program Product Into Production	40
5.0	VMSES/E Licensed Product Technical Notes	43
5.1	VMSES/E Licensed Product Specific Considerations	43
5.1.1	5654-A22 XL C/C++ 130 FOR Z/VM V1R3.0	43
5.1.2	5654-A23 IBM DEBUG TOOL FOR Z/VM V4R1.0	47
5.1.3	5654-010 ACF/VTAM ESA V4R2.0	51
5.1.4	5654-010 APPC APPL SUITE V1R1.0	55
5.1.5	5654-029 DITTO V1R3.0	58
5.1.6	5655-T13 IBM TIVOLI ZSECURE MANAGER FOR RACF V1R11.0	61
5.1.7	5668-723 GDDM-IVU V1R1.3	66
5.1.8	5668-801 GDDM-IMD V2R1.3	69
5.1.9	5668-812 GDDM-PGF V2R1.3	73
5.1.10	5684-042 ICKDSF V1R17.0	76
5.1.11	5684-168 GDDM/VM V3R2.0	79
5.1.12	5695-013 REXX/370 COMPILER V1R4.0	83
5.1.13	5695-013 REXX/370 COMPILER KANJI V1R4.0	86
5.1.14	5695-014 REXX/370 LIBRARY V1R4.0	89
5.1.15	5695-014 REXX/370 LIBRARY KANJI V1R4.0	93
5.1.16	5696-234 HLASM V1R6.0	96
5.1.17	5696-234 HLASM TOOLKIT V1R6.0	100
5.1.18	5697-F42 DB2 SERVER FOR VM V7R5.0	104
5.1.19	5697-F42 DB2 DATA PROPAGATOR V7R4.0	108
5.1.20	5697-F42 DB2 QMF V7R2.0	112
5.1.21	5697-F42 DB2 CLIENT FOR VM V7R5.0	116
5.1.22	5697-J05 ARCHIVE MANAGER FOR Z/VM V1R1.0	120
5.1.23	5697-J06 BACKUP AND RESTORE MANAGER FOR Z/VM V1R2.0	124
5.1.24	5697-J08 TAPE MANAGER FOR Z/VM V1R3.0	127

5.1.25	5697-J10 OPERATIONS MANAGER FOR Z/VM V1R4.0	131
5.1.26	5698-A36 IBM TIVOLI OMEGAMON XE ON Z/VM V4R2.0	135
5.1.27	5741-A07 DFSMS/VM V2R2.1	139
5.1.28	5741-A07 DFSMS/VM KANJI V2R2.1	143
6.0	Semi-VMSES/E Licensed Product Technical Notes	147
6.1	Semi-VMSES/E Licensed Product Specific Considerations	147
6.1.1	5654-260 EREP V3R5.0	147
6.1.2	5684-043 ISPF V3R2.0	152
6.1.3	5684-123 ISPF/PDF V3R2.0	157
6.1.4	5684-123 ISPF/PDF NLS V3R2.0	168
6.1.5	5697-F42 DB2 RXSQL V7R1.0	173
6.1.6	5697-F42 DB2 DATA RESTORE V7R3.0	177
6.1.7	5697-F42 DB2 CONTROL CENTER V7R3.0	181
6.1.8	5697-F42 DB2 NLS VM HELP FILES V7R5.0	185
6.1.9	5697-F42 DB2 CLIENT NLS VM HELP FILES V7R5.0	189
Appendix A.	z/VM SDO IBM Licensed Program Products	195
A.1	z/VM SDO Licensed Products Table	195
Appendix B.	IBM Licensed Program Products Interdependencies	197
B.1	Requisite IBM Licensed Program Product Dependencies	197
B.1.1	Pre-Requisites (Install-Time Full Requisite)	197
B.1.2	Co-Requisite (Run-time Full Requisite)	197
B.1.3	If-Requisites (Install-time and Run-time Part Requisites)	197
B.2	z/VM SDO Licensed Product Requisites Table	198
Appendix C.	DASD Requirements	201
C.1	z/VM SDO Licensed Product DASD Requirements	201
Appendix D.	Saved Segments	211
D.1	id=segtable.z/VM SDO Program Product Segment Layout	211
D.2	Creating Saved Segments Utilizing the	213
Appendix E.	Licensed Products Tapemaps	215
E.1	Stacked Tape for VMSES/E and Semi-VMSES/E Licensed Products	215
Appendix F.	z/VM 6.2 Installation and Production Enablement Requirements	219
F.1	SSI-Enabled (Multisystem SSI Cluster) User ID Definitions	219
F.2	SSI-Enabled Real Device and Minidisk Management	219
F.3	Installation of Licensed Program Product into SFS Directories	221
F.4	z/VM 6.2 System Maintenance ID and System Disk Ownership	221
F.5	SSI-Enabled Environment LP Production Enablement Considerations	222
Bibliography		225

Reader's Comments	227
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1.0 Introduction

Thank you for ordering the z/VM System Delivery Offering (z/VM SDO, 5741-A08) package.

The person receiving this order should make sure everything on the Packing List was received. The *Read This First* letter (GI11-9471), Packing List, and the Media Report contain important information about the SDO installation and will be required by the system programmer.

The Packing List contains information about the tapes and the documentation sent. The Media Report describes the contents of the stacked tapes. If the Media Report is not available, the system programmer must load the Licensed Product tape and use VMFPLC2 to determine the contents of the tape.

If there are any discrepancies between the package contents and the Packing List or if you have not received any part of your order, please call **IBM Software Manufacturing and Delivery** at the number indicated on the cover letter of the Packing List.

1.1 z/VM System Delivery Offering

The z/VM SDO Version 6 Release 2.0, program number 5741-A08, is the IBM® program offering for z/VM® that includes a single deliverable containing z/VM and a group of fully serviced IBM licensed program products.

The z/VM SDO Licensed Product package contains:

- The z/VM System which is the VM operating system
- z/VM SDO Optional Products Enabling Aid
- z/VM SDO Licensed Products

1.1.1 The z/VM System

The z/VM System provides a highly flexible test and production environment which provides the capability for the installation and execution of additional IBM Licensed Products, the development and execution of applications and the ability to run full-function operating systems as guests. The z/VM System is a prebuilt VM operating system which is available on 3590 or 3592 tape cartridge, DVD or through electronic internet delivery. The 3590 and 3592 tape cartridge delivery of the z/VM System is in DDR format. The DVD and the electronic internet delivery are in binary image format.

Note: Electronic Internet delivery of the the z/VM System and IBM Licensed Products is only available when ordered through Shopz.

1.1.2 Enabling Aid

The Enabling Aid is a z/VM SDO Product and it is recommended that it be installed prior to installing z/VM SDO Licensed Products. The Enabling Aid consists of files that contain information about the SDO Licensed Products such as Saved Segments, PUT/RSU/ESO levels for the products and sample directory entries.

1.1.3 z/VM SDO IBM Licensed Program Products

The following subsections describe the characteristics of the Licensed Products that are part of z/VM SDO. Installation of the z/VM SDO Licensed Products is supported on the following DASD types:

- 3390

Licensed Products may be in one of these install formats:

1. **VMSES/E** are those products packaged in the IBM Standard VMSES/E Enabled format. One or more Licensed Products may be delivered on a stacked tape so it is important to refer to the Media Report for a product's location.
2. **Semi-VMSES/E** are products that were not originally in VMSES/E format but that have been put through an IBM Process that installs the product per the original IBM installation procedure and repackages the installed product in a VMSES/E enabled format. This provides for the installation of the product utilizing standard VMSES/E commands. One or more Licensed Products may be delivered on a stacked tape so it is important to refer to the Media Report for the product's location.

Note!

A **Semi-VMSES/E** product was previously called '**Pre-Install**' format; however, this term was misleading in that it may have indicated that the product was already installed. The name has been changed to better describe the install format type.

The term 'Pre-Install' may still appear on the Packing List or the Media Report, the Configurator, or Marketing Literature, but should be interpreted to mean Semi-VMSES/E.

1.1.4 z/VM SDO Web Site

There is additional information about the z/VM SDO on the web site <http://www.vm.ibm.com/sdo/>. This site is maintained with the current z/VM SDO Program Directory (in PDF format), the list of SDO products, and information on applied service. This site also provides links to other useful z/VM information.

1.1.5 Basic Publications

The following basic publications are included with your order of the z/VM base product and will be useful during installation:

z/VM Installation Guide

z/VM License Information

Program directories for z/VM and its features are supplied with your order.

1.1.6 Publications for Licensed Products

Program Directories for a number of the optional IBM SDO Licensed Products that you may have ordered may be found on the IBM z/VM website at:

<http://www.vm.ibm.com/library>

If the Program Directory is not available on the above website, it may be obtained from the IBM Publications website at:

<http://www.ibm.com/shop/publications/order>

Many of the basic publications for IBM Licensed Program Products can be found on DVD, SK5T-7054, *IBM Online Library: z/VM Collection* (one copy of the DVD is supplied with the z/VM 6.2 System Deliverable at no additional charge).

This collection contains libraries for approximately 60 products in both PDF and BookManager® format. If you need a publication in hardcopy format, the PDF files can be printed from the DVD.

Alternatively, you can print or order a hardcopy from the IBM Publications Center website at:

<http://www.ibm.com/shop/publications/order>

The distribution of the IBM Online Library: z/VM Collection, on CD-ROM as a no-charge deliverable, has been discontinued. Both the IBM Online Library: z/VM Collection CD-ROM, and the IBM Online Library: z/VM Collection on DVD, are available (for a fee) from the IBM Publications Center website at:

<http://www.ibm.com/shop/publications/order>

1.1.7 Optional Documentation

Optional unlicensed documentation is supplied only in PDF or BookManager format with z/VM.

Publications available in these formats are provided on DVD, SK5T-7054, *IBM Online Library: z/VM Collection*.

Additional copies of the DVD or printed versions of some publications can be ordered (for a fee), from the IBM Publications Center website at:

<http://www.ibm.com/shop/publications/order>

Publications available in PDF and BookManager format can also be found via the IBM z/VM Internet Library at:

<http://www.ibm.com/vm/library>

Publications can also be found at the IBM Publications Center website at:

<http://www.ibm.com/shop/publications/order>

2.0 z/VM SDO Installation Instructions

2.1 Checklist of z/VM SDO Installation Steps

Notes:

- *Perform the steps in order.*
- *Mandatory steps are preceded by squares (■).*
- *Optional steps are preceded by circles (○).*
- *Page references appear in parentheses.*

- ■ **2.2, Before You Begin** (5)
 - ■ Verify Order with Packing List (6)
 - ■ Gather Publications Useful During Installation (3)
- ■ **2.3, Program Support** (7)
 - ■ Obtain latest z/VM SDO and Licensed Product Install Bucket Information (7)
 - ■ Obtain the latest PSP information (7)
- ■ **2.4, Installation of the z/VM System and Stacked RSU** (8)
 - ■ Review the z/VM Content (8)
 - ■ DASD Storage Requirements (14)
 - ■ Install the z/VM System and the RSU, referring to the z/VM Program Directory. (14)

If the SDO order includes Licensed Program Products in addition to the z/VM System, continue the installation with the following instructions. If there are no additional products, the installation of the z/VM System is complete.

- ○ **2.5, Install the SDO Optional Products Enabling Aid (Optional)** (14)
- ■ **2.6, Plan for Licensed Product Interdependencies** (19)
- ■ **2.7, Determine the Install Format of the Licensed Products** (19)
 - ■ **For each VMSES/E Licensed Product repeat the following:**
 - ■ 3.0, VMSES/E Licensed Product Installation Instructions (23)
 - ■ 5.0, VMSES/E Licensed Product Technical Notes (43)
 - ■ **For each Semi-VMSES/E Licensed Product repeat the following:**
 - ■ 4.0, Semi-VMSES/E Licensed Product Installation Instructions (27)
 - ■ 6.0, Semi-VMSES/E Licensed Product Technical Notes (147)

2.2 Before You Begin

Before you begin installing the z/VM SDO, verify that all program materials ordered have been received. Additionally, there are several publications and reference material that may be useful to have available during the installation.

2.2.1 Verify Your Order

Verify the physical tapes with the Packing List and Media Report to ensure that all tapes and materials have been received. The Packing List includes information about the tapes and the documentation. If for some reason you do not have all the tapes and the documentation specified in the Packing List, or if they are damaged, call the number specified on the cover letter of the Packing List. It may not be possible to install the Licensed Product if you are missing any of the material.

Tapes can be sorted first by using the information on the tape label. Under the IBM logo, in bold letters, you will see headings similar to the following:

z/VM 3390 System DDR

z/VM SDO (with the words 'Stacked RSU' on the fourth line)

z/VM Licensed Program Products

Specific Product Name (ie., AFP Fonts)

The System DDR and RSU tapes may be delivered on multiple tapes so verify you have all the tapes in the sequence. On the tape label, across from the IBM logo, will indicate Seq 001 of 003, etc.

Under the barcode at the bottom of the tape label, will appear the reference number of the tape, like *WM6578354*. Using only the numeric digits, 6578354, use this number to match the information on the Media Report and Packing List under the column Ref. No. to the tapes.

The Media Report describes the contents of the software ordered and tells which products are on the stacked tapes. If the Media Report is not available, the system programmer must load the Licensed Product tape and use VMFPLC2 to determine the contents.

If you ordered Optional Licensed Program Products, most will be stacked on one of the tapes labelled 'z/VM Licensed Program Products'. If you received more than one Licensed Program Product tape, you will need to refer to the Media Report and reference number from the tape to determine the contents on each tape.

The actual number of physical tapes you receive depends on the tape density and the install format of the Licensed Program Products ordered. All VMSES/E and Semi-VMSES/E Licensed Program Products may be 'stacked' on the same tape(s), with the possible exception the Fonts. Dependent upon the tape media utilized, this Program Product may be shipped on a separate tape(s).

If you ordered the AFP Fonts and the Program Product is shipped on a separate tape(s), the tape(s) will show the Program Product name on the tape label.

With your z/VM SDO order, you will receive a Program Directory for most of the Licensed Products ordered. There are a few products that do not have Program Directories or may have Installation Guides instead. Many products can be installed using only the directions in the *z/VM SDO Program Directory*. However, it is also possible that while installing a Licensed Product, you will be asked to refer to the product's Program Directory.

2.3 Program Support

For z/VM and the z/VM SDO Licensed Products, refer to the individual Licensed Product Program Directories for programming service details.

2.3.1 Preventive Service Planning

Before installing the z/VM SDO Package (the z/VM System, and the z/VM SDO Licensed Products), you should contact the IBM Support Center or use the Preventive Service Planning (PSP) facility in IBMLink (ServiceLink) to obtain the latest PSP information. The latest PSP Install buckets contain pertinent installation information, corrections to documentation and also may recommend additional service.

2.3.1.1 z/VM SDO PSP Install Bucket Information

To obtain the PSP Install Buckets specific to z/VM SDO specify the following UPGRADE and SUBSET values pertaining to the level of the z/VM SDO being installed.

Figure 1. PSP Upgrade and Subset ID

Retain				
COMPID	Release	Upgrade	Subset	Description
N/A	N/A	SDO2012	SDO620	SDO 2012 with z/VM SDO Version 6 Release 2.0

2.3.1.2 z/VM PSP Install Bucket Information

Refer to the *z/VM Program Directory* for PSP Install Bucket information.

2.3.1.3 Licensed Products PSP Install Bucket Information

For PSP Install Bucket information for the Licensed Products, refer to the Program Support section of the individual Licensed Product's Program Directory. Licensed Product service levels may be found under the link "z/VM SDO Optional Licensed Product Service" on the IBM VM Website:

<http://www.vm.ibm.com/sdo/sdozvm62.html>

2.3.2 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an Authorized Program Analysis Report (APAR) is required, the Support Center will provide the address to which any needed documentation can be sent.

2.4 Installation of the z/VM System and Stacked RSU

2.4.1 z/VM 6.2.0 Content

The z/VM System is a pre-built VM system that serves as an installation platform for other IBM Licensed Products in the z/VM SDO package. The z/VM Installation Guide should be followed to load the system from the delivery media. Once loaded the z/VM System may be tailored to your individual requirements.

The pre-built VM system contains the following:

Prerequisite IBM licensed programs:

- EREP/VM, V3.5 (5654-260)
- ICKDSF for VM, V1.17 (5684-042) (includes ICKDSF Standalone release 17)
 - EREP and ICKDSF are pre-installed on the z/VM 6.2 System Deliverable.

The z/VM System contains z/VM Version 6 Release 2.0 and includes the following components and facilities:

- AVS
- Control Program (CP)
- Conversational Monitoring System (CMS)
- Dump Viewing Facility (DVF)
- Group Control System (GCS)
- HCD and HCM for z/VM, function level 620
- Language Environment® (LE), function level 620
- Open Systems Adapter/Support Facility (OSA/SF), function level 440
- REstructured eXtended eXecutor (REXX)
- Transmission Control Protocol/Internet Protocol (TCP/IP), function level 620
- Transparent Services Access Facility (TSAF)
- VM Serviceability Enhancements Staged/Extended (VMSES/E)
- SFS and CRR file pools
- DASD Dump Restore (DDR) program
- Translated CP and CMS message repositories
- English and translated z/VM HELP files
- 3800 printer image library object code
- 3800 printer image library source

z/VM Optional Features:

- DirMaint™, function level 620
- Performance Toolkit for VM™, function level 620
- RACF Security Server for z/VM, function level 620
- RSCS Networking for z/VM, function level 620

Notes

1. ICKDSF and EREP are not part of the z/VM product. They are separate prerequisite IBM licensed programs that are included in the z/VM System Image for convenience. Before using ICKDSF and EREP/VM you must be already licensed for them, or you must place orders for them to establish licenses.
2. The DirMaint, Performance Toolkit, RACF®, and RSCS optional features are included in the z/VM System Image for convenience. They are installed disabled. If you decide to use any of these features, you must place orders for them so that you can enable them.
3. The DFSMS/VM optional feature is not included in the z/VM System Image. If desired, DFSMS/VM must be ordered as a no-cost optional feature of the z/VM SDO.
4. The IBM z/VM Single System Image Feature is not included in the z/VM System Image. If desired, this feature must be ordered through the z/VM SDO.

2.4.1.1 Hardware Requirements

The z/VM V6.2 system operates on the IBM zEnterprise 196, the IBM zEnterprise 114, the IBM System z10 Enterprise Class, and the IBM System z10 Business Class servers. Refer to the DEVICEnnnn Preventative Service Planning (PSP) bucket for the minimal MCL level and any required updates or PTFs, where 'nnnn' is 2817 for the z196, 2818 for the z114, 2097 for the z10 Enterprise Class and 2098 for the z10 Business Class.

2.4.1.2 Product Packaging

The z/VM V6.2 System deliverable is available as:

- Multivolume 3390 DASD Dump Restore (DDR) image on 3590 or 3592 tape cartridges
- Binary image on DVD or internet delivery
- The restricted source and the PL/X source are not orderable or shipped with z/VM V6. Both will be available as no-charge downloads from IBM Resource Link at
<http://www.ibm.com/servers/resourceLink>
- If you are not registered with Resource Link™, you will be required to register for a user ID and password. You must also be licensed for z/VM V6.2 and entitlement will be verified when you request the source code. After approval, you will receive instructions describing how to download the code.

Except for EREP, ICKDSF/VM, and the NLS HELP files, the products/components/features are serviced on the stacked RSU. The stacked RSU will be updated and refreshed in the product install package. The naming convention for the stacked RSU is 62nn (ie. VRnn, where nn is incremented by one for each level built).

Note!

z/VM is the successor to IBM's VM/ESA® operating system. Some products and functions supported on z/VM and some publications might continue to use VM/ESA in their names.

Withdrawal of distribution medium

z/VM is not available on the 3480 tape medium, satisfying the the statement of direction made in the IBM Software Announcement dated February 6, 2007. Simultaneous with the withdrawal of support for 3480 tape medium, support for the installation of z/VM utilizing the 3490 Tape Subsystems was discontinued.

z/VM is distributed on 3590 and 3592 tape media, DVD, and through electronic Internet delivery.

Distribution of the Recommended Service Update (RSU) on CD-ROM in Optical Media Attachment/2 (OMA/2) format has been discontinued.

Changes to the z/VM System Delivery Offering (SDO)

The following changes have been included with the new z/VM 6.2:

- Virtualization technology and Linux enablement

z/VM V6.2 implements multi-system virtualization clustering technology allowing up to four z/VM instances to be clustered together as members in a Single System Image (SSI). This multi-system virtualization clustering technology is a first for the mainframe. Members of a z/VM SSI cluster are managed, serviced and administered as a single system and share the following resources:

- User directory
- Minidisks
- SPOOL files
- Network device MAC addresses

Live Guest Relocation (LGR) is a function of a z/VM SSI cluster that provides the capability for a running Linux virtual machine to be moved transparently without disruption from one z/VM system to another within a Single System Image. Live Guest Relocation provides continuity for virtual server workloads during planned z/VM and machine outages, such as service and hardware upgrades.

- Technology exploitation

z/VM 6.2 provides support for the newest IBM System z hardware technologies, including the IBM zEnterprise 196 (z196) and the IBM zEnterprise 114 (z114) and enables guests to exploit selected new features.

- Systems management

z/VM 6.2 implements improvements that help to provide self-configuring, self-managing and self-optimization facilities, one being the support for the IBM zEnterprise Unified Resource Manager which runs in a Hardware Management Console (HMC) and controls virtual server lifecycle management.

The following changes were previously made when z/VM was upgraded from 5.4 to 6.1:

- Closer Integration with IBM Systems Director

To help simplify installation, the following IBM Systems Director V6.2 Agents were delivered on the z/VM V6.1 System:

- Manageability Access Point Agent for z/VM (zMAP)
- Core Services Agent (Level-1 Agent)

These two Agents no longer had to be downloaded from the IBM System Director Website.

- Discontinuation of Support for HMF

Host Management Facility (HMF) V1.1 (5684-157) was withdrawn from marketing effective September 8, 2008 as announced in the IBM Withdrawal Announcement dated June 03, 2008. Service support for HMF V1.1 was discontinued on April 5, 2010 as announced in the IBM Withdrawal and Service Announcement dated February 03, 2009.

HMF V1.1 was not supported on z/VM 6.1. The replacement IBM Program Product for HMF V1.1 is IBM Operations Manager V1.3.0 (5697-J10) or later.

- VMPRF Mode was Not Supported by Performance Toolkit FL610

VMPRF mode, which provided compatibility with the report file specifications of VM Performance Reporting Facility (5684-073) was not supported by Performance Toolkit for VM FL610 executing under z/VM 6.1. Under Performance Toolkit for VM FL610, all reports must follow the report specifications required by Performance Toolkit FL610.

Service Support for VM Performance Reporting Facility (5694-073) was discontinued on December 31, 2005 as announced in the IBM Software Service Discontinuance Announcement dated August 3, 2004.

-
- **Withdrawal of Support for RPC-Based System Management APIs**

With z/VM 6.1, IBM withdrew support for the RPC-based System Management APIs. This satisfied the statement of direction made in the IBM Software Announcement dated February 6, 2007. Sockets-based System Management APIs continue to be supported.

- **Withdrawal of German NLS Files**

With z/VM 6.1, z/VM message repositories, help files and other panel or text files were not translated into German.

- **Language Environment Migration Requirements**

With z/VM 6.1, Language Environment (LE) was at Function Level (FL) 540, which was required for the execution of LE Applications under z/VM 6.1. Therefore versions of LE at a Function Level lower than 540 should not have been migrated to z/VM 6.1. Attempts to execute LE Applications under levels of LE lower than Function Level 540 would fail.

SDO Packaging Changes from z/VM 5.4 that still applied for z/VM 6.1:

- **Removal of Delivery of the SDO Enabling Aid with SDO Product Order**

With z/VM 5.4, the SDO Enabling Aid feature was no longer shipped with the SDO Product Order, it was only available as an electronic Internet download from the IBM Website at <http://www.ibm.com/eserver/zseries/zvm/sdo/>.

z/VM V6.2 Information Center

IBM publishes the z/VM V6.2 documentation in an information center using the IBM Eclipse Help System framework. The z/VM V6R2 Information Center includes information for the z/VM base product and optional features, the prerequisite IBM products, and some optional IBM products and facilities. The content of the information center is identical to that in the traditional IBM BookManager and Adobe PDF formats; however the presentation might differ to some degree.

Advantages of information centers are:

- Content is indexed by Google and other internet search engines to help locate information more easily.
- Custom searches can be created that include only the information you need for a particular task or job role.

The z/VM V6.2 Information Center is available on:

-
- z/VM V6R2 Information Center website at <http://www.publib.boulder.ibm.com/infocenter/zvm/v6r2/index.jsp>
 - z/VM V6R2 Information Center DVD, SK5T-7098. The DVD includes the IBM Eclipse Help System framework, which allows you to install the z/VM V6R2 Information Center on a workstation or internet. The DVD can be ordered (for a fee) from the IBM Publications Center website at: <http://www.ibm.com/shop/publications/order/>

z/VM Collection DVD

The IBM Online Library: z/VM Collection DVD, SK5T-7054, includes BookManager bookshelves and PDF libraries for z/VM and current IBM licensed programs that run on z/VM. One copy of the DVD is supplied with z/VM (at no additional cost).

Notes

1. Only unlicensed publications are included
2. Some licensed programs might not have PDF libraries; some publications might not have PDF versions.
3. The DVD also includes the following programs:

IBM Softcopy Reader

Allows you to view and search BookManager files and organize BookManager files and bookshelves.

IBM Softcopy Librarian

Allows you to manage BookManager files in a repository and download BookManager files from the Internet.

Softcopy Receiver Tool

Allows you to transfer BookManager files from the DVD to the workstation or host.

2.4.2 Tape Formats for Machine Readable Material

The actual number of physical tapes you receive depends on the tape density and the install format of the Licensed Program Products ordered.

The layout of the z/VM System is specified in the *z/VM Installation Guide*.

For more information on the format of a stacked VMSES/E tape for Licensed Products, please refer to Appendix Appendix E, "Licensed Products Tapemaps" on page 215.

2.4.3 DASD Storage Requirements

Refer to *z/VM Installation Guide* for the DASD storage requirements.

It is important to have page, spool, and temp space defined. Paging space, spooling space, and temporary minidisk space (PAGE, TEMP, and TDSK, respectively) are installation dependent. The amount of page space required depends on the number and size of logged-on virtual machines, processor size and workload. The amount of space needed for spooling and temporary minidisk requests will be dependent upon user demand and application requirements.

For more information on virtual machine DASD requirements and allocation for PAGE, TEMP, and TDSK, please refer to *z/VM CP Planning and Administration*.

2.4.4 Install the z/VM System

Install the z/VM System prior to installing the Licensed Products.

1. Refer to the appropriate *z/VM Installation and Service Summary* which comes with the *z/VM Installation Guide*. This provides a summary of the steps required to install the z/VM system and will serve as your guide.
2. Install the z/VM System using the appropriate *z/VM Installation and Service Summary* and the *z/VM Installation Guide*. The stacked RSU will be installed as part of the z/VM installation.
3. Install additional service, if noted in the Preventive Service Planning stage. This service is specified either in the z/VM Program Directory or the z/VM PSP Bucket.
4. After the installation of the z/VM System and RSU, and other necessary configurations as stated in *z/VM Installation Guide*, return back to this point in the SDO Program Directory when you are ready to install the Licensed Products.
5. If the SDO order includes licensed program products, continue the installation with the following instructions. If there are no additional products, the installation of the z/VM System and z/VM SDO is complete.

2.5 Install the SDO Optional Products Enabling Aid (Optional)

Please review this section before installing the Enabling Aid to determine whether it is required. Although, the files provided with the Enabling Aid may be useful to system programmers, they are not required in order to install the other Products. However, if installed, the Enabling Aid (5741-A08), should be installed before installing the Licensed Products.

The Enabling Aid consists of two z/VM SDO configuration files which contain sample VM Directory entries and Saved Segment definitions for the SDO Optional Products. Information on the two Enabling Aid files follows.

2.5.1 SDOZVM62 SAMPDIR

This file is generally placed on the **MAINT 2C2** (Samples & Install Tools Disk). The file contains a prologue section describing the file's contents. This prologue includes the following information:

- The organization of the directory (directory entries are broken down by products in VM for the SDO option).
- Sample user directory, with a brief description of each directory entry.
- Minidisks required to install the products.
- Minidisk sizes
- How to edit the file for your own use.
- How to use XEDIT to determine total minidisk size required, based on individual product minidisk size information.

2.5.2 SDOZVM62 PRODPART

This file is generally placed on the **MAINT 2C2** (Samples & Install Tools Disk). The file contains the saved segment definitions for the z/VM SDO Licensed Products.

The VMSES/E SEGDATA file may be updated with the Saved Segment (DCSS) definitions for all the z/VM SDO Licensed Products at the same time by following the instructions in Appendix D.2, "Creating Saved Segments Utilizing the" on page 213.

After the VMSES/E SEGDATA file has been updated, the VMSES/E VMFBLD Command may be utilized to define and create the Saved Segments for VMSES/E Format Licensed Products.

The Saved Segments for z/VM SDO Semi-VMSES/E Licensed Products must be defined and created by following the instructions in the Technical Notes provided for each z/VM SDO Semi-VMSES/E Licensed Products.

2.5.3 Installation Steps for the Enabling Aid

The Enabling Aid files are available as a download on the z/VM SDO Website.

<http://www.vm.ibm.com/sdo/>

The Enabling Aid files are provided in VMARC Archive format. The following are the general steps required to transfer the VMARC Archive file to a z/VM System and to unpack the Enabling Aid files from the VMARC Archive file.

1. On the VM SDO Home Page, click on 'z/VM 6.2.0 SDO (5741-A08)'

-
- This will take you to a Webpage that lists the z/VM 6.2.0 SDO specific documents that are available on-line, including the SDO Enabling Aid.
2. On the VM SDO Document Page, click on 'z/VM SDO Enabling Aid'
 - This will take you to a Webpage that contains the SDO Enabling Aid download link and information on how to upload the VMARC Archive file from your PC to a z/VM and then unpack the VMARC Archive file.
 3. On the SDO Enabling Aid Webpage, click on 'Download z/VM SDO Enabling Aid'
 - This will download the VMARC Archive file with the Enabling Aid files to your PC.
 - If you are using Microsoft Internet Explorer, click on the link and save the archive file to your PC.
 - If you are us Mozilla Firefox, right click on the link and select 'Save link as ...' to save the archive file to your PC.
 4. Upload the VMARC Archive file with the Enabling Aid files from your PC to your z/VM System.
 - The VMARC Archive file must be uploaded in binary.
 5. On the z/VM System, perform the following steps to unpack the VMARC Archive file.
 - a. Reblock the VMARC Archive file to fixed length 80 character records
 - b. Unpack the reblocked VMARC Archive file with the 'VMARC UNPK' command.

The following sections contain procedures that may be utilized to upload the VMARC Archive file from your PC to a z/VM System; and to unpack the VMARC Archive file on the z/VM System.

Additional information on the download of VMARC Archive Files, the VMARC Command and the download of the VMARC Command software may be found at following IBM Website.

<http://www.vm.ibm.com/download/>

2.5.3.1 Sample Upload Procedure

The following are the steps required to transfer the VMARC Archive file from your PC to a z/VM System utilizing FTP (TCP/IP's File Transfer Protocol). The steps require that FTP be enabled on both the PC and the z/VM System.

From a DOS window, enter the following-

FTP url_of_zVM_System ==> Where 'url_of_zVM_System'
is the IP address (url)
of the z/VM System

User: Userid_on_zVM System ==> In response to the prompt
'User:' enter the name of
the ID on the z/VM System
that will be utilized
for the FTP (e.g. MAINT)

Password: Password_for_Userid ==> In response to the prompt
'Password:' enter the
password for the ID on
the z/VM System.

ftp> CD mini_disk_SFS_dir ==> In response to the prompt
'ftp>' enter the minidisk
or the SFS Directory that
will be utilized to store
the Enabling Aid files.
- The minidisk must be
specified as
'userid.minidisk'
(e.g. MAINT.2C2)
- The SFS Directory
must be specified as
a standard z/VM SFS
Directory name (e.g.
SYSPool:MAINT.2C2.)

ftp> BINARY ==> In response to the prompt
'ftp>' specify 'binary'
transmission mode

ftp> PUT pc_file zvm_file ==> In response to the prompt
'ftp>' enter the name of
the PC file (pc_file) and
the name of the z/VM file
(zvm_file). The z/VM
file must be in the format
'file_name.file_type'
(e.g. ENABLE.VMARC)

ftp> QUIT ==> In response to the prompt
'ftp>' enter 'quit' to
exit FTP.

In order for the above procedure to work, the minidisk or SFS Directory specified to contain the VMARC Archive file cannot be accessed in 'write' mode by any ID on the z/VM System.

2.5.3.2 VMARC File Unpack Procedure

The following commands may be utilized as indicated to unpack the Enabling Aid files from the VMARC Archive file and place them either on a minidisk or in an SFS Directory. On the z/VM System, perform the following steps to unpack the VMARC Archive file.

1. Reblock the VMARC Archive file to fixed length 80 character records

```
PIPE < fn1 ft1 fm1 | FBLOCK 80 00 | > fn2 ft2 fm2 F 80
```

2. Unpack the reblocked VMARC Archive file with the 'VMARC UNPK' command.

```
VMARC UNPK fn2 ft2 fm2
```

- Where:

```
fn1 ft1 fm1    ==> The file name (fn1), file
                  type (ft1) and file mode
                  (fm1) of the VMARC Archive
                  file that was uploaded from
                  your PC
```

```
fn2 ft2 fm2    ==> The file name (fn2), file
                  type (ft2) and file mode
                  (fm2) of the reblocked
                  VMARC Archive file.
```

An example of the above commands follows:

```
PIPE < ENA VMARC A | FBLOCK 80 00 | > ENAUNB VMARC A F 80
```

```
VMARC UNPK ENAUNB VMARC A
```

Note:

The VMARC command in the above format will place the Enabling Aid files on the same disk as the reblocked VMARC Archive file (i.e. For the above, on the 'A' disk.)

2.6 Plan for Licensed Product Interdependencies

Many Licensed Products are dependant upon other Licensed Products for successful installation or in order for the product to execute correctly. Based on the Licensed Products to be installed, you should now plan for installation of any pre-requisite, co-requisite and if-requisites products. A pre-requisite product is one that is required to be installed before you install the Licensed Product, so you should also plan for the order the products should be installed.

See Appendix B, “IBM Licensed Program Products Interdependencies” on page 197 to verify the Pre-requisites, Co-requisites, and If-Requisites for the Licensed Products and plan for the order of installation.

When installing a Licensed Product that is a prerequisite to another previously installed Licensed Product(s), it is recommended that the other Licensed Product(s) be re-installed. Also, you may need to increase the space available on the minidisk, especially if the install process loads files to a common minidisk, such as the Product Code Disk (MAINT 19E)

Warning

There is a possibility of losing customized files if a Licensed Product is reinstalled over an existing version.

Also, you may need to increase the space available on the minidisk.

2.7 Determine the Install Format of the Licensed Products

The instructions for installing Licensed Products depends on the install format of the product. To determine the install format of the product, refer to Appendix A, “z/VM SDO IBM Licensed Program Products” on page 195.

To install each Licensed Product, begin by following the general installation instructions for that Licensed Product's format. Then complete the installation by following the specific installation instructions for that Licensed Product in the Technical Notes.

- **VMSES/E**

- Chapter 3.0, “VMSES/E Licensed Product Installation Instructions” on page 23.

- Chapter 5.0, “VMSES/E Licensed Product Technical Notes” on page 43.

- **Semi-VMSES/E**

- Chapter 4.0, “Semi-VMSES/E Licensed Product Installation Instructions” on page 27.

- Chapter 6.0, “Semi-VMSES/E Licensed Product Technical Notes” on page 147.

2.8 IBM Systems Director (Optional)

2.8.1 IBM Systems Director for Linux on System z, V6.3, 5648-SEZ

IBM Systems Director, V6.3 is a platform management solution that provides consistent views and tools for the management of both physical and virtual resources across multiple operating systems and virtualization technologies for both IBM and non-IBM platforms. IBM Systems Director utilizes a modular platform services foundation allowing for the addition of platform management service as required. This approach to platform management is designed to facilitate both the optimization of system availability and the reduction of overall IT costs.

A z/VM Manageability Access Point (zMAP) Agent is provided for IBM Systems Director to communicate with z/VM. This agent allows IBM Systems Director to obtain information about guest virtual machines running under the z/VM Operating System as well as to take action on behalf of these virtual machines such as create, manage and delete. This z/VM agent executes in a Linux server under the z/VM Operating System.

The z/VM Agents that are installed on the z/VM 6.2.0 System must be supported by the level of IBM Systems Director that is being utilized. When installing IBM Systems Director, V6.3 ensure the z/VM Agents installed on the z/VM 6.2.0 System are supported by IBM Systems Director, V6.3

IBM Systems Director, V6.3 and the zMAP Agent for z/VM V6.2.0 will be available on December 16, 2011 as a download through IBM's Systems Director Downloads webpage.

Please note that with z/VM V6.2.0, the following z/VM Agents for IBM Systems Director, V6.2 are no longer included on the z/VM 6.2 System Image (i.e. the z/VM 6.2 System Deliverable Tape) delivered with SDO:

- z/VM Manageability Access Point (MAP) Agent for System z
- Platform (Core Services) Agent for Linux on System z (Level-1 Agent)

Additional information on IBM Systems Director, V6.3 may be found at the following website.

<http://www.ibm.com/systems/management/director>

When upgrading to IBM Systems Director, V6.3 all installed IBM Systems Director plug-ins must be checked for compatibility with IBM Systems Director, V6.3. Any incompatible plug-ins must be replaced with plug-ins compatible with IBM Systems Director, V6.3. Failure to do so may result in an inconsistent state which may cause unexpected behavior including loss of all scheduled jobs.

2.8.2 IBM Systems Director VMControl Image Manager for Linux on System z, V2.3.1

IBM Systems Director VMControl Image Manager, V2.3.1 is a plug-in (extension) to IBM Systems Director that is designed to provide support for managing and deploying virtual appliances from a single IBM Systems Director user interface. IBM Systems Director VMControl also provides lifecycle management which allows for the creation and deletion of Linux virtual servers under z/VM and for the modification of resources assigned to the virtual servers.

For z/VM, IBM Systems Director VMControl operates in a Linux server under the z/VM Operating System.

IBM Systems Director VMControl, V2.3.1 is available as a download through IBM's Systems Director Downloads webpage. IBM Systems Director VMControl is not available through IBM's Service Delivery Offering (SDO).

Additional information on IBM Systems Director VMControl Image Manager, V2.3.1 may be found at the following website.

<http://www.ibm.com/systems/management/director/plugins/>

2.8.3 IBM Systems Director Active Energy Manager™ (AEM) for Linux on System z, V4.3

IBM Systems Director Active Energy Manager, V4.3 is a plug-in (extension) to IBM Systems Director that is designed to provide energy consumption management across multiple IBM and non-IBM platforms and operating systems. AEM provides a single view of actual energy consumption and thermal levels in your IT infrastructure which allows for the efficient allocation, matching and capping of energy resources throughout your IT environment.

AEM, V4.3 offers improved integration with facility providers and has been enhanced to include the ability for AEM energy monitoring functions to operate with IBM System z10 servers with updated firmware levels.

For z/VM, AEM operates in a Linux server as a guest of the z/VM hypervisor.

AEM, V4.3 is available as a download through IBM's Systems Director Downloads webpage. AEM is not available through IBM's Service Delivery Offering (SDO).

Additional information on IBM Systems Director Active Energy Manager, V4.3 may be found at the following website.

<http://www.ibm.com/systems/management/director/plugins/>

2.8.4 Additional Plug-ins (Extensions) for IBM Systems Director for Linux on System z, V6.2

In addition to AEM and IBM Systems Director VMControl, IBM provides a number of extensions to IBM Systems Director that are designed to increase the platform management capability of IBM Systems Director in a manner that is consistent with and takes advantage of the single point of management offered with IBM Systems Director. Additional information on the available extensions may be found at the following website:

<http://www.ibm.com/systems/software/director/products.html>

3.0 VMSES/E Licensed Product Installation Instructions

The following is a brief description of the main steps for installing an z/VM SDO VMSES/E Licensed Product using VMSES/E. If you have any questions about using VMSES/E, refer to *z/VM VMSES/E Introduction and Reference*.

The z/VM System serves as an installation platform for other Licensed Products in the SDO package. After the installation of a base z/VM system, the Licensed Products can be installed.

3.1 Checklist of the VMSES/E Licensed Products Installation Process

Notes:

- *Perform the steps in order.*
- *Mandatory steps are preceded by squares (■).*
- *Optional steps are preceded by circles (○).*
- *Page references appear in parentheses.*

For each VMSES/E Licensed Product, perform the following installation steps

- ■ **3.2, Allocate DASD and Userids (23)**
- ■ **3.3, Prepare the VMSES/E Order for Installation (24)**
- ■ **3.4, Install the z/VM SDO VMSES/E Licensed Product (25) by following the instructions in the Technical Notes (43)**

- ■ Install using the VMFINS command
- ■ Technical Notes may refer to additional instructions in the Licensed Product Program Directory
- ■ Re-save Saved Segments for some Licensed Products
- ■ Verify successful installation

If the SDO order includes additional VMSES/E Licensed Products, repeat the installation steps in this checklist beginning at 3.2, Allocate DASD and Userids (23)

3.2 Allocate DASD and Userids

Appendix C, "DASD Requirements" on page 201 identifies the user IDs and minidisks necessary to install each of the Licensed Product. This information is provided to help plan for DASD storage and other requirements for the installation of these Licensed Products.

Create any required user IDs and minidisks before beginning the installation. Also, any newly created minidisks must be formatted.

3.3 Prepare the VMSES/E Order for Installation

The IBM Licensed Program Product order can be fulfilled either by physical tape or downloaded from the internet. In the next step, you will either mount the physical tape or prepare the Product Envelope delivered via the internet for the installation.

3.3.1 Mount the VMSES/E Tape

A VMSES/E product will be found on a tape labeled *z/VM Licensed Program Products*. VMSES/E and Semi-VMSES/E Licensed Program Products can be 'stacked' on the same tape(s). The actual number of physical tapes depends on the tape density and the install format of the Licensed Products.

To determine the contents of each tape, refer to the tape labels and the Media Report or Packing List. Match the reference number on the tape to the Media Report to locate the appropriate tape. If the Media Report or Packing List are not available, then use the VMFPLC2 command to determine what is on the tape.

After the correct tape has been identified, mount the tape.

For more information about the format of a stacked VMSES/E tape, please refer to Appendix Appendix E, "Licensed Products Tapemaps" on page 215.

3.3.2 Prepare the Product Envelope Delivered from Internet

To install a product using a Product Envelope delivered from the Internet, follow the Installation Instructions provided with Shopz to upload the Product Envelope to the host VM system and de-compact it.

To identify the contents of your order, refer to the packing list provided by Shopz. Match the file names of the downloaded files, to the names listed under the heading 'Ref. No.'. The description will tell you the contents of your file. It may be helpful to rename this file to a descriptive name so that it is easily recognized for future reference. The file type must be renamed to SERVLINK.

Example

V6608454 TERS0028	* File name on Workstation
V6608454 BIN	* File received to VM as Binary Fixed 1024
HLASM SERVLINK	* De-compacted file and renamed to SERVLINK

After you have uploaded the Product Envelope to the VM host system in BINARY FIXED 1024 and de-compacted the file, you may install the product. When installing using a Product Envelope, the ENV option must be used with the VMFINS commands.

3.4 Install the z/VM SDO VMSES/E Licensed Product

To complete the installation process for a VMSES/E Licensed Product:

1. Review the Technical Notes for the product in the Chapter 5.0, “VMSES/E Licensed Product Technical Notes” on page 43. The Technical Notes will refer to the appropriate sections in the Licensed Product Program Directory and give additional important information about the product.
2. Follow the Installation Instructions in the Program directory of each Licensed Product.

NOTE

In the case of a conflict, the information provided in this SDO Program Directory and in the *z/VM SDO Enabling Aid* overrides the information provided in the Licensed Program Product's Program Directory, all z/VM and Licensed Program Product documents and the Licensed Program Product's *PLANINFO* file.

The SDO Program Directory and the *z/VM SDO Enabling Aid* should be utilized as the basis for the installation of the Program Product. The SDO Program Directory will refer to the Licensed Program Product Program Directory and/or other z/VM or Licensed Program Product documents when appropriate.

Important Note for Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

EXAMPLE: VMFINS INSTALL INFO (NOMEMO ENV HLASM

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

EXAMPLE: VMFINS INSTALL PPF 5696234J HLASM (PLAN NOMEMO ENV HLASM

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

EXAMPLE: VMFINS INSTALL PPF 5696234J HLASMT (NOMEMO NOLINK ENV HLASM

4.0 Semi-VMSES/E Licensed Product Installation Instructions

The following chapter describes the system environment required and explains how to install a Semi-VMSES/E Licensed Product.

The z/VM System serves as an installation platform for other Licensed Products in the SDO package. Licensed Products can be installed after the installation of base z/VM system.

4.1 Checklist for the Semi-VMSES/E Licensed Products Installation Process

Notes:

- *Perform the steps in order.*
- *Mandatory steps are preceded by squares (■).*
- *Optional steps are preceded by circles (○).*
- *Page references appear in parentheses.*

For each Semi-VMSES/E Licensed Products, perform the following installation steps

— ■ **4.3, Semi-VMSES/E Installation Overview and Planning (28)**

— ■ 4.3.1, Plan for the Installation of the Semi-VMSES/E Licensed Product (29)

— ■ 4.3.2, Prepare the Semi-VMSES/E Order for Installation (29)

— ○ 4.3.3, Load Installation-Related Files from Tape (30)

— ■ 4.3.4, Allocate Resources for the Semi-VMSES/E Licensed Product (33) Choose from the following:

— ○ Install Directly to Default Production Minidisks (33)

— ○ Install to Test Minidisks, then to Production Minidisks (33)

— ○ Installing to Shared File System (35)

— ■ **4.4, Install the Semi-VMSES/E Licensed Product using the VMFINS command (37) in conjunction with the instructions in the Technical Notes for the Licensed Product.(147)**

— ■ Install using the VMFINS command

— ■ Technical Notes may refer to additional instructions in the Licensed Product Program Directory

— ■ Re-save Saved Segments for some Licensed Products

— ■ Verify successful installation

— ○ **If installed to PRETEST place Licensed Product files into production after testing (40)**

If the SDO order includes additional SEMI-VMSES/E Licensed Products, repeat the installation steps in this checklist beginning at 4.3, Semi-VMSES/E Installation Overview and Planning (28)

4.2 Semi-VMSES/E Licensed Product Definition

z/VM SDO Semi-VMSES/E Licensed Products are products that are not originally in VMSES/E format but have been installed using the IBM recommended defaults. Because installation files are created and many installation steps are already taken, this will reduce the time it will take to install this Licensed Product. The installation procedure (the Innnnnnn EXEC, where nnnnnnn is the Licensed Product number and the INSTFPP exec) are used to generate new files. All these files are delivered on the Semi-VMSES/E Licensed Product tape.

After this process, the files are in VMSES/E enabled format which is supported by VMFINS (the installation tool for VMSES/E). To install from a Semi-VMSES/E Licensed Product tape, the system must be at z/VM SDO Version 6 Release 2.0. The Innnnnnn EXEC has been used for each Licensed Product and will not be used again.

4.3 Semi-VMSES/E Installation Overview and Planning

The VMFINS EXEC will be used to install all Semi-VMSES/E Licensed Products. This exec is supplied as part of the VMSES/E component of z/VM and provides a consistent process for installing z/VM and Licensed Products. The VMFINS command syntax is given in Chapter 6.0, "Semi-VMSES/E Licensed Product Technical Notes" on page 147 for each Licensed Product. Installations may be done from any user ID which has the authority to obtain write access to installation minidisks, write access to Software Inventory Disk (MAINT 51D), and read access to VMSES/E Build Disk (MAINT 5E5).

For a complete description of the VMFINS EXEC and its options, refer to:

- *z/VM VMSES/E Introduction and Reference*

The step-by-step procedures that follow are in two column format. The steps to be performed are in bold large numbers. The commands associated with these steps are on the left hand side of the page in bold print; additional information for a command may exist to the right of that command.

Each step of these installation instructions must be followed. Do not skip any step unless directed otherwise.

Throughout these instructions, the use of IBM-supplied default minidisk addresses and user IDs is assumed. If you use different user IDs, minidisk addresses, or SFS directories to install a Licensed Product, adapt these instructions as needed for your environment.

The sample console output presented throughout these instructions was produced on a z/VM SDO Version 6 Release 2.0 system. If installing Semi-VMSES/E product on a different z/VM system, the results obtained for some commands may differ from those depicted here.

4.3.1 Plan for the Installation of the Semi-VMSES/E Licensed Product

Each Semi-VMSES/E Licensed Product can either be placed directly into production on the installation defaulted minidisks, can be installed first to “test” mode then to the production minidisks, or installed to the Shared File System (SFS) directories.

It's recommended that you install each Semi-VMSES/E Licensed Product in “test” mode, so that Licensed Product files are loaded to alternate (or “test”) minidisks, instead of directly into production. This will also help avoid problems if a previous version or level of the Licensed Product is currently in production on your system.

If you want to place a Licensed Product directly into production, you can do so by specifying a production-related component when you issue the VMFINS installation commands. The components that will allow this type of installation contain the string PRD at the end of the component name.

4.3.2 Prepare the Semi-VMSES/E Order for Installation

The IBM Licensed Program Product order can be fulfilled either by physical tape or downloaded from the internet. In the next step, you will either mount the physical tape or prepare the internet delivered Product Envelope for the installation.

4.3.2.1 Mount the Licensed Product Tape

A Semi-VMSES/E Licensed Product will be found on a tape labeled *z/VM Licensed Program Products*. VMSES/E and Semi-VMSES/E Licensed Program Products can be 'stacked' on the same tape(s). The actual number of physical tapes depends on the tape density and the install format of the Licensed Products.

To determine the contents of each tape, refer to the tape labels and the Media Report or Packing List. Match the reference number on the tape to the Media Report to locate the appropriate tape. If the Media Report or Packing List are not available, then use the VMFPLC2 command to determine what is on the tape.

After the correct tape has been identified, mount the tape.

For more information about the format of a stacked VMSES/E tape, please refer to Appendix E, “Licensed Products Tapemaps” on page 215.

4.3.2.2 Prepare the Product Envelope Delivered from Internet

To install a product using a Product Envelope delivered from the Internet, follow the Installation Instructions provided with Shopz to upload the Product Envelope to the host VM system and de-compact it.

To identify the contents of your order, refer to the packing list provided by Shopz. Match the file names of

the downloaded files, to the names listed under the heading 'Ref. No.'. The description will tell you the contents of your file. It may be helpful to rename this file to a descriptive name so that it is easily recognized for future reference. The file type must be renamed to SERVLINK.

Example

V6608454	TERS0028	* File name on Workstation
V6608454	BIN	* File received to VM as Binary Fixed 1024
EREP	SERVLINK	* De-compacted file and renamed to SERVLINK

After you have uploaded the Product Envelope to the VM host system in BINARY FIXED 1024 and de-compacted the file, you may install the product. When installing using a Product Envelope, the ENV option must be used with the VMFINS commands.

Important Note for Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

EXAMPLE: VMFINS INSTALL INFO (NOMEMO ENV EREP

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

EXAMPLE: VMFINS INSTALL PPF \$5654260 EREPPRD (PLAN NOMEMO ENV EREP

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

EXAMPLE: VMFINS INSTALL PPF \$5654260 EREPPRD (NOMEMO ENV EREP

4.3.3 Load Installation-Related Files from Tape

This step is optional. However, it is necessary to perform these steps if you are installing to SFS directories in order to get the resources needed for SFS.

The Installation-Related files include all the Memo-to-Users, various Licensed Product control files, including the Product Parameter file (PPF) and the PRODPART files. It will also create the VMFINS PRODLIST file which contains a list of Licensed Products on the installation tape. Although the VMFINS command is being used in this step, the product will **not** be loaded at this time.

To install information on the tape contents, perform the following steps.

- 1 Log on to your Licensed Product installation user ID.

cp link maint 5e5 5e5 rr
read password
access 5e5 b

The 5E5 minidisk is where VMSES/E resides.

Note: The linking of VMSES/E Build Disk (MAINT 5E5) is only required if you are not installing from userid MAINT.

This user ID can be any ID that has read access to the VMSES/E Build Disk (MAINT 5E5) and write access to the Software Inventory Disk (MAINT 51D).

- 2** Ensure the tape is mounted and attached to the installation userid at virtual address 181.
- 3** Establish write access to the Software Inventory minidisk if it's not already linked R/W.

cp link maint 51d 51d mr
multi password
access 51d d

The Software Inventory Disk (MAINT 51D) is where the VMSES/E system-level Software Inventory and other Licensed Product dependent files reside.

Note: If another user already has the Software Inventory Disk (MAINT 51D) linked in write mode (R/W), you will obtain only read access (R/O) to this minidisk. If this occurs, you will need to have that user re-link the Software Inventory Disk (MAINT 51D) in read-only mode (RR), and then re-issue the above LINK and ACCESS commands. Do not continue with these procedures until a R/W link is established to the Software Inventory Disk (MAINT 51D).

- 4** Load Licensed Product-specific files to the Software Inventory Disk (MAINT 51D).

a If installing from a tape:

vmfins install info (nomemo

b If installing from a Product Envelope:

vmfins install info (nomemo env *envelope_filename*

The NOMEMO option will load memos from the tape but will not issue a prompt to send them to the system printer. Specify the MEMO option if you want to be prompted for printing the memo.

This command will perform the following:

- loads all of the Memo-to-Users
- loads various Licensed Product control files, including the Product Parameter file (PPF) and PRODPART files
- create the VMFINS PRODLIST on your A-disk. The VMFINS PRODLIST contains a list of Licensed Products on the installation tape.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS1909I VMFINS PRODLIST created on your A-disk
VMFINS2760I VMFINS processing completed successfully
Ready;
```

Notes:

1. Licensed Product files will **not** be loaded by the VMFINS command at this time.
2. If you are installing one or more Licensed Products using SFS directories, you should review the information in Chapter 4.3.4.3, “Shared File System (SFS) Considerations” on page 35 before you continue with this step.
3. If you change the PPF name, a default user ID, or other parameters associated with a given Licensed Product via a PPF override, you will need to use your changed values instead of those indicated (when appropriate), throughout the remainder of the installation process for that Licensed Product. For example, you will need to specify your PPF override file name instead of the name of the PPF file provided on the tape for certain VMSES/E commands.
4. If you are not familiar with creating PPF overrides using VMFINS, you should review the 'Using the Make Override Panel' section in the chapter entitled “Using the VMFINS EXEC” of *z/VM VMSES/E Introduction and Reference* before you continue.

4.3.4 Allocate Resources for the Semi-VMSES/E Licensed Product

Each Semi-VMSES/E Licensed Product can be placed directly into production on the default production minidisks, or can be installed first to “test” mode then to the production minidisks, or to Shared File System (SFS) directories.

If you are going to install directly to production minidisks, continue with Chapter 4.3.4.1, “Default Production Minidisks” on page 33.

If you plan to install first to Test minidisks, continue with Chapter 4.3.4.2, “Semi-VMSES/E Test Resource Requirements.”

If you are installing to SFS, continue with Chapter 4.3.4.3, “Shared File System (SFS) Considerations” on page 35.

4.3.4.1 Default Production Minidisks

The IBM-supplied default minidisk addresses and user IDs can be found in Appendix C, “DASD Requirements” on page 201. This Appendix lists all the z/VM SDO products and their DASD Requirements. If you performed the optional step in 4.3.3, “Load Installation-Related Files from Tape” on page 30, the resource information can be found in the PLANINFO file. Using this information, allocate the resources.

Once the default production minidisks have been allocated, continue the installation in Chapter 4.4, “Install the Semi-VMSES/E Licensed Product” on page 36.

4.3.4.2 Semi-VMSES/E Test Resource Requirements

If you have decided to install Semi-VMSES/E Licensed Products on test minidisks, for each selected Licensed Product:

1. Add to your system directory a user ID called **PRETEST**. This user ID is used as a place holder for the test minidisks and will own all the alternate minidisks used in conjunction with the Semi-VMSES/E Licensed Products.
2. Set up and format the appropriate minidisks listed in Figure 2 on page 34. These minidisks must be set up and formatted before you begin the installation process. Additionally, they must be defined using addresses within the range 400 to 4FF, as indicated in Figure 2 on page 34.
3. The minidisks required for the Licensed Product must be allocated as well because some Licensed Products may have files placed on any one of the Licensed Product's minidisks (i.e. MAINT 319). Refer to Chapter Appendix C, “DASD Requirements” on page 201 for a list of minidisk requirements.
4. For features which have PRETEST addresses which are the same as the base, add the number of blocks needed for both the base and feature(s) to get the total number of blocks required for test installation.

The installation will fail if the resource is not allocated (i.e. defined and formatted). Files which will eventually end up on end user disks, will be loaded to the test disk(s), and all others are loaded to the appropriate disk (memos, etc.). If the product has one or more features, it may use the same test minidisk as the base product.

In Chapter 6.0, “Semi-VMSES/E Licensed Product Technical Notes” on page 147, you will be given the **VMFINS** command to install the Licensed Product on the test minidisk(s). All of the Licensed Products end user files will be placed on the test minidisk(s).

Once you have completed testing, you will copy the files from the test minidisk to the “Related Production Disk” via the **VMFCOPY** command.

Figure 2. PRETEST minidisk requirements

Licensed Product Number	Description	PRETEST Minidisk	Size -CMS 4K blocks unless otherwise stated	Related Production Minidisk
5654-260	EREP	431	2250	MAINT 201
5684-043	ISPF	458	150	ISPVM 191
		459	6700	ISPVM 192
5684-123	ISPF PDF	457	6000	ISPVM 192
5684-123	ISPF PDF NLS	457	2700	ISPVM 192
5697-F42	DB2/VM	476	360	SQLMACH 198
		477	900	SQLMACH 199
		46A	1620	SQLDRR 191
		47C	3600	MSTRSRVO 195
		479	6660	5697F75A 193
5697-F42	DB2/VM Client Edition	476	360	SQLCLNT 198
		477	900	SQLCLNT 199
		46A	1620	SQLDRR 191
		47C	3600	MSTRSRVO 195
		47E	6660	5697F75C 193

Once the test and default minidisks have been allocated, continue the installation in Chapter 4.4, “Install the Semi-VMSES/E Licensed Product” on page 36.

4.3.4.3 Shared File System (SFS) Considerations

This section provides basic information about changes to these instructions you will need to make if you plan to install any Semi-VMSES/E Licensed Product using SFS directories. However, you may need to make additional changes or adjustments, based on the actual Licensed Product(s) you are installing in this manner.

In general, you will need to adapt any minidisk-specific instructions and concepts to account for an SFS environment. And, when issuing a VMFINS command, you will need to specify an SFS-related component name instead of those established for a minidisk environment (SFS-related component names use the string SFS as part of the component name.).

You'll also need to obtain the SFS storage requirements for each Licensed Product using the PLAN option of the VMFINS command; this option will create a \$NNNNNNN PLANINFO file that contains this information.

Note: VMSYS is the filepool name used in the supplied PPF for both test and production SFS installations.

After the appropriate planning information is available (within the \$NNNNNNN PLANINFO file), you will need to do the following:

- 1** Determine the number of 4K blocks that are required for the SFS directories you will use. Refer to the \$NNNNNNN PLANINFO file and add up the 4K blocks required for each SFS directory you plan to use. This will give you the total number of 4K blocks required. You should also keep track of the 4K block requirements for each user ID as well.

You'll need this information if you need to enroll any Licensed Product user IDs in the VMSYS filepool, or if you need to increase the space allocated to an existing user ID.

Note: If you have created your own PPF override file, you should use your PPF name instead of \$NNNNNNN.

- 2** Enroll any required Licensed Product user IDs in the VMSYS filepool by using the ENROLL USER command:

```
ENROLL USER userid VMSYS (BLOCKS blocks)
```

where *userid* is the actual user ID to be enrolled and *blocks* is the number of 4K blocks required for this user ID, that you calculated previously.

Note: The ENROLL USER must be issued from a user ID that is an administrator for the VMSYS filepool.

- 3** Determine if there are enough blocks available in the filepool to install the Licensed Product. This information can be obtained by using the QUERY

FILEPOOL STATUS command. Near the end of the output from this command is a list of minidisks in the filepool and the number of blocks free. If the number of available blocks is smaller than the total available 4K blocks needed for this Licensed Product, you will need to add space to the filepool. See the *z/VM CMS File Pool Planning, Administration, and Operation* manual for information on adding space to a filepool.

- 4 Create the subdirectories listed in the \$NNNNNNN PLANINFO file using the CREATE command with the DIRECTORY option.

set filepool vmsys:
create directory *dirid*

dirid is the name of the SFS directory you are creating, such as:

```
CREATE DIRECTORY dirid
```

If necessary, see the *z/VM CMS Commands and Utilities Reference* for more information about the CREATE DIRECTORY command.

Note: Subdirectories, when required, must be created from the respective user IDs.

- 5 Give SFS READ (and in some cases, WRITE) authority for each directory to those user IDs for which it's appropriate, using the GRANT AUTHORITY command.

grant auth *dirid* to *userid* (*authority*)

If necessary, see the *z/VM CMS Commands and Utilities Reference* for more information about the GRANT AUTHORITY command.

4.4 Install the Semi-VMSES/E Licensed Product

Notes:

Before you continue with the installation process, ensure you have completed the following:

1. Added all of the required user ID directories to the system directory.
2. Changed the passwords for all added user IDs from xxxxx to valid passwords, in accordance with your security guidelines.
3. Placed the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.
4. Formatted any newly created minidisks or created SFS directories.

NOTE

In the case of a conflict, the information provided in this SDO Program Directory and in the *z/VM SDO Enabling Aid* overrides the information provided in the Licensed Program Product's Program Directory, all z/VM and Licensed Program Product documents and the Licensed Program Product's *PLANINFO* file.

The SDO Program Directory and the *z/VM SDO Enabling Aid* should be utilized as the basis for the installation of the Program Product. The SDO Program Directory will refer to the Licensed Program Product Program Director and/or other z/VM or Licensed Program Product documents when appropriate.

4.4.1 Install Using the VMFINS EXEC

- 1 Log on to the product installation user ID.
- 2 Establish write access to the **MAINT 51d** and **5e5**, if it's not already linked R/W.

```
cp link maint 5e5 5e5 rr
read password
cp link maint 51d 51d mr
multi password
```

The Software Inventory Disk (MAINT 51D) is where the VMSES/E system-level Software Inventory files reside.

- 3 Create a PROFILE EXEC that will contain ACCESS commands for the VMSES/E Build Disk (MAINT 5E5) and Software Inventory Disk (MAINT 51D), or add these commands to the existing PROFILE EXEC.

```
xedit profile exec a
====> input /**/
====> input 'ACCESS 5E5 B'
====> input 'ACCESS 51D D'
====> file
```

- 4 Use the profile to access the VMSES/E Build Disk (MAINT 5E5) and Software Inventory Disk (MAINT 51D).

profile

- 5 Ensure the tape is mounted and attached to the installation user ID at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

Note: Please be aware that if you have more than one tape, that they are independent of each other. Therefore you must mount the tape on which the Licensed Product is loaded.

6 Install the Licensed Product.

Notes:

- a. If you have already created a PPF override file, you should specify your override file name after the **PPF** keyword for the following VMFINS command.
- b. You may be prompted for additional information during VMFINS INSTALL processing depending on your installation environment. If you are unsure how to respond to a prompt, refer to the “Installing Products with VMFINS” and “Install Scenarios” chapters in the *z/VM VMSES/E Introduction and Reference* to decide how to proceed.

Note!

The specific command for each product can be found in Chapter 6.0, “Semi-VMSES/E Licensed Product Technical Notes” on page 147.

a If installing from a tape:

```
vmfins install ppf ppfname {compid | compidsfs | compidprd | compidsfsprd} (nomemo
```

b If installing from a Product Envelope:

```
vmfins install ppf ppfname {compid | compidsfs | compidprd | compidsfsprd} (nomemo env envelope_filename
```

Use *compid* if you are installing using test minidisks and **not** placing this Licensed Product directly into production.

Use *compidsfs* if you are installing using test SFS directories and **not** placing this Licensed Product directly into production.

Use *compidprd* if you are installing using minidisks and you **are** placing this Licensed Product directly into production.

Use *compidsfsprd* if you are installing using SFS directories and you **are** placing this Licensed Product directly into production.

Note: If you have created your own PPF override file, you should use your PPF name instead of \$NNNNNNN.

LINK is the default option on the VMFINS INSTALL command. The LINK option should be utilized so that required minidisks not owned by the installation user ID will be available. VMFINS will attempt to link to these minidisks, and will access them in the appropriate order.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF $NNNNNNN COMPID
             $nnnnnnn%COMPID?
             Enter 0 (No), 1 (Yes) or 2 (Exit)
```

0

Enter 0 to bypass creating an override.

Enter 1 to create an override, change the PPF name, and change minidisk definitions.

Enter 2 to exit the VMFINS exec.

```

VMFINS2603I Processing product :PPF $NNNNNNN COMPID :PRODID $nnnnnnn
VMFREQ2805I Product :PPF $NNNNNNN COMPID :PRODID $nnnnnnn%COMPID
           requisite checking
VMFINT2603I Installing product :PPF $NNNNNNN COMPID :PRODID $nnnnnnn
VMFSET2760I VMFSETUP processing started for $nnnnnnn COMPID
VMFUTL2205I Minidisk|Directory Assignments:
           String      Mode  Stat  Vdev  Label/Directory
VMFUTL2205I string   fm    R/W  dev  label
           :
VMFUTL2205I -----  A      R/W  191   INS191
VMFUTL2205I -----  B      R/O  5E5   MNT5E5
VMFUTL2205I -----  D      R/W  51D   MNT51D
VMFUTL2205I -----  S      R/O  190   MNT190
VMFUTL2205I -----  Y/S   R/O  19E   MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1851I (1 of mm) VMFRCALL processing tapefile
VMFRCA2159I Loading part(s) to string dev (fm)
VMFRCA2159I Loaded nn part(s) to string dev (fm)
           :
VMFREC1851I (mm of mm) VMFRCALL processing tapefile
VMFRCA2159I Loading part(s) to string dev (fm)
VMFRCA2159I Loaded nn part(s) to string dev (fm)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
Ready;

```

- 7 Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific installation messages, see the appropriate z/VM manual.

vmfview install

4.4.2 Place IBM Licensed Program Product Into Production

If you did not install this Licensed Product directly into production, you should verify that its components operate satisfactorily within your environment, using the appropriate PRETEST alternate minidisks, and Licensed Product documentation. When you have completed your testing, you should resume with the steps described below.

Notes:

1. The following steps should be done from the MAINT user ID, with links to the required installation minidisks, so that appropriate CMS shared segments can be re-saved, when necessary.
2. You will need to repeat steps 2 and 3 for each pair of test/production minidisks that are associated with this Licensed Product.

1 Log on to the **MAINT** user ID.

2 Link and access the appropriate test build (PRETEST 4xx) and production build minidisks. With regard to the latter minidisk, note the following:

- The production minidisk only needs to be linked if it's not a MAINT-owned minidisk.
- If another user already has the production minidisk linked in write mode (R/W), you will obtain only read access (R/O) to this minidisk. If this occurs, you will need to have that user re-link this minidisk in read-only mode (RR), and then re-issue the appropriate LINK and ACCESS commands. Do not continue with these procedures until a R/W link is established to this minidisk.

cp link PRETEST 4xx addr1 rr
read password

addr1 is an available minidisk address on the MAINT user ID. *4xx* is the address of the PRETEST test build minidisk where Licensed Product files were loaded to during installation.

cp link userid prdaddr addr2 mr
multi password

addr2 is an available minidisk address on the MAINT user ID. *prdaddr* is the address of the *userid* production build minidisk where Licensed Product files are to be copied.

Note: If you are already on the MAINT userid and have R/W access to the *prdaddr* minidisk, you do not need to do the **cp link**.

access addr1 e

access addr2 f

If *userid prdaddr* is a MAINT-owned minidisk, use *prdaddr* instead of *addr2*.

3 Copy the Licensed Product files from the test build minidisk (PRETEST 4xx) to the corresponding production build minidisk. (*userid prdaddr*)

vmfcopy * * e = = f2 (prodid ppfname%compid olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the *prdaddr* minidisk.

The time required for the VMFCOPY command will vary depending upon the number of files being copied.

Note:

If you have copied files to the MAINT Product Code Disk (MAINT 19E) (“Y”-disk), you will need to re-save the appropriate CMS shared segment to return this minidisk to “shared” status. If you have copied files to the MAINT AMENG Help Disk (MAINT 19D) (CMS HELP disk) you may need to re-save the CMS HELP saved segment as well. See the *z/VM Service Guide* for detailed information about how these saved segments should be saved on your system.

5.0 VMSES/E Licensed Product Technical Notes

This chapter provides technical considerations for the z/VM SDO VMSES/E Licensed Products. After you have followed the general instructions for VMSES/E products, from 3.0, “VMSES/E Licensed Product Installation Instructions” on page 23, locate the specific Licensed Product in this chapter to complete the installation. Products are ordered in this section by product number.

NOTE

In the case of a conflict, the information provided in this SDO Program Directory and in the *z/VM SDO Enabling Aid* overrides the information provided in the Licensed Program Product's Program Directory, all z/VM and Licensed Program Product documents and the Licensed Program Product's *PLANINFO* file.

The SDO Program Directory and the *z/VM SDO Enabling Aid* should be utilized as the basis for the installation of the Program Product. The SDO Program Directory will refer to the Licensed Program Product Program Director and/or other z/VM or Licensed Program Product documents when appropriate.

5.1 VMSES/E Licensed Product Specific Considerations

5.1.1 5654-A22 XL C/C++ 130 FOR Z/VM V1R3.0

5.1.1.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.1.2 Service Excluded

None.

5.1.1.3 Pre-Requisite Service

None.

5.1.1.4 Co-Requisite Service

None.

5.1.1.5 If-Requisite Service

None.

5.1.1.6 Product Manuals

Form Number	Publication Title
GI11-2899	Program Directory for IBM XL C/C++ for z/VM
SC09-7625	XL C/C++ for z/VM User's Guide
SC09-7624	XL C/C++ for z/VM Run-Time Library Reference
SC09-4815	C/C++ Language Reference
GC09-4819	z/OS C/C++ Messages
SC09-4767	z/OS C/C++ User's Guide
GC09-4913	z/OS C/C++ Compiler and Run-Time Migration Guide
SC09-4765	z/OS C/C++ Programming Guide
SA22-7820	z/OS C courses
SA22-7821	z/OS C/C++ Run-Time Library Reference
GA22-7560	z/OS Language Environment Debugging Guide
SA22-7566	z/OS Language Environment Run-Time Messages

5.1.1.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, "z/VM 6.2 Installation and Production Enablement Requirements" on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

WARNING:

You **cannot** install both C/C++ Compiler (5654-A22) and IBM C Compiler for VM/ESA (5654-033) on the same system, both targeting the MAINT 19E disk. These two products have identically named files that would overwrite each other yielding unpredictable results. These identical files are:

CC EXEC

CDSECT EXEC

LOCALDEF EXEC

CC HELPCMS

CDSECT HELPCMS

LOCALDEF HELPCMS

CBCDSECT MODULE

Important Note for Product Installation

The 29E disk has been increased in size. Please verify you have the correct size before installation.

IBM XL C/C++ for z/VM is in VMSES/E format and cannot be installed using INSTFPP.

Refer to the *Program Directory for IBM XL C/C++ for z/VM* in the section entitled "Installation Instructions" for the steps to install IBM XL C/C++ using VMSES/E.

For customization instructions, please refer to the section entitled "Customization of Compile-Time Options" in the *Program Directory for IBM XL C/C++ for z/VM*

For instructions on applying service to IBM XL C/C++ for z/VM, please refer to the *Program Directory for IBM XL C/C++ for z/VM*, section 7 .0, entitled "Service Instructions."

5.1.1.8 DCSS Information

Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

Refer to the *Program Directory for IBM XL C/C++ for z/VM* in the section 8.0 entitled "Define and Build The XL C/C++ for z/VM Compiler Saved Segment". for the steps on Saved Segments.

5.1.1.9 Verification

Verification of XL C/C++ is done automatically during installation.

You can run the installation verification manually by issuing the following:

v5654A22

5.1.2 5654-A23 IBM DEBUG TOOL FOR Z/VM V4R1.0

5.1.2.1 PUT/ESO Applied

The product is at service level ESO0809.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.2.2 Service Excluded

None.

5.1.2.3 Pre-Requisite Service

None.

5.1.2.4 Co-Requisite Service

None.

5.1.2.5 If-Requisite Service

None.

5.1.2.6 Product Manuals

Form Number	Publication Title
GC18-9387	Licensed Program Specifications for Debug Tool
GI10-8669	Program Directory for Debug Tool for z/VM
SC18-9388	Debug Tool for z/VM: User's Guide

5.1.2.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Other Program Product Requirements Depending on the product being verified, at least one of the following (at level specified or higher):

IBM COBOL for OS/390 & VM V2R1 (5648-A25)

PL/I for MVS & VM V1R1.1 (5688-235)

IBM XL C/C++ for z/VM V1R2 (5654-A22)

Debug Tool for z/VM is in VMSES/E format and cannot be installed using INSTFPP.

Refer to the *Program Directory for IBM Debug Tool for z/VM* in the section entitled "Installation Instructions" for the steps to install IBM Debug Tool for z/VM using VMSES/E.

For instructions on applying service to IBM Debug Tool for z/VM, please refer to the *Program Directory for IBM Debug Tool for z/VM*, section 7.0, entitled "Service Instructions."

5.1.2.8 DCSS Information

Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

Refer to the *Program Directory for IBM Debug Tool for z/VM* in the section entitled "Define and Build the IBM Debug Tool for z/VM Saved Segments Using VMSES/E" for the steps on Saved Segments.

5.1.2.9 Verification

Verification of Debug Tool is done automatically during installation.

You can run the installation verification manually by issuing the following:

V5654A23

Important Note for Verifying with C/C++ on z/VM

You should have a minimum of 128M virtual storage when running the verification exec (V5654A23) on a z/VM system and choose to include the C/C++ compiler either implicitly or explicitly (with the **ALL** option).

5.1.3 5654-010 ACF/VTAM ESA V4R2.0**5.1.3.1 PUT/ESO Applied**

The product is at service level ESO1011.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.3.2 Service Excluded

None.

5.1.3.3 Pre-Requisite Service

None.

5.1.3.4 Co-Requisite Service

Product Number	PTF	APAR	Product Description
5664-280	UV55517	VM52524	VTAM V3R4 VM/SP
5684-095	UV55515	VM52522	VTAM V3R4 VM/ESA
5684-112	UM59196	VM59196	AVS
5684-112	UM26835	VM58989	CP
5684-112	UM26882	VM58859	CP

5.1.3.5 If-Requisite Service

5654-010

Product Number	PTF	APAR	Product Description
5654-010	UV59166	VM59197	VTAM V4R2 VM/ESA
5654-010	UV59178	VM59198	VTAM V4R2 VM/ESA

5.1.3.6 Product Manuals

Form Number	Publication Title
GI10-8154	Program Directory for ACF/VTAM
GC31-8114	Overview of VTAM V4R2 for VM/ESA and VSE/ESA
SC31-7122	Planning for Netview, NCP, and VTAM
SC31-7123	Planning Integrated Networks
SX75-0092	Planning Aids: Pre-installation Planning Checklist
GC31-6558	VTAM Glossary for V4R2 for MVS/ESA, VM/ESA, and VSE/ESA
GC31-6490	VTAM Licensed Program Specifications
SC31-6493	VTAM Messages and Codes
GC31-8071	VTAM Migration Guide
SC31-6494	VTAM Network Implementation Guide
SC31-6495	VTAM Operation
SX75-0205	VTAM Operation Quick Reference
GC31-8089	VTAM Release Guide
SC31-6498	VTAM Resource Definition Reference
SK2T-2007	Estimating Storage for VTAM
SC31-6496	VTAM Programming
SC31-6497	VTAM Programming for LU6.2
SC31-6499	VTAM Resource Definition Samples
LY43-0063	VTAM Customization
LY43-0103	VTAM Data Areas for VM/ESA
LY43-0065	VTAM Diagnosis

5.1.3.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Notes:

If you did not receive a password with your product to bring it up as Client Server, Multi Domain, or Interenterprise you will need to contact the Key Registration Center.

The Key Registration Center is now in Denmark and they service the whole world.

The phone number is 1-877-426-5397 which can be used by anyone in the Americas, they handle ALL keys for ALL products. Another 1-800 number that can be used is 1-800-446-8989.

If preferred, an e-mail can be sent. For Canadian customers, the email address is cakeys@dk.ibm.com. For US customers, the email address is uskeys@dk.ibm.com

Information required to get the key are:

- Customer Number
- Product name
- Product number
- How the product was ordered.

After you place your order, you will receive your password, which you need to start VTAM®. In most cases, you must update your VM startup EXEC with your IBM customer number and your VTAM password for the package you have ordered. If you start VTAM with the IBM supplied sample startup EXEC (found on the samples disk), VTAM is initialized as Client/Server. If you have ordered MultiDomain or InterEnterprise, before you can start VTAM, you must edit the sample startup EXEC and replace the default customer number and VTAM password (specified on the VTAM START command) with your customer number and VTAM password obtained separately from IBM. For further information and instructions, see "PROFILE for the VTAM Virtual Machine" in the *VTAM Network Implementation Guide*.

For installation instructions, please refer to the Installation Instructions section of the *Advanced Communications Function For Virtual Telecommunications Access Method Program Directory* and Installing VTAM under VM of the *VTAM Network Implementation Guide*.

NOTE: The following minidisks for 5654010A have increased:

2D2 disk has increased to 15000 4K blocks. (100 cylinders of 3380 DASD or 84 cylinders of 3390 DASD.)

401 disk has increased to 1200 4K blocks. (8 cylinders of 3380 DASD or 7 cylinders of 3390 DASD.)

402 disk has increased to 1200 4K blocks. (8 cylinders of 3380 DASD or 7 cylinders of 3390 DASD.)

For customization instructions, please refer to *VTAM Customization*.

For service instructions, please refer to the Service Instructions section of the *Advanced Communications Function For Virtual Telecommunications Access Method Program Directory* and Applying Service of the *VTAM Network Implementation Guide*.

5.1.3.8 DCSS Information

Refer to Define and Build the VTAM V4R2 for VM/ESA Saved Segments Using VMSES/E section of the *Advanced Communications Function For Virtual Telecommunications Access Method Program Directory*. Please note that the segment range is based on the segment layout as defined and distributed as part of the SDO package. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.3.9 Verification

For verification instructions, please refer to the Verifying the Installation section of the *VTAM Network Implementation Guide*.

5.1.4 5654-010 APPC APPL SUITE V1R1.0

5.1.4.1 PUT/ESO Applied

The product is at service level ESO9807.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.4.2 Service Excluded

None.

5.1.4.3 Pre-Requisite Service

5.1.4.4 Co-Requisite Service

5.1.4.5 If-Requisite Service

None.

5.1.4.6 Product Manuals

Form Number	Publication Title
GI10-9617	Program Directory for APPC Application Suite for VM/ESA
SC31-6532	APPC Application Suite User's Guide
SC31-6533	APPC Application Suite Administration
SC31-6534	APPC Application Suite Programming

5.1.4.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, “DASD Requirements” on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

OTHER PROGRAM PRODUCT REQUIREMENTS

IBM C370 LIBRARY 5688-188

For installation instructions, please refer to the Installation Instructions section of the *APPC Application Suite for VM/ESA Program Directory*.

For customization instructions, please refer to *APPC Application Suite Administration Guide* .

For service instructions, please refer to the Service Instructions section of the *APPC Application Suite for VM/ESA Program Directory* .

Notes:

When setting up your SERVERS (eg. ANAME, A3270) use the Administration Guide for the correct setup. The VTAM PRODPART file has a different setup and should not be used.

5.1.4.8 DCSS Information

None.

5.1.4.9 Verification

None.

5.1.5 5654-029 DITTO V1R3.0

5.1.5.1 PUT/ESO Applied

The product is at service level ESO1105.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.5.2 Service Excluded

None.

5.1.5.3 Pre-Requisite Service

None.

5.1.5.4 Co-Requisite Service

None.

5.1.5.5 If-Requisite Service

None.

5.1.5.6 Product Manuals

Form Number	Publication Title
GI10-0438	Program Directory for DITTO/ESA for VM
GC26-9598	DITTO/ESA Installation and Customization Guide
GH19-8223	DITTO/ESA Release 3 Licensed Program Specifications
GH19-8222	Introducing DITTO/ESA Release 3
SH19-8221	DITTO/ESA Release 3 User's Guide and Reference
SX11-6110	DITTO/ESA Release 3 Reference Summary

5.1.5.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, “DASD Requirements” on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

DITTO/ESA is in VMSES/E format and cannot be installed using INSTFPP.

Refer to the *Program Directory for Data Interfile Transfer, Testing, and Operations Utility / ESA* section entitled "Installation Instructions" for the steps to install DITTO/ESA using VMSES/E.

5.1.5.8 DCSS Information

None.

5.1.5.9 Verification

To verify the installation of DITTO/ESA, perform the following steps:

1. Logon to a CMS user ID that is enabled to access and use DITTO/ESA.
2. Enter DITTO after Ready; appears on your CMS terminal.
3. The first time you invoke DITTO/ESA a copyright panel appears. Press the cancel key(F12) to continue.
4. The DITTO/ESA for VM Release 3 main menu should appear.
5. Press the menu key(F2) to flip between the task selection menu and the primary function menu. You may decide later on your preference for daily operation.
6. Enter NEWS in the entry field or in the command line. Please read the information presented and then press the exit key to return to the menu.
7. Enter LVL in the entry field or in the command line. The information presented tells you the release and service level of DITTO/ESA.
8. Press the exit key to end the DITTO/ESA session.

5.1.6 5655-T13 IBM TIVOLI ZSECURE MANAGER FOR RACF V1R11.0

5.1.6.1 PUT/ESO Applied

The product is at service level ESO1010.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.6.2 Service Excluded

None.

5.1.6.3 Pre-Requisite Service

None.

5.1.6.4 Co-Requisite Service

None.

5.1.6.5 If-Requisite Service

None.

5.1.6.6 Product Manuals

Form Number	Publication Title
GI11-7865	IBM zSecure Manager for RACF z/VM Program Directory
GC23-7984	IBM zSecure Manager for RACF z/VM License Information
Z125-6011	IBM International Program License Agreement (IPLA)
LC27-2781	IBM zSecure Manager for RACF z/VM: User Reference Manual
LCD7-1387	IBM Tivoli zSecure Suite Documentation CD

5.1.6.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

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The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

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- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

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VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

5.1.6.8 Installation Instructions for zSecure Manager

For installation instructions for IBM Tivoli zSecure Manager for RACF z/VM please refer to the '6.0 Installation Instructions' Section in the *Program Directory for IBM Tivoli zSecure Manager for RACF z/VM Version 1 Release 11.0*.

Please note that 'Step 1' of Section '6.4.2 BUILD the Tivoli zSecure Manager for RACF z/VM CKRCARLA LOADLIB' will be skipped if ISPF/DM is not installed on the system. However, the remaining Steps in Section 6.4.2 must be performed and the CKRCARLA LOADLIB rebuilt.

5.1.6.9 Service Instructions for zSecure Manager

For instructions on applying service to IBM Tivoli zSecure Manager for RACF z/VM please refer to the *Program Directory for IBM Tivoli zSecure Manager for RACF z/VM* section 7.0, entitled 'Service Instructions'.

Important Note for Product Service

The first paragraph in Section '7.2.5 Build Serviced Objects' incorrectly states:

'If ISPF/DM is not installed, Step 1 does not have to be performed.'

Step 1 'Rebuild IBM Tivoli zSecure Manager for RACF z/VM serviced part' **must always be performed.**

If ISPF/DM is not installed, the following steps required to link and access the ISPF/DM product code disk do not have to be performed.

release C

link ispfvm idev zdev rr

access zdev C

5.1.6.10 Execution Requirements for zSecure Manager

The following program products are required to allow for Tivoli zSecure Manager for RACF z/VM to execute with full functionality -

ISPF/DM version 3 release 2 or later

zSecure Manager will execute without ISPF/DM being installed, however the zSecure panels will not be available.

ISPF/PDF is not required to provide for a full function zSecure Manager. ISPF/PDF however will allow for the utilization of z/VM capabilities such as Browse and Edit.

5.1.6.11 Configuration of zSecure Manager

zSecure Manager may be utilized from any ID on the System that has been correctly configured. In order to execute zSecure Manager, the ID requires a Read link to the 5655T13B 200 disk.

A copy of the zSecure Documentation CD is included with each order of zSecure. The CD contains the Tivoli zSecure Documentation Suite which includes the following manuals for IBM Tivoli zSecure Manager for RACF z/VM:

SC27-2782 IBM zSecure Manager for RACF z/VM: Installation and Deployment Guide

GC23-9747 IBM Tivoli zSecure Messages

Detailed information on the configuration of IBM Tivoli zSecure Manager for RACF z/VM may be found in the *IBM Tivoli zSecure Manager for RACF z/VM Installation and Deployment Guide*

Additional information on IBM Tivoli zSecure Manager for RACF z/VM may be found at the following IBM Tivoli zSecure WebSite::

<http://www-01.ibm.com/software/tivoli/products/zsecure/>

5.1.6.12 DCSS Information

None.

5.1.6.13 Verification

There is no verification program for IBM Tivoli zSecure Manager for RACF z/VM

5.1.7 5668-723 GDDM-IVU V1R1.3

5.1.7.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.7.2 Service Excluded

None.

5.1.7.3 Pre-Requisite Service

None.

5.1.7.4 Co-Requisite Service

None.

5.1.7.5 If-Requisite Service

None.

5.1.7.6 Product Manuals

Form Number	Publication Title
GC33-1802	Program Directory for GDDM/VM

Form Number	Publication Title
SC33-0479	GDDM Image View Utility

5.1.7.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters in the z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes in the z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

IMPORTANT NOTE

The Program Directory for GDDM-IVU Section 6.13 mistates when to Update the Build Status Table. This needs to be done BEFORE Section 6.12: Place GDDM into Production

You will need to run it after the following sections:

1. 6.5 Install GDDM/VM using the VMFINS EXEC, Step 4
2. 6.7 Install GDDM-PGF using the VMFINS EXEC, Step 4
3. 6.8 Install GDDM-IMD using the VMFINS EXEC, Step 4
4. 6.9 Install GDDM-IVU using the VMFINS EXEC, Step 4

You can use the tables listed in Section 6.13 for reference as to what the syntax of the VMFINS command should be.

GDDM-IVU is in VMSES/E format and cannot be installed using INSTFPP.

Refer to the *Program Directory for GDDM/VM* in the section entitled "6.0 Install GDDM/VM using the VMFINS EXEC" for the steps for installing GDDM-IVU using VMSES/E.

Refer to the *Program Directory for GDDM/VM* in the section entitled "7.0 Service Instructions" for information on applying service to GDDM-IVU using VMSES/E.

5.1.7.8 DCSS Information

Refer to "Using GDDM® saved segments" section of the *GDDVM/VM Program Directory*

Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.7.9 Verification

GDDM/VM and GDDM/VM NLS (US ENGLISH) feature must be installed prior to verifying the installation of GDDM-IVU. Consult **Testing GDDM-IVU Installation, Chapter 9** in the *Program Directory for GDDM/VM* for instructions to run the verification.

5.1.8 5668-801 GDDM-IMD V2R1.3

5.1.8.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.8.2 Service Excluded

None.

5.1.8.3 Pre-Requisite Service

None.

5.1.8.4 Co-Requisite Service

None.

5.1.8.5 If-Requisite Service

None.

5.1.8.6 Product Manuals

Form Number	Publication Title
GC33-1802	Program Directory for GDDM/VM
SC33-0338	GDDM Interactive Map Definition

5.1.8.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

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Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

IMPORTANT NOTE

The Program Directory for GDDM-IMD Section 6.13 mistates when to Update the Build Status Table. This needs to be done BEFORE Section 6.12: Place GDDM into Production

You will need to run it after the following sections:

1. 6.5 Install GDDM/VM using the VMFINS EXEC, Step 4
2. 6.7 Install GDDM-PGF using the VMFINS EXEC, Step 4
3. 6.8 Install GDDM-IMD using the VMFINS EXEC, Step 4
4. 6.9 Install GDDM-IVU using the VMFINS EXEC, Step 4

You can use the tables listed in Section 6.13 for reference as to what the syntax of the VMFINS command should be.

GDDM-IMD is in VMSES/E format and cannot be installed using INSTFPP.

Refer to the *Program Directory for GDDM/VM* in the section entitled "6.0 Install GDDM/VM using the VMFINS EXEC" for the steps for installing GDDM-IMD using VMSES/E.

Refer to the *Program Directory for GDDM/VM* in the section entitled "7.0 Service Instructions" for information on applying service to GDDM-IMD using VMSES/E.

5.1.8.8 DCSS Information

Refer to "Using GDDM saved segments" section of the *Program Directory for GDDM/VM*

Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.8.9 Verification

GDDM/VM and GDDM/VM NLS (US ENGLISH) feature must be installed prior to verifying the installation of GDDM-IMD. Consult **Testing GDDM-IMD Installation, Chapter 9** in the *Program Directory for GDDM/VM* for instructions to run the verification.

5.1.9 5668-812 GDDM-PGF V2R1.3

5.1.9.1 PUT/ESO Applied

The product is at service level ESO0003.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

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This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.9.2 Service Excluded

None.

5.1.9.3 Pre-Requisite Service

None.

5.1.9.4 Co-Requisite Service

None.

5.1.9.5 If-Requisite Service

None.

5.1.9.6 Product Manuals

Form Number	Publication Title
GC33-1802	Program Directory for GDDM/VM
SC33-0328	GDDM-PGF Interactive Chart Utility

Form Number	Publication Title
SC33-0913	GDDM-PGF Application Programming Guide
SC33-0333	GDDM-PGF Application Programming Reference
SC33-0330	GDDM-PGF Vector Symbol Editor
SC33-1776	GDDM-PGF OPS User's Guide

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The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

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VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

IMPORTANT NOTE

The Program Directory for GDDM-PGF Section 6.13 mistates when to Update the Build Status Table. This needs to be done BEFORE Section 6.12: Place GDDM into Production

You will need to run it after the following sections:

1. 6.5 Install GDDM/VM using the VMFINS EXEC, Step 4
2. 6.7 Install GDDM-PGF using the VMFINS EXEC, Step 4
3. 6.8 Install GDDM-IMD using the VMFINS EXEC, Step 4
4. 6.9 Install GDDM-IVU using the VMFINS EXEC, Step 4

You can use the tables listed in Section 6.13 for reference as to what the syntax of the VMFINS command should be.

GDDM-PGF is in VMSES/E format and cannot be installed using INSTFPP. Refer to the *Program Directory for GDDM/VM*, Chapter 6.0, "Installation Instructions" and Chapter 7.0, "Service Instructions", for the steps to install and apply service to GDDM-PGF using VMSES/E.

5.1.9.8 DCSS Information

Refer to "Using GDDM saved segments" section of the *Program Directory for GDDVM/VM*

Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.9.9 Verification

GDDM/VM and GDDM/VM NLS (US ENGLISH) feature must be installed prior to verifying the installation of GDDM-PGF. Consult **Testing GDDM-PGF Installation, Chapter 9** in the *Program Directory for GDDM/VM* for instructions to run the verification.

5.1.10 5684-042 ICKDSF V1R17.0

5.1.10.1 PUT/ESO Applied

The product is at service level ESO1201.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.10.2 Service Excluded

None.

5.1.10.3 Pre-Requisite Service

None.

5.1.10.4 Co-Requisite Service

None.

5.1.10.5 If-Requisite Service

None.

5.1.10.6 Product Manuals

Form Number	Publication Title
GI10-4514-02	Program Directory for Device Support Facilities (ICKDSF)
GC26-3946-21	Device Support Facilities Release 17 System Control Program Specifications
GC35-0033-24	Device Support Facilities User's Guide and Reference Release 17

5.1.10.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

ICKDSF is in VMSES/E format and cannot be installed using INSTFPP.

Refer to the *Program Directory for Device Support Facilities (ICKDSF)* in chapter 6.0 entitled "Installation Instructions" for the steps to install ICKDSF using VMSES/E.

Refer to the *Program Directory for Device Support Facilities (ICKDSF)* in chapter 8.0 entitled "The Stand-Alone Program" to see how to create the stand-alone ICKDSF IPL tape.

Important Installation Note

PTFs UK61061, UK70218, UK70052, UK68685, UK67626, UK70553, UK71584 and UK74445 have made product enhancements or Publication Changes to the *Device Support Facilities (ICKDSF) User's Guide and Reference Release 17* (GC35-0033-39)

Please refer to the 'MEMO TO USERS' (':UMEMO.') section of the following files for information regarding these changes: 'UK61061 \$PTFPART' 'UK70218 \$PTFPART' 'UK70052 \$PTFPART' 'UK68685 \$PTFPART' 'UK67626 \$PTFPART' 'UK70553 \$PTFPART' 'UK71584 \$PTFPART' 'UK74445 \$PTFPART' These files may be found on the maintenance ID '5684042J' 2D2 disk.

5.1.10.8 DCSS Information

None.

5.1.10.9 Verification

To run the verification program issue:

v5684042

5.1.11 5684-168 GDDM/VM V3R2.0

5.1.11.1 PUT/ESO Applied

The product is at service level ESO0603.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.11.2 Service Excluded

5.1.11.3 Pre-Requisite Service

None.

5.1.11.4 Co-Requisite Service

None.

5.1.11.5 If-Requisite Service

None.

5.1.11.6 Product Manuals

Form Number	Publication Title
GC33-0866	GDDM General Information
SC33-0875	GDDM User's Guide
SC33-0867	GDDM Base Application Programming Guide
SC33-0868	GDDM Base Application Programming Reference
SC33-0870	GDDM Diagnosis
SC33-0869	GDDM Messages
SC33-0871	GDDM System Customization and Administration
SC33-0920	GDDM Using the Image Symbol Editor
GC33-0876	GDDM Series Licensed Program Specifications
GC33-1802	Program Directory for GDDM/VM
LY33-6080	How to activate GDDM-REXX

5.1.11.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

IMPORTANT NOTE

The Program Directory for GDDM/VM Section 6.13 mistates when to Update the Build Status Table. This needs to be done BEFORE Section 6.12: Place GDDM into Production

You will need to run it after the following sections:

1. 6.5 Install GDDM/VM using the VMFINS EXEC, Step 4
2. 6.7 Install GDDM-PGF using the VMFINS EXEC, Step 4
3. 6.8 Install GDDM-IMD using the VMFINS EXEC, Step 4
4. 6.9 Install GDDM-IVU using the VMFINS EXEC, Step 4

You can use the tables listed in Section 6.13 for reference as to what the syntax of the VMFINS command should be.

GDDM is in VMSES/E format and cannot be installed using INSTFPP. Refer to the *Program Directory for GDDM/VM*, Chapter 6.0, "Installation Instructions", for the steps to install GDDM using VMSES/E.

GDDM-PCLK and GDDM-OS/2 Link are shipped as part of GDDM/VM. If you want to make them available to your systems, refer to *GDDM System Customization and Administration (SC33-0871)*.

GDDM-REXX is also shipped as part of GDDM/VM. To activate GDDM-REXX refer to *How to activate GDDM-REXX (LY33-6080)*. To save the DCSS for GDDM-REXX see instructions in the "DCSS Information" section of this document.

Refer to *GDDM System Customization and Administration* to customize GDDM/VM.

Refer to the *Program Directory for GDDM/VM*, Chapter 7.0 "Service Instructions", for information on applying service to GDDM using VMSES/E.

5.1.11.8 DCSS Information

Refer to "Using GDDM saved segments" section of the *GDDVM/VM Version 3 Program Directory*

Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.11.9 Verification

The verification will be run automatically at the end of the **vmfins build** step if you have GDDM/VM US English National Language Support installed or have a GDDM user default specification for NATLANG telling GDDM to use a different language. Consult the *Program Directory for GDDM/VM*, **Chapter 9.0 "Testing GDDM Installation"**, for instructions to run the verification separately. Note that step 4 of the **Testing GDDM/VM Base** section documents a process for setting the User Control Key to something other than the default of PA3. This may be necessary if the keyboard does not have a PA3 key, or if the PA3 key is already used by another application. If it is necessary to follow this step, you can facilitate this by creating a **PROFILE ADMDEFS** file, if one does not already exist. Then insert the following line into that file as indicated, making sure that there is a space in col 1. This line is an example of how to define the PF1 key to function as the User Control Key:

```
ADMMNICK FAM=1,PROCOPT=((CTLKEY,1,1))
```

5.1.12 5695-013 REXX/370 COMPILER V1R4.0

5.1.12.1 PUT/ESO Applied

The product is at service level ESO0507.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.12.2 Service Excluded

None.

5.1.12.3 Pre-Requisite Service

None.

5.1.12.4 Co-Requisite Service

None.

5.1.12.5 If-Requisite Service

None.

5.1.12.6 Product Manuals

Form Number	Publication Title
SH19-8160	IBM Compiler and Library for REXX on zSeries User's Guide and Reference Version 1 Release 4
SH19-8179	IBM Compiler and Library for REXX on zSeries Diagnosis Guide Version 1 Release 4
GI19-0029	Program Directory for IBM Compiler for REXX on zSeries Release 4.0

5.1.12.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, "z/VM 6.2 Installation and Production Enablement Requirements" on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

For installation instructions, please refer to chapter 6 of the *Program Directory for IBM COMPILER for REXX on zSeries*.

5.1.12.8 DCSS Information

None.

5.1.12.9 Verification

Verification could be started automatically by the installation exec or manually by entering:

v5695013

5.1.13 5695-013 REXX/370 COMPILER KANJI V1R4.0

5.1.13.1 PUT/ESO Applied

The product is at service level ESO0404.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.13.2 Service Excluded

None.

5.1.13.3 Pre-Requisite Service

None.

5.1.13.4 Co-Requisite Service

None.

5.1.13.5 If-Requisite Service

None.

5.1.13.6 Product Manuals

Form Number	Publication Title
GI19-0029	Program Directory for IBM Compiler for REXX on zSeries Release 4.0

5.1.13.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

For installation instructions, please refer to Appendix A. 'Install NLS Japanese (Kanji) Feature with VMSES/E in the *Program Directory for IBM COMPILER for REXX on zSeries*.

- **Note:**

1. The Program Directory indicates that 'the Japanese (Kanji) feature is located on the REXX Compiler base tape.' Since the time that this was written, IBM has changed the procedure utilized to create Product Tapes. Please check the documentation provided with your order to determine which tape contains the Japanese feature.
2. Step 3 'Install the Japanese feature' is missing several of the steps required to load the REXX Compiler Japanese Feature control files to the 51D disk. The following steps must be executed to load the Japanese Feature:

vmfins install info (nomemo

vmfins install ppf 5695013J {rexxc|rexxcsfs}{plan nomemo

vmfins install ppf 5695013J {rexxc|rexxcsfs}{nomemo nolink

vmfins build ppf 5695013J {rexxc|rexxcsfs}{serviced nolink

- Use **rexxc** if installing using minidisks or
- Use **rexxcsfs** if installing using SFS

5.1.13.8 DCSS Information

None.

5.1.13.9 Verification

There is no verification routine for the Japanese Feature of the REXX Compiler.

5.1.14 5695-014 REXX/370 LIBRARY V1R4.0

5.1.14.1 PUT/ESO Applied

The product is at service level ESO0505.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.14.2 Service Excluded

None.

5.1.14.3 Pre-Requisite Service

None.

5.1.14.4 Co-Requisite Service

None.

5.1.14.5 If-Requisite Service

None.

5.1.14.6 Product Manuals

Form Number	Publication Title
SH19-8179	IBM Compiler and Library for REXX on zSeries Diagnosis Guide Version 1 Release 4
SH19-8160	IBM Compiler and Library for REXX on zSeries User s Guide and Reference Version 1 Release 4
GI19-0027	Program Directory for IBM Library for REXX on zSeries Release 4.0

5.1.14.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

For installation instructions, please refer to Chapter 6 of the *Program Directory for IBM Library for REXX on z/Series*.

5.1.14.8 DCSS Information

Please note if you are going to utilize the REXX Library segment, the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

If the REXX Library segment is defined in the range 20000-3FFFF, the z/VM 6.1 SAMPI VM Guard Server, VSMGUARD, will fail initialization with:

```
DMSITP143T Data exception occurred at B2D00002 in system routine
DMSRTPRC; re-IPL CMS
```

in a call to routine DMSSIDM from the exec DMSWSSMI. The error is the result of the EAGRTSEG REXX Library Segment being overlaid by the SMAPI VM Guard Server Segment VSMDCSS.

When creating the REXX Library segment, be sure that your machine's virtual storage is sufficient. For the SDO recommended segment range, your machine's virtual storage size should be 2048M.

For additional information on the REXX Library segment, please refer to the section Define and Build the REXX Library Saved Segment of the *IBM Library for REXX on z/Series Program Directory*.

5.1.14.9 Verification

Verification could be started automatically by the installation exec or manually by entering:

v5695014

5.1.15 5695-014 REXX/370 LIBRARY KANJI V1R4.0

5.1.15.1 PUT/ESO Applied

The product is at service level ESO0404.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.15.2 Service Excluded

None.

5.1.15.3 Pre-Requisite Service

None.

5.1.15.4 Co-Requisite Service

None.

5.1.15.5 If-Requisite Service

None.

5.1.15.6 Product Manuals

Form Number	Publication Title
GI19-0027	Program Directory for IBM Library for REXX on zSeries Release 4.0

5.1.15.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Important Note for Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

For installation instructions, please refer to Appendix B. 'Install NLS Japanese (Kanji) Feature with VMSES/E in the *Program Directory for IBM LIBRARY for REXX on zSeries*.

- **Note:**

1. The Program Directory indicates that 'the Japanese (Kanji) feature is located on the REXX Library base tape.' Since the time that this was written, IBM has changed the procedure utilized to create Product Tapes. Please check the documentation provided with your order to determine which tape contains the Japanese feature.

2. Step 3 'Install the Japanese feature' is missing several of the steps required to load the REXX Library Japanese Feature control files to the 51D disk. The following steps must be executed to load the Japanese Feature:

vmfins install info (nomemo

vmfins install ppf 5695014J {rexllrexxlsfs}(plan nomemo

vmfins install ppf 5695014J {rexllrexxlsfs}(nomemo nolink

vmfins build ppf 5695014J {rexllrexxlsfs}(serviced nolink

- Use **rexll** if installing using minidisks or
- Use **rexxlsfs** if installing using SFS

5.1.15.8 DCSS Information

None.

5.1.15.9 Verification

There is no verification routine for the Japanese Feature of the REXX Library.

5.1.16 5696-234 HLASM V1R6.0

5.1.16.1 PUT/ESO Applied

The product is at service level ESO1201.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.16.2 Service Excluded

5.1.16.3 Pre-Requisite Service

None.

5.1.16.4 Co-Requisite Service

None.

5.1.16.5 If-Requisite Service

None.

5.1.16.6 Product Manuals

Form Number	Publication Title
GC26-4944	High Level Assembler for z/OS & z/VM & z/VSE Licensed Program Specifications
SC26-3494	High Level Assembler for z/OS & z/VM & z/VSE Installation and Customization Guide Release 6
SC26-4940	High Level Assembler for z/OS & z/VM & z/VSE Language Reference
SC26-4941	High Level Assembler for z/OS & z/VM & z/VSE Programmers Guide
GC26-4943	High Level Assembler for z/OS & z/VM & z/VSE General Information

5.1.16.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

See the IBM HLASM Installation and Customization Guide for installation instructions.

IBM High Level Assembler V1R6.0 is VMSES/E enabled and must be installed using VMFINS. VMFINS is an installation aid supplied as part of VMSES/E to make installation of VM and LPs consistent.

Important Installation Note

The 'HLASM Installation and Customization Guide' Release 6 indicates that the name of the HLASM PPF file is 'P696234J'. This is incorrect, the PPF file name is '5696234J'.

The installation and tailoring of IBM High Level Assembler V1R6.0 is documented in the *IBM HLASM Installation and Customization Guide*. You **must** have a copy of this manual to properly install and customize the High Level Assembler.

The *IBM HLASM Installation and Customization Guide* can be found on the following web page:

<http://www.ibm.com/software/awdtools/hlasm/>

Click on Product Library

Installation and Customization Guide (SC26-3494)

Click on either View in PDF or BookServer format.

Additional information on the installation, customization and servicing of High Level Assembler may be found in the following chapters of the *IBM HLASM Installation and Customization Guide*:

- Installation: Chapter 8, "Installing High Level Assembler on VM"
- Customization: Chapter 9, "Customizing High Level Assembler on VM"
- Service: Chapter 10, "Maintaining High Level Assembler on VM"

Important Installation Note

PTF UK15391 made a Publication Change (DEVCHG) to *High Level Assembler for MVS & VM & VSE Installation and Customization Guide Release 5* (SC26-3494) Chapter 8, Installing High Level Assembler on VM. However, the DEVCHNG was never incorporated and it is not reflected in the new *High Level Assembler for MVS & VM & VSE Installation and Customization Guide Release 6* (SC26-3494-04).

As a result the following information is missing:

If you are to run the HLASM toolkit with the assembler in a saved segment then use VMFCOPY to copy ASMADOP MODULE to the Y disk.

PTF UK59302 modified High Level Assembler (HLASM) to support D/T2917. The addition of this support resulted in changes (DEVCHNG) to the HLASM publications. Please refer to the ':UMEMO.' section of the 'UK59302 \$PTFPART' file for information on the DEVCHNG. The 'UK59302 \$PTFPART' file may be found on the maintenance ID 'P696234J' 2D2 disk.

For more information on servicing IBM High Level Assembler using VMSES/E refer to *VMSES/E Introduction and Reference*.

5.1.16.8 DCSS Information

Refer to Part 2, Chapter 8, Step 5 "Define and Build High Level Assembler Saved Segment" of the *Installation and Customization Guide* for HLASM V1R6. for complete instructions. Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.16.9 Verification

See the IBM HLASM Installation and Customization Guide for verification instructions.

When the command is issued to update the VMSES/E Build Status Table for IBM High Level Assembler, VMSES/E also executes the verification EXEC, V5696234. The procedure for updating the build status table is outlined in Step 4: "Verify the Installation in a Test Environment" in Chapter 8. "Installing High Level Assembler on VM" of the *IBM HLASM Installation and Customization Guide*.

5.1.17 5696-234 HLASM TOOLKIT V1R6.0**5.1.17.1 PUT/ESO Applied**

The product is at service level ESO1112.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.17.2 Service Excluded

5.1.17.3 Pre-Requisite Service

None.

5.1.17.4 Co-Requisite Service

None.

5.1.17.5 If-Requisite Service

None.

5.1.17.6 Product Manuals

Form Number	Publication Title
GC26-4944	High Level Assembler for z/OS & z/VM & z/VSE Licensed Program Specifications
GC26-8711	High Level Assembler for z/OS & z/VM & z/VSE Toolkit Feature Installation and Customization Guide Release 6
GC26-8709	High Level Assembler for z/OS & z/VM & z/VSE Toolkit Feature Interactive Debug Facility User's Guide Release 6
GC26-8710	High Level Assembler for z/OS & z/VM & z/VSE Toolkit Feature User's Guide Release 6
GC26-8712	High Level Assembler for z/OS & z/VM & z/VSE IDF Reference Summary Release 6

5.1.17.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, “DASD Requirements” on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

See the High Level Assembler Toolkit Feature Installation and Customization Guide for installation instructions.

IBM High Level Assembler Toolkit Feature is VMSES/E enabled and must be installed using VMFINS.

Important Installation Note

The 'High Level Assembler for z/OS & z/VM & z/VSE Toolkit Feature Installation and Customization Guide' Release 6 (GC26-8711-08) indicates that the name of the HLASM Toolkit PPF file is 'P696234K'. This is incorrect, the PPF file name is '5696234K'.

The installation and tailoring of IBM High Level Assembler Toolkit Feature is documented in the *High Level Assembler Toolkit Feature Installation and Customization Guide*. You **must** have a copy of this manual to properly install and customize the High Level Assembler Toolkit Feature.

The *IBM High Level Assembler Toolkit Feature Installation and Customization Guide* can be found on the following web page:

<http://www.ibm.com/software/awdtools/hlasm/>

Click on Product Library

Installation and Customization Guide (SC26-3494)

Click on either View in PDF or BookServer format.

Additional information on the installation, customization and servicing of HLASM Toolkit may be found in the following chapters of the *IBM Toolkit Installation and Customization Guide*:

5.1.17.8 DCSS Information

The HLASM ToolKit Feature does not have any segments.

5.1.17.9 Verification

See the IBM High Level Assembler Toolkit Feature Installation and Customization Guide for verification instructions.

Chapter 5 step 4 describes the verification test. You need to run T5696234 exec and reproduce the output shown in the *IBM High Level Assembler Toolkit Installation and Customization Guide*.

NOTE:If HLASM has been loaded into a shared segment and with no links to the HLASM mini disks, the invoking of HLASM returns RC=20. The NOSEG option has been removed from the IVP exec T5696234 invocation of HLASM. If HLASM has been loaded into a shared segment then HLASM will be found and assembly of IVP sample program will work.

5.1.18 5697-F42 DB2 SERVER FOR VM V7R5.0

5.1.18.1 PUT/ESO Applied

The product is at service level ESO1201.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.18.2 Service Excluded

5.1.18.3 Pre-Requisite Service

5.1.18.4 Co-Requisite Service

None.

5.1.18.5 If-Requisite Service

None.

5.1.18.6 Product Manuals

Form Number	Publication Title
GC09-2659	DB2 Server for VSE & VM Licensed Program Specifications
GC09-2984	DB2 Server for VM Messages and Codes
GC09-2987	DB2 Server for VSE & VM Performance Tuning Handbook
GC09-2995	DB2 Server for VSE & VM Overview
LC09-2907	DB2 Server for VM Diagnosis Guide and Reference
SC09-2888	DB2 Server for VSE & VM Database Administration
SC09-2889	DB2 Server for VSE & VM Application Programming
SC09-2890	DB2 Server for VSE & VM Master Index and Glossary
SC09-2980	DB2 Server for VM System Administration
SC09-2983	DB2 Server for VSE & VM Database Services Utility
SC09-2986	DB2 Server for VSE & VM Operation
SC09-2988	DB2 Server for VSE & VM Quick Reference
SC09-2989	DB2 Server for VSE & VM SQL Reference
SC09-2990	DB2 Server for VSE & VM Interactive SQL Guide and Reference
GI10-4998	Program Directory for IBM DATABASE 2 SERVER FOR VM Version 7 Release 5 Modification Level 0

5.1.18.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

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When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

IMPORTANT NOTE REGARDING THIS SERVICE

There is subsequent DB2 Server for VM service processing required due to the service that has been applied. DB2 Server for VM DBS Utility load module (object ARISLKUC.UTILITY) had service applied.

Link-edit all user programs that include the DBS Utility according to instructions in the *DB2 Server for VM Database Services Utility manual*.

IMPORTANT NOTE

Please review the PSP Bucket for latest updates prior to installing this feature. The PSP Bucket in RETAIN Upgrade: DB2VSEVM750 Subset: DB2/750 will be updated with any documentation updates.

Note: Items 1 and 3 that are listed under the **SECTION 3. GENERAL INFORMATION** have already been incorporated in this delivery, so **DO NOT** execute these steps or you may backlevel the code if any of mentioned files have been serviced.

For installation instructions and details, please refer to the Installing DB2 for VM section in the *Program Directory for IBM DATABASE 2 Server for VM Version 7 Release 5 Modification Level 0*.

The DB2® management system you will install, following the install instructions, does not support the distributed relational database architecture (DRDA®), nor VMDSS. However, you can install the additional code required for these facilities after installation. For DRDA, please reference the instructions in the *The DB2 Server for VM System Administration* manual.

If you plan to use VM DB2 Data Spaces Support (VMDSS) please review “Chapter 6” in the *DB2 Server for VSE & VM Performance Tuning Handbook* manual.

5.1.18.8 DCSS Information

Refer to the Saved Segment section of the *DB2 Server for VM System Administration* manual for details on Saving Segments. Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, “Saved Segments” on page 211 for more information.

5.1.18.9 Verification

For instructions on verifying DB2, please refer to the “Section for Installation Verification” in the *Program Directory for IBM DATABASE 2 Server for VM Version 7 Release 5 Modification Level 0*.

5.1.19 5697-F42 DB2 DATA PROPAGATOR V7R4.0

5.1.19.1 PUT/ESO Applied

The product is at service level ESO0712.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.19.2 Service Excluded

None.

5.1.19.3 Pre-Requisite Service

None.

5.1.19.4 Co-Requisite Service

None.

5.1.19.5 If-Requisite Service

None.

5.1.19.6 Product Manuals

Form Number	Publication Title
SC18-7568	IBM DB2 Information Integrator Replication and Event Publishing Guide and Reference
GI10-5000	Program Directory for IBM DB2 DataPropagator Q Capture for VM Version 7 Release 4.0

5.1.19.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Pre-Requisite Licensed Products

DB2 UDB Universal Database

MQ Series Client for VM/ESA

Note on Publications

The publications for DB2 DProp Q Capture for VM V7.4 are included with the pre-requisite product, DB2 UDB Universal Database. No publications are included when you order the basic materials for DB2 DProp Q Capture for VM V7.4.

For Installation instructions and details, please refer to "The Installation Instructions section" in the *Program Directory for DataPropagator Q Capture for VM Version 7 Release 4.0*. Also check the PSP Bucket in RETAIN for the latest information regarding the the installation or servicing of DB2 DataPropagator Q Capture V7R4.0

Error Messages

During installation you may see the following error message, which the developer has determined can be ignored. Please reference the information contained in the PSP Bucket in RETAIN (Upgrade: DB2VSEVM740 Subset: DPRVM).

```
VMFSIP2500E Requisite error, missing requisite *@C0092YD* for PRODID
5697F74B%DPROPR
```

It also possible that you may see the following error messages, which result from DB2 DataPropagator Q Capture not recognizing DB2 Server for VM V7R5.0 (5697F75A) as the correct prerequisite. This can be corrected by issuing the commands that follow. Please reference the RETAIN PSP Bucket for more complete information.

```
SV:VMFSIP2500E Requisite error, missing requisite 5697F74A for PRODID
SV:          5697F74B%DPROPR
SV:VMFSIP2503E PRODID 5697F74B%DPROPR has a status of APPLIED but has
SV:          requisites that have not been APPLIED
WN:VMFREQ2806W The following requisites for product :PPF 5697F74B DPRORP
WN:          :PRODID 5697F74B%DPROPR are not satisfied:
WN:VMFREQ2806W Type          Product Component          PTF
WN:          -----
WN:VMFREQ2806W Prerequisite  5697F74A
SV:VMFINS2604E Product :PPF 5697F74B DPRORP :PRODID 5697F74B%DPROPR
SV:          cannot be processed because its requisites are not
SV:          satisfied
ST:VMFINS2760I VMFINS processing completed unsuccessfully
```

1. vmfsim modify vm sysrecs d tdata :prodid 5697F74A :PPF 5697F74A lib :stat received
2. vmfsim modify vm sysapps d tdata :prodid 5697F74A :PPF 5697F74A lib :stat applied
3. vmfsim modify vm sysreqt d tdata :prodid 5697F74A

5.1.19.8 DCSS Information

5.1.19.9 Verification

For Installation instructions and details, please refer to “The Installation Instructions section” in the *Program Directory for DataPropagator Q Capture for VM Version 7 Release 4.0*. Also check the PSP Bucket in RETAIN® for the latest information regarding the installation or servicing of DB2 DataPropagator Q Capture V7R4.0

For instructions on verifying DB2 DataPropagator Q Capture, please reference “The Installation Verification section” in the *Program Directory for DataPropagator Q Capture for VM Version 7 Release 4.0*.

5.1.20 5697-F42 DB2 QMF V7R2.0

5.1.20.1 PUT/ESO Applied

The product is at service level ESO0709.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.20.2 Service Excluded

None.

5.1.20.3 Pre-Requisite Service

None.

5.1.20.4 Co-Requisite Service

5.1.20.5 If-Requisite Service

None.

5.1.20.6 Product Manuals

Form Number	Publication Title
GC27-0720	Query Management Facility Installing and Managing QMF Version 7 Release 2
GC27-0717	Query Management Facility QMF Messages and Codes Version 7 Release 2
GC27-0714	Query Management Facility Introducing QMF Version 7 Release 2
SC27-0715	Query Management Facility QMF Reference Version 7 Release 2
SC27-0716	Query Management Facility Using QMF Version 7 Release 2
SC27-0718	Query Management Facility Developing QMF Applications Version 7
GI10-8329	Program Directory for Query Management Facility for VM/ESA Version 7 Release 2.0

5.1.20.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

For installation instructions and details, please refer to the "Installation Instructions" section of the *Program Directory for Query Management Facility Version 7 Release 2.0*.

NOTE: The P697F4BA 2D2 disk has increased to 1620 4K blocks. (9 cylinders of 3380 DASD or 8 cylinders of 3390 DASD.)

NOTE: Refer to the **Memo To Users** section of the UQ83930 \$PTFPART file on the P697F4BA 2D2 disk for important USER information regarding service that has been applied.

Error Messages

During installation you may see the following error messages, which results from DB2 QMF not recognizing DB2 Server for VM V7R5.0 (5697F75A) as the correct prerequisite. This can be corrected by issuing the commands that follow. Please reference the RETAIN PSP Bucket for more complete information.

```
SV:VMFSIP2500E Requisite error, missing requisite 5697F74A for PRODID
SV:          5697F4BA%QMF
SV:VMFSIP2503E PRODID 5697F4BA%QMF has a status of APPLIED but has
SV:          requisites that have not been APPLIED
WN:VMFREQ2806W The following requisites for product :PPF 5697F74B DPRPR
WN:          :PRODID 5697F4BA%QMF are not satisfied:
WN:VMFREQ2806W Type          Product Component          PTF
WN:          -----
WN:VMFREQ2806W Prerequisite  5697F74A
SV:VMFINS2604E Product :PPF 5697F4BA QMF :PRODID 5697F4BA%QMF
SV:          cannot be processed because its requisites are not
SV:          satisfied
ST:VMFINS2760I VMFINS processing completed unsuccessfully
```

1. vmfsim modify vm sysrecs d tdata :prodid 5697F74A :PPF 5697F74A lib :stat received
2. vmfsim modify vm sysapps d tdata :prodid 5697F74A :PPF 5697F74A lib :stat applied
3. vmfsim modify vm sysreqt d tdata :prodid 5697F74A

5.1.20.8 DCSS Information

For segment build instructions and details, please refer to the “Place QMF Into Production” section of the *Program Directory for Query Management Facility Version 7 Release 2.0*. Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, “Saved Segments” on page 211 for more information.

Important Note for Saving QMF Segment

Step 6.5.1.8 **Prepare to build segments.** of the *Program Directory for Query Management Facility Version 7 Release 2.0*. needs to be updated with the following:

Virtual Storage Needs to be set to **999M**.

Change the GDDM Link statement in substep D. to read:

```
link p68416b 29e 194 rr
```

5.1.20.9 Verification

For instructions on verifying QMF, please refer to the *Installing and Managing QMF on VM/ESA* manual.

5.1.21 5697-F42 DB2 CLIENT FOR VM V7R5.0

5.1.21.1 PUT/ESO Applied

The product is at service level ESO1201.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.21.2 Service Excluded

None.

5.1.21.3 Pre-Requisite Service

None.

5.1.21.4 Co-Requisite Service

None.

5.1.21.5 If-Requisite Service

None.

5.1.21.6 Product Manuals

Form Number	Publication Title
GC09-2659	DB2 Server for VSE & VM Licensed Program Specifications
GC09-2984	DB2 Server for VM Messages and Codes
GC09-2987	DB2 Server for VSE & VM Performance Tuning Handbook
GC09-2995	DB2 Server for VSE & VM Overview

Form Number	Publication Title
LC09-2907	DB2 Server for VM Diagnosis Guide and Reference
SC09-2888	DB2 Server for VSE & VM Database Administration
SC09-2889	DB2 Server for VSE & VM Application Programming
SC09-2890	DB2 Server for VSE & VM Master Index and Glossary
SC09-2980	DB2 Server for VM System Administration
SC09-2983	DB2 Server for VSE & VM Database Services Utility
SC09-2986	DB2 Server for VSE & VM Operation
SC09-2988	DB2 Server for VSE & VM Quick Reference
SC09-2989	DB2 Server for VSE & VM SQL Reference
SC09-2990	DB2 Server for VSE & VM Interactive SQL Guide and Reference
GI11-8336	Program Directory for IBM DB2 SERVER FOR VM CLIENT EDITION Version 7 Release 5 Modification Level 0

5.1.21.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid (PLAN NOMEMO ENV* *envelope_filename*

VMFINS INSTALL PPF *ppfname compid (NOMEMO NOLINK ENV* *envelope_filename*

IMPORTANT NOTE REGARDING THIS SERVICE

There is subsequent DB2 Server for VM service processing required due to the service that has been applied. DB2 Server for VM DBS Utility load module (object ARISLKUC.UTILITY) had service applied.

Link-edit all user programs that include the DBS Utility according to instructions in the *DB2 Server for VM Database Services Utility manual*.

IMPORTANT NOTE

Please review the PSP Bucket for latest updates prior to installing this feature. The PSP Bucket in RETAIN Upgrade: DB2VSEVM750 Subset: DB2750C will be updated with any documentation updates.

Note: Item 2 (APAR PK68794) that is listed under the **SECTION 3. GENERAL INFORMATION** has already been incorporated in this delivery, so **DO NOT** execute this step or you may backlevel the code if any of mentioned files have been serviced.

For installation instructions and details, please refer to the Installing DB2 for VM Client Edition section in the *Program Directory for IBM DATABASE 2 Server for VM Client Edition Version 7 Release 5 Modification Level 0*.

The DB2 management system you will install, following the install instructions, does not support the distributed relational database architecture (DRDA). You can install the additional DRDA code required for these facilities after installation, by following the instructions in the *The DB2 Server for VM System Administration* manual.

Documentation Updates for

The DB2 Server for VM System Administration manual.

Refer to APAR PK79201 for important Document updates to the *DB2 Server for VM System Administration* manual. regarding DRDA code.

5.1.21.8 DCSS Information

Refer to the Saved Segment section of the *DB2 Server for VM System Administration* manual for details on Saving Segments. Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.21.9 Verification

For instructions on verifying DB2, please refer to the "Section for Installation Verification" in the *Program Directory for IBM DATABASE 2 Server for VM Client Edition Version 7 Release 5 Modification Level 0*.

5.1.22 5697-J05 ARCHIVE MANAGER FOR Z/VM V1R1.0

5.1.22.1 PUT/ESO Applied

The product is at service level ESO1201.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.22.2 Service Excluded

None.

5.1.22.3 Pre-Requisite Service

None.

5.1.22.4 Co-Requisite Service

None.

5.1.22.5 If-Requisite Service

None.

5.1.22.6 Product Manuals

Form Number	Publication Title
SC18-9345	IBM Archive Manager for z/VM Administration Guide Version 1 Release 1
SC18-9348	IBM Archive Manager for z/VM User's Guide Version 1 Release 1
GI10-8661	Program Directory for Archive Manager for z/VM version 1 release 1.0

5.1.22.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Softcopy Publications

The Archive Manager for z/VM publications can be found at the Archive Manager World Wide Web home page at url:

<http://www.ibm.com/software/stormgmt/zvm/archive/library.html>

For installation instructions, please refer to the Installation Instructions section of the *Archive Manager for z/VM Program Directory*.

Post-installation information is contained in the *Archive Manager Installation Guide* (SC18-9345). Perform the steps required for file tailoring and initial activation of the program, as described in the *Archive Manager for z/VM Administration Guide*, before continuing.

Other product requirements to review:

Archive Manager requires the Share File System component of z/VM, plus one of the following:

IBM Library for REXX on zSeries R4 (5695-014)

IBM Alternate Library for REXX on zSeries. IBM recommends you acquire the latest available version. Alternate Library for REXX on zSeries is available as a free download from:

<http://www.ibm.com/software/awdtools/rexx/rexxzseries/index.html>

Please reference the *Program Directory for Archive Manager for z/VM* for complete product requirements.

For service instructions, please refer to the Service Instructions section of the *Archive Manager for z/VM Program Directory*

5.1.22.8 DCSS Information

None.

5.1.22.9 Verification

None

5.1.23 5697-J06 BACKUP AND RESTORE MANAGER FOR Z/VM V1R2.0

5.1.23.1 PUT/ESO Applied

The product is at service level ESO1201.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.23.2 Service Excluded

None.

5.1.23.3 Pre-Requisite Service

None.

5.1.23.4 Co-Requisite Service

None.

5.1.23.5 If-Requisite Service

None.

5.1.23.6 Product Manuals

Form Number	Publication Title
SC18-9346	IBM Backup and Restore Manager for z/VM Administration Guide Version 1 Release 2
SC18-9523	IBM Backup and Restore Manager for z/VM User s Guide Version 1 Release 2
GI10-8662	Program Directory for Backup and Restore Manager for z/VM version 1 release 2.0

5.1.23.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Softcopy Publications The Backup and Restore Manager for z/VM publications can be found at the Backup and Restore Manager for z/VM World Wide Web home page at url:
<http://www.ibm.com/software/stormgmt/zvm/backup/library.html>

For installation instructions, please refer to the Installation Instructions section of the *Backup and Restore Manager for z/VM Program Directory*

Post-installation information is contained in the *Backup and Restore Manager for z/VM Administration Guide* (SC18-9346). Perform the steps required for file tailoring and initial activation of the program, as described in the *Backup and Restore Manager for z/VM Administration Guide* (SC18-9346), before continuing.

For service instructions, please refer to the Service Instructions section of the *Backup and Restore Manager for z/VM Program Directory*

Important Note on applied PTF UK72432

Reference the User-To-Memo in the UK72432 \$PTFPART file located on the 5697J06B 2D2 disk for pertinent information regarding the service that was applied.

Other product requirements to review:

In addition, Backup and Restore Manager for z/VM requires:

Shared File System (included in z/VM) as the repository for the backup catalog

One of the following

- IBM Library for REXX on zSeries R4 (5695-014)
- IBM Alternate Library for REXX on zSeries. IBM recommends you acquire the latest available version. IBM Alternate Library for REXX on zSeries is available as a free download from: <http://www.ibm.com/software/awdtools/rexx/rexxzseries/index.html>

Please reference the *Program Directory for Backup and Restore Manager for z/VM* for complete product requirements.

5.1.23.8 DCSS Information

None.

5.1.23.9 Verification

None

5.1.24 5697-J08 TAPE MANAGER FOR Z/VM V1R3.0**5.1.24.1 PUT/ESO Applied**

The product is at service level ESO1112.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.24.2 Service Excluded

None.

5.1.24.3 Pre-Requisite Service

None.

5.1.24.4 Co-Requisite Service

None.

5.1.24.5 If-Requisite Service

None.

5.1.24.6 Product Manuals

Form Number	Publication Title
SC18-9344	IBM Tape Manager for z/VM Installation and Administration Guide Version 1 Release 3
SC18-9349	IBM Tape Manager for z/VM User s Guide and Reference Version 1 Release 3
GI10-8660	Program Directory for Tape Manager for z/VM version 1 release 3.0

5.1.24.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

The installation instructions are contained in the *IBM Tape Manager for z/VM Program Directory* (GI10-8660). Follow the directions in the Program Directory up to the **Post-Installation Instructions** section, then refer to **Chapter 2. Installing Tape Manager** in the *Tape Manager for z/VM Installation and Administration Guide* manual (SC18-9344) to complete the installation.

For service instructions, please refer to the Service Instructions section of the *Tape Manager for z/VM Program Directory*

Other product requirements to review:

Tape Manager requires:

One of the following:

- IBM Library for REXX on zSeries R4 (5695-014) or
- IBM Alternate Library for REXX on zSeries. IBM recommends you acquire the latest available version. Alternate Library for REXX on zSeries is available as a free download from:
<http://www.ibm.com/software/awdtools/rexx/rexxzseries/index.html>

DFSMS Removable Media Services (RMS) for support of an Automated Tape Library (ATL) or Virtual Tape Server (VTS)

Oracle StorageTek VM/Host Software Component V6.1 for support of Oracle StorageTek Silos. In addition, the fix for Tape Manager APAR PM20384 is required to support Oracle StorageTek silos.

In addition, when using Tape Manager release 3.0 with DFSMSrmm, the following are required:

z/OS, V1 (5694-A01) R9, or later

The DFSMSrmm, optional feature of the z/OS release installed

A TCP/IP connection between the z/VM and z/OS systems that will be sharing the RMM tape catalog.

Please reference the *Program Directory for Tape Manager for z/VM 1.3* for complete product requirements.

Important Migration Information

For Migration information, please refer to the *Tape Manager for z/VM V1.3 Program Directory* sections:

5.2.3 Migrating from Tape Manager V1.2.0

5.2.3.1 Add and update minidisks (or SFS directories)

5.2.3.2 Modify other CP directory information

5.2.3.3 Move the Tape Manager configuration file

5.2.3.4 Update Tape Manager configuration information

5.2.3.5 Back up and migrate the Tape Manager catalog

5.1.24.8 DCSS Information

None

5.1.24.9 Verification

None

5.1.25 5697-J10 OPERATIONS MANAGER FOR Z/VM V1R4.0

5.1.25.1 PUT/ESO Applied

The product is at service level ESO1012.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.25.2 Service Excluded

None.

5.1.25.3 Pre-Requisite Service

None.

5.1.25.4 Co-Requisite Service

None.

5.1.25.5 If-Requisite Service

None.

5.1.25.6 Product Manuals

Form Number	Publication Title
SC18-9347	IBM Operations Manager for z/VM Operations Manager Administration Guide Version 1 Release 4
GI10-8664	Program Directory for Operations Manager for z/VM version 1 release 4.0

5.1.25.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

Important Migration Information

For Migration information, please refer to the *Operations Manager for z/VM Program Directory* sections:

5.2.3.1 Migrating from Operations Manager V1.3.0

5.2.3.2 Migrating from Operations Manager V1.2.0

5.2.3.3 Migrating from Operations Manager V1.1.0

Other product requirements to review:

The following products are required to use specific functions of Operations Manager:

An External Security Manager, such as the RACF Security Server feature for z/VM, is required for:

Command level authorization

Read versus update access to consoles using VIEWCON

Read versus update access to spool files using VIEWSP

Please reference the *Operations Manager for z/VM Program Directory* for complete product requirements.

For installation instructions, please refer to the Installation Instructions section of the *Operations Manager for z/VM Program Directory*.

Post-installation information is contained in the *Operations Manager Administration Guide* (SC18-9347). Perform the steps required for file tailoring and initial activation of the program, as described in the Administration Guide, before continuing.

For service instructions, please refer to the Service Instructions section of the *Operations Manager for z/VM Program Directory*

The Operations Manager publications can be found in Adobe Portable Document Format off of the Operations Manager World Wide Web home page at url:

<http://www.ibm.com/software/sysmgmt/zvm/operations/library.html>

They can also be downloaded using the specific publication number through the IBM Publication Center at: <http://www.ibm.com/shop/publications/order>

The Publications Center is a world wide central repository for IBM product publications and marketing material.

Important Service Information

Please refer to the Memo-T0-Users section in UK62815 \$PTFPART which located on the 5697J10D 2D2 disk for pertinent information regarding the service supplied with this PTF.

5.1.25.8 Verification

None.

5.1.25.9 DCSS Information

None

5.1.26 5698-A36 IBM TIVOLI OMEGAMON XE ON Z/VM V4R2.0**5.1.26.1 PUT/ESO Applied**

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.26.2 Service Excluded

None.

5.1.26.3 Pre-Requisite Service

None.

5.1.26.4 Co-Requisite Service

None.

5.1.26.5 If-Requisite Service

None.

5.1.26.6 Product Manuals

Form Number	Publication Title
GC27-2838	IBM Tivoli OMEGAMON XE on z/VM and Linux Troubleshooting Guide Version 4.2.0
GI11-9441	IBM Tivoli OMEGAMON XE on z/VM and Linux Quick Start Guide Version 4.2.0
SC27-2836	IBM Tivoli OMEGAMON XE on z/VM and Linux User's Guide Version 4.2.0
SC27-2837	IBM Tivoli OMEGAMON XE on z/VM and Linux Planning and Configuration Guide Version 4.2.0
GI11-4135	Program Directory for IBM Tivoli OMEGAMON XE on z/VM and Linux version 4 release 2.0

5.1.26.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, "z/VM 6.2 Installation and Production Enablement Requirements" on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

5.1.26.8 Packaging of IBM Tivoli OMEGAMON XE on z/VM and Linux

IBM Tivoli OMEGAMON XE on z/VM and Linux consists of three (3) components as follows which execute both under z/VM and Linux:

1. z/VM Performance Toolkit Component

- This part consists of a new level of the z/VM Performance Toolkit containing extensions that allow it to gather data and place it in a DCSS where it can be retrieved by the Tivoli OMEGAMON XE on z/VM and Linux, Linux Agent. It also contains a tool to help you analyze your installation and decide how large of a DCSS you will need for your performance data. This piece is delivered as part of the z/VM operating system. Depending on your version of z/VM it may be necessary to install service to receive this support.

– NOTE:

z/VM Performance Toolkit is an optional z/VM feature which is delivered on the z/VM DDR in a 'DISABLED' state. In order to utilize IBM Tivoli OMEGAMON XE on z/VM and Linux, the following z/VM Performance Toolkit requirements must be met:

- License obtained.
- 'ENABLED' on the z/VM System that IBM Tivoli OMEGAMON XE on z/VM and Linux will be utilized on.
- Upgraded to include the service that contains the modifications that allows Toolkit to gather data required by OMEGAMON® and place the data where it can be retrieved by the OMEGAMON Linux Agent.
- For additional information on the z/VM Performance Toolkit and the service that is required to support OMEGAMON, please refer to the following website:

<http://www.vm.ibm.com/related/perfkit/>

2. Linux Agent

- This is the z/VM agent that runs on a Linux guest. It will take the data gathered by the Tivoli OMEGAMON XE on z/VM and Linux, Performance Toolkit Extensions and deliver it to the Tivoli Enterprise Management Server (TEMS). It is delivered on a CD which also contains seeding files for the TEMS, the Tivoli Enterprise Portal Server (TEPS) and the Tivoli Enterprise Portal (TEP). For instructions on installing and servicing this piece, see the *IBM Tivoli OMEGAMON XE on z/VM*

and Linux: Planning and Configuration Guide. Note: If you have not previously installed IBM Tivoli Monitoring Services at your installation, there are CDs containing the product and documentation included in this package.

3. Command Processor

- This is the Command Processor portion of the product. It is installed and runs on your z/VM system.

The Command Processor Component is designed to allow action to be taken on the commands sent from the Linux Agent. The Command Process executes under z/VM.

This Service Delivery Offering (SDO) Program Directory and the *Program Directory for IBM Tivoli OMEGAMON XE on z/VM and Linux Version 4 Release 2.0*. are designed to provide the information required to install the **Command Processor Component** of the IBM Tivoli OMEGAMON XE on z/VM and Linux Product on your z/VM System.

5.1.26.9 Installation Instructions for OMEGAMON Command Processor Component

For installation instructions for IBM Tivoli OMEGAMON XE on z/VM and Linux please refer to the '6.0 Installation Instructions' Section in the *Program Directory for IBM Tivoli OMEGAMON XE on z/VM and Linux Version 4 Release 2.0*.

Note: Other Program Product Requirements

The following program products are required to run Tivoli OMEGAMON XE on z/VM and Linux:

1. IBM Tivoli OMEGAMON XE on z/VM and Linux Tivoli Enterprise Portal Agent (includes seeding) LCD7-0982-06.
2. One of the following:
 - SUSE Linux Enterprise Server 9 for zSeries, 31-bit or 64-bit mode. Must be SP3 or above.
 - SUSE Linux Enterprise Server 10 for zSeries.
 - RedHat Enterprise Linux version 4 Update 5 or above

5.1.26.10 DCSS Information

None.

5.1.26.11 Verification

There is no verification program for IBM Tivoli OMEGAMON XE on z/VM and Linux.

5.1.27 5741-A07 DFSMS/VM V2R2.1

5.1.27.1 PUT/ESO Applied

The product is at service level ESO1006.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.27.2 Service Excluded

None.

5.1.27.3 Pre-Requisite Service

None.

5.1.27.4 Co-Requisite Service

None.

5.1.27.5 If-Requisite Service

None.

5.1.27.6 Product Manuals

Form Number	Publication Title
SC24-6049	z/VM: DFSMS/VM Function Level 221 Planning Guide
SC24-6047	z/VM: DFSMS/VM Function Level 221 Customization
SC24-6051	z/VM: DFSMS/VM Function Level 221 Storage Administration Guide and Reference
GC24-6048	z/VM: DFSMS/VM Function Level 221 Messages and Codes
SC24-6050	z/VM: DFSMS/VM Function Level 221 Removable Media Services
GC24-6046	z/VM: DFSMS/VM Function Level 221 Diagnosis Guide

5.1.27.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

For installation instructions, please refer to chapter 6 of the *Program Directory for DFSMS/VM*.

When you get to the part where you build the DFSMSSEG segment, you will need to do the following commands first:

When you get to the part where you build the DFSMSSEG segment, you will need to update the FSMSEGDF EXEC file on the DFSMS 1B5 mdisk. The segment location should be changed because it conflicts with the INSTSEG segment. You will want to change the line that reads:

```
seg_address = '1400-14FF'          /* address of DFSMS segment */
```

to something like this:

```
seg_address = '2200-22FF'          /* address of DFSMS segment */
```

You will get an error when running FSMSEGDF if you do not make this change to the FSMSEGDF EXEC first.

Refer to chapter 6 of the *Program Directory for DFSMS/VM* in section 6.6.2 step number 13 "Update the ISMF EXEC". It explains how to update the ISMF EXEC. You want to change this file to show that the PDF code is installed on the ISPVM 192 disk. You want to change the line from:

```
separate_pdf_disk = 'YES';          /* PDF available    */
```

to:

```
separate_pdf_disk = 'NO';          /* PDF available    */
```

Refer to the *Program Directory for DFSMS/VM* in the chapter entitled "Installation Requirements and Considerations" in the section titled "Migrating from Previous Releases of DFSMS/VM to Function Level 221" for information on migration considerations.

5.1.27.8 DCSS Information

The steps to create the DFSMS segment are described in: *z/VM DFSMS/VM Function Level 221 Customization*

Refer to Define the DFSMS/VM Saved Segment for Space Management step in the DFSMS/VM Tailoring section of the *Program Directory for DFSMS/VM*, in the chapter entitled "Installation Instructions". Please note that the segment range should be based on the segment layout as defined in the SDO Program Directory. See Appendix D, "Saved Segments" on page 211 for more information.

5.1.27.9 Verification

Refer to the *z/VM DFSMS/VM Function Level 221 Customization* in the chapter entitled "Verifying the Installation Process" for information on verifying DFSMS.

5.1.28 5741-A07 DFSMS/VM KANJI V2R2.1

5.1.28.1 PUT/ESO Applied

The product is at service level ESO1003.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

5.1.28.2 Service Excluded

None.

5.1.28.3 Pre-Requisite Service

None.

5.1.28.4 Co-Requisite Service

None.

5.1.28.5 If-Requisite Service

None.

5.1.28.6 Product Manuals

Form Number	Publication Title
SC24-6049	z/VM: DFSMS/VM Function Level 221 Planning Guide
GC24-6047	z/VM: DFSMS/VM Function Level 221 Customization
SC24-6051	z/VM: DFSMS/VM Function Level 221 Storage Administration Guide and Reference
SC24-6048	z/VM: DFSMS/VM Function Level 221 Messages and Codes
SC24-6050	z/VM: DFSMS/VM Function Level 221 Removable Media Services
GC24-6046	z/VM: DFSMS/VM Function Level 221 Diagnosis Guide

5.1.28.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

A standard Maintenance ID has been defined for this Licensed Program Product. However, the Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

It is recommended that the Product be installed utilizing the standard Maintenance ID defined for this Licensed Program Product.

For information on the DASD storage requirements for the installation of this Licensed Program Product, refer to Appendix C, "DASD Requirements" on page 201.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO NOLINK ENV *envelope_filename*

The mdisks listed in the Appendix labeled DASD Requirements of this document show the size of the mdisks for DSFMS. These mdisks must be increased by the amount shown for Kanji feature mdisks.

For installation instructions, please refer to Install Japanese Language Feature section of chapter 6 of the *Program Directory for DFSMS/VM*.

5.1.28.8 DCSS Information**5.1.28.9 Verification**

6.0 Semi-VMSES/E Licensed Product Technical Notes

This chapter provides technical considerations for the Semi-VMSES/E Licensed Products. After you have followed the general instructions for Semi-VMSES/E products, from 4.0, "Semi-VMSES/E Licensed Product Installation Instructions" on page 27, locate the specific Licensed Product in this chapter to complete the installation. Products are ordered in this section by product number.

NOTE

In the case of a conflict, the information provided in this SDO Program Directory and in the *z/VM SDO Enabling Aid* overrides the information provided in the Licensed Program Product's Program Directory, all z/VM and Licensed Program Product documents and the Licensed Program Product's *PLANINFO* file.

The SDO Program Directory and the *z/VM SDO Enabling Aid* should be utilized as the basis for the installation of the Program Product. The SDO Program Directory will refer to the Licensed Program Product Program Director and/or other z/VM or Licensed Program Product documents when appropriate.

6.1 Semi-VMSES/E Licensed Product Specific Considerations

6.1.1 5654-260 EREP V3R5.0

6.1.1.1 PUT/ESO Applied

The product is at service level PUT9405.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.1.2 Service Excluded

None.

6.1.1.3 Pre-Requisite Service

None.

6.1.1.4 Co-Requisite Service

None.

6.1.1.5 If-Requisite Service

None.

6.1.1.6 Product Manuals

Form Number	Publication Title
GI10-8140	Program Directory for use with EREP Version 3 for VM
GC35-0151	EREP User's Guide
GC35-0152	EREP Reference

6.1.1.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, "z/VM 6.2 Installation and Production Enablement Requirements" on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

This Licensed Program Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D and 31D disks
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the *z/VM 6.2* standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

To install this product onto a test disk issue:

vmfins install ppf \$5654260 erep (nomemo

To install this product onto the production disk issue:

vmfins install ppf \$5654260 ereprd (nomemo

To install this product into the SFS test directory issue:

vmfins install ppf \$5654260 erepsfs (nomemo

To install this product into the SFS production directory issue:

vmfins install ppf \$5654260 erepsfsprd (nomemo

If you have installed the product onto a test disk, use **VMFCOPY** to copy the files to your production disks once you have completed your testing.

6.1.1.8 EREP Service Application

Corrective service for EREP will be supplied using normal service procedures, either on tape or delivered electronically.

Corrective service must be applied manually for EREP because it is not in the standard VMSES/E format. ERPTFLIB TLBXXXXX is shipped with the PTF, where XXXXX is the number of the PTF being applied. This file will replace ERPTFLIB TXTLIB on your system.

Electronic service for non-VMSES format products is delivered in one of the following formats:

NLSTxxxx.bin and NPTFxxxx.bin

- or -

order_number.SHIPDOCN and order_number.SHIPTFSN

The files need to be transferred to VM as BINARY FIXED 1024. DETERSE needs to be run against the electronically delivered files once they are on VM. DETERSE is on the MAINT 5E5 or 5E6 minidisk. The file type on VM must be SERVLINK.

The following steps will be performed using the tape or the service envelope file, SERVLINK, for the NPTFxxxx or SHIPTFSN file in order to apply the corrective service.

1. By default, EREP is installed on the MAINT 201 minidisk. Back up the critical EREP files before beginning any maintenance activity.
2. Scan the PTF media to identify the highest level textlib. Locate the ERPTFLIB TLBXXXXX file on the tape using the VMFPLC2 command or in the service envelope file, using the VMFPLCD command.


```
VMFPLC2 SCAN (181 DISK DATE EOT
- output will be TAPE MAP A
- or from envelope where envelope is on A-disk -
VMFPLCD SCAN ENV= envname SERVLINK A (DISK DATE EOD
- output will be DISK MAP A
```
3. XEDIT the TAPE MAP or DISK MAP file created by the SCAN and issue ALL/ERPTFLIB at the command line. Locate the file with the highest numeric suffix string in the filetype following the TLB prefix (TLBnnnnn).
4. Load the highest level ERPTFLIB TLBXXXXX file.


```
-- from tape --
VMFPLC2 REW 181
VMFPLC2 LOAD ERPTFLIB TLBnnnnn a (EOT
-- or from envelope --
VMFPLCD RST
VMFPLCD LOAD ERPTFLIB TLBnnnnn a (EOD
-- output will be the ERPTFLIB TLBXXXXX file on A disk
```
5. Copy ERPTFLIB TLBXXXXX to ERPTFLIB TXTLIB with the REPLACE option, where xxxxx is the highest level PTF number. Make sure the previous version is backed up.


```
ACCESS 201 Z
RENAME ERPTFLIB TXTLIB Z ERPTFLIB TLBOLD Z (REPLACE
COPYFILE ERPTFLIB TLBxxxxx A ERPTFLIB TXTLIB Z (REPLACE
```

This completes the application of a 'typical' VM EREP PTF. A 'typical' VM EREP PTF replaces the EREP text lib (TXTLIB). Any other files received with the ERPTFLIB should be ignored. They are included due to packaging rules within the product and operating system. They are NOT needed in order to install EREP maintenance. They are NOT needed for any other component of your system. They should be ignored and should NOT be used by you for any reason. You should manually keep track of the service applied to your system.

6.1.1.9 DCSS Information

None.

6.1.1.10 Verification

Verification can be started by entering:

v5654260

6.1.2 5684-043 ISPF V3R2.0

6.1.2.1 PUT/ESO Applied

The product is at service level PUT9404.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.2.2 Service Excluded

None.

6.1.2.3 Pre-Requisite Service

None.

6.1.2.4 Co-Requisite Service

None.

6.1.2.5 If-Requisite Service

None.

6.1.2.6 Product Manuals

Form Number	Publication Title
GC34-4268	ISPF LICENSED PROGRAM SPECIFICATION
SC34-4273	ISPF DIALOG MANAGEMENT GUIDE AND REFERENCE
SC34-4265	ISPF DIALOG MANAGEMENT EXAMPLES
SC34-4267	ISPF DIALOG TAG LANGUAGE GUIDE AND REFERENCE
SC34-4297	ISPF AND ISPF/PDF REFERENCE SUMMARY
GC34-4261	ISPF AND ISPF/PDF GENERAL INFORMATION
SC34-4271	ISPF AND ISPF/PDF PLANNING AND CUSTOMIZING

Form Number	Publication Title
SC34-4270	ISPF AND ISPF/PDF PRIMER
SC34-4282	ISPF AND MASTER INDEX
GI11-1448	ISPF V3R2 PROGRAM DIRECTORY
GI10-8150	ISPF/PDF V3R2 PROGRAM DIRECTORY

6.1.2.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

This Licensed Program Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D and 31D disks
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the z/VM 6.2 standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

To install this product onto a test disk issue:

vmfins install ppf \$5684043 ispdm (nomemo

To install this product onto the production disk issue:

vmfins install ppf \$5684043 ispdmprd (nomemo

To install this product into the SFS test directory issue:

vmfins install ppf \$5684043 ispdmsfs (nomemo

To install this product into the SFS production directory issue:

vmfins install ppf \$5684043 ispdmsfsprd (nomemo

If you have installed the product onto a test disk, use **VMFCOPY** to copy the files to your production disks once you have completed your testing.

The ISPF/DM segment is required for the execution of ISPF/PDF. Be careful, not to delete the Production version of the ISPF/DM segment during out the production segment during testing.

Warning

The *Program Directory for ISPF/DM V3* provides sample VM Directory entries for the ISPVM virtual service machine. These entries are for VM/SP 6 and VM/XA and should not be utilized for z/VM Systems. A sample VM Directory entry for the ISPVM virtual service machine for z/VM is provided in the SDO Enabling Aid feature. Information on the SDO Enabling Aid may be found in the Section: 2.5, "Install the SDO Optional Products Enabling Aid (Optional)" on page 14.

The ISPVM virtual service machine must execute using the System/370 Architecture to support the ISPF/DM application. The System/370 Architecture is not supported under z/VM. To allow for the execution of applications that require the System/370 Architecture the 370 Accomodation Facility has been included as a integrated part of z/VM. The 370 Accomodation Facility is enabled by issuing the command 'CP SET 370ACCOM ON' prior to invoking the application.

The command 'CP SET 370ACCOM ON' has already been added to the PROFILE EXEC that is delivered on the ISPVM 191 disk. If you utilize this exec, no additional action is required. However, if you utilize another exec to start the ISPF/DM application on the ISPVM virtual service machine, the exec must be modified to include the 'CP SET 370ACCOM ON' command prior to invoking the ISPF/DM application.

6.1.2.8 DCSS Information

The following commands may be utilized to create the ISPF/DM segment. The commands may be issued from any ID that with the following:

1. Maximum virtual storage size of 1024M (1G)
2. CP Privilege Class 'E' (Required to create the segment)
3. Write access to the ISPF/DM Code disk (Required to load the segment)
 - For the ISPF/DM Product disks, this is the ISPVM 192.
 - For the ISPF/DM Test disks, this is the PRETEST 459.

The segment range utilized for the ISPF/DM segment should be based on the segment layout as defined in the SDO Program Directory.

- Define the virtual storage at 1024M (1G) and ensure that storage is cleared.

```
def stor 1024M
```

```
system clear
```

- Link and access the ISPF/DM code disk. The disk should be linked in write mode.

- For the ISPF/DM Production disk:

- link ISPVM 192 002 MW**

- acc 002 b**

- For the ISPF/DM Test disk:

- link PRETEST 459 002 MW**

- acc 002 b**

- Define the ISPF/DM segment space

- defseg *segmentname startaddr - endaddr SR***

- Where:***

- segment name - The name of the ISPF/DM segment.

- startaddr - The starting address of the segment range

- endaddr - The ending address of the segment range

- Note:***

- 1. ISPDCSS is the default name for the ISPF/DM segment.

- 2. The segment range specified in the SDO Program Directory is based on only English NLS been loaded. If other Language NLS is to be included in the segment, the segment range (size) must be adjusted accordingly.

- For the space required to load additional National Languages into the ISPF/DM segment, please refer to the table *ISPF DCSS Storage Requirements for National Language Files* in Section 2.4 *Step 2 - Define the ISPF DCSS Area* in the *Program Directory for ISPF/DM V3*.

- Execute the ISPSAVE exec to save the ISPF/DM segment.

- ISPSAVE *segmentname***

- Where:***

- segment name - The name of the ISPF/DM segment.

- Note:***

- The ISPSAVE exec will output a series of questions regarding the size of the ISPF/DM segment and the National Languages that are to be included in the segment.

For additional information regarding the creation of the ISPF/DM segment, please see Appendix D, "Saved Segments" on page 211.

6.1.2.9 Verification

1. Make sure the ISPVM Virtual Machine is running disconnected:

query ispvms

This should return:

ISPVM - DSC

2. Link and access the ISPVM 192 disk containing the ISPF/DM application code:

link ispvms 192 192 rr

access 192 b

3. Execute the ISPSTART EXEC
4. The ISPF exec has executed successfully if the master application panel is displayed.

6.1.3 5684-123 ISPF/PDF V3R2.0

6.1.3.1 PUT/ESO Applied

The product is at service level PUT9405.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.3.2 Service Excluded

None.

6.1.3.3 Pre-Requisite Service

Product Number	PTF	APAR	Product Description
5684-043	UM18982	VM45458	ISPF APAR
5684-043	UM16038	VM43115	ISPF APAR
5684-043	UM17561	VM44707	ISPF APAR
5748-XX9	UN04159	PL77128	SCRIPT APAR: execute SCRIPT/BOOKMASTER in ISPF/PDF

6.1.3.4 Co-Requisite Service

Product Number	PTF	APAR	Product Description
5684-123	UM18168	VM46996	ISPF/PDF NLS - Swiss German
5684-123	UM18424	VM47921	ISPF/PDF NLS - Swiss German
5684-123	UM19493	VM47561	ISPF/PDF NLS - Swiss German
5684-123	UM19509	VM46996	ISPF/PDF NLS - Swiss German
5684-123	UM19509	VM47574	ISPF/PDF NLS - Swiss German
5684-123	UM19510	VM47675	ISPF/PDF NLS - Swiss German
5684-123	UM19515	VM47676	ISPF/PDF NLS - Swiss German
5684-123	UM21878	VM47921	ISPF/PDF NLS - Swiss German
5684-123	UM21878	VM51918	ISPF/PDF NLS - Swiss German
5684-123	UM22584	VM53357	ISPF/PDF NLS - Swiss German
5684-123	UM22769	VM53002	ISPF/PDF NLS - Swiss German
5684-123	UM23024	VM53030	ISPF/PDF NLS - Swiss German
5684-123	UM23197	VM53876	ISPF/PDF NLS - Swiss German
5684-123	UM23669	VM53876	ISPF/PDF NLS - Swiss German
5684-123	UM23669	VM54245	ISPF/PDF NLS - Swiss German
5684-123	UM24823	VM56318	ISPF/PDF NLS - Swiss German
5684-123	UM25230	VM54518	ISPF/PDF NLS - Swiss German
5684-123	UM25939	VM57709	ISPF/PDF NLS - Swiss German
5684-123	UM26370	VM58322	ISPF/PDF NLS - Swiss German
5684-123	UM27019	VM59075	ISPF/PDF NLS - Swiss German
5684-123	UM27102	VM59240	ISPF/PDF NLS - Swiss German
5684-123	UM27655	VM60128	ISPF/PDF NLS - Swiss German
5684-123	UM28251	VM60513	ISPF/PDF NLS - Swiss German
5684-123	UM28303	VM60791	ISPF/PDF NLS - Swiss German
5684-123	UM29205	VM62060	ISPF/PDF NLS - Swiss German
5684-123	UM31095	VM63433	ISPF/PDF NLS - Swiss German
5684-123	UM18169	VM46996	ISPF/PDF NLS - Japanese
5684-123	UM18425	VM47921	ISPF/PDF NLS - Japanese
5684-123	UM19494	VM47561	ISPF/PDF NLS - Japanese
5684-123	UM19508	VM46996	ISPF/PDF NLS - Japanese
5684-123	UM19508	VM47574	ISPF/PDF NLS - Japanese

Product Number	PTF	APAR	Product Description
5684-123	UM19511	VM47675	ISPF/PDF NLS - Japanese
5684-123	UM19516	VM47676	ISPF/PDF NLS - Japanese
5684-123	UM21879	VM47921	ISPF/PDF NLS - Japanese
5684-123	UM21879	VM51918	ISPF/PDF NLS - Japanese
5684-123	UM22585	VM53357	ISPF/PDF NLS - Japanese
5684-123	UM22770	VM53002	ISPF/PDF NLS - Japanese
5684-123	UM23025	VM53030	ISPF/PDF NLS - Japanese
5684-123	UM23198	VM53876	ISPF/PDF NLS - Japanese
5684-123	UM23670	VM53876	ISPF/PDF NLS - Japanese
5684-123	UM23670	VM54245	ISPF/PDF NLS - Japanese
5684-123	UM24824	VM56318	ISPF/PDF NLS - Japanese
5684-123	UM25231	VM54518	ISPF/PDF NLS - Japanese
5684-123	UM25940	VM57709	ISPF/PDF NLS - Japanese
5684-123	UM26371	VM58322	ISPF/PDF NLS - Japanese
5684-123	UM27020	VM59075	ISPF/PDF NLS - Japanese
5684-123	UM27103	VM59240	ISPF/PDF NLS - Japanese
5684-123	UM27656	VM60128	ISPF/PDF NLS - Japanese
5684-123	UM28252	VM60513	ISPF/PDF NLS - Japanese
5684-123	UM28304	VM60791	ISPF/PDF NLS - Japanese
5684-123	UM29206	VM62060	ISPF/PDF NLS - Japanese
5684-123	UM31096	VM63433	ISPF/PDF NLS - Japanese
5684-123	UM18170	VM46996	ISPF/PDF NLS - German
5684-123	UM18426	VM47921	ISPF/PDF NLS - German
5684-123	UM19495	VM47561	ISPF/PDF NLS - German
5684-123	UM19503	VM46996	ISPF/PDF NLS - German
5684-123	UM19503	VM47574	ISPF/PDF NLS - German
5684-123	UM19512	VM47675	ISPF/PDF NLS - German
5684-123	UM19517	VM47676	ISPF/PDF NLS - German
5684-123	UM21880	VM47921	ISPF/PDF NLS - German
5684-123	UM21880	VM51918	ISPF/PDF NLS - German
5684-123	UM22586	VM53357	ISPF/PDF NLS - German
5684-123	UM22771	VM53002	ISPF/PDF NLS - German

5684-123

Product Number	PTF	APAR	Product Description
5684-123	UM23026	VM53030	ISPF/PDF NLS - German
5684-123	UM23199	VM53876	ISPF/PDF NLS - German
5684-123	UM23671	VM53876	ISPF/PDF NLS - German
5684-123	UM23671	VM54245	ISPF/PDF NLS - German
5684-123	UM24825	VM56318	ISPF/PDF NLS - German
5684-123	UM25232	VM54518	ISPF/PDF NLS - German
5684-123	UM25941	VM57709	ISPF/PDF NLS - German
5684-123	UM26372	VM58322	ISPF/PDF NLS - German
5684-123	UM27021	VM59075	ISPF/PDF NLS - German
5684-123	UM27104	VM59240	ISPF/PDF NLS - German
5684-123	UM27657	VM60128	ISPF/PDF NLS - German
5684-123	UM28253	VM60513	ISPF/PDF NLS - German
5684-123	UM28305	VM60791	ISPF/PDF NLS - German
5684-123	UM29207	VM62060	ISPF/PDF NLS - German
5684-123	UM31097	VM63433	ISPF/PDF NLS - German
5684-123	UM18216	VM46996	ISPF/PDF NLS - Traditional Chinese
5684-123	UM18427	VM47921	ISPF/PDF NLS - Traditional Chinese
5684-123	UM19496	VM47561	ISPF/PDF NLS - Traditional Chinese
5684-123	UM19504	VM46996	ISPF/PDF NLS - Traditional Chinese
5684-123	UM19504	VM47574	ISPF/PDF NLS - Traditional Chinese
5684-123	UM19513	VM47675	ISPF/PDF NLS - Traditional Chinese
5684-123	UM19518	VM47676	ISPF/PDF NLS - Traditional Chinese
5684-123	UM21881	VM47921	ISPF/PDF NLS - Traditional Chinese
5684-123	UM21881	VM51918	ISPF/PDF NLS - Traditional Chinese
5684-123	UM22587	VM53357	ISPF/PDF NLS - Traditional Chinese
5684-123	UM22772	VM53002	ISPF/PDF NLS - Traditional Chinese
5684-123	UM23027	VM53030	ISPF/PDF NLS - Traditional Chinese
5684-123	UM23200	VM53876	ISPF/PDF NLS - Traditional Chinese
5684-123	UM23672	VM53876	ISPF/PDF NLS - Traditional Chinese
5684-123	UM23672	VM54245	ISPF/PDF NLS - Traditional Chinese
5684-123	UM24826	VM56318	ISPF/PDF NLS - Traditional Chinese
5684-123	UM25235	VM54518	ISPF/PDF NLS - Traditional Chinese

Product Number	PTF	APAR	Product Description
5684-123	UM25942	VM57709	ISPF/PDF NLS - Traditional Chinese
5684-123	UM26373	VM58322	ISPF/PDF NLS - Traditional Chinese
5684-123	UM27022	VM59075	ISPF/PDF NLS - Traditional Chinese
5684-123	UM27105	VM59240	ISPF/PDF NLS - Traditional Chinese
5684-123	UM27658	VM60128	ISPF/PDF NLS - Traditional Chinese
5684-123	UM28254	VM60513	ISPF/PDF NLS - Traditional Chinese
5684-123	UM28306	VM60791	ISPF/PDF NLS - Traditional Chinese
5684-123	UM29208	VM62060	ISPF/PDF NLS - Traditional Chinese
5684-123	UM31098	VM63433	ISPF/PDF NLS - Traditional Chinese

6.1.3.5 If-Requisite Service

None.

6.1.3.6 Product Manuals

Form Number	Publication Title
GC34-4261	ISPF AND ISPF/PDF GENERAL INFORMATION
SC34-4270	ISPF AND ISPF/PDF PRIMER
SC34-4295	ISPF AND ISPF/PDF MASTER INDEX
GC34-4303	LICENSED PROGRAM SPECIFICATION
SC34-4305	ISPF AND ISPF/PDF PLANNING AND CUSTOMIZING
GC34-4306	ISPF/PDF GUIDE
GC34-4307	ISPF/PDF SERVICES
GC34-4308	ISPF/PDF LIBRARY MANAGEMENT FACILITY
SC34-4309	ISPF AND ISPF/PDF REFERENCE SUMMARY
SC34-4296	Software Configuration and Library Manager (SCLM) Guide and Reference
GI11-1448	ISPF V3R2 PROGRAM DIRECTORY
GI10-8150	ISPF/PDF V3R2 PROGRAM DIRECTORY

6.1.3.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

This Licensed Program Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D and 31D disks
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the z/VM 6.2 standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

Other Requisite Licensed Products

VS PASCAL Library V1R2.0 5668-717

PRODUCT INSTALLATION REQUIREMENTS

1. Mount the Product Tape as 181

2. Load Product Files from Tape

- To install this product onto a test disk issue:

vmfins install ppf \$5684123 ispdf (nomemo

- To install this product onto the production disk issue:

vmfins install ppf \$5684123 ispdfprd (nomemo

- To install this product into the SFS test directory issue:

vmfins install ppf \$5684123 ispdfsfs (nomemo

- To install this product into the SFS production directory issue:

vmfins install ppf \$5684123 ispdfsfsprd (nomemo

3. Detach Product Tape

4. Load NLS Other Than English

Notes:

- a. The English ISPF/PDF - NLS feature in MACLIB format is included with this version of ISPF/PDF.
- b. The ISPF/PDF - NLS feature should be installed only if a language other than English is required.
- c. The SDO ISPF/PDF NLS feature has all the service listed as co-req service already applied. (i.e. If the SDO ISPF/PDF NLS feature is utilized to install a language, no additional service has to be applied to the language.)

If the SDO ISPF/PDF NLS feature **IS NOT** utilized to install a language, all the service listed as co-req service for the NLS must be applied. Failure to do so may result in incorrect results and/or the abend of ISPF/PDF.

5. Customize ISPF/PDF

Please refer to the *ISPF/PDF Program Directory* for tailoring and customization.

Notes:

- a. If the Remote Spooling Communications (RSCS) Subsystem and the PDF Spool Utility (Option 3.6) are to be utilized the ISRXPARM ASSEMBLE file must be created. Failure to do so will result in the ISPF/PDF modules being built incorrectly by the ISRINSXR exec. Please refer to the section *Preprocessing for Transmit/Receive* in the *ISPF/PDF Program Directory* for information on the ISRXPARM ASSEMBLE file.
- b. The ISPF/PDF modules are built utilizing the following command:

ISRINSXR fm

where:

fm - The file mode of the disk containing the ISPF/PDF code. The disk must be accessed as R/W.

Notes:

- 1) The disk containing the Product 5684-043 ISPF/DM must be accessed.
- 2) The modules created by the ISRINSXR EXEC are not included on the SDO tape. As a result, when the ISRINSXR EXEC attempts to erase the modules prior to creating them it is unable to do so and the following message is output:

DMSERS002E FILE module_name MODULE B1 NOT FOUND

This messages may be ignored.

- 3) Please refer to the section '*ISRINSXR EXEC*' in the *ISPF/PDF Program Directory* for information on the use of the '*ISRINSXR EXEC*'.

6. Build the ISPF/PDF Segment

Please refer to the section *DCSS Information* for information on building the ISPF/PDF segments.

7. Move ISPF/PDF Into Production

If you have installed the product onto a test disk, use **VMFCOPY** to copy the files to your production disks once you have completed your testing.

PRODUCT SERVICE REQUIREMENTS

- After the service has been loaded from the corrective service tape and the 'RENAME EXEC' has been executed, renamed files must be moved to the disk that contains your PDF Product maintenance.
- If your corrective service contains any of the following files the 'ISRINSXR EXEC' will have to be run to rebuild the appropriate modules. Please refer to the section '*ISRINSXR EXEC*' in the the *ISPF/PDF Program Directory* for information on the use of the '*ISRINSXR EXEC*'.

FLMCMD	TEXT	ISRFXDAT	TEXT	ISRLE*	TEXT
ISRLMFI	TEXT	ISRLMFZ	TEXT	ISRS*	TEXT
ISRV*	TEXT	ISRW*	TEXT	ISRX*	TEXT

- IF your corrective service contains any 'ISR* TEXT' files other than those mentioned above, the 'ISRSAVE EXEC' will have to be run to rebuild your ISPF/PDF shared segment. Please refer to the section *SAVE THE ISPF/PDF AND SCLM DCSS* in the *ISPF/PDF Program Directory* for information on resaving the ISPF/PDF shared segments.
- If your corrective service contains any 'FLM* TEXT' files other than those listed above, the 'FLMSAVE EXEC' will have to be run to rebuild your SCLM shared segment. Please refer to the section *SAVE THE ISPF/PDF AND SCLM DCSSS* in the the *ISPF/PDF Program Directory* for information on resaving the ISPF/PDF shared segments.
- Any panels, messages, skeletons of tables should be put into the appropriate MACLIB using the CMS 'MACLIB REP' command.

6.1.3.8 DCSS Information

The following commands may be utilized to create the ISPF/PDF segment. The commands may be issued from any ID that with the following:

1. Maximum virtual storage size of 1024M (1G)
2. CP Privilege Class 'E' (Required to create the segment)
3. Write access to the ISPF/DM and ISPF/PDF Code disks (Required to load the segment)
 - For the ISPF/DM and ISPF/PDF Product disk, this is the ISPVM 192.
 - For the ISPF/DM and ISPF/PDF Test disks, this is the PRETEST 459 and PRETEST 457 respectively.

The segment range utilized for the ISPF/PDF segment should be based on the segment layout as defined in the SDO Program Directory.

- Define the virtual storage at 1024M (1G) and ensure that storage is cleared.

def stor 1024M

system clear

- Link and access the ISPF/DM ISPF/PDF code disk(s). The disk(s) should be linked in write mode.

- For the ISPF/DM and ISPF/PDF Production disk:

link ISPVM 192 002 MW

acc 002 b

- For the ISPF/DM and ISPF/PDF Test disk:

link PRETEST 459 002 MW

link PRETEST 457 003 MW

acc 003 b

acc 002 c

- Define the ISPF/PDF segment space

defseg *segmentname startaddr - endaddr* SR

Where:

segment name - The name of the ISPF/PDF segment.

startaddr - The starting address of the segment range

endaddr - The ending address of the segment range

Note:

1. ISRDCSS is the default name for the ISPF/PDF segment.

2. The segment range specified in the SDO Program Directory is large enough to contain ISPF/PDF, LMF and two National Languages. If more than two languages are to be included in the ISPF/PDF segment, seven (7) must be added to the segment range for each additional segment.

For example, if the segment range for the ISPF/PDF segment range specified in the SDO Program Directory is 30000-300FF and one (1) additional National Language is to be included in the segment, then a segment range of 30000-30106 must be specified.

If three additional languages are to be included in the segment (i.e. All five National Languages provided with ISPF/PDF are to be included in the segment), a segment range of 30000-30115 must be specified.

- Execute the ISRSAVE exec to save the ISPF/PDF segment.

ISRSAVE *segmentname*

Where:

segment name - The name of the ISPF/PDF segment.

Note:

The ISRSAVE exec will output a series of questions regarding the size of the ISPF/PDF segment and the National Languages that are to be included in the segment.

For additional information regarding the creation of the ISPF/PDF segment, please see Appendix D, "Saved Segments" on page 211.

The SCLM feature of ISPF/PDF is not required for the execution of ISPF/PDF, is not Y2K Ready and is no longer supported by IBM.

The SCLM feature however has been included with this version of ISPF/PDF for consistency with previous versions of ISPF/PDF on a 'as is' basis.

For more information on the SCLM feature of ISPF/PDF refer to the *ISPF/PDF Software Configuration and Library Manager(SCLM) Guide and Reference*.

For information on the creation of the segment for the SCLM feature, please refer to the section *DCSS Information* and to the *ISPF/PDF Program Directory*.

For the recommended segment range for the SCLM segment, please see Appendix D, "Saved Segments" on page 211.

6.1.3.9 Verification

1. Make sure the ISPVMM Virtual Machine is running disconnected **query ispvm**

This should return:

ISPVMM - DSC

5684-123

2. Use the **PDF EXEC**
 3. The exec ran successfully if the primary option panel is displayed.
-

6.1.4 5684-123 ISPF/PDF NLS V3R2.0

6.1.4.1 PUT/ESO Applied

The product is at service level PUT9405.

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.4.2 Service Excluded

None.

6.1.4.3 Pre-Requisite Service

None.

6.1.4.4 Co-Requisite Service

Product Number	PTF	APAR	Product Description
5684-123	UM28301	VM60791	ISPF/PDF BASE
5684-123	UM28249	VM60513	ISPF/PDF BASE
5684-123	UM27100	VM59240	ISPF/PDF BASE
5684-123	UM27017	VM59075	ISPF/PDF BASE
5684-123	UM26368	VM58322	ISPF/PDF BASE
5684-123	UM25937	VM57709	ISPF/PDF BASE
5684-123	UM25228	VM54518	ISPF/PDF BASE
5684-123	UM23667	VM54245	ISPF/PDF BASE
5684-123	UM23195	VM53876	ISPF/PDF BASE
5684-123	UM23022	VM53030	ISPF/PDF BASE

Product Number	PTF	APAR	Product Description
5684-123	UM22767	VM53002	ISPF/PDF BASE
5684-123	UM31093	VM63433	ISPF/PDF BASE

6.1.4.5 If-Requisite Service

None.

6.1.4.6 Product Manuals

None.

6.1.4.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the *z/VM* Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

This Licensed Program Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D and 31D disks
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the *z/VM 6.2* standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

SDO ISPF/PDF NLS Tape Content

The SDO ISPF/PDF NLS Tape contains the following languages in MACLIB format:

- German
- Swiss German
- Traditional Chinese
- Japanese
- English (American English)

All service specified as required in the ISPF/PDF Base feature section of the SDO Program Directory has been included. (i.e. If this feature is utilized to install a language no additional service has to be applied to the language.)

SDO ISPF/PDF NLS Disk Requirements

The disk size specified in the 'DASD Requirements' Appendix of the SDO Program Directory for ISPF/PDF NLS feature is the amount of DASD required to install one (1) NLS language. To estimate the total DASD required for the ISPF/PDF NLS feature multiple the disk size specified in the Appendix by the number of NLS languages to be installed.

For example, if you are going to install German and Swiss German and the 'DASD Requirements' Appendix states that 1000 4K blocks are required, then the DASD required for German and Swiss German is 2000 4k blocks (i.e. 2 x 1000).

NLS INSTALLATION REQUIREMENTS

1. Mount the SDO ISPF/PDF NLS Tape as 181

2. Load Language Files from Tape

- To install a language onto a test disk issue:

vmfins install ppf \$568412n inLLL (nomemo

- To install a language onto the production disk issue:

vmfins install ppf \$568412n inLLLprd (nomemo

- To install a language into the SFS test directory issue:

vmfins install ppf \$568412n inLLSfs (nomemo

- To install a language into the SFS production directory issue:

vmfins install ppf \$568412n inLLSfsprd (nomemo**Notes:**

- a. 'LLL' in the above command must be replaced with the three character language code for the language that is to be loaded:
 - DEU - German
 - DES - Swiss German
 - CHT - Traditional Chinese
 - JPN - Japanese
 - ENG - English
- b. The above command must be repeated for each language to be loaded.
- c. English NLS in MACLIB format is included with the SDO ISPF/PDF Base feature. If the Base feature of ISPF/PDF was installed from the SDO, the English NLS does not have to be installed from the ISPF/PDF NLS tape.
- d. All service listed in the SDO Program Directory under the ISPF/PDF Base Feature as co-req service for the NLS feature has already been applied. (i.e. If this feature is utilized to install a language, no additional service has to be applied to the language.)
- e. The SDO ISPF/PDF Base feature has all the service listed as co-req service already applied. (i.e. If the SDO ISPF/PDF Base feature was utilized to install the Base feature of ISPF/PDF no additional service has to be applied to the Base feature of ISPF/PDF.)

If the SDO ISPF/PDF Base feature **WAS NOT** utilized to install the Base feature of ISPF/PDF, all the service listed as co-req service for ISPF/PDF Base Feature must be applied. Failure to do so may result in incorrect results or the abend of ISPF/PDF.

Warning: Ensure that all minidisks required by this Licensed Product are not linked R/W by any user ID including the user ID where this Licensed Product is being installed from. For production minidisk information refer to Appendix C, "DASD Requirements" on page 201 or for test minidisk information refer to Figure 2 on page 34.

3. Detach ISPF/PDF NLS Tape**PRODUCT SERVICE REQUIREMENTS**

The ISPF/PDF NLS feature is serviced as part of ISPF/PDF. Please refer to the ISPF/PDF Base feature section of the SDO Program Directory for information on servicing ISPF/PDF.

6.1.4.8 DCSS Information

Please refer to the ISPF/PDF Base feature section of the SDO Program Directory for information on the generation of the ISPF/PDF segment and the inclusion of a language within the segment.

6.1.4.9 Verification

Please refer to the ISPF/PDF Base feature section of the SDO Program Directory for information on ISPF/PDF verification.

6.1.5 5697-F42 DB2 REXSQL V7R1.0

6.1.5.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.5.2 Service Excluded

None.

6.1.5.3 Pre-Requisite Service

None.

6.1.5.4 Co-Requisite Service

None.

6.1.5.5 If-Requisite Service

None.

6.1.5.6 Product Manuals

Form Number	Publication Title
SC09-2891	DB2 REXX SQL for VM/ESA Installation and Reference

Form Number	Publication Title
GI10-5006	Program Directory for REXX SQL for VM/ESA Version 7 Release 1, Modification Level 0

6.1.5.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO V6R2.0* webpage.

The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Installation Guidelines

This Licensed Program Product may be installed from any ID that has:

- READ access to the MAINT 5E5 disk
- WRITE access to the MAINT 51D and 31D disks
- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the z/VM 6.2 standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

To install this product onto a test disk issue:

- **vmfins install ppf B5697F42 db2 (nomemo**

To install this product onto the production disk issue:

- **vmfins install ppf B5697F42 db2prd (nomemo**

To install this product into the SFS test directory issue:

- **vmfins install ppf B5697F42 db2sfs (nomemo**

To install this product into the SFS production directory issue:

- **vmfins install ppf B5697F42 db2sfsprd (nomemo**

If you have installed the product onto a test disk, use **VMFCOPY** to copy the files to your production disks once you have completed your testing.

Installation of RXXSQL into a Database

The RXXSQL Package and Help tables must be manually installed into each DB2 DataBase that REXX SQL is to be utilized with.

The following steps may be used to install the RXXSQL feature in the DataBase:

- Logon to an ID with DBA Authority

Note: The DB2 Application Server that contains the DataBase must have already been started.

- Link the DB2 RXXSQL Production Disk, SQLMACH 198, type:

LINK SQLMACH 198 198 RR

ACCESS 198 P

- Link the DB2 RXXSQL Service Disk, SQLMACH 199, type:

LINK SQLMACH 199 199 RR

ACCESS 199 V

- Link the DB2 Application Server Production Disk,SQLMACH 195, type:

LINK SQLMACH 195 195 RR

ACCESS 195 Q

- Enter the command:

SET LANG AMENG (ADD ARI USER

- Connect to the database

SQLINIT DB(dbname)

Note: The dbspace RXXSQHELP will be dropped and recreated with the new RXXSQL help tables if you are upgrading. The installation exec will acquire the necessary dbspace for the help tables if you are installing for the first time.

- Install DB2 RXXSQL into a DB2 application server

ELOAMOD

- Install DB2 RXXSQL HELP tables

ELOHLPLD

- To update the DB2 RXXSQL HELP tables

ELOSHLP LANG(S001)

Please refer to the ***Installing DB2 RXXSQL*** chapter of the 'DB2 REXX SQL for VM/ESA Installation' manual for complete installation instructions for RXXSQL 7.1.0.

6.1.5.8 DCSS Information

None.

6.1.5.9 Verification

To verify the RXSQL installation, refer to the chapter entitled "Installing DB2 RXSQL", in the section entitled "Installation Verification", in the *DB2 REXX SQL for VM/ESA Installation and Reference* manual.

Prior to running step three of the verification (issuing the EMPCRE command), a private DB space for SQLUSER must be obtained. To do this, enter the following command from ISQL:

- **acquire private dbspace named sqluser.example**

Note: This step can only be done by a userid that already has DBA authority.

6.1.6 5697-F42 DB2 DATA RESTORE V7R3.0

6.1.6.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

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This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.6.2 Service Excluded

None.

6.1.6.3 Pre-Requisite Service

None.

6.1.6.4 Co-Requisite Service

None.

6.1.6.5 If-Requisite Service

None.

6.1.6.6 Product Manuals

Form Number	Publication Title
SC09-2991	DB2 Data Restore Guide
GC09-2982	DB2 Server for VM & VSE LPS for VM/ESA & VSE/ESA
GI10-5004	Program Directory for Data Restore for VM/ESA Version 7 Release 3, Modification Level 0

6.1.6.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

The DASD storage requirements (e.g. minidisk definitions) and the User ID definitions (i.e. Virtual Machine VM System Directory entries) from the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the IDs and minidisks required for the installation and Production enablement of this Licensed Program Product.

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This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the *z/VM 6.2* standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

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VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

To install this product onto a test disk issue:

- **vmfins install ppf F5697F42 db2 (nomemo**

To install this product onto the production disk issue:

- **vmfins install ppf F5697F42 db2prd (nomemo**

To install this product into the SFS test directory issue:

- **vmfins install ppf F5697F42 db2sfs (nomemo**

To install this product into the SFS production directory issue:

- **vmfins install ppf F5697F42 db2sfsprd (nomemo**

If you have installed the product onto a test disk, use **VMFCOPY** to copy the files to your production disks once you have completed your testing.

In order for the Data Restore facility to be utilized on a DB2 DataBase, Data Restore must be installed (loaded) into the DataBase.

Please refer to the **Installing Under VM** section in the **Installing Data Restore** chapter of the 'DB2 Data Restore Guide' manual for Data Restore installation instructions.

- **Note:**

1. The disk containing the Data Restore code (e.g. SQLDRR 191) must be linked in write mode and accessed as the 'A' disk.
2. If you are migrating from an earlier level of Data Restore, only **Step 3.3 Load the Data Restore Packages** is required to be performed.
 - **Note:** The following error may occur during the execution of the exec XTS9PREP. This error does not relate to the reload of Data Restore and may be ignored.

```
ARI0503E An SQL error has occurred.  
An attempt to revoke a privilege from DATARFTR  
was denied. Either DATARFTR does not have  
this privilege, or SQLDBA does not have  
the authority to revoke this privilege.  
ARI0505I SQLCODE = -556 SQLSTATE = 42504 ROWCOUNT = 0  
ARI0504I SQLERRP: ARIXA09 SQLERRD1: -300 SQLERRD2: 0
```

3. If Data Restore is to be installed on more than one application server, repeat the installation steps for each application server.

6.1.6.8 DCSS Information

None.

6.1.6.9 Verification

To verify that the Restore Feature was installed successfully, follow the steps outlined in the chapter entitled "Installing Data Restore", Refer to section "Installing under VM", of the *DB2 Data Restore Guide* manual.

6.1.7 5697-F42 DB2 CONTROL CENTER V7R3.0

6.1.7.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

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This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.7.2 Service Excluded

None.

6.1.7.3 Pre-Requisite Service

None.

6.1.7.4 Co-Requisite Service

None.

6.1.7.5 If-Requisite Service

None.

6.1.7.6 Product Manuals

Form Number	Publication Title
GC09-2993	DB2 Server for VSE & VM Control Center Operations Guide for VM
GI10-5002	Program Directory for Control Center for VM Version 7 Release 3.0

6.1.7.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

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This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the *z/VM 6.2* standard system maintenance ID, MAINT620, and the Test disks.

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Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

Important Note about Document Changes

Please review the PSP Bucket for the latest Document changes for *IBM DB2 for VM Control Center Operations Guide V7.3* GC09-2993-01 Use RETAIN Upgrade DB2VSEVM730, subset CCVM

To install this product onto a test disk issue:

- **vmfins install ppf G5697F42 db2 (nomemo**

To install this product onto the production disk issue:

- **vmfins install ppf G5697F42 db2prd (nomemo**

To install this product into the SFS test directory issue:

- **vmfins install ppf G5697F42 db2sfs (nomemo**

To install this product into the SFS production directory issue:

- **vmfins install ppf G5697F42 db2sfsprd (nomemo**

If you have installed the product onto a test disk, use **VMFCOPY** to copy the files to your production disks once you have completed your testing.

For detailed instructions on installing the Control Center, reference the *Program Directory for Control Center for VM V7R3.0*.

NOTE. You must configure the Control Center for your specific site. Please refer to section "Configure Control Center Files" in the *Program Directory for Control Center for VM V7R3.0*.

NOTE. For Migration information refer to Chapter 6 in the *Program Directory for Control Center for VMV7R3.0*.

6.1.7.8 DCSS Information

None.

6.1.7.9 Verification

For instructions on verifying the Control Center, refer to section 7 “Installation Verification” in the *Program Directory for Control Center for VM V7R3.0*.

6.1.8 5697-F42 DB2 NLS VM HELP FILES V7R5.0

6.1.8.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

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This section provides the PUT/ESO Service Level of the Licensed Program Products plus a list of PTFs in addition to the PTFs included in the PUT/ESO service that have been applied.

6.1.8.2 Service Excluded

None.

6.1.8.3 Pre-Requisite Service

None.

6.1.8.4 Co-Requisite Service

None.

6.1.8.5 If-Requisite Service

None.

6.1.8.6 Product Manuals

6.1.8.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

An overview of the changes introduced in z/VM 6.2 to support an SSI environment may be found in Chapter 2. *System Changes* in the *z/VM 6.2 Migration Guide*.

Appendix Appendix F, “z/VM 6.2 Installation and Production Enablement Requirements” on page 219 contains an overview of several of the major changes introduced with z/VM 6.2 and their effect on the installation and Production enablement of Licensed Program Products. This appendix should be reviewed prior to the installation of this Licensed Program Product.

DASD Storage Requirements And User ID Definitions

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The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

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Installation Guidelines

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- WRITE access to the minidisks or SFS Directory that is to be utilized for the Licensed Program Product's code.

This Licensed Program Product may be installed to the Product's Production disks or to the Product's Test disks.

- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the z/VM 6.2 standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

6.1.8.8 DB2 NLS Requirements

The requirements for the installation of an NLS Language are detailed in Section "10.0 NLS Installation Instructions" of the *Program Directory for IBM DATABASE 2 Server for VM Version 7 Release 5 Modification Level 0*

It is recommended that, with the exception of the Sub-Section "10.4.2 Install an NLS Language for DB2 for VM," this section be reviewed prior to the installation of the DB2 NLS.

Please note that the 5697F75A 193 disk and the SQLMACH 193 DASD minidisks may require additional space to hold the NLS Languages.

For example, the 5697F75A 193 disk must have sufficient free space to hold all 5 NLS Languages provided for DB2. On a 3380 DASD, this amounts to approximately 9000 4k blocks (or 60 cylinders).

Please refer to Section 10.3 “DASD Storage and User ID Requirements” in the *Program Directory for IBM DATABASE 2 Server for VM Version 7 Release 5 Modification Level 0*

6.1.8.9 DB2 NLS Semi-VMSES/E Installation

DB2 NLS should be installed from the installation DB2 Installation ID 5697F75A.

All the NLS Languages will be installed to the DB2 Server Code test build 193 minidisk (or SFS Directory) under the ID 5697F75A. This is different from the standard installation defined in the Sub-Section “10.4.2 Install an NLS Language for DB2 for VM,” of the *Program Directory for IBM DATABASE 2 Server for VM Version 7 Release 5 Modification Level 0* which provides for the installation of a single NLS language on the 5697F75A 193 (DB2 Server Code test build disk).

After logging onto the installation ID and mounting the DB2 for VM NLS installation tape at virtual address 181, the following steps/commands replace the commands specified in Sub-Section “10.4.2 Install an NLS Language for DB2 for VM,” and must be utilized to install DB2 NLS:

1. Access the VMSES/E code:

link MAINT 5E5 5E5 rr

access 5E5 b

2. Access the System Software Inventory disk:

link MAINT 51D 51D mr

access 51D d

3. Install the DB2 NLS code:

-

- a. Onto the Pretest DB2 Server Code minidisk issue:

vmfins install ppf I5697F42 db2 (nomemo

- b. Onto the Pretest DB2 Server Code build SFS directory:

vmfins install ppf I5697F42 db2sfs (nomemo

- c. Onto the DB2 Server production Code build minidisk:

vmfins install ppf I5697F42 db2prd (nomemo

- d. Onto the production DB2 Server Code build SFS directory:

vmfins install ppf I5697F42 db2sfsprd (nomemo

- **Note:** If desired, the default installation disk addresses may be altered by creating a PPF override file for the DB2 NLS. Please refer to the *GC24-5837 VM/ESA VMSES/E Introduction and Reference* manual for information on creating a PPF override file.

After the NLS has been placed on the NLS disk, the desired NLS language must be integrated into the appropriate DB2 DataBase(s) and copied to DB2 and System Production minidisks (SFS Directories). This is accomplished by performing the steps defined in Sections “10.4.3 Installation Step 3. Install DB2 for VM Messages, ISQL Help Text and CMS Help” through “10.4.7 Installation Step 7. Post-Installation Customization Steps for DB2 for VM”

6.1.8.10 DCSS Information

It is recommended for performance reasons that each activated NLS Language be saved in a shared segment. Please refer to the section “Using Saved Segments for NLS Components and Choosing a National Language” in the *DB2 Server for VM System Administration* for the procedures on “defining Message Repositories as Saved Segments.”

6.1.8.11 Verification

None.

6.1.9 5697-F42 DB2 CLIENT NLS VM HELP FILES V7R5.0

6.1.9.1 PUT/ESO Applied

The PUT/ESO Service Level of the Licensed Program Product may be found in the *z/VM SDO Optional Licensed Product Service* section on the *z/VM SDO V6R2.0* webpage.

This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

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6.1.9.2 Service Excluded

None.

6.1.9.3 Pre-Requisite Service

None.

6.1.9.4 Co-Requisite Service

Product Number	PTF	APAR	Product Description
5741-A05	VM63968	UM32108	Z/VM CP V5R3M0

6.1.9.5 If-Requisite Service

None.

6.1.9.6 Product Manuals

6.1.9.7 Installation

With z/VM 6.2, a number of changes were introduced in the System Maintenance and Service environment. Prior to installing a Licensed Program Product in an Single System Image (SSI) environment (SSI-Ready or SSI-Enabled) Chapter 28. *Converting a z/VM System to a Single-Member z/VM SSI Cluster* and Chapter 25. *Setting Up z/VM Single System Image Clusters* in the *z/VM 6.2 CP Planning and Administration* manual should be reviewed.

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The information on DASD storage requirements and User ID definitions provided in the *z/VM SDO Enabling Aid* may also be found in the *z/VM SDO Product DASD Requirements* section and the *z/VM SDO Optional Licensed Products VM Directory* section on the *z/VM SDO V6R2.0* webpage.

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- For Production minidisk information refer to Appendix C, "DASD Requirements" on page 201.
- For Test minidisk information refer to Figure 2 on page 34.

It is recommended that the Product be installed utilizing the *z/VM 6.2* standard system maintenance ID, MAINT620, and the Test disks.

Prior to installation of this Licensed Program Product, ensure that all minidisks required by this Licensed Program Product are **not linked R/W** by any ID including the ID where this Licensed Program Product is being installed from.

Installing Licensed Products Utilizing Product Envelopes

When installing using the Product Envelope, use the ENV option with the VMFINS commands. The Product Envelope should be on a minidisk or SFS directory accessed as the 'C' disk.

VMFINS INSTALL INFO (NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (PLAN NOMEMO ENV *envelope_filename*

VMFINS INSTALL PPF *ppfname compid* (NOMEMO ENV *envelope_filename*

6.1.9.8 DB2 NLS Requirements

IMPORTANT NOTE

Please review the PSP Bucket for latest updates prior to installing this feature. The current Program Directory dated February 2007 2007 is incomplete. The PSP Bucket in RETAIN Upgrade: DB2VSEVM750 Subset: DB2750C will be updated to reflect this information in the near future:

The requirements for the installation of an NLS Language are detailed in Section "8.0 NLS Installation Instructions" of the *Program Directory for IBM DB2 Server for VM Client Edition Version 7 Release 5 Modification Level 0*

It is recommended that, with the exception of the Sub-Section "8.4.2 Install an NLS Language for DB2 for VM Client Edition," this section be reviewed prior to the installation of the DB2 NLS.

Please note that the 5697F75C 193 disk and the SQLCLNT 193 DASD minidisks may require additional space to hold the NLS Languages.

For example, the 5697F75C 193 disk must have sufficient free space to hold all 5 NLS Languages provided for DB2. On a 3380 DASD, this amounts to approximately 9000 4k blocks (or 60 cylinders).

Please refer to Section 8.3 "DASD Storage and User ID Requirements" in the *Program Directory for IBM DB2 Server for VM Client Edition Version 7 Release 5 Modification Level 0*

6.1.9.9 DB2 Client Edition NLS Semi-VMSES/E Installation

DB2 Client Edition NLS should be installed from the installation DB2 Client Edition Installation ID 5697F75C.

All the NLS Languages will be installed to the DB2 Server Code test build 193 minidisk (or SFS Directory) under the ID 5697F75C. This is different from the standard installation defined in the Sub-Section "8.4.2 Install an NLS Language for DB2 for VM Client Edition," of the *Program Directory for IBM DB2 Server for Client Edition VM Version 7 Release 5 Modification Level 0* which provides for the installation of a single NLS language on the 5697F75C 193 (test service build disk).

After logging onto the installation ID and mounting the DB2 for VM Client Edition NLS installation tape at virtual address 181, the following steps/commands replace the commands specified in Sub-Section “8.4.2 Installation Step 2. Install an NLS Language for DB2 for VM Client Edition,” and must be utilized to install DB2 Client NLS:

1. Access the VMSES/E code:

link MAINT 5E5 5E5 rr

access 5E5 b

2. Access the System Software Inventory disk:

link MAINT 51D 51D mr

access 51D d

3. Install the DB2 NLS code:

-

- a. Onto the Pretest DB2 Client Code minidisk issue:

vmfins install ppf J5697F42 db2 (nomemo

- b. Onto the Pretest DB2 Client Code build SFS directory:

vmfins install ppf J5697F42 db2sfs (nomemo

- c. Onto the DB2 Client production Code build minidisk:

vmfins install ppf J5697F42 db2prd (nomemo

- d. Onto the production DB2 Client Code build SFS directory:

vmfins install ppf J5697F42 db2sfsprd (nomemo

- **Note:** If desired, the default installation disk addresses may be altered by creating a PPF override file for the DB2 Client Edition NLS. Please refer to the *GC24-5837 VM/ESA VMSES/E Introduction and Reference* manual for information on creating a PPF override file.

After the NLS has been placed on the NLS disk, the desired NLS language must be integrated into the appropriate DB2 DataBase(s) and copied to DB2 and System Production minidisks (SFS Directories). This is accomplished by performing the steps defined in Sections “8.4.3 Installation Step 3. Install DB2 for VM Client Edition Messages, ISQL Help Text and CMS Help” through “8.4.6 Installation Step 7. Post-Installation Customization Steps for DB2 for VM Client Edition”

6.1.9.10 DCSS Information

It is recommended for performance reasons that each activated NLS Language be saved in a shared segment. Please refer to the section “Using Saved Segments for NLS Components and Choosing a National Language” in the *DB2 Server for VM System Administration* for the procedures on “defining Message Repositories as Saved Segments.”

6.1.9.11 Verification

None.

Appendix A. z/VM SDO IBM Licensed Program Products

The figure below is a list of the z/VM SDO Licensed Products. The list is in alphabetical order by "Product Abbrev" and can be used as a cross reference between Licensed Product name and Licensed Product number.

Note!

A **Semi-VMSES/E** product was previously called '**Pre-Install**' format.

These terms were misleading, so the names have been changed to better describe the install format of the Licensed Product. The term 'Pre-Install' may still appear on the Packing List or the Media Description report, the Configurator, or Marketing Literature, but should be interpreted to mean Semi-VMSES/E.

A.1 z/VM SDO Licensed Products Table

Figure 3 (Page 1 of 2). Licensed Products Abbreviations

Product Abbrev.	Product Number	Description	Install Format
Archive Manager for z/VM	5697-J05	Archive Manager for z/VM	VMSES/E
ACF/VTAM ESA	5654-010	ACF/VTAM for Use with VM/ESA	VMSES/E
APPC APPL SUITE	5654-010	APPC Applications Suite	VMSES/E
Backup and Restore Manager for z/VM	5697-J06	Backup and Restore Manager for z/VM	VMSES/E
DB2 Client for VM	5697-F42	DB2 Client for VM	VMSES/E
DB2 Client NLS VM Help Files	5697-F42	DB2 Client NLS VM Help Files	Semi-VMSES/E
DB2 Control Center	5697-F42	DB2 Control Center	Semi-VMSES/E
DB2 Data Propagator	5697-F42	DB2 Data Propagator	VMSES/E
DB2 Data Restore	5697-F42	DB2 Data Restore	Semi-VMSES/E
DB2 NLS VM Help Files	5697-F42	DB2 NLS VM Help Files	Semi-VMSES/E
DB2 QMF	5697-F42	Query Management Facility English Base VM	VMSES/E
DB2 RXSQL	5697-F42	DB2 RXSQL	Semi-VMSES/E
DB2 Server for VM	5697-F42	DB2 Server for VM	VMSES/E
DFSMS/VM	5741-A07	DFSMS/VM - Data Facility Storage Management Subsystem	VMSES/E

Figure 3 (Page 2 of 2). Licensed Products Abbreviations

Product Abbrev.	Product Number	Description	Install Format
DFSMS/VM KANJI	5741-A07	DFSMS/VM - Data Facility Storage Management Subsystem (JAPANESE)	VMSES/E
DITTO	5654-029	Data Interfile Transfer, Testing, and Operations Utility for VM	VMSES/E
EREP	5654-260	Environmental Record Editing and Printing Program	Semi-VMSES/E
GDDM-IMD	5668-801	Graphical Data Display Manager/Interactive Map Definition	VMSES/E
GDDM-IVU	5668-723	Graphical Data Display Manager/Image Viewing Facility	VMSES/E
GDDM-PGF	5668-812	Graphical Data Display Manager/Presentation Graphics Facility	VMSES/E
GDDM/VM	5684-168	Graphical Data Display Manager/VM	VMSES/E
HLASM	5696-234	IBM High Level Assembler/VM	VMSES/E
HLASM Toolkit	5696-234	IBM High Level Assembler/VM	VMSES/E
IBM Debug Tool for z/VM	5654-A23	IBM Debug Tool for z/VM	VMSES/E
IBM Director	5648-DRZ	IBM Director for Linux on System z	DVD
IBM Tivoli zSecure Manager for RACF	5655-T13	IBM Tivoli zSecure Manager for RACF z/VM	VMSES/E
IBM Tivoli Omegamon XE on z/VM	5698-A36	IBM Tivoli Omegamon XE on z/VM and Linux	VMSES/E
ICKDSF	5684-042	Device Support Facilities	VMSES/E
ISPF/PDF	5684-123	ISPF/Program Development Facility	Semi-VMSES/E
ISPF/PDF NLS	5684-123	ISPF/Program Development Facility NLS	Semi-VMSES/E
ISPF	5684-043	Interactive System Productivity Facility/Dialog Manager	Semi-VMSES/E
Operations Manager for z/VM	5697-J10	Operations Manager for z/VM	VMSES/E
REXX/370 Compiler	5695-013	IBM Compiler for SAA REXX/370	VMSES/E
REXX/370 Compiler Kanji	5695-013	IBM Compiler for SAA REXX/370	VMSES/E
REXX/370 Library	5695-014	IBM Library for SAA REXX/370	VMSES/E
REXX/370 Library Kanji	5695-014	IBM Library for SAA REXX/370	VMSES/E
SDO z/VM Opt. Product Enabling Aid	5741-A08	SDO z/VM Optional Products Enabling Aid	Internet Download
Tape Manager for z/VM	5697-J08	Tape Manager for z/VM	VMSES/E
XL C/C++ 130 for z/VM	5654-A22	XL C/C++ for z/VM	VMSES/E

Appendix B. IBM Licensed Program Products Interdependencies

B.1 Requisite IBM Licensed Program Product Dependencies

Figure 4 on page 198 lists the pre-, co-, and if-requisites for all the z/VM SDO Licensed Products that are part of the z/VM SDO package. A requisite Licensed Product is one that is required by another Licensed Product. The extent of the requirement determines which requisite category the Licensed Product belongs in.

When re-installing a Licensed Product Y, then any Licensed Product X that has Y as a pre- or co-requisite should also be re-installed. This is recommended for every re-install.

Note: z/VM SDO ensures that the Pre-requisites and Co-requisites of the Licensed Products are also included in the z/VM SDO package, unless otherwise noted.

B.1.1 Pre-Requisites (Install-Time Full Requisite)

The absence of a pre-requisite (Y) prevents the successful installation of Licensed Product X. A pre-requisite (Y) must be installed prior to the installation of Licensed Product X; otherwise, Licensed Product X will not be installed successfully.

B.1.2 Co-Requisite (Run-time Full Requisite)

The absence of a co-requisite (Y) results in the full loss of the function of any Licensed Product X. This loss of function occurs at the time that Licensed Product X is used. Although Licensed Product X installed successfully, Licensed Product X will not function. A co-requisite (Y) may be installed after Licensed Product X without affecting the installation or the operation of Licensed Product X.

B.1.3 If-Requisites (Install-time and Run-time Part Requisites)

Note: Only Licensed Products supported by z/VM SDO are listed as If-requisites.

- If-requisite Needed for Install-time

The absence of an if-requisite (Y) for install results in the partial loss of function for any Licensed Product X, during the installation of Licensed Product X. Usually this loss occurs in the interface between Licensed Product X and the requisite (Y). An if-requisite for install must be installed prior to the installation of Licensed Product X; otherwise, Licensed Product X will lose some of its function.

- If-requisite Needed for Run-time

The absence of an if-requisite (Y) for run-time results in the partial loss of function for any Licensed Product X. This loss of function occurs at the time that Licensed Product X is used. Although Licensed Product X was installed successfully, some of the functions of Licensed Product X will not be

available when Licensed Product X is used. An if-requisite for run-time may be installed after Licensed Product X without affecting the installation or operation of Licensed Product X.

B.2 z/VM SDO Licensed Product Requisites Table

Figure 4 (Page 1 of 2). Product Pre-, Co-, and If-Requisites List

Product Number	Product Abbrev.	Pre-Requisites	If-Requisite (for Install)	Co-Requisite	If-Requisite (for run-time)
feature of 5654-A22	XL C/C++	HLASM			
5654-A23	Debug Tool for z/VM				
5654-010	ACF/VTAM ESA				
feature of 5654-010	APPC APPL SUITE			ACF/VTAM ESA	
5654-029	DITTO				
5654-260	EREP				
5655-T13	zSecure Manager	ISPF/DM		ISPF/DM	ISPF/PDF
5668-723	GDDM-IVU	GDDM/VM			GDDM/VM
5668-801	GDDM-IMD	GDDM/VM			GDDM/VM
5668-812	GDDM-PGF	GDDM/VM			GDDM/VM
5684-042	ICKDSF				
5684-043	ISPF/DM				
5684-123	ISPF/PDF	ISPF/DM		ISPF/PDF NLS	
feature of 5684-123	ISPF/PDF NLS	ISPF/PDF			
5684-168	GDDM/VM				
feature of 5695-013	REXX/370 Comp. Kanji	REXX/370 Compiler			
5695-013	REXX/370 Compiler			REXX/370 Library	
feature of 5695-014	REXX/370 Lib. Kanji	REXX/370 Library			
5695-014	REXX/370 Library			REXX/370 Compiler	
5696-234	HLASM				
feature of 5696-234	HLASM Toolkit	HLASM			
5697-F42	DB2 Server for VM				
feature of 5697-F42	DB2 Data Propagator	DB2 Server for VM			
feature of 5697-F42	DB2 RXSQL	DB2 Server for VM			
feature of 5697-F42	DB2 Data Restore	DB2 Server for VM			
feature of 5697-F42	DB2 Control Center	DB2 Server for VM			
feature of 5697-F42	DB2 QMF	DB2 Server for VM	GDDM/VM	GDDM/VM	ISPF/PDF GDDM-PGF

Figure 4 (Page 2 of 2). Product Pre-, Co-, and If-Requisites List

Product Number	Product Abbrev.	Pre-Requisites	If-Requisite (for Install)	Co-Requisite	If-Requisite (for run-time)
feature of 5697-F42	DB2 NLS VM Help			DB2 Server for VM	
feature of 5697-F42	DB2 Client for VM				
feature of 5697-F42	DB2 Client NLS Help			DB2 Client for VM	
5697-J05	Archive Manager			REXX/370 Library	
5697-J06	Backup and Restore			REXX/370 Library	
5697-J08	Tape Manager			REXX/370 Library	
5697-J10	Operations Manager				
5698-A36	Omegamon XE				
feature of 5741-A07	DFSMS/VM			ISPF/DM	ISPF/PDF REXX/370 Compiler REXX/370 Library
feature of 5741-A07	DFSMS/VM JAPANESE	DFSMS/VM		ISPF/DM	ISPF/PDF REXX/370 Compiler REXX/370 Library

Appendix C. DASD Requirements

This appendix provides the specific sizes for the minidisks associated with each of the Licensed Products in z/VM SDO.

To obtain an estimated total amount of DASD required to install the z/VM System Delivery and selected Licensed Products please see your IBM Marketing Representative.

To estimate the size a minidisk should be in order to install the Licensed Products you have selected, total the number of blocks for each minidisk across all Licensed Products.

For example, the following Licensed Products are going to be installed:

ISPF Service Machine Work Disk	ISPVM 191	150 4K blocks
ISPF Service Machine Code Disk	ISPVM 192	6700 4K blocks
ISPVM Document Disk	MAINT 319	150 4K blocks
	TOTAL	7000 4K blocks

VMFCNVT can be used to obtain the number of cylinders required for your DASD type. Refer to *z/VM VMSES/E Introduction and Reference* for more information on using VMFCNVT.

For updates, refer to 2.3.1, "Preventive Service Planning" on page 7 for PSP information.

C.1 z/VM SDO Licensed Product DASD Requirements

Figure 5 (Page 1 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
feature of 5654-A22	XL C/C++	29E *	5654A22C * 81000 *
		2A2 *	5654A22C * 900 *
		2D2 *	5654A22C * 81000 *
		19E MAINT	81000
		51D MAINT	2700
		191 5654A22C	22500
		2A6 5654A22C	900
		2B2 5654A22C	45000
		2C2 5654A22C	900

Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.

Figure 5 (Page 2 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
5654-A23	Debug Tool for z/VM	19E MAINT 51D MAINT 191 5654A23A 29E 5654A23A 2A2 5654A23A 2A6 5654A23A 2B2 5654A23A 2C2 5654A23A 2D2 5654A23A	3600 360 900 3600 360 360 5400 360 2700
5654-010	ACF/VTAM ESA	51D MAINT 191 5654010A 29A 5654010A 2A2 5654010A 2A6 5654010A 2B2 5654010A 2C2 5654010A 2C4 5654010A 2D2 5654010A 401 5654010A 402 5654010A 493 5654010A 49A 5654010A	35 3000 6000 1500 1500 11250 1500 300 15000 1200 1200 900 6000
feature of 5654-010	APPC APPL SUITE	191 ANAME 191 A3270 51D MAINT 191 5654025 29A 5654025 2A2 5654025 2A6 5654025 2B2 5654025 2C2 5654025 2D2 5654025 49A 5654025	1500 1500 150 1500 4500 300 300 4500 1500 1500 4500
5654-029	DITTO	51D MAINT 191 5654029D 2A2 5654029D 2A6 5654029D 2B2 5654029D 2C2 5654029D 2D2 5654029D 400 5654029D 401 5654029D	150 2250 300 300 3000 300 2250 2340 2250
5654-260	EREP	201 MAINT	2250

Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.

<i>Figure 5 (Page 3 of 10). Product DASD Requirements</i>			
Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
5655-T13	zSecure Manager	51D MAINT 0191 5655T13B 02A2 5655T13B 02A6 5655T13B 02B2 5655T13B 02C2 5655T13B 02D2 5655T13B 100 5655T13B 200 5655T13B	180 5400 1800 1800 19800 360 7200 19800 19800
5668-723	GDDM-IVU	19E MAINT 51D MAINT 191 P68416B 29E P68416B 2A2 P68416B 2A6 P68416B 2B2 P68416B 2C2 P68416B 2D2 P68416B	150 180 180 300 180 180 300 180 180
5668-801	GDDM-IMD	19E MAINT 51D MAINT 191 P68416B 29E P68416B 2A2 P68416B 2A6 P68416B 2B2 P68416B 2C2 P68416B 2D2 P68416B	750 180 180 750 180 180 750 180 180
5668-812	GDDM-PGF	19E MAINT 51D MAINT 191 P68416B 29E P68416B 2A2 P68416B 2A6 P68416B 2B2 P68416B 2C2 P68416B 2D2 P68416B	1800 180 180 1800 180 180 1980 180 1260
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

Figure 5 (Page 4 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
5684-042	ICKDSF	19D MAINT 19E MAINT 51D MAINT 191 5684042J 29D 5684042J 29E 5684042J 2A2 5684042J 2A6 5684042J 2B2 5684042J 2C2 5684042J 2D2 5684042J	55 1K 775 35 1620 360 2700 360 360 1440 360 3600
5684-043	ISPF/DM	191 ISPVM 192 ISPVM 319 MAINT	150 6700 150
5684-123	ISPF/PDF	192 ISPVM 319 MAINT	6000 120
feature of 5684-123	ISPF/PDF NLS	192 ISPVM 192 ISPVM 192 ISPVM 192 ISPVM 192 ISPVM	2700 2700 2700 2700 2700
5684-168	GDDM/VM	19E MAINT 51D MAINT 191 P68416B 29E P68416B 2A2 P68416B 2A6 P68416B 2B2 P68416B 2C2 P68416B 2D2 P68416B	15000 450 15000 15000 450 450 13600 450 9000
5695-013	REXX/370 Compiler	19E MAINT 51D MAINT 101 P695013H 191 P695013H 201 P695013H 2A2 P695013H 2A6 P695013H 2B2 P695013H 2C2 P695013H 2D2 P695013H	450 150 1200 1800 1200 300 300 1050 300 1500
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

<i>Figure 5 (Page 5 of 10). Product DASD Requirements</i>			
Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
feature of 5695-013	REXX/370 Comp. Kanji	51D MAINT 191 P695013H 2A2 P695013H 2A6 P695013H 2D2 P695013H 501 P695013H	150 150 150 150 150 300
5695-014	REXX/370 Library	19E MAINT 51D MAINT 100 P695014H 191 P695014H 200 P695014H 2A2 P695014H 2A6 P695014H 2B2 P695014H 2C2 P695014H 2D2 P695014H	600 150 600 1500 600 150 150 300 150 4500
feature of 5695-014	REXX/370 Lib. Kanji	51D MAINT 191 P695014H 2A2 P695014H 2A6 P695014H 2D2 P695014H 501 P695014H	150 150 150 150 150 150
5696-234	HLASM	51D MAINT 0191 P696234J 29E P696234J 2A2 P696234J 2A6 P696234J 2B2 P696234J 2C2 P696234J 2D2 P696234J	180 900 1080 180 180 1800 720 1800
feature of 5696-234	HLASM Toolkit	51D MAINT 0191 P696234K 29E P696234K 2A2 P696234K 2A6 P696234K 2B2 P696234K 2C2 P696234K 2D2 P696234K	180 900 9000 180 180 9000 720 9000
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

Figure 5 (Page 6 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
5697-F42	DB2 Server for VM	51D MAINT 191 SQLMACH 193 SQLMACH 195 SQLMACH 200 SQLMACH 201 SQLMACH 202 SQLMACH 191 SQLUSER 191 5697F75A 193 5697F75A 195 5697F75A 2A2 5697F75A 2A6 5697F75A 2B2 5697F75A 2C2 5697F75A 2D2 5697F75A	300 1980 12600 5940 5220 1K 1260 11700 900 5400 12600 5940 2340 2340 11160 1620 9900
feature of 5697-F42	DB2 Data Propagator	191 CAPTMACH 300 CAPTMACH 51D MAINT 191 5697F74B 200 5697F74B 2A2 5697F74B 2A6 5697F74B 2B2 5697F74B 2C2 5697F74B 2D2 5697F74B	180 2160 300 720 2160 180 180 2160 180 2700
feature of 5697-F42	DB2 RXSQL	198 SQLMACH 199 SQLMACH 191 SQLUSER	540 1080 900
feature of 5697-F42	DB2 Data Restore	191 SQLDRR	1620
feature of 5697-F42	DB2 Control Center	191 MSTRSRVO 195 MSTRSRVO	2700 3600
feature of 5697-F42	DB2 QMF	51D MAINT 191 P697F4BA 2A2 P697F4BA 2A6 P697F4BA 2B2 P697F4BA 2C2 P697F4BA 2D2 P697F4BA 400 P697F4BA 401 P697F4BA 500 P697F4BA 501 P697F4BA	450 1620 360 360 4500 360 1620 3240 3240 3060 3060
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

Figure 5 (Page 7 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
feature of 5697-F42	DB2 NLS VM Help	401 MAINT 402 MAINT 404 MAINT 405 MAINT 193 SQLMACH 193 5697F75A	300 300 300 300 1800 9000
feature of 5697-F42	DB2 Client for VM	51D MAINT 191 SQLCLNT 193 SQLCLNT 195 SQLCLNT 191 SQLUSER 191 5697F75C 193 5697F75C 195 5697F75C 2A2 5697F75C 2A6 5697F75C 2B2 5697F75C 2C2 5697F75C 2D2 5697F75C	300 1980 12600 5940 900 5400 12600 5940 2340 2340 11160 1620 9900
feature of 5697-F42	DB2 Client NLS Help	401 MAINT 402 MAINT 404 MAINT 405 MAINT 193 SQLCLNT 193 5697F75C	300 300 300 300 1800 9000
5697-J05	Archive Manager	191 AMVADMIN 191 AMVARKIV 191 AMVCATLG 191 AMVWRK01 191 AMVWRK02 191 AMVWRK03 191 AMVWRK04 19D MAINT 19E MAINT 51D MAINT 191 5697J05A 198 5697J05A 2A2 5697J05A 2A6 5697J05A 2B2 5697J05A 2C2 5697J05A 2D2 5697J05A 491 5697J05A 492 5697J05A 49D 5697J05A 591 5697J05A 592 5697J05A	900 180 180 180 180 180 180 180 900 900 300 1800 360 180 180 900 360 1800 900 900 900 900 900

Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.

Figure 5 (Page 8 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
5697-J06	Backup and Restore	191 BKRADMIN 191 BKRBKUP 191 BKRCATLG 191 BKRWRK01 191 BKRWRK02 191 BKRWRK03 191 BKRWRK04 19D MAINT 19E MAINT 51D MAINT 191 5697J06B 198 5697J06B 199 5697J06B 2A2 5697J06B 2A6 5697J06B 2B2 5697J06B 2C2 5697J06B 2D2 5697J06B 491 5697J06B 492 5697J06B 49D 5697J06B 591 5697J06B 592 5697J06B	900 180 180 180 180 180 180 900 900 300 7200 360 900 180 180 900 360 9000 1260 900 900 1260 900
5697-J08	Tape Manager	19D MAINT 19E MAINT 51D MAINT 191 TMCMM 191 TMDMM 191 TMLM1 191 TMRMM 1200 TMTMM 1210 TMTMM 191 TMTMM 198 TMTMM 200 TMTMM 210 TMTMM 191 5697J08C 2A2 5697J08C 2A6 5697J08C 2B2 5697J08C 2C2 5697J08C 2C4 5697J08C 2D2 5697J08C 300 5697J08C 310 5697J08C 400 5697J08C 410 5697J08C	540 540 300 900 900 900 540 5400 900 360 360 5400 900 10800 360 360 1080 360 360 10800 900 540 900 540
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

Figure 5 (Page 9 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
5697-J10	Operations Manager	19D MAINT 19E MAINT 51D MAINT 191 OPMGRM1 194 OPMGRM1 198 OPMGRM1 191 OPMGRS1 191 OPMGRS2 191 OPMGRS3 191 OPMGRS4 191 5697J10D 2A2 5697J10D 2A6 5697J10D 2B2 5697J10D 2C2 5697J10D 2C4 5697J10D 2D2 5697J10D 300 5697J10D 310 5697J10D 400 5697J10D 410 5697J10D	900 900 180 900 9000 900 900 900 900 900 1800 360 360 900 360 360 5400 900 900 900 900
5698-A36	Omegamon XE	51D MAINT 0191 OMEGACMD 0301 OMEGACMD 0191 5698A36C 02A2 5698A36C 02A6 5698A36C 02B2 5698A36C 02C2 5698A36C 02D2 5698A36C 300 5698A36C	180 360 360 180 180 180 360 180 360 360
feature of 5741-A07	DFSMS/VM	191 DFSMS 1A2 DFSMS 1A4 DFSMS 1A6 DFSMS 1B1 DFSMS 1B5 DFSMS 1C2 DFSMS 1C4 DFSMS 1D6 DFSMS 19D MAINT 51D MAINT	5400 300 300 300 12300 12420 300 300 7200 5600 1K 900
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

Figure 5 (Page 10 of 10). Product DASD Requirements

Product Number	Product Abbrev.	Minidisks	Size -CMS 4K blocks unless otherwise stated
feature of 5741-A07	DFSMS/VM JAPANESE	191 DFSMS 1A2 DFSMS 1A4 DFSMS 1A6 DFSMS 1B1 DFSMS 1B2 DFSMS 1B5 DFSMS 1C2 DFSMS 1C4 DFSMS 1D6 DFSMS 401 MAINT 51D MAINT	300 150 150 150 150 5400 150 150 150 750 4950 1K 150
Note 1: The amount of DASD used by the feature has been included in the DASD allocation shown for a previous feature.			

Appendix D. Saved Segments

This appendix provides the recommended size, location and name for the saved segments associated with the z/VM Licensed Program Products.

For information about planning, administering and generating saved segments see the *z/VM Saved Segments Planning and Administration* manual.

It is recommended that the Section *Planning Considerations* in Chapter 1. *Planning and Defining CP Saved Segments* in the *z/VM Saved Segments Planning and Administration* manual be reviewed.

D.1 id=segtable.z/VM SDO Program Product Segment Layout

The following table provides the recommended size, location and name for the saved segments associated with the z/VM SDO Licensed Program Products.

The segment layout specified in the table is the same layout that is utilized by IBM internally. The layout is designed to both allow for expansion and to place as many saved segments associated with with the Program Products above the 16MB memory line as possible.

Segment Overlap

Saved segments for Licensed Program Products and z/VM Components/Features may overlap provided that the Products and/or z/VM Component/Features are not normally utilized at the same time.

The **VMFSGMAP** or **q nss map** command may be utilized to see which saved segments overlap.

Shared Segment Size Requirements

The shared segment size specified in the *z/VM SDO Enabling Aid* and the SDO Program Directory should be utilized when creating the shared segment for the z/VM SDO Licensed Program Products.

The information provided in the *z/VM SDO Enabling Aid* and the SDO Program Directory overrides the information provided in the Licensed Program Product's Program Directory and *PLANINFO* file. The information provided in the Program Directory and the *PLANINFO* file may not have been updated to reflect changes resulting from the IBM Service that has been applied to the Licensed Program Product or changes in the z/VM Environment.

The *z/VM SDO Enabling Aid* may be downloaded from the *z/VM SDO VnRn.0* webpage, which may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

Figure 6 (Page 1 of 2). Product Segments for z/VM SDO SDO Products

Product Number	Product Abbrev.	Segment Name	Location	Type	Space Name
5654-A22	C/C++ Compiler	CCNSEG	3D000-41BFF	SR	
5654-A23	Debug Tool	SEQBSEG SEQASEG	900-9FF 2800-2EFF	SR SR	
5654-010	ACF/VTAM ESA	VTAM	D00-DFF	SR	
5668-723	GDDM-IVU	ADMIV000	3C900-3C9FF	SR	
5668-801	GDDM-IMD	ADMIM000	3BF00-3BFFF	SR	
5668-812	GDDM-PGF	ADMPG000	3B700-3BDFF	SR	
5684-043	ISPF	ISPDCSS	30000-300FF	SR	
5684-123	ISPF/PDF	ISRDCSS FLMDCSS	30200-302FF 36000-36172	SR SR	
5684-168	GDDM/REXX GDDM/VM	ERXR000 ADMXSS00	36700-367FF 3C400-3C8FF	SR SR	
5695-014	REXX/370 Library	EAGRTSEG	40000-400FF	SR	
5696-234	HLASM	ASMAPSEG	3CF00-3CFFF	SR	

Figure 6 (Page 2 of 2). Product Segments for z/VM SDO SDO Products

Product Number	Product Abbrev.	Segment Name	Location	Type	Space Name
5697-F42	DB2 for VM	SQLISQL	B00-B5F	SR	
		SQLRMGR	3A000-3A23F	SR	
		SQLSQLDS	900-A7F	SR	
		SQLXRDS	35000-353DF	SR	
		LANGS001	A00-A4F	SR	
		LANGS002	A00-A4F	SR	
		LANGS003	A00-A4F	SR	
	DB2 Client Edition	LANGS004	A00-A4F	SR	
		LANGD001	A00-A4F	SR	
		SQLISQL	B00-B5F	SR	
		SQLRMGR	3A000-3A23F	SR	
		LANGS001	A00-A4F	SR	
		LANGS002	A00-A4F	SR	
		LANGS003	A00-A4F	SR	
		LANGS004	A00-A4F	SR	
		LANGD001	A00-A4F	SR	
		5697-F42	QMF	QMF720E	36400-366FF
5741-A07	DFSMS/VM FL 221	DFSMSSEG	2200-22FF	SW	

D.2 Creating Saved Segments Utilizing the

SDO Enabling Aid

VMSES/E can be utilized to manage and create saved segments for Licensed Program Products that are in VMSES/E format. To allow for the use of VMSES/E for VMSES/E Program Product, a SDOZVM62 PRODPART file is provided as part of the *z/VM SDO Enabling Aid*. This *PRODPART* may be utilized to update the VMSES/E *SEGDATA* file with the saved segment definitions for VMSES/E formatted z/VM SDO Licensed Program Products.

Semi-VMSES/E Formatted Program Products

Saved segments for z/VM SDO Licensed Program Products that are in Semi-VMSES/E format must be defined and created following the instructions in the &TECHNOTES. provided for each Product.

Semi-VMSES/E formatted Licensed Program Products cannot be created utilizing VMSES/E.

To utilize the SDOZVM62 PRODPART file, the *SDO Enabling Aid* must first be downloaded to the z/VM System.

The *SDO Enabling Aid* may be downloaded from the *z/VM SDO VnRn.0* webpage. This webpage may be found off the *VM System Delivery Offering (SDO)* website at url:

<http://www.vm.ibm.com/sdo/>

After the *z/VM SDO Enabling Aid* has been downloaded to the z/VM System, the instructions found in Chapter 3. *Using VMSES/E to Define, Build and Manage Saved Segments* of the *z/VM Saved Segments Planning and Administration* manual under the Sub-Section *Adding Saved Segment Definitions for VMSES/E-Format Product* may be utilized, with the following modifications, to update the *SEGDATA* file:

- In Step 4, use **sdozvm62** as the *prodid*
A *compname*, which represents a product component, is not required.
- Skip Step 5
- In Step 7, type in the keyword **deleted** in the *DEFPARMS* field for any saved segments for an Licensed Program Product that you haven't installed and are not planning to install

After you have completed Step 11, the *VMFBLD* Command (z/VM 5.4 or z/VM 6.2) or the *PUT2PROD* Exec (z/VM 6.2) may be utilized to build or delete the saved segments.

Segment Requirements

- Segment Overlap
Saved segments for Licensed Program Products and z/VM Components/Features may overlap provided that the Products and/or z/VM Component/Features are not normally utilized at the same time.
The **VMFSGMAP** or **q nss map** command may be utilized to see which saved segments overlap.
- Segments Above the 16MB Memory Line
If any part of the segment range specified on the *DEFPARMS* line in the segment definition is above the 16MB Memory Line (i.e. Page 1000 or greater), then the *GT_16MB* must be set to **YES**
If all of the segment range specified on the *DEFPARMS* line in the segment definition is below the 16MB Memory Line (i.e. Page 0FFF or less), then the *GT_16MB* must be set to **NO**

Appendix E. Licensed Products Tapemaps

This appendix provides tapemaps of stacked VMSES/E and Semi-VMSES/E.

E.1 Stacked Tape for VMSES/E and Semi-VMSES/E Licensed Products

The first tape file of the Licensed Product tape is created by merging the first tape files of all the products on the tape. The second tape file of the Licensed Product tape is created by merging the second tape files of all the products on the tape. Together, the first and second files form the Table of Contents (TOC) of the Licensed Product tape.

The first file on Tape File 1 will be a file with a filename of 'INS' and filetype of the 'yymm' (where 'yy' is the year and 'mm' is the month in which the tape was manufactured). This file combines the 'INS' files for all the products on the tape. The next file will be the \$\$TAPE\$\$ VMSES file, which combines all the copyright files for all the products on the tape.

Tape File 3 marks the beginning of the first product on the tape and contains only information on the first product. It can be identified by the 'prodid 0vrmmn1' and 'prodid \$INSyymm' file. The remainder of the tape files for this product will follow in sequence.

The next product will follow, beginning with its Tape File 3, the 'prodid 0vrmmn1' and 'prodid \$INSyymm' files.

Figure 7 (Page 1 of 2). VMSES/E and Semi-VMSES/E IBM Licensed Program Product Tape Format

```
Tape File 1 (Combines all Tape Files 1 for all Products on
Tape)
INS    0203
$$TAPE$$ VMSES
prodid1 $PPF
prodid1 PPF
prodid1 PRODPART
prodid1 MEMO
.
.
.
prodidn $PPF
prodidn PPF
prodidn PRODPART
prodidn MEMO
```

Figure 7 (Page 2 of 2). VMSES/E and Semi-VMSES/E IBM Licensed Program Product Tape Format

Tape File 2 (Combines all Tape Files 2 for all Products on Tape)

```

prodid1 0vrn1
prodid1 $PPF
prodid1 PPF
prodid1 PRODPART
prodid1 MEMO
.
.
.
prodidn 0vrn1
prodidn $PPF
prodidn PPF
prodidn PRODPART
prodidn MEMO

```

Tape File 3 (Tape File 3 of first product only)

```

prodid1 0vrn1
prodid1 $INSyymm

```

Tape File 4 (Tape File 4 of first product only)

```

$prodid1 MEMO

```

Tape File 5 (Begins remaining tape files of first product)

```

$prodid1 Files
.
.
.

```

Tape File n (Tape File 3 of next product)

```

prodidn 0vrn1
prodidn $INSyymm

```

Tape File n + 1 (Tape File 4 of next product)

```

prodidn MEMO

```

Tape File n + 2 (Begins remaining tape files for this product)

```

$prodidn Files
.
.
.

```

Files in Tape File1 to Tape File 4

- prodid1, prodidn - Indicates the PPF file name
- INS 'yymm' - Content directory which lists tape files for all products on this tape. 'yymm' indicates the year and month this tape was manufactured.
- \$\$TAPE\$\$ VMSES - Contains copyright statements for all products on the tape.

-
- prodid MEMO - The z/VM SDO memo for prodid
 - prodid \$PPF - Source Product Parameter File (installation customization file) for prodid
 - prodid PPF - Compiled Product Parameter File prodidN
 - prodid PRODPART - Contains control information for prodidN such as resource requirements
 - prodid 0vrmmn1 - the Licensed Product identifier file for prodidN The characters in the file type are defined as follows

<i>0</i>	Constant denoting this as part of the Licensed Product tape.
<i>v</i>	The version number of the Licensed Product
<i>r</i>	The release number of the Licensed Product
<i>m</i>	The modification level number of the Licensed Product
<i>nn</i>	The number of product files + 2 product headers + 1 tape header
<i>1</i>	The "1" indicates it is in VMSES/E format.

Appendix F. z/VM 6.2 Installation and Production Enablement Requirements

This appendix provides an overview of the major changes introduced in z/VM 6.2 to support a z/VM Single System Image (SSI) and the effect of the changes on the installation and Production enablement of Licensed Program Products.

F.1 SSI-Enabled (Multisystem SSI Cluster) User ID Definitions

z/VM 6.2 introduced a new VM Directory ID definition statement, *IDENTITY* and changed how a System utilizes the *USER* VM Directory ID definition statement:

USER: An ID defined by the *USER* statement can only be logged on (i.e. actively logged on or in a disconnected state) a single Member in the Cluster at any given time. That is the ID *CANNOT* be concurrently logged onto more than one(1) Member in the Cluster.

IDENTITY: An ID defined by the *IDENTITY* statement can be logged onto one(1) or more Members in the Cluster at any given point in time. That is the ID can be concurrently logged onto more than one(1) Member in the Cluster.

For those Licensed Program Products that have a unique installation User ID associated with them, it is recommended that the installation ID be defined utilizing the *USER* statement.

F.2 SSI-Enabled Real Device and Minidisk Management

In an SSI-Enabled environment, real DASD storage devices may be either:

Shared:

The real DASD storage devices are accessible by more than one System (Member) in the SSI Cluster. With Shared DASD, the DASD may be accessed from an available authorized Member in the Cluster regardless of the availability of any other authorized Member of the Cluster.

For example, in a two system SSI Cluster, Member '1' and Member '2', for DASD authorized to be accessed by both Member '1' and Member '2', the DASD may be accessed by

- Member '1' when Member '1' is available and Member '2' is not available.
- Member '2' when Member '2' is available and Member '1' is not available.
- Both Member '1' and Member '2' when both Member '1' and Member '2' are available.

Nonshared:

The real DASD storage devices are only accessible from a single System (Member) in the SSI Cluster. With Nonshared DASD, the DASD cannot be accessed if the single authorized Member in the Cluster is not available.

For example in a two system SSI Cluster, Member '1' and Member '2', if a Nonshared DASD is only authorized to be accessed by Member '1', then the DASD cannot be accessed by Member '2', regardless of whether Member '1' is available or not available.

Minidisks may be defined on either Nonshared or Shared DASD. If the minidisk is defined on Nonshared DASD, then the minidisk is only accessible on the Member in the SSI Cluster that DASD is authorized for.

If the minidisk is defined on a Shared DASD, then the minidisk may be accessible from all Members in the Cluster. Whether a minidisk is accessible on a specific Member in the Cluster is dependent upon whether the DASD is authorized for the Member and how the minidisk is defined in the VM System Directory.

z/VM 6.2 introduced the VM Directory *SUBCONFIGURATION* statement. The *SUBCONFIGURATION* statement must be associated with a *IDENTITY* User ID definition statement and is utilized to specify those User ID statements which apply only to the specific Member in the Cluster associated with the *SUBCONFIGURATION* statement.

Each Member in a Cluster has its own unique *SUBCONFIGURATION* statement. When a User ID logs onto a Member in the Cluster, the User ID statements under the *SUBCONFIGURATION* statement for the Member are merged with the User ID statements under the ID's *IDENTITY* statement to create the instance of the ID on the Member.

The *Scope of a Minidisk* is utilized to indicate the effect the *USER*, *IDENTITY* and *SUBCONFIGURATION* statements associated with the minidisk's *MDISK* definition statement have on the accessibility of a minidisk from the Members in a Cluster:

Scope	Cluster Accessibility	Minidisk Definition
<i>Global</i>	All Members in the SSI Cluster	<i>MDISK</i> statement under <i>USER</i> or <i>IDENTITY</i> User ID definition statement
<i>Local</i>	Single Member in the SSI Cluster	<i>MDISK</i> statement under <i>SUBCONFIGURATION</i> statement

In addition to its *Scope*, a minidisk is defined as either *Shareable* or *Nonshareable (Private)*. A *Shareable* minidisk may be concurrently linked by multiple virtual machines. A *Nonshareable* minidisk may only be accessed by a single virtual machine at any given time.

All minidisks defined by a *MDISK* statement in the VM Directory are *Shareable* regardless of whether they are defined under a *USER*, *IDENTITY* or *SUBCONFIGURATION* statement.

For those Licensed Program Products that have a unique installation minidisks associated with them, it is recommended that the minidisks be defined with a *Global Scope* on *Shared DASD*.

F.3 Installation of Licensed Program Product into SFS Directories

Licensed Program Products may be installed either on minidisks or into a Shared File System (SFS) Filepool. Unless specified in either the SDO PD or the Licensed Program Product's PD, the default SFS Filepool for Licensed Program Products delivered under SDO, is the z/VM System Filepool *VMSYSU*

In a SSI-Enabled Environment, a separate *VMSYSU* filepool exist on each Member in the SSI Cluster. Directories established in this filepool are unique to the Member that the directory was created on and cannot be shared across Members in the Cluster.

The recommended SFS Filepool for Licensed Program Products is *VMSYSP*. On the IBM z/VM 6.2 System as delivered by IBM, the minidisks utilized for this filepool are defined on *Shared* DASD and have a *Global* scope. As a result the minidisks that comprise the *VMSYSP* filepool may be accessed from any Member in the SSI Cluster.

However, the z/VM SFS component only allows a single filepool server for a given filepool to be active (e.g. logged on) at any point in time. In addition, under z/VM, SFS filepools whose name starts with *VMSYS* are accessible only from the System that the filepool server is active on.

Therefore, the SFS directories in the *VMSYSP* Filepool can only be accessed from one Member in the SSI Cluster (i.e. the Member that the filepool server is active on) at any point in time.

For example, in a two (2) Member Cluster, Member '1' and Member '2', if the *VMSYSP* filepool server *VMSEVP* is logged on Member '1', then directories in the *VMSYSP* filepool can only be accessed from Member '1'. They cannot be accessed from Member '2'.

If the directories are to be accessed on Member '2', the *VMSEVP* filepool server must logged off Member '1' and then logged on Member '2'.

If the Licensed Program Product is to be installed on other than the default filepool for the Product, the Product's PPF file must be updated with the name of the filepool that is to be utilized for the installation. For information on modifying the Licensed Program Product's PPF file refer to Chapter 3 in the *z/VM VMSES/E Introduction and Reference* manual.

F.4 z/VM 6.2 System Maintenance ID and System Disk Ownership

The standard system maintenance ID for z/VM 6.2 is MAINT620.

The MAINT ID, which was the standard system maintenance ID prior to z/VM 6.2, is still defined on the z/VM 6.2 System as delivered by IBM.

The MAINT620 ID is defined utilizing an *IDENTITY* VM Directory statement which allows the MAINT620 to be concurrently logged on to multiple Members in the SSI Cluster. The MAINT ID is defined utilizing a

USER VM Directory statement. As a result, the MAINT ID can only be logged onto a single Member in the Cluster at any point in time.

The MAINT620 ID and the MAINT ID share the same 5E5 (SES/E code disk), 51D (System Inventory disk), 319 (System document disk) and System Disks (190, 193, 19D, 19E). Therefore either the MAINT ID or the MAINT620 ID may be utilized for Licensed Program Product installation, customization and Production enablement.

For example, if the Licensed Program Product instructions state that the MAINT 19E should be linked in WRITE mode as the 29E then either a *'LINK MAINT 19E 29E MW'* or a *'LINK MAINT620 19E 29E MW'* may be utilized.

When performing Licensed Program Product installation, maintenance or Production enablement consideration must be given to the Member of the Cluster that is being utilized for the installation, maintenance or enablement, and the disk access requirements.

On the IBM delivered z/VM 6.2 System, the MAINT620 ID owns the 5E5, 51D and 319 minidisks. These minidisks are defined on *Shared* DASD volumes which are accessible from all Members of the SSI Cluster. Therefore, the same 5E5, 51D and 319 minidisks are utilized on all Members in the SSI Cluster.

The System Disks (190, 193, 19D, 19E) are owned by the MAINT ID and are defined on *Nonshared* DASD volumes which are only accessible to a single Member in the Cluster. As a result, the System Disks are unique to each Member in the Cluster.

The z/VM 6.2 System as delivered by IBM is based on the same Member of the SSI Cluster being utilized for maintenance of the all z/VM System Components. It is recommended that Licensed Program Product installation and service be performed on the same Member that is utilized for z/VM System Component service.

In addition, when the Licensed Program Product installation, customization or Production enablement instructions indicate that the MAINT ID should be utilized to perform a task, it is recommended that the MAINT620 ID be utilized instead.

F.5 SSI-Enabled Environment LP Production Enablement Considerations

The following items should be taken into consideration when Production enabling a Licensed Program Product (LP) in a Single System Image (SSI) Cluster multisystem (SSI-Enabled) environment.

System Minidisks and SFS Filepools

In an SSI-Enabled environment, each Member in the cluster has its own System minidisks (MAINT 190, 193, 19D and 19E disks) and System filepools (VMSYS and VMSYSU). As a result, for Licensed Program Products that are to be utilized on more than one (1) Member in the Cluster, consideration must be given

as to whether the Licensed Program Product code is to be shared across the Members in the SSI Cluster or whether each Member in the Cluster is to have its own unique version of the Product code.

For example, for a Licensed Program Product that is normally placed on the MAINT 19E, the decision may be to place the Product on a minidisk that is shared across all Members in the Cluster.

If the decision is to continue to utilize the MAINT 190, 193, 19D or 19E disks, or the filepools VMSYS or VMSYSU than the Product must be moved to the minidisks or filepools on *EACH* Member in the Cluster that the Product will be utilized on.

Licensed Program Product Shared Segments

Shared Segments are unique to each Member in the SSI Cluster and cannot be shared across Members. Therefore, if a Licensed Program Product utilizes a Shared Segment, the Segment must be created (saved) on each Member in the Cluster that the Product will be utilized on.

For some Licensed Program Products, the creation of a shared segment for the Product is optional. If the optional shared segment for a Product is created on one Member of the Cluster, it is recommended that the shared segment be created on all Members in the Cluster.

z/VM 6.2 Shared Segments and Systems

Dependent upon the service applied to or the customization performed on a Licensed Program Product, it may be necessary to rebuild the CMS Saved System or the z/VM System Shared Segments. Information on rebuilding the CMS Saved System and z/VM System Shared Segments may be found in the *z/VM Service Guide*.

It is recommended that the both CMS Saved System and the z/VM System Shared Segments be rebuilt from the MAINT620 Maintenance ID.

The following are the general commands for rebuilding CMS Saved System and the z/VM Shared Segments:

CMS Saved System

PUT2PROD SAVECMS

z/VM Shared Segments

- All z/VM Shared Segments

PUT2PROD SEGMENTS ALL

- Specific z/VM Shared Segment

PUT2PROD SEGMENTS segment_name

In an SSI-Enabled Environment, the CMS Saved System and the z/VM System Shared Segments must be rebuilt on each Member in the Cluster.

z/VM 6.2 DASD Format and Directory Maintenance Utilities

With z/VM 6.2 the following utilities components have been moved from the *MAINT 190 (System CMS Disk)* to a new disk, *PMAINT 551*.

CPFMTXA EXEC
CPRMTXA MODULE
DIRECTXA MODULE
DIRMAP MODULE
DISKMAP EXEC
FORMSSI MODULE

The *PMAINT 551* is defined on a *Shared DASD* and is available on all Members in the SSI Cluster.

Bibliography

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z/VM Installation Guide (GC24-6246)

z/VM General Information (GC24-6193)

z/VM VMSES/E Introduction and Reference
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z/VM Other Components Messages and Codes
(GC24-6207)

z/VM Saved Segments Planning and Administration
(SC24-6229)

Reader's Comments

Program Directory for System Delivery Offering Version 6

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RATING SCALE					
very satisfied	<=====			=====	very dissatisfied
1	2	3	4	5	not applicable N

	Satisfaction					
	1	2	3	4	5	N
Ease of Licensed Products installation						
Contents of program directory						
Installation Verification Programs						
Time to install the Licensed Product						
Readability and organization of program directory tasks						
Necessity of all installation tasks						
Accuracy of the definition of the installation tasks						
Technical level of the installation tasks						
Ease of getting the system into production after installation						

Did you order this Licensed Product as an independent Licensed Product or as part of a package?

- Independent
- Package

If this Licensed Product was ordered as part of a package, what type of package was ordered?

- CustomPac
 - FunctionPac
 - SystemPac®
- System Delivery Offering (SDO)
- Other - Please specify type:

Is this the first time your organization has installed this Licensed Product?

- Yes
- No

Were the people who did the installation experienced with the installation of VM Licensed Products?

Yes

No

If yes, how many years?

If you have any comments to make about your ratings above, or any other aspect of the Licensed Product installation, please list them below:

Please provide the following contact information:

Name and Job Title

Organization

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