Program Directory for

IBM Z Storage Management Suite

3.1.0

Program Number 5698-BT1

for use with
z/OS

Document Date: November 2024

GI13-6405-00

Note

Before using this information and the product it supports, be sure to read the general information under 7.0, “Notices” on page 57.

Contents

Figures

1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM Z Storage Management Suite. This publication refers to IBM Z Storage Management Suite as Z Storage Management Suite.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 6 identifies the basic program materials and documentation for Z Storage Management Suite.
- 3.0, “Program Support” on page 9 describes the IBM support available for Z Storage Management Suite.
- 4.0, “Program and Service Level Information” on page 11 lists the APARs (program level) and PTFs (service level) that have been incorporated into Z Storage Management Suite.
- 5.0, “Installation Requirements and Considerations” on page 13 identifies the resources and considerations that are required for installing and using Z Storage Management Suite.
- 6.0, “Installation Instructions” on page 38 provides detailed installation instructions for Z Storage Management Suite. It also describes the procedures for activating the functions of Z Storage Management Suite, or refers to appropriate publications.

Z Storage Management Suite is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The program directory that is provided in softcopy format on the CBPDO is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for Z Storage Management Suite are included on the CBPDO.

Before installing Z Storage Management Suite, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that are supplied with this program in softcopy format and this program directory; after which, keep the documents for your reference. Section 3.2, “Preventive Service Planning” on page 9 tells you how to find any updates to the information and procedures in this program directory.

Do not use this program directory if you install Z Storage Management Suite with a z/OSMF Portable Software Instance (z/OSMF Portable Software Instance (ServerPac)). When you use one of those offerings, use the jobs and documentation supplied with the offering. The offering will point you to specific sections of this program directory as needed.

1.1 IBM Z Storage Management Suite Description

The Z Storage Management Suite offering that you purchased includes a suite of products you can use to manage your System z environments. This offering simplifies ordering of a IBM product portfolio and provides a single product package to solve some of your needs. Rather than having to predetermine exactly which IBM technologies you want to use, this offering license allows you to use any of the included products.

New in Z Storage Management Suite 3.1.0:

- The IBM Z OMEGAMON AI for Storage offering delivers detailed IBM z Systems platform monitoring to help reduce the cost and risks for managing your business. This offering provides realtime and historical performance, and availability capabilities for your IBM z/OS operating system. It includes 2 new integrations. First, with OMEGAMON Data Provider which gives users the capability to stream data outside of the product. Second, with OMEGAMON AI Insights which provides AI/ML tooling to build data models for dashboarding and anomaly detection.
- IBM Z OMEGAMON AI for Storage 6.1.0 is the comprehensive monitor for z/OS I/O subsystem performance and storage availability. The product combines comprehensive storage performance monitoring with a flexible, easy-to-use browser interface that helps you clearly understand storage conditions and ensure optimal performance. Specifically, you use Z Storage Management Suite to manage the performance and availability of mainframe attached storage (including disk, tape devices, and virtual tape devices) and the data sets that are located on them. The product also features in-depth analysis of the following three key components of IBM storage software:
  - Data Facility Systems Managed Storage (DFSMS), which manages the service levels and priorities of data sets based on user-created storage goals.
  - Data Facility Hierarchical Storage Manager (DFSMShsm), which manages backup of data based on usage patterns.
  - Data Facility Removable Media Manager (DFSMSrmm), which manages tape volumes across multiple systems, including the data sets on the volumes.

  BM Z OMEGAMON AI for Storage delivers detailed IBM Z platform monitoring to help reduce the cost and risks for managing your business.
- IBM Discovery Library Adapter for z/OS 3.2.0 discovers z/OS resources and generates output XML files. The files, often referred to as Books, conform to the Discovery Library IdML XML schema and Common Data Model (CDM).
- Discovery coverage includes:
  - z/OS information e.g. PARMLIB active member contents, LNKLST, IODF data set etc.
  - zSeries machine information e.g. Serial Number, Processing Capacity and LPAR
  - SYSPLEX group information
  - IMS information e.g. transactions, programs and data bases
  - CICS information e.g. transactions, programs, files and System Initialiization on Table (SIT) details

  - DB/2 for z/OS information e.g. database, tables spaces
  - MQSeries for z/OS information e.g. ports and connections
  - WebSphere Application Server for z/OS information e.g. Cell, Node, configuration files
  - Address Space information e.g. Allocations
  - DASD volumes information
- IBM Z Storage Management Suite IZSAM ID 3.1.0, HSMS310 FMID, is a function that allows IBM Z Software Asset Management to differentiate between individual products and suites that are composed of a number of these same products.

This offering includes the following products:

- IBM Tivoli Advanced Catalog Management for z/OS offers powerful features to assist your organization in the day-to-day management of your ICF catalog environment including auditing, diagnosing, recovering, managing and maintaining access to your data assets, even in the event of unforeseen problems ranging from human errors to natural disasters.
- IBM Tivoli Advanced Allocation Management for z/OS provides functionality that attempts to prevent, and recover from, space-related abends. It also provides enhanced selection criteria capabilities to help provide even greater control over filtering and customization.
- IBM Tivoli Advanced Reporting and Management for DFSMShsm is a powerful tool that helps manage critical aspects of the Data Facility Storage Management Subsystem (DFSMS) hierarchical storage manager (HSM) environment.
- IBM Tivoli Advanced Audit for DFSMShsm can help storage administrators maintain healthy metadata environments and prevent temporary or permanent loss of data access to the DFSMShsm Control Data Sets. It provides extremely fast and accurate audits and diagnostics, as well as automated corrective actions to help resolve error conditions.
- IBM Cloud Tape Connector for z/OS enables clients to take advantage of the flexibility and economics of cloud storage for the z/OS mainframe environment. Cloud Tape Connector enables tape data to be easily copied to one of the popular cloud storage environments where it can be easily and quickly recalled, and where data status can be monitored. This product requires no complicated cloud storage gateway hardware devices to purchase, configure, and maintain - it directly connects with private, public, or hybrid cloud storage environments. Cloud Tape Connector provides reporting to give visibility into the location and status of data stored in the cloud, and as a means to regulate the amount of data copied to the cloud. z/OS storage administrators can now effectively use cloud storage as a low-cost archive for inactive data and for certain disaster-recovery scenarios where tape vaulting may not provide adequate recovery objectives and active hot sites are deemed too expensive.

1.2 Z Storage Management Suite FMIDs

Z Storage Management Suite consists of the following FMIDs:

HCKM260
HKRN260
HABR330
HKRJ330
HARH260
HKRH260
HAKD260
HKRG260
HKS3610
HKOB750
HKSB810
HIZD320
HRKD560
HKOA110
HSMS310
HCUZ210
HCUZ21V

2.0 Program Materials

An IBM program is identified by a program number. The program number for Z Storage Management Suite is 5698-BT1.

Basic Machine-Readable Materials are materials that are supplied under the base license and are required for the use of the product.

The program announcement material describes the features supported by Z Storage Management Suite. Ask your IBM representative for this information if you have not already received a copy.

2.1 Basic Machine-Readable Material

The distribution medium for this program is physical media or downloadable files. This program is in SMP/E RELFILE format and is installed by using SMP/E. See 6.0, “Installation Instructions” on page 38 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for Z Storage Management Suite in the *CBPDO Memo To Users Extension*.

2.2 Program Publications

The following sections identify the basic publications for Z Storage Management Suite which can be found at **IBM Products documentation https://www.ibm.com/docs/en/products** and by direct links below.

Figure 1 identifies the basic unlicensed publications for Z Storage Management Suite.

The unlicensed documentation for Z Storage Management Suite can be found on the IBM Documentation website at **https://www.ibm.com/docs/en/tasmsfz**

Figure 1 (Page 1 of 2). Basic Material: Unlicensed Publications
Publication Title
IBM Tivoli Advanced Catalog Management for z/OS documentation
Monitoring Agent Planning and Configuration Guide
Advanced Catalog Management for z/OS User's Guide
Monitoring Agent User's Guide
IBM Tivoli Advanced Allocation Management for z/OS documentation
User's Guide
Monitoring Agent User's Guide

Figure 1 (Page 2 of 2). Basic Material: Unlicensed Publications
Publication Title
Monitoring Agent Planning and Configuration Guide
IBM Tivoli Advanced Reporting and Management for DFSMShsm documentation
User's Guide
Monitoring Agent Planning and Configuration Guide
Monitoring Agent User's Guide
IBM Tivoli Advanced Audit for DFSMShsm documentation
Advanced Audit for DFSMShsm: User's Guide
Monitoring Agent Planning and Configuration Guide
Monitoring Agent User's Guide
IBM Z OMEGAMON AI for Stotrage z/OS documentation
Planning and Configuration Guide
User's Guide
Tuning Guide
Troubleshooting Guide
OMEGAMON II for SMS
IBM Cloud Tape Connector documentation
IBM Cloud Tape Conector for z/OS: User's Guide
IBM Tivoli Discovery Library Adapter for z/OS documentation
IBM Discovery Library Adapter for z/OS User's Guide and Reference
OMEGAMON and Tivoli Management Services on z/OS shared documentation
New in this Release
Overview
Getting started
Planning
Installing
Upgrading
Configuring
Scenarios and how-tos
Reference

Prior to installing Z Storage Management Suite, IBM recommends you review the OMEGAMON shared documentation **First time deployment guide (FTU installation and tasks)**, the Planning, Configuring, and Configuration Manager topics for general planning and configuration flow. This documentation focuses on the things you will need to know for a successful installation and configuration of the product components included in ths package.

The OMEGAMON shared documentation can be found at the IBM Documentation URL listed below:

https://www.ibm.com/docs/en/om-shared

Refer to the *Program Directory for IBM Tivoli Management Services on z/OS* (GI11-4105) for a complete documentation list and installation instructions for its product components.

2.3 Program Source Materials

No program source materials or viewable program listings are provided for Z Storage Management Suite.

2.4 Publications Useful During Installation

You might want to use the publications listed in Figure 2 during the installation of Z Storage Management Suite which can be found at **IBM Products documentation** https://www.ibm.com/docs/en/products.

Figure 2. Publications Useful During Installation

Publication
IBM SMP/E for z/OS User's Guide
IBM SMP/E for z/OS Reference
IBM SMP/E for z/OS Commands
IBM SMP/E for z/OS Messages, Codes, and Diagnosis

3.0 Program Support

This section describes the IBM support available for Z Storage Management Suite.

3.1 Program Services

Contact your IBM representative for specific information about available program services.

To report issues or defects related to the use of the IBM Z Distribution for Zowe™ functionality use the IBM Advanced Storage Management Suite for z/OS 5698-BT1 program number and or related component IDs.

3.2 Preventive Service Planning

Before you install Z Storage Management Suite, make sure that you review the PSP bucket information for IBM Z products document **https://www.ibm.com/support/pages/node/7127792**. It contains the latest information concerning the installation of IBM products, including the latest service recommendations and cross-product dependencies. This information was previously available in traditional PSP buckets, which are no longer published for IBM Z products.

For support, access the Software Support Website at **https://www.ibm.com/mysupport/**

3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 3 identifies the component IDs (COMPID) for Z Storage Management Suite.

Figure 3. Component IDs

FMID	COMPID	Component Name	Release
HCKM260	5698A9500	Advanced Catalog Management base	260
HKRN260	5698A9501	Advanced Catalog Management monitoring agent	260
HABR330	5698A3000	Advanced Allocation Management Base	330
HKRJ330	5698A3001	Advanced Allocation Management Agent	330
HARH260	5698A9800	Advanced Reporting and Management for DFSMShsm base	260
HKRH260	5698A9801	Advanced Reporting and Management for DFSMShsm monitoring agent	260
HAKD260	5698A9600	Advanced Audit for DFSMShsm base	260
HKRG260	5698A9601	Advanced Audit for DFSMShsm monitoring agent	260
HKS3610	5608A1000	OMEGAMON AI for Storage	610
HKOB750	5608A41OB	OMNIMON Base	750
HKSB810	5608A41SP	Shared Probes	810
HIZD320	5698A4700	IBM Discovery Library Adapter for z/OS	320
HRKD560	5698B6604	OMEGAMON Integration Monitor DE	560
HKOA110	5698B6605	OMEGAMON Data Provider	110
HSMS310	5698AAJ00	IBM Z Storage Management Suite IZSAM ID	310
HCUZ210	5698ABM00	Cloud Tape Connector	210
HCUZ21V	5698ABM00	Virtual Tape Emulation	210

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of Z Storage Management Suite. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

The following APAR fixes against the previous release of components included with Z Storage Management Suite have been incorporated into this release. They are listed by FMID.

- FMID HCKM260

  PI05124 PI06233 PI06294 PI07673 PI08411 PI08774 PI09098 PI09244
  PI09366 PI09570 PI09572 PI10313 PI10407 PI10549 PI10607 PI11173
  PI11380 PI11501 PI11505 PI11964 PI11970 PI12396 PI13117 PI13628
  PI13843 PI14344 PI14450 PI14628 PI14741 PI15190 PI15656 PI15748
  PI15751 PI16045 PI16277 PI16454 PI16507 PI16510 PI16950 PI17451
  PI18761 PI19824 PM92933 PM92934 PM92985 PM92990 PM92992 PM92999
  PM93000 PM93048 PM93088 PM93091 PM93100 PM93103 PM93110 PM93112
  PM93114 PM93120 PM93212 PM93234 PM93244 PM93653 PM93760 PM93885
  PM94669 PM94677 PM94710 PM95170 PM95555 PM95801 PM95884 PM95945
  PM96165 PM96474 PM97310 PM97476 PM97719 PM97918 PM98416 PM98426
  PM98623 PM98659 PM99120 PM99391 PM99452

- FMID HKRN260

  PI05972 PI15642

- FMID HABR330

  PM45390 PM50855 PM51117 PM51118 PM52088 PM52701 PM60410 PM60413
  PM60842 PM63551 PM64797 PM68021 PM71272 PM71911 PM72515 PM73330
  PM73854 PM74367 PM74553 PM74921 PM75127 PM77005 PM77386 PM77905
  PM78958 PM79696 PM80006 PM82721 PM83345 PM85911

- FMID HARH260

  PI12306 PI12373 PI12387 PI12392 PI13005 PI16414 PI16427 PI16428
  PI16429 PI16430 PI18342 PI19428 PI23710 PI23715 PI24196 PI30079
  PI30080 PI32046 PI32047 PI35279 PI35293 PI35857 PI38952 PI38954
  PI41102 PI43510 PI43513 PI43518 PI43519 PI43520 PI51328 PM82428
  PM94500 PM98392 PM98398 PM98415 PM98433

- FMID HKRH260

  PI05924 PI16572 PI28033 PM84336

- FMID HAKD260

  PI06207 PI06209 PI06217 PI06218 PI06382 PI08494 PI12000 PI18053
  PI18075 PI18084 PI18086 PI18090 PI18160 PI18204 PI18206 PI24197
  PI26001 PI26002 PI26923 PI29775 PI29783 PI32030 PI32109 PI37465
  PI37472 PI37476 PI43602 PM96931 PM96932

- FMID HKRG260

  PI06030 PI16573 PI20924

- FMID HKS3610

  OA56089 OA56376 OA56368 OA56156 OA56536 OA56434 OA56440 OA56276
  OA56496 OA56920 OA57135 OA57486 OA57799 OA57903 OA58044 OA58180
  OA58181 OA58327 OA58413 OA58375 OA58468 OA58669 OA58797 OA59018
  OA59067 OA59103 OA59311 OA59526 OA59614 OA59901 OA60031 OA60158
  OA60363 OA60448 OA60192 OA60974 OA61075 OA61197 OA61518 OA61611
  OA61770 OA62263 OA62848 OA63258 OA63342 OA63505 OA63573 OA63667
  OA63862 OA64032 OA64284 OA64433 OA63400 OA64721 OA65094 OA65270
  OA65418 OA65501 OA65812 OA65962 OA66476

- FMID HKOB750

  OA45606 OA45816 OA45821 OA45846 OA46014 OA46177 OA46354 OA46704
  OA46857 OA46860 OA46861 OA46867 OA46911 OA47142 OA47263 OA47617
  OA48029 OA48198 OA48295 OA48532 OA48662 OA48739 OA48917 OA49057
  OA49106 OA49278 OA49686 OA49902 OA49927 OA49966 OA50243 OA50263
  OA50563 OA50894 OA51033 OA51043 OA51357 OA51417 OA51556 OA51564
  OA51646 OA51815 OA51908 OA52016 OA52082 OA52314 OA52323 OA52442

- FMID HKSB810

  OA57882 OA58126 OA58209 OA58425 OA58469 OA58798 OA58783 OA59704
  OA60191 OA61921 OA62273 OA62056 OA64203 OA65093 OA65813 OA66006

- FMID HCUZ210

  PH00398 PI69338 PI73987 PI75319 PI79160 PI84486 PI87393 PI91260
  PI93475 PI96441

4.2 Service Level Information

No PTFs against this release of Z Storage Management Suite have been incorporated into the product package.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating Z Storage Management Suite. The following terminology is used:

- *Driving system*: the system on which SMP/E is executed to install the program.

  The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.

- *Target system*: the system on which the program is configured and run.

  The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.
- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can assess these impacts without disrupting your production system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install Z Storage Management Suite.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements

Figure 4. Driving System Software Requirements

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	2.5 or higher	N/A	No

Notes:

1. SMP/E is a requirement for installation and is an element of z/OS.
2. Installation might require migration to new z/OS releases to be service supported. See **https://www.ibm.com/support/lifecycle/**.

The OMEGAMON Data Connect component of OMEGAMON Data Provider component is installed into a file system.

Before installing this component, you must ensure that the target system file system data sets are available for processing on the driving system. OMVS must be active on the driving system and the target system file data sets must be mounted on the driving system.

zFS must be active on the driving system. Information on activating and using zFS can be found in z/OS Distributed File Service zSeries File System Administration, SC24-5989.

5.2 Target System Requirements

This section describes the environment of the target system required to install and use Z Storage Management Suite.

Z Storage Management Suite installs in the z/OS (Z038) SREL.

5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

5.2.2 Programming Requirements

5.2.2.1 Installation Requisites

Installation requisites identify products that are required and *must* be present on the system or products that are not required but *should* be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product. These products are specified as PREs or REQs.

Figure 5. Target System Mandatory Installation Requisites

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5698-A79	IBM Tivoli Management Services on z/OS	6.3.3	N/A	No

Note: Installation might require migration to new releases to obtain support. See **https://www.ibm.com/support/lifecycle/**

Conditional installation requisites identify products that are *not* required for successful installation of this product but can resolve such things as certain warning messages at installation time. These products are specified as IF REQs.

Z Storage Management Suite has no conditional installation requisites.

5.2.2.2 Operational Requisites

Operational requisites are products that are required and *must* be present on the system or products that are not required but *should* be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions.

Figure 6. Target System Mandatory Operational Requisites

Program Number	Product Name and Minimum VRM/Service Level
5650-ZOS	z/OS 2.5 or higher
5698-A79	IBM Tivoli Management Services on z/OS 6.3.3 or higher

Note: Installation might require migration to new releases to obtain support. See **https://www.ibm.com/support/lifecycle/**

Conditional operational requisites identify products that are *not* required for this product to operate its basic functions but are required at run time for this product to operate specific functions. These products are specified as IF REQs.

Figure 7. Target System Conditional Operational Requisites

Program Number	Product Name and Minimum VRM/Service Level	Function
One or more of the following:		
5698-ZWG	IBM Z Distribution for Zowe 2.2 or higher	

Notes:

1. Zowe 2.16 or higher is recommended
2. Zowe is required if you want to use the OMEGAMON AI for Storage integration with Zowe. Integrated with Zowe, OMEGAMON AI for Storage offers extended functions.
3. Installation might require migration to new releases to obtain support. See **https://www.ibm.com/support/lifecycle/**

5.2.2.3 Toleration/Coexistence Requisites

Toleration/coexistence requisites identify products that must be present on sharing systems. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD environment at different time intervals.

Z Storage Management Suite has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites

Negative requisites identify products that must *not* be installed on the same system as this product.

Z Storage Management Suite has no negative requisites.

5.2.3 DASD Storage Requirements

Z Storage Management Suite libraries can reside on all supported DASD types.

Figure 8 lists the total space that is required for each type of library.

Figure 8. Total DASD Space Required by Z Storage Management Suite

Library Type	Total Space Required in 3390 Trks
Target	5229
Distribution	7212
File System(s)	2290

Notes:

1. If you are installing into an existing environment that has the data sets in Figure 11 on page 19 and Figure 13 on page 22 already allocated, ensure sufficient disk space and directory blocks are available to support the requirement listed. This might require you to reallocate some data sets to avoid x37 abends.
2. For non-RECFM U data sets, IBM recommends using system-determined block sizes for efficient DASD utilization. For RECFM U data sets, IBM recommends using a block size of 32760, which is most efficient from the performance and DASD utilization perspective.
3. Abbreviations used for data set types are shown as follows.

   U Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.

   S Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

   E Existing shared data set, used by this product and other products. This data set is *not* allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

   If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old release and reclaim the space that was used by the old release and any service that had been installed. You can determine whether these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information about the names and sizes of the required data sets, see 6.1.6, “Allocate SMP/E Target and Distribution Libraries” on page 44.

4. Abbreviations used for the file system path type are as follows.

   N New path, created by this product.
   X Path created by this product, but might already exist from a previous release.
   P Previously existing path, created by another product.

5. All target and distribution libraries listed have the following attributes:

   - The default name of the data set can not be changed.
   - The default block size of the data set can be changed.
   - The data set can not be merged with another data set that has equivalent characteristics.
   - The data set can be either a PDS or a PDSE, with some exceptions. If the value in the "ORG" column specifies "PDS", the data set must be a PDS. If the value in "DIR Blks" column specifies "N/A", the data set must be a PDSE.

6. All target libraries listed have the following attributes:

   - These data sets can be SMS-managed, but they are not required to be SMS-managed.
   - These data sets are not required to reside on the IPL volume.
   - The values in the "Member Type" column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.

7. All target libraries that are listed and contain load modules have the following attributes:

   - These data sets can not be in the LPA, with some exceptions. If the data set should be placed in the LPA, see the Special Considerations section below.
   - These data sets can be in the LNKLST except for TKANMODR and TKANMODS.
   - These data sets are not required to be APF-authorized, with some exceptions. If the data set must be APF-authorized, see the Special Considerations section below.

If you are installing into an existing environment, ensure the values used for the SMP/E work data sets reflect the minimum values shown in Figure 9 on page 19. Check the corresponding DDDEF entries in all zones because use of values lower than these can result in failures in the installation process. Refer to the SMP/E manuals for instructions on updating DDDEF entries.

Figure 9. Storage Requirements for SMP/E Work Data Sets

Library DDNAME	TYPE	ORG	RECFM	LRECL	Prim No. of 3390 Trks	Sec No. of 3390 Trks	No. of DIR Blks
SMPWRK1	E	PDS	FB	80	150	150	220
SMPWRK2	E	PDS	FB	80	150	150	220
SMPWRK3	E	PDS	FB	80	300	600	1320
SMPWRK4	E	PDS	FB	80	150	150	220
SMPWRK6	E	PDS	FB	80	300	1500	660
SYSUT1	E	SEQ	--	--	75	75	0
SYSUT2	E	SEQ	--	--	75	75	0
SYSUT3	E	SEQ	--	--	75	75	0
SYSUT4	E	SEQ	--	--	75	75	0

If you are installing into an existing environment, ensure the current SMP/E support dataset allocations reflect the minimum values shown in Figure 10. Check the space and directory block allocation and reallocate the data sets, if necessary.

Figure 10. Storage Requirements for SMP/E Data Sets

Library DDNAME	TYPE	ORG	RECFM	LRECL	Prim No. of 3390 Trks	Sec No. of 3390 Trks	No. of DIR Blks
SMPLTS	E	PDSE	U	0	15	150	N/A
SMPMTS	E	PDS	FB	80	15	150	220
SMPPTS	E	PDSE	FB	80	300	1500	N/A
SMPSCDS	E	PDS	FB	80	15	150	220
SMPSTS	E	PDS	FB	80	15	150	220

Figure 11 and Figure 13 on page 22 describe the target and distribution libraries and file system paths that will be allocated by this product's install jobs or that will be required for installation. The space requirements reflect what is specified in the allocation job or the space that this product will require in existing libraries. Additional tables are provided to show the specific space required for libraries that are used by each FMID. See 5.2.4, “DASD Storage Requirements by FMID” on page 25 for more information.

The storage requirements of Z Storage Management Suite must be added to the storage required by other programs having data in the same library or path.

Figure 11 (Page 1 of 3). Storage Requirements for Z Storage Management Suite Target Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SAJMLOAD	LMOD	Any	U	PDS	U	0	2	44
SAJMPKGI	Data	Any	U	PDS	FB	80	2	44
SAKDCLST	CLIST	Any	U	PDS	FB	80	30	132
SAKDCNTL	Data	Any	U	PDS	FB	80	60	264
SAKDJCL	Data	Any	U	PDS	FB	80	30	132
SAKDLOAD	LMOD	Any	U	PDS	U	0	135	176
SAKDMSGS	Data	Any	U	PDS	FB	80	45	132
SAKDPARM	Parm	Any	U	PDS	FB	80	30	132
SAKDPENU	Panel	Any	U	PDS	FB	80	30	132
SAKDPKGI	Data	Any	U	PDS	FB	80	30	132
SARHCLST	CLIST	Any	U	PDS	FB	80	75	132
SARHLOAD	LMOD	Any	U	PDSE	U	0	225	N/A
SARHMSGS	Message	Any	U	PDS	FB	80	30	132
SARHPARM	Parm	Any	U	PDS	FB	80	30	132
SARHPENU	Panel	Any	U	PDS	FB	80	90	132
SARHPKGI	Data	Any	U	PDS	FB	80	30	132
SARHSAMP	Sample	Any	U	PDS	FB	80	45	132
SCKMCNTL	Data	Any	U	PDS	FB	80	30	132
SCKMLOAD	LMOD	Any	U	PDSE	U	0	285	N/A
SCKMMENU	Message	Any	U	PDS	FB	80	30	132
SCKMMSGS	Data	Any	U	PDS	FB	80	90	132
SCKMPARM	Data	Any	U	PDS	FB	80	30	132
SCKMPENU	Panel	Any	U	PDS	FB	80	150	352
SCKMPKGI	Data	Any	U	PDS	FB	80	30	132
SCUZLOAD	LMOD	Any	U	PDSE	U	0	90	N/A
SCUZMENU	MESSAGE	Any	U	PDS	FB	80	4	44
SCUZPENU	PANEL	Any	U	PDS	FB	80	65	176

Figure 11 (Page 2 of 3). Storage Requirements for Z Storage Management Suite Target Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SCUZPKGI	DATA	Any	U	PDS	FB	80	6	44
SCUZSAMP	SAMPLE	Any	U	PDS	FB	80	8	44
SCUZSENU	DATA	Any	U	PDS	FB	80	2	44
SGLOLOAD	LMOD	Any	U	PDS	U	0	45	132
SGLOMENU	Message	Any	U	PDS	FB	80	30	132
SGLOPENU	Panel	Any	U	PDS	FB	80	30	132
SGLOPKGI	Data	Any	U	PDS	FB	80	30	132
SGLOSAMP	Sample	Any	U	PDS	FB	80	30	132
SGLOSLIB	Skel	Any	U	PDS	FB	80	30	132
SHVTLOAD	LMOD	Any	U	PDS	U	0	50	44
SHVTMAC	Macro	Any	U	PDS	FB	80	2	44
SHVTMSG	CLIST	Any	U	PDS	FB	80	3	44
SHVTPKGI	Data	Any	U	PDS	FB	80	5	44
SHVTPNL	Panel	Any	U	PDS	FB	80	73	N/A
SHVTSAMP	SAMPLE	Any	U	PDS	FB	80	13	44
SIZDEXEC	CLIST	Any	U	PDS	FB	80	30	132
SIZDINST	JCL	Any	U	PDS	FB	80	30	132
SIZDLOAD	Samples	Any	U	PDS	U	0	105	132
SIZDMESG	CLIST	Any	U	PDS	FB	80	30	132
SIZDSAMP	Samples	Any	U	PDS	FB	80	45	132
TKANCUS	CLIST	Any	E	PDS	FB	80	108	81
TKANDATR	Data	Any	S	PDS	FB	160	75	132
TKANDATV	Data	Any	E	PDS	VB	6160	859	15
TKANEXEC	EXEC	Any	S	PDS	VB	255	60	132
TKANHENU	Help	Any	E	PDS	FB	80	136	93
TKANISP	CLIST	Any	S	PDS	FB	80	30	132
TKANMAC	Macro	Any	E	PDS	FB	80	8	3
TKANMOD	LMOD	Any	E	PDS	U	0	450	44
TKANMODL	LMOD	Any	E	PDS	U	0	400	61

Figure 11 (Page 3 of 3). Storage Requirements for Z Storage Management Suite Target Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANMODP	LMOD	Any	E	PDSE	U	0	345	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	75	58
TKANOSRC	Data	Any	S	PDS	VB	255	30	132
TKANPAR	Parm	Any	E	PDS	FB	80	19	10
TKANPENU	Panel	Any	E	PDS	FB	80	6	5
TKANPKGI	Data	Any	E	PDS	FB	80	52	14
TKANSAM	Sample	Any	E	PDS	FB	80	16	16
TKANSQL	SQL	Any	E	PDS	FB	80	25	57
TKANWENU	Panel	Any	S	PDS	FB	80	150	220
TKOBDATF	Data	Any	S	PDS	FB	80	30	132
TKOBHELP	Help	Any	S	PDS	FB	80	45	176

Figure 12. Z Storage Management Suite File System Paths

DDNAME	TYPE	Path Name
TKAYHFS	N	/usr/lpp/omdp/bin/IBM

Figure 13 (Page 1 of 4). Storage Requirements for Z Storage Management Suite Distribution Libraries

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
AAJMLOAD	U	PDS	U	0	2	44
AAJMPKGI	U	PDS	FB	80	2	44
AAKDCLST	U	PDS	FB	80	30	132
AAKDCNTL	U	PDS	FB	80	60	264
AAKDJCL	U	PDS	FB	80	30	132
AAKDLOAD	U	PDS	U	0	135	176
AAKDMSGS	U	PDS	FB	80	45	132

Figure 13 (Page 2 of 4). Storage Requirements for Z Storage Management Suite Distribution Libraries

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
AAKDPARM	U	PDS	FB	80	30	132
AAKDPENU	U	PDS	FB	80	30	132
AAKDPKGI	U	PDS	FB	80	30	132
AARHCLST	U	PDS	FB	80	75	132
AARHLOAD	U	PDSE	U	0	225	N/A
AARHMSGS	U	PDS	FB	80	30	132
AARHPARM	U	PDS	FB	80	30	132
AARHPENU	U	PDS	FB	80	90	132
AARHPKGI	U	PDS	FB	80	30	132
AARHSAMP	U	PDS	FB	80	45	132
ACKMCNTL	U	PDS	FB	80	30	132
ACKMLOAD	U	PDSE	U	0	285	N/A
ACKMMENU	U	PDS	FB	80	30	132
ACKMMSGS	U	PDS	FB	80	90	132
ACKMPARM	U	PDS	FB	80	30	132
ACKMPENU	U	PDS	FB	80	150	352
ACKMPKGI	U	PDS	FB	80	30	132
ACUZLOAD	U	PDSE	U	0	90	N/A
ACUZMENU	U	PDS	FB	80	4	44
ACUZPENU	U	PDS	FB	80	65	176
ACUZPKGI	U	PDS	FB	80	6	44
ACUZSAMP	U	PDS	FB	80	8	44
ACUZSENU	U	PDS	FB	80	2	44
AGLOLOAD	U	PDS	U	0	45	132
AGLOMENU	U	PDS	FB	80	30	132
AGLOPENU	U	PDS	FB	80	30	132
AGLOPKGI	U	PDS	FB	80	30	132
AGLOSAMP	U	PDS	FB	80	30	132
AGLOSLIB	U	PDS	FB	80	30	132

Figure 13 (Page 3 of 4). Storage Requirements for Z Storage Management Suite Distribution Libraries

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
AHVTLOAD	U	PDS	U	0	50	N/A
AHVTMAC	U	PDS	FB	80	2	44
AHVTMSG	U	PDS	FB	80	3	44
AHVTPKGI	U	PDS	FB	80	5	44
AHVTPNL	U	PDS	FB	80	73	N/A
AHVTSAMP	U	PDS	FB	80	13	44
AIZDEXEC	U	PDS	FB	80	30	132
AIZDINST	U	PDS	FB	80	30	132
AIZDLOAD	U	PDS	U	0	105	132
AIZDMESG	U	PDS	FB	80	30	132
AIZDSAMP	U	PDS	FB	80	45	132
DKANCUS	E	PDS	FB	80	108	81
DKANDATR	S	PDS	FB	160	75	132
DKANDATV	E	PDS	VB	6160	859	15
DKANEXEC	S	PDS	VB	255	60	132
DKANHENU	E	PDS	FB	80	136	93
DKANISP	S	PDS	FB	80	30	132
DKANMAC	E	PDS	FB	80	8	3
DKANMOD	E	PDS	U	0	244	136
DKANMODL	E	PDS	U	0	607	63
DKANMODP	E	PDSE	U	0	105	N/A
DKANMODS	E	PDS	U	0	62	5
DKANOSRC	S	PDS	VB	255	30	132
DKANPAR	E	PDS	FB	80	19	10
DKANPENU	E	PDS	FB	80	6	5
DKANPKGI	E	PDS	FB	80	52	14
DKANSAM	E	PDS	FB	80	16	16
DKANSQL	E	PDS	FB	80	25	57
DKANWENU	S	PDS	FB	80	150	220

Figure 13 (Page 4 of 4). Storage Requirements for Z Storage Management Suite Distribution Libraries

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
DKAYHFS	U	PDSE	VB	32740	2295	N/A
DKOBDATF	S	PDS	FB	80	30	132
DKOBHELP	S	PDS	FB	80	45	176

5.2.4 DASD Storage Requirements by FMID

The tables in this section can help determine the specific space required for components not already installed in an existing environment. There is a table for each FMID included with the product.

Figure 14. Storage Requirements for HCKM260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SCKMCNTL	Data	Any	U	PDS	FB	80	8	10
SCKMLOAD	LMOD	Any	U	PDSE	U	0	269	N/A
SCKMMENU	Message	Any	U	PDS	FB	80	3	4
SCKMMSGS	Data	Any	U	PDS	FB	80	65	22
SCKMPARM	Data	Any	U	PDS	FB	80	11	5
SCKMPENU	Panel	Any	U	PDS	FB	80	129	222
SCKMPKGI	Data	Any	U	PDS	FB	80	10	2
ACKMCNTL			U	PDS	FB	80	8	10
ACKMLOAD			U	PDSE	U	0	269	N/A
ACKMMENU			U	PDS	FB	80	3	4
ACKMMSGS			U	PDS	FB	80	65	22
ACKMPARM			U	PDS	FB	80	11	5
ACKMPENU			U	PDS	FB	80	129	222
ACKMPKGI			U	PDS	FB	80	10	2

Figure 15. Storage Requirements for HKRN260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	11	7
TKANDATV	Data	Any	E	PDS	VB	6160	13	2
TKANMOD	LMOD	Any	E	PDS	U	0	3	1
TKANMODL	LMOD	Any	E	PDS	U	0	15	1
TKANPAR	Parm	Any	E	PDS	FB	80	2	2
TKANPKGI	Data	Any	E	PDS	FB	80	4	2
DKANCUS			E	PDS	FB	80	11	7
DKANDATV			E	PDS	VB	6160	13	2
DKANMOD			E	PDS	U	0	3	1
DKANMODL			E	PDS	U	0	15	1
DKANPAR			E	PDS	FB	80	2	2
DKANPKGI			E	PDS	FB	80	4	2

Figure 16. Storage Requirements for HABR330 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SGLOLOAD	LMOD	Any	U	PDS	U	0	20	6
SGLOMENU	Message	Any	U	PDS	FB	80	2	2
SGLOPENU	Panel	Any	U	PDS	FB	80	9	20
SGLOPKGI	Data	Any	U	PDS	FB	80	4	2
SGLOSAMP	Sample	Any	U	PDS	FB	80	6	3
SGLOSLIB	Skel	Any	U	PDS	FB	80	2	1
AGLOLOAD			U	PDS	U	0	20	6
AGLOMENU			U	PDS	FB	80	2	2
AGLOPENU			U	PDS	FB	80	9	20
AGLOPKGI			U	PDS	FB	80	4	2
AGLOSAMP			U	PDS	FB	80	6	3
AGLOSLIB			U	PDS	FB	80	2	1

Figure 17. Storage Requirements for HKRJ330 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	11	7
TKANDATV	Data	Any	E	PDS	VB	6160	12	2
TKANMOD	LMOD	Any	E	PDS	U	0	1	1
TKANMODL	LMOD	Any	E	PDS	U	0	13	1
TKANPAR	Parm	Any	E	PDS	FB	80	2	1
TKANPKGI	Data	Any	E	PDS	FB	80	4	2
DKANCUS			E	PDS	FB	80	11	7
DKANDATV			E	PDS	VB	6160	12	2
DKANMOD			E	PDS	U	0	1	1
DKANMODL			E	PDS	U	0	13	1
DKANPAR			E	PDS	FB	80	2	1
DKANPKGI			E	PDS	FB	80	4	2

Figure 18 (Page 1 of 2). Storage Requirements for HARH260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SARHCLST	CLIST	Any	U	PDS	FB	80	46	38
SARHLOAD	LMOD	Any	U	PDSE	U	0	200	N/A
SARHMSGS	Message	Any	U	PDS	FB	80	12	20
SARHPARM	Parm	Any	U	PDS	FB	80	2	2
SARHPENU	Panel	Any	U	PDS	FB	80	63	44
SARHPKGI	Data	Any	U	PDS	FB	80	14	2
SARHSAMP	Sample	Any	U	PDS	FB	80	19	29
AARHCLST			U	PDS	FB	80	46	38
AARHLOAD			U	PDSE	U	0	200	N/A
AARHMSGS			U	PDS	FB	80	12	20
AARHPARM			U	PDS	FB	80	2	2
AARHPENU			U	PDS	FB	80	63	44

Figure 18 (Page 2 of 2). Storage Requirements for HARH260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
AARHPKGI			U	PDS	FB	80	14	2
AARHSAMP			U	PDS	FB	80	19	29

Figure 19. Storage Requirements for HKRH260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	12	7
TKANDATV	Data	Any	E	PDS	VB	6160	89	2
TKANMOD	LMOD	Any	E	PDS	U	0	5	2
TKANMODL	LMOD	Any	E	PDS	U	0	46	1
TKANPAR	Parm	Any	E	PDS	FB	80	4	1
TKANPKGI	Data	Any	E	PDS	FB	80	3	2
DKANCUS			E	PDS	FB	80	12	7
DKANDATV			E	PDS	VB	6160	89	2
DKANMOD			E	PDS	U	0	5	2
DKANMODL			E	PDS	U	0	46	1
DKANPAR			E	PDS	FB	80	4	1
DKANPKGI			E	PDS	FB	80	3	2

Figure 20 (Page 1 of 2). Storage Requirements for HAKD260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SAKDCLST	CLIST	Any	U	PDS	FB	80	7	5
SAKDCNTL	Data	Any	U	PDS	FB	80	36	138
SAKDJCL	Data	Any	U	PDS	FB	80	14	6
SAKDLOAD	LMOD	Any	U	PDS	U	0	113	74

Figure 20 (Page 2 of 2). Storage Requirements for HAKD260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SAKDMSGS	Data	Any	U	PDS	FB	80	17	14
SAKDPARM	Parm	Any	U	PDS	FB	80	3	2
SAKDPENU	Panel	Any	U	PDS	FB	80	4	3
SAKDPKGI	Data	Any	U	PDS	FB	80	13	2
AAKDCLST			U	PDS	FB	80	7	5
AAKDCNTL			U	PDS	FB	80	36	138
AAKDJCL			U	PDS	FB	80	14	6
AAKDLOAD			U	PDS	U	0	113	74
AAKDMSGS			U	PDS	FB	80	17	14
AAKDPARM			U	PDS	FB	80	3	2
AAKDPENU			U	PDS	FB	80	4	3
AAKDPKGI			U	PDS	FB	80	13	2

Figure 21. Storage Requirements for HKRG260 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	12	8
TKANDATV	Data	Any	E	PDS	VB	6160	28	2
TKANMOD	LMOD	Any	E	PDS	U	0	8	1
TKANMODL	LMOD	Any	E	PDS	U	0	36	1
TKANPAR	Parm	Any	E	PDS	FB	80	3	1
TKANPKGI	Data	Any	E	PDS	FB	80	3	2
DKANCUS			E	PDS	FB	80	12	8
DKANDATV			E	PDS	VB	6160	28	2
DKANMOD			E	PDS	U	0	8	1
DKANMODL			E	PDS	U	0	36	1
DKANPAR			E	PDS	FB	80	3	1
DKANPKGI			E	PDS	FB	80	3	2

Figure 22 (Page 1 of 2). Storage Requirements for HKS3610 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	49	37
TKANDATR	Data	Any	S	PDS	FB	160	54	43
TKANDATV	Data	Any	E	PDS	VB	6160	594	4
TKANEXEC	EXEC	Any	S	PDS	VB	255	30	30
TKANHENU	Help	Any	E	PDS	FB	80	128	82
TKANMOD	LMOD	Any	E	PDS	U	0	110	35
TKANMODL	LMOD	Any	E	PDS	U	0	380	46
TKANMODP	LMOD	Any	E	PDS	U	0	63	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	1	2
TKANOSRC	Data	Any	S	PDS	VB	255	1	3
TKANPAR	Parm	Any	E	PDS	FB	80	8	3
TKANPENU	Panel	Any	E	PDS	FB	80	6	5
TKANPKGI	Data	Any	E	PDS	FB	80	25	3
TKANSAM	Sample	Any	E	PDS	FB	80	13	13
TKANSQL	SQL	Any	E	PDS	FB	80	25	57
TKANWENU	Panel	Any	S	PDS	FB	80	88	75
DKANCUS			E	PDS	FB	80	49	37
DKANDATR			S	PDS	FB	160	54	43
DKANDATV			E	PDS	VB	6160	594	4
DKANEXEC			S	PDS	VB	255	30	30
DKANHENU			E	PDS	FB	80	128	82
DKANMOD			E	PDS	U	0	114	36
DKANMODL			E	PDS	U	0	452	47
DKANMODP			E	PDS	U	0	63	N/A
DKANMODS			E	PDS	U	0	1	2
DKANOSRC			S	PDS	VB	255	1	3
DKANPAR			E	PDS	FB	80	8	3
DKANPENU			E	PDS	FB	80	6	5
DKANPKGI			E	PDS	FB	80	25	3

Figure 22 (Page 2 of 2). Storage Requirements for HKS3610 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
DKANSAM			E	PDS	FB	80	13	13
DKANSQL			E	PDS	FB	80	25	57
DKANWENU			S	PDS	FB	80	88	73

Figure 23 (Page 1 of 2). Storage Requirements for HKOB750 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	13	15
TKANDATV	Data	Any	E	PDS	VB	6160	1	2
TKANEXEC	EXEC	Any	S	PDS	VB	255	21	15
TKANHENU	Help	Any	E	PDS	FB	80	12	13
TKANISP	CLIST	Any	S	PDS	FB	80	1	2
TKANMAC	Macro	Any	E	PDS	FB	80	8	3
TKANMOD	LMOD	Any	E	PDS	U	0	121	19
TKANMODL	LMOD	Any	E	PDS	U	0	12	2
TKANMODP	LMOD	Any	E	PDSE	U	0	330	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	74	56
TKANOSRC	Data	Any	S	PDS	VB	255	5	5
TKANPAR	Parm	Any	E	PDS	FB	80	1	2
TKANPKGI	Data	Any	E	PDS	FB	80	15	2
TKANSAM	Sample	Any	E	PDS	FB	80	3	3
TKANWENU	Panel	Any	S	PDS	FB	80	74	67
TKOBDATF	Data	Any	S	PDS	FB	80	2	2
TKOBHELP	Help	Any	S	PDS	FB	80	17	66
DKANCUS			E	PDS	FB	80	13	15
DKANDATV			E	PDS	VB	6160	1	2
DKANEXEC			S	PDS	VB	255	21	15
DKANHENU			E	PDS	FB	80	12	13

Figure 23 (Page 2 of 2). Storage Requirements for HKOB750 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
DKANISP			S	PDS	FB	80	1	2
DKANMAC			E	PDS	FB	80	8	3
DKANMOD			E	PDS	U	0	125	90
DKANMODL			E	PDS	U	0	12	2
DKANMODP			E	PDSE	U	0	81	N/A
DKANMODS			E	PDS	U	0	61	3
DKANOSRC			S	PDS	VB	255	5	5
DKANPAR			E	PDS	FB	80	1	2
DKANPKGI			E	PDS	FB	80	15	2
DKANSAM			E	PDS	FB	80	3	3
DKANWENU			S	PDS	FB	80	74	67
DKOBDATF			S	PDS	FB	80	2	2
DKOBHELP			S	PDS	FB	80	17	66

Figure 24. Storage Requirements for HKSB810 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANDATV	Data	Any	E	PDS	VB	6160	6	2
TKANMOD	LMOD	Any	E	PDS	U	0	6	5
TKANMODL	LMOD	Any	E	PDS	U	0	33	8
TKANPKGI	Data	Any	E	PDS	FB	80	2	2
DKANDATV			E	PDS	VB	6160	6	2
DKANMOD			E	PDS	U	0	6	6
DKANMODL			E	PDS	U	0	33	8
DKANPKGI			E	PDS	FB	80	2	2

Figure 25. Storage Requirements for HIZD320 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SIZDEXEC	CLIST	Any	U	PDS	FB	80	6	1
SIZDINST	JCL	Any	U	PDS	FB	80	2	1
SIZDLOAD	Samples	Any	U	PDS	U	0	80	10
SIZDMESG	CLIST	Any	U	PDS	FB	80	2	1
SIZDSAMP	Samples	Any	U	PDS	FB	80	4	3
AIZDEXEC			U	PDS	FB	80	6	1
AIZDINST			U	PDS	FB	80	2	1
AIZDLOAD			U	PDS	U	0	80	10
AIZDMESG			U	PDS	FB	80	2	1
AIZDSAMP			U	PDS	FB	80	4	3

Figure 26. Storage Requirements for HRKD560 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCUS	CLIST	Any	E	PDS	FB	80	1	2
TKANMOD	LMOD	Any	E	PDS	U	0	1	2
TKANPKGI	Data	Any	E	PDS	FB	80	1	2
DKANCUS			E	PDS	FB	80	1	2
DKANMOD			E	PDS	U	0	1	2
DKANPKGI			E	PDS	FB	80	1	2

Figure 27 (Page 1 of 2). Storage Requirements for HKOA110 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANMODP	LMOD	Any	E	PDSE	U	0	350	N/A

Figure 27 (Page 2 of 2). Storage Requirements for HKOA110 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANSAM	Sample	Any	E	PDS	FB	80	3	2
DKANMODP			E	PDSE	U	0	350	N/A
DKANSAM			E	PDS	FB	80	3	2
DKAYHFS			U	PDSE	VB	32740	2275	N/A

Figure 28. Storage Requirements for HSMS310 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SAJMLOAD	LMOD	Any	U	PDS	U	0	2	44
SAJMPKGI	Data	Any	U	PDS	FB	80	2	44
AAJMLOAD			U	PDS	U	0	2	44
AAJMPKGI			U	PDS	FB	80	2	44

Figure 29 (Page 1 of 2). Storage Requirements for HCUZ210 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SCUZLOAD	LMOD	Any	U	PDSE	U	0	79	N/A
SCUZMENU	Message	Any	U	PDS	FB	80	4	6
SCUZPENU	Panel	Any	U	PDS	FB	80	57	98
SCUZPKGI	DATA	Any	U	PDS	FB	80	6	2
SCUZSAMP	Sample	Any	U	PDS	FB	80	7	5
SCUZSENU	Data	Any	U	PDS	FB	80	2	2
ACUZLOAD			U	PDSE	U	0	79	N/A
ACUZMENU			U	PDS	FB	80	4	6
ACUZPENU			U	PDS	FB	80	57	98
ACUZPKGI			U	PDS	FB	80	6	2

Figure 29 (Page 2 of 2). Storage Requirements for HCUZ210 Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
ACUZSAMP			U	PDS	FB	80	7	5
ACUZSENU			U	PDS	FB	80	2	2

Figure 30. Storage Requirements for HCUZ21V Libraries

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SHVTLOAD	LMOD	Any	U	PDS	U	0	44	N/A
SHVTMAC	Macro	Any	U	PDS	FB	80	2	1
SHVTMSG	Macro	Any	U	PDS	FB	80	3	3
SHVTPKGI	DATA	Any	U	PDS	FB	80	5	1
SHVTPNL	Panel	Any	U	PDS	FB	80	64	N/A
SHVTSAMP	SAMPLE	Any	U	PDS	FB	80	12	11
AHVTLOAD			U	PDS	U	0	44	N/A
AHVTMAC			U	PDS	FB	80	2	1
AHVTMSG			U	PDS	FB	80	3	3
AHVTPKGI			U	PDS	FB	80	5	1
AHVTPNL			U	PDS	FB	80	64	N/A
AHVTSAMP			U	PDS	FB	80	12	11

5.3 FMIDs Deleted

Installing Z Storage Management Suite might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the ++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install Z Storage Management Suite into separate SMP/E target and distribution zones.

Note: These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands documentation for details.

5.4 Special Considerations

To effectively manage a suite of products with common components, you can install products into shared zones of a consolidated software inventory (CSI). Space requirements are reduced by installing products into shared CSI zones avoiding the duplication when different target zones, distribution zones, and data sets are used. Sharing a common set of zones also allows SMP/E to automatically manage IFREQ situations that exist across product components.

If you intend to share a Tivoli Enterprise Monitoring Server on z/OS with other products, use shared CSI zones so product configuration sets up the runtime environment correctly.

The installation of Z Storage Management Suite requires the Tivoli Enterprise Monitoring Server on z/OS be installed in the CSI. Refer to the *Program Directory for IBM Tivoli Management Services on z/OS* (GI11-4105) for installation instructions of its product components.

To report issues or defects related to the use of the IBM Z Distribution for Zowe functionality use the IBM Advanced Storage Management Suite for z/OS 5698-BT1 program number and or related component IDs.

Prior to installing Z Storage Management Suite, IBM recommends you review the OMEGAMON shared documentation **First time deployment guide (FTU installation and tasks)**, the Planning, Configuring, and Configuration Manager topics for general planning and configuration flow. This documentation focuses on the things you will need to know for a successful installation and configuration of this product.

The OMEGAMON shared documentation can be found at the IBM Documentation URL listed below:

https://www.ibm.com/docs/en/om-shared

If you are installing into an existing CSI zone that contains the listed FMIDs, ensure the maintenance has been installed previously or it must be installed with this product package.

```
HKCI310 - UJ96215
HKDS630 - UA79950 UA79951
HKLV630 - UA79952 UA79953
HKOA110 - UJ93165
HKOB750 - UJ09123
```

New DDDEFs and allocations were introduced via the service process and must be present in the CSI before the APPLY job is executed.

- PTF UJ95016 (HKOB750 FMID) introduced the requirement for D/TKANBENU library allocation and definitions, reference the ptfs HOLDDATA for instructions.
- PTF UJ93059 (HIZD320 FMID), requires SMP/E SMPTLOAD DDDEF, ensure that SMPTLOAD is defined in the CSI.

The following sample job can be used to define the SMPTLOAD DDDEF. Change all occurrences of the following lowercase variables to values suitable for your installation before submitting.

```
  #globalcsi - The dsname of your global CSI.
  #tzone - The name of the SMP/E target zone.
  #dzone - The name of the SMP/E distribution zone.
//SMPTLOAD JOB 'ACCOUNT INFORMATION','SMPTLOAD',
//       CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1),NOTIFY=&SYSUID
//*************************************************************
//*             D e f i n e   D D D E F   E n t r i e s  *
//*************************************************************
//SMPTLOAD EXEC PGM=GIMSMP,REGION=4096K
//SMPCSI   DD DISP=OLD,DSN=#globalcsi
//SMPCNTL  DD *
    SET   BDY(GLOBAL) .
    UCLIN .
    ADD DDDEF(SMPTLOAD) CYL SPACE(2,1) DIR(10)
       UNIT(SYSALLDA) .
       ENDUCL .

    SET   BDY(#tzone) .
    UCLIN .
    ADD DDDEF(SMPTLOAD) CYL SPACE(2,1) DIR(10)
       UNIT(SYSALLDA) .
       ENDUCL .

    SET   BDY(#dzone) .
    UCLIN .
    ADD DDDEF(SMPTLOAD) CYL SPACE(2,1) DIR(10)
       UNIT(SYSALLDA) .
       ENDUCL .
/*
```

Consider the following items when using shared CSI zones.

- You must specify the same high-level qualifier for the target and distribution libraries as the other products in the same zones for the configuration tool to work correctly.
- If you install a product into an existing CSI that contains a previous version of the same product, SMP/E deletes the previous version during the installation process. To maintain multiple product versions concurrently, they must be installed into separate CSI zones.
- If you install into an existing environment, you might need to remove data set references from the installation jobs to avoid errors because the data sets already exist.
- If you are installing into an existing environment that has the data sets already allocated, ensure sufficient space and directory blocks are available to support the requirement listed in the DASD tables. This might require you to reallocate some data sets to avoid x37 abends.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of Z Storage Management Suite.

Please note the following points:

- If you want to install Z Storage Management Suite into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets.
- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.

6.1 Installing Z Storage Management Suite

6.1.1 SMP/E Considerations for Installing Z Storage Management Suite

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of Z Storage Management Suite.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 31. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

Figure 31. SMP/E Options Subentry Values

Subentry	Value	Comment
DSSPACE	300,1200,1200	Use 1200 directory blocks
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

6.1.3 SMP/E CALLLIBS Processing

Z Storage Management Suite uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When Z Storage Management Suite is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCCNOBJ
- SCEEBIND
- SCEEBND2
- SCEECPP
- SCEELIB
- SCEELKED
- SCEELKEX
- SCEERUN
- SCEERUN2
- SCLBSID
- SCSFMOD0
- SEZACMTX
- SISPLOAD

Note: CALLLIBS uses the previous DDDEFs only to resolve the link-edit for Z Storage Management Suite. These data sets are not updated during the installation of Z Storage Management Suite.

6.1.4 Installation Job Generator Utility

A utility is available to generate the necessary installation jobs for this product and others that might be included in the product package deliverable. Be aware that not all products are supported and maintenance might be required to get the latest updates for the Job Generator product selection table. It is recommended you use this job generation utility to create a set of jobs to install the product package when installing into an existing environment rather than using the sample jobs provided for each product.

The job generation utility is delivered in the z/OS Installation and Configuration Tool component of the Tivoli Management Services on z/OS product, which is a requisite of this product. This utility is enhanced through the maintenance stream so there could be an issue if it is invoked from an environment without the latest maintenance. Ensure the latest maintenance is installed for the components of this product to get the latest updates for the Job Generator product selection table.

If you are installing for the first time into a new environment and don't have an existing environment available to invoke this utility, you must use the sample jobs for the Tivoli Management Services on z/OS product and install it first. This will install the FMID containing the job generation utility and the latest maintenance. Then you can invoke the utility from the target library TKANCUS to install other products in the package.

The job generation utility can be invoked from the SMP/E target library with the low-level qualifier of TKANCUS, launch the utility by using ISPF option 6 and entering the following command.

```
ex '&gbl_target_hilev.TKANCUS'
```

Select "SMP/E-install z/OS products with Install Job Generator (JOBGEN)" from the z/OS Installation and Configuration Tool main menu.

You can use the online help available as a tutorial to become familiar with the utility and its processes.

6.1.4.1 Introduction to the Job Generator

The job generation utility creates a set of jobs to define a SMP/E environment (CSI and supporting data sets), allocate product libraries (target and distribution zone data sets and DDDEFS), and install the products (RECEIVE APPLY ACCEPT). You can use these jobs to create a new environment or to install the products into an existing CSI.

Processing Steps

- The jobs are generated from a series of ISPF interactive panels and ISPF file tailoring.
- The initial step is selection of the product mix. The set of products will determine any additions to the basic set of values needed to create the JCL.

Process Log

- One of the members of the generated job library is KCIJGLOG, which is the process log.

- This member shows the generating parameters and internal lists that were used to create the batch jobs.
- It also indicates which jobs were actually produced and need to be run. Note that the RECEIVE, APPLY, and ACCEPT jobs are always generated even if the selected products are already in the target CSI. In that case, the jobs install additional maintenance when available.

6.1.4.2 Product Selection

You can select one or more products from a table that will determine the set of FMIDs to install. You must select at least one product and you should always select the appropriate version of the IBM Tivoli Management Services on z/OS product (5698-A79) that is an installation requisite for this product offering. This will install the necessary FMIDs and maintenance for a new environment but also ensure any requisite maintenance will be processed when installing into an existing environment.

The selection table contains information about all of the supported products and might contain entries for products that you do not have or do not wish to install. Select only those products that are available in the package delivered and that you want to install.

6.1.4.3 Installing into an existing CSI

When the high-level qualifiers point to an existing environment, the job generation utility eliminates the jobs that allocate and initialize the CSI.

The job generation utility suppresses the creation of libraries that already exist in the target environment. Instead, the generator creates a job to determine whether sufficient space is available for any additional data to be installed into the libraries.

The member KCIJGANL is generated to report on the available space for each of the existing libraries that will have new data. However, KCIJGANL cannot check for the maintenance stream requirements.

The space analyzer function is very helpful in identifying data set space issues that might cause X37 abends during APPLY and ACCEPT processing.

6.1.4.4 Job Generator - Update Command

The job generation utility was enhanced to allow dynamic additions to the product table. The UPDATE routine is used to obtain additional data for products that are available but not yet included in the installation job generator table, KCIDJG00.

You must have the product RELFILEs available on DASD in order to run this routine and all components of the product must be available. After a successful run, the output of this routine will replace the KCIDJG00 member of the work data set. If you make multiple changes to the data member be sure to save the original member as a backup.

Note: Not all products qualify for inclusion in the job generator process. Refer to the online help for more information about this facility.

6.1.5 Sample Jobs

If you choose not to use the installation job generator utility documented in the previous section, you can use the sample jobs that were originally created for the products included in Z Storage Management Suite. This will require you to research and tailor each of the jobs accordingly. The Relfiles and member names for these sample jobs are provided in the following tables.

The sample jobs provided expect a CSI to exist already.

Figure 32. Sample Installation Jobs for IBM Tivoli Advanced Catalog Management for z/OS

Job Name	Job Type	Description	SMPTLIB Data Set
KRNJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKRN260.F7
KRNJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKRN260.F7
KRNJ5REC	RECEIVE	Sample RECEIVE job	IBM.HKRN260.F7
KRNJ6APP	APPLY	Sample APPLY job	IBM.HKRN260.F7
KRNJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HKRN260.F7

Figure 33. Sample Installation Jobs for IBM Tivoli Advanced Allocation Management for z/OS

Job Name	Job Type	Description	RELFILE
KRJJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKRJ330.F7
KRJJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKRJ330.F7
KRJJ5REC	RECEIVE	Sample RECEIVE job	IBM.HKRJ330.F7
KRJJ6APP	APPLY	Sample APPLY job	IBM.HKRJ330.F7
KRJJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HKRJ330.F7

Figure 34. Sample Installation Jobs for IBM Tivoli Advanced Reporting and Management for DFSMShsm

Job Name	Job Type	Description	RELFILE
KRHJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKRH260.F7
KRHJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKRH260.F7
KRHJ5REC	RECEIVE	Sample RECEIVE job	IBM.HKRH260.F7
KRHJ6APP	APPLY	Sample APPLY job	IBM.HKRH260.F7
KRHJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HKRH260.F7

Figure 35. Sample Installation Jobs for IBM Tivoli Advanced Audit for DFSMShsm

Job Name	Job Type	Description	RELFILE
KRGJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKRG260.F7
KRGJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKRG260.F7
KRGJ5REC	RECEIVE	Sample RECEIVE job	IBM.HKRG260.F7
KRGJ6APP	APPLY	Sample APPLY job	IBM.HKRG260.F7
KRGJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HKRG260.F7

Figure 36. Sample Installation Jobs for IBM Z OMEGAMON AI for Storage

Job Name	Job Type	Description	RELFILE
KS3J3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKS3610.F17
KS3J4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKS3610.F17
KS3J5REC	RECEIVE	Sample RECEIVE job	IBM.HKS3610.F17
KS3J6BDI	MKDIR	Sample job to invoke the supplied KAYMKDIR EXEC to allocate file system paths	IBM.HKS3610.F17
KS3J7APP	APPLY	Sample APPLY job	IBM.HKS3610.F17
KS3J8ACC	ACCEPT	Sample ACCEPT job	IBM.HKS3610.F17

Figure 37. Sample Installation Jobs for IBM Cloud Tape Connector

Job Name	Job Type	Description	RELFILE
CUZJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HCUZ210.F7
CUZJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HCUZ210.F7
CUZJ5REC	RECEIVE	Sample RECEIVE job	IBM.HCUZ210.F7
CUZJ6APP	APPLY	Sample APPLY job	IBM.HCUZ210.F7
CUZJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HCUZ210.F7

Figure 38 (Page 1 of 2). Sample Installation Jobs for IBM Advanced Storage Management Suite for z/OS ID

Job Name	Job Type	Description	RELFILE
AJMJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HSMS310.F1
AJMJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HSMS310.F1
AJMJ5REC	RECEIVE	Sample RECEIVE job	IBM.HSMS310.F1
AJMJ6APP	APPLY	Sample APPLY job	IBM.HSMS310.F1

Figure 38 (Page 2 of 2). Sample Installation Jobs for IBM Advanced Storage Management Suite for z/OS ID			
Job Name	**Job Type**	**Description**	**RELFILE**
AJMJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HSMS310.F1

The installation of Z Storage Management Suite requires the Tivoli Enterprise Monitoring Server on z/OS be installed in the CSI. Refer to the *Program Directory for IBM Tivoli Management Services on z/OS* (GI11-4105) for installation instructions of its product components.

You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.8, “Perform SMP/E RECEIVE” on page 45) then copy the jobs from the SMPTLIB data sets to a work data for editing and submission.

You can also copy the sample installation jobs from the product files by submitting the following job. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

```
//STEP1    EXEC PGM=IEBCOPY,REGION=4M
//SYSPRINT DD SYSOUT=*
//IN   DD DSN=IBM.fmid.relfile,UNIT=SYSALLDA,DISP=SHR,
//         VOL=SER=filevol
//OUT      DD DSNAME=jcl-library-name,
//         DISP=(NEW,CATLG,DELETE),
//         VOL=SER=dasdvol,UNIT=SYSALLDA,
//         SPACE=(TRK,(10,2,5))
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN    DD *
    COPY INDD=IN,OUTDD=OUT
    SELECT MEMBER=(member-names)
/*
```

See the following information to update the statements in the previous sample:

IN:
: **filevol** is the volume serial of the DASD device where the downloaded files reside.

OUT:
: **jcl-library-name** is the name of the output data set where the sample jobs are stored.
: **dasdvol** is the volume serial of the DASD device where the output data set resides.

6.1.6 Allocate SMP/E Target and Distribution Libraries

Edit and submit the generated job KCIJGALO to allocate the SMP/E target and distribution libraries for Z Storage Management Suite.

If you are not using the generated allocation job, select the sample allocation job for each of the products included. Edit and submit it after making appropriate changes for your environment. Consult the instructions in the sample job for more information. Consider the following issues before submitting the job.

- If you are installing into an existing environment, you might have to remove lines for data sets that already exist.
- If you are installing into an existing environment that has the data sets already allocated, ensure sufficient space and directory blocks are available to support the requirement listed in the DASD tables. This might require you to reallocate some data sets to avoid x37 abends.

Expected Return Codes and Messages: 0

6.1.7 Create DDDEF Entries

Edit and submit the generated job KCIJGDDF to create DDDEF entries for the SMP/E target and distribution libraries for Z Storage Management Suite.

If you are not using the generated job, select the sample DDDEF job for each of the products included. Edit and submit it after making appropriate changes for your environment. Consult the instructions in the sample job for more information. If you are installing into an existing environment, you might have to remove lines for data sets that already exist.

Expected Return Codes and Messages: 0

6.1.8 Perform SMP/E RECEIVE

If you have obtained Z Storage Management Suite as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the Z Storage Management Suite FMIDs, service, and HOLDDATA that are included on the CBPDO package. For more information, see the documentation that is included in the CBPDO.

You can also choose to edit and submit the generated job KCIJGREC to perform the SMP/E RECEIVE for Z Storage Management Suite. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: 0

6.1.9 Allocate, create and mount ZFS Files (Optional)

This job allocates, creates a mountpoint, and mounts zFS data sets.

You can choose to create a new file system for this product installation by copying, editing, and submitting the JCL below. Add a job card and change all occurrences of the following lowercase variables to values suitable for your installation before submitting.

```
#zfsdsn - The dsname of your zFS directory.
#volser - The volume serial number for the DASD that will contain
          the new file system.
#zfsdir - The zFS directory where this product will be installed.
       The recommended mountpoint is /-PathPrefix-/usr/lpp/kan.
          The zFS directory tree is case sensitive. Ensure #zfsdir
```

```
          is an absolute path name and begins with a slash (/).
//*************************************************************
//* ALLOCZ This step allocates your zFS data set.             *
//*************************************************************
//ALLOCZ   EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN    DD *
   DEFINE CLUSTER(NAME(#zfsdsn) -
   LINEAR CYLINDERS(15 5) SHAREOPTIONS(3) VOLUMES(#volser))
/*
//*************************************************************
//* FORMAT This step formats your newly created zFS data set.  *
//*   When executing the IOEAGFMT program you must have       *
//*   superuser authority (UID 0) or READ authority to the    *
//*   SUPERUSER.FILESYS.PFSCTL profile in the UNIXPRIV class.  *
//*************************************************************
//FORMAT EXEC PGM=IOEAGFMT,REGION=0M,
//       PARM=('-aggregate #zfsdsn -compat')
//STEPLIB  DD DSN=IOE.SIOELMOD,DISP=SHR
//SYSPRINT DD SYSOUT=*
//*************************************************************
//* MAKEDIR This step creates the directory path for your     *
//* Mount Point                                               *
//*************************************************************
//MAKEDIR  EXEC PGM=IKJEFT01
//SYSTSPRT DD SYSOUT=*
//SYSTSIN  DD *
  PROFILE WTPMSG MSGID
  MKDIR '#zfsdir' MODE(7,5,5)
  PROFILE
/*
//*************************************************************
//*  MOUNT This step MOUNTS your newly created zFS File System *
//*  using the AGGRGROW parameter.                            *
//*************************************************************
//MOUNT    EXEC PGM=IKJEFT01
//SYSTSPRT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSTSIN  DD *
  MOUNT FILESYSTEM('#zfsdsn') +
     TYPE(ZFS) MODE(RDWR) PARM('AGGRGROW') +
     MOUNTPOINT('#zfsdir')
/*
```

Expected Return Codes and Messages: 0

6.1.10 Allocate File System Paths

If you are installing the OMEGAMON Integration Monitor components, edit and submit the generated job KS3J6BDI to define the file system paths.

If you are not using the generated job, select the sample job KS3J6BDI. Edit and submit it after making appropriate changes for your environment. Consult the instructions in the sample job for more information. Consider the following items before submitting the job.

Important Notes:

1. The RELFILE containing the KAYMKDIR exec must be available prior to running this job. The RELFILE needed is HKOA110.F2 and should be available after running the RECEIVE job.
2. This job must be run before the APPLY job.
3. This job must be run by a user ID that has superuser authority (UID=0) or read access to resource BPX.SUPERUSER under the FACILITY profile and superuser authority must be activated.
4. The user ID must have read access to the BPX.FILEATTR.APF and BPX.FILEATTR.PROGCTL resource profiles in the RACF FACILITY class.
5. If you plan to create a new file system for this product, ensure it is created before submitting this job to define file system paths.
6. The file system must be in read/write mode before this job is run.
7. If you create a new file system for Z Storage Management Suite, consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This action can be helpful if an IPL occurs before the installation is completed.

Expected Return Codes and Messages: 0

6.1.11 Perform SMP/E APPLY

Ensure that you have the latest HOLDDATA, then edit and submit the generated job KCIJGAPP to perform an SMP/E APPLY CHECK for Z Storage Management Suite.

If you are not using the generated job, select the sample APPLY job for each of the products included. Edit and submit it after making appropriate changes for your environment. Consult the instructions in the sample job for more information.

Important Notes:

1. If OMEGAMON Data Provider component is being installed, the APPLY job must be run by a user ID that has superuser authority (UID=0) or read access to resource BPX.SUPERUSER under the FACILITY profile and superuser authority must be activated.
2. The user ID must also have read access to the BPX.FILEATTR.APF and BPX.FILEATTR.PROGCTL resource profiles in the RACF FACILITY class. This is required for the script to execute successfully and maintain the APF-authorized attributes for all executables and DLLs during unpax.

3. The file system must be in read/write mode before this job is run.

The latest HOLDDATA is available through several different portals, including https://public.dhe.ibm.com/s390/assigns/ or https://www.ibm.com/support/pages/enhanced-holddata-zos for usage instructions. The latest HOLDDATA may identify HIPER and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the APPLY CHECK. The SMP/E root cause analysis identifies the cause only of *errors* and not of *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings, instead of errors).

Here are sample APPLY commands:

1. To ensure that all recommended and critical service is installed with the FMIDs, receive the latest HOLDDATA and use the APPLY CHECK command as follows

   ```
   APPLY S(fmid,fmid,...) CHECK
   FORFMID(fmid,fmid,...)
   SOURCEID(RSU*)
   FIXCAT(IBM.ProductInstall-RequiredService)
   GROUPEXTEND .
   ```

   Some HIPER APARs might not have fixing PTFs available yet. You should analyze the symptom flags for the unresolved HIPER APARs to determine if the reported problem is applicable to your environment and if you should bypass the specific ERROR HOLDs in order to continue the installation of the FMIDs.

   This method requires more initial research, but can provide resolution for all HIPERs that have fixing PTFs available and are not in a PE chain. Unresolved PEs or HIPERs might still exist and require the use of BYPASS.

2. To install the FMIDs without regard for unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are installed, use the SMP/E REPORT ERRSYSMODS command to identify unresolved HIPER APARs and any fixing PTFs.

```
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER)) .
 ..any other parameters documented in the program directory
```

This method is quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRSYSMODS command to investigate any unresolved HIPERs. If you have received the latest HOLDDATA, you can also choose to use the REPORT MISSINGFIX command and specify Fix Category IBM.PRODUCTINSTALL-REQUIREDSERVICE to investigate missing recommended service.

If you bypass HOLDs during the installation of the FMIDs because fixing PTFs are not yet available, you can be notified when the fixing PTFs are available by using the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink.

Expected Return Codes and Messages from APPLY CHECK: 4

After you take actions that are indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

Note: The GROUPEXTEND operand indicates that SMP/E applies all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

If the BYPASS operand is not included in the control statement when processing a PTF with a ++HOLD statement, the job will get a return code of 12 and the following message.

```
GIM30206E command PROCESSING FAILED FOR SYSMOD sysmod.
          HOLD REASON IDS WERE NOT RESOLVED.
```

Expected Return Codes and Messages from APPLY: 4

You can receive many of the following messages depending on your environment. These messages can be ignored, because they will not affect product execution.

```
GIM23913W  LINK-EDIT PROCESSING FOR SYSMOD aaaaaaa
           WAS SUCCESSFUL FOR MODULE bbbbbbbb IN
           LMOD cccccccc IN THE dddddddd LIBRARY.  THE
           RETURN CODE WAS ee.  DATE yy.ddd -- TIME
           hh:mm:ss -- SEQUENCE NUMBER nnnnnn --
           SYSPRINT FILE ffffffff.

GIM43401W  elmtype elmname IN SYSMOD sysmod WAS NOT INSTALLED IN
           ANY TARGET LIBRARY.

IEW2454W  SYMBOL symbol UNRESOLVED. NO AUTOCALL (NCAL) SPECIFIED.
```

```
IEW2646W  ESD RMODE(24) CONFLICTS WITH USER-SPECIFIED
          RMODE(ANY) FOR SECTION section-name.
```

Figure 39 contains a list of elements that might be marked as not selected during the APPLY and ACCEPT processes. This might occur because a VERSION parameter was supplied in an FMID indicating that it contained a higher level version of the same element provided by another FMID being processed at the same time. The higher version element is selected for processing and the lower version is not selected for processing. It might also occur because maintenance is being installed at the same time as the FMIDs.

Figure 39 (Page 1 of 4). SMP/E Elements Not Selected

IZDCDEF	IZDRDB2	IZDRDLA	IZDSSUBI	KAYBNETL	KAYBRP00
KAYB0001	KAYCONN	KAYOPEN	KAYSIP00	KAYSISDL	KAYSIS01
KAY1BDP	KAY1ODP	KAY11PAX	KAY11SH	KAY11ZIP	KAY4BDP
KAY4ODP	KCAALOC0	KCADEVT0	KCAIMGR4	KCAMODE0	KCAOSYS0
KCAUCBS0	KCCTDT	KCNCFDRP	KCNCPYRM	KEBCINT0	KEBCPPL0
KEBDUMMY	KEBEPLG0	KEBFINL0	KEBFINT0	KEBFNDD0	KEBFPAR0
KEBFSCR0	KEBGETD0	KEBGTID0	KEBICPW0	KEBINIT	KEBLNKA0
KEBLNKC0	KEBMSGF0	KEBMXA14	KEBNVCR0	KEBNVDL0	KEBNVEA0
KEBNVIQ0	KEBNVOP0	KEBNVSU0	KEBNVUD0	KEBPRFE0	KEBROPN0
KEBSMFI4	KEBSPFD0	KEBSTAE4	KEBSTAK0	KEBTIOT0	KEBTSO0
KEBVSMC0	KEBWKGT0	KEBWKPT0	KEBZSB10	KEB132F0	KEB2ISPF
KIABGMN	KIACARE	KIACKPG5	KIACMLK5	KIACPUW5	KIADPGN5
KIADWCL5	KIAENQW5	KIAHSKP5	KIAIAFM	KIAIAJ25	KIAIAMD
KIAIANL5	KIAIANZ	KIAMDCL5	KIAMDIN5	KIAMNTP0	KIAMSEL0
KIAPGSW5	KIAQIOW5	KIARCOL5	KIARECD5	KIARECV5	KIARSMS5
KIASORT0	KIASRMD5	KOB$VERT	KOBABOUT	KOBAG2	KOBALER3
KOBALIAS	KOBALTCK	KOBAPPS	KOBBASEM	KOBBCM1M	KOBBLOGM
KOBBMSGM	KOBBR##M	KOBCALLM	KOBCATTC	KOBCBLK$	KOBCBLK@
KOBCBLKQ	KOBCENV$	KOBCENV@	KOBCENVG	KOBCENVV	KOBCFGAP
KOBCIDSM	KOBCIFCM	KOBCIFEM	KOBCIGCM	KOBCIGEM	KOBCIGLM
KOBCIIAR	KOBCIIDR	KOBCIIPM	KOBCIIRR	KOBCIITM	KOBCIIUM
KOBCIOBE	KOBCIOST	KOBCIPRR	KOBCIROM	KOBCISDR	KOBCISRM
KOBCITRM	KOBCJUMP	KOBCLOCK	KOBCMAP$	KOBCMAP@	KOBCMAPI
KOBCMDDM	KOBCMDVM	KOBCONFM	KOBCRACF	KOBCSART	KOBCSOC$
KOBCSOC@	KOBCSOCK	KOBCSTIO	KOBCSTLB	KOBCSTRN	KOBCTHR$
KOBCTHR@	KOBCTHRD	KOBCTIME	KOBCTRAC	KOBCTREE	KOBCTYPE

Figure 39 (Page 2 of 4). SMP/E Elements Not Selected					
KOBCUA	KOBCUNIS	KOBCUST	KOBCUXIO	KOBCVSTG	KOBCWTOL
KOBCZDIO	KOBDATAM	KOBDATA1	KOBDELFM	KOBDEV#T	KOBDFMTM
KOBDIR#T	KOBDSNCK	KOBDSPCT	KOBDSQZM	KOBENUS	KOBENV#T
KOBERROR	KOBESAIS	KOBEXCDM	KOBEXECS	KOBFILTD	KOBFILTE
KOBFILTH	KOBFILTN	KOBFILTS	KOBFINPU	KOBGALA	KOBGATW0
KOBGDEL2	KOBGDFNM	KOBGENSA	KOBGEN1W	KOBGMAC	KOBGROUP
KOBGWCND	KOBGWCV$	KOBGWCV#	KOBGWCV@	KOBGWCVA	KOBGWLPA
KOBGWOBV	KOBGWRE$	KOBGWRE@	KOBGWREG	KOBHASH1	KOBHBCOL
KOBHBDRA	KOBHBGET	KOBHBHDR	KOBHBMSL	KOBHBMSN	KOBHBSTO
KOBHBTPO	KOBHBUSE	KOBHELP	KOBHISB1	KOBHISB2	KOBHISB3
KOBHISNR	KOBHISN1	KOBHISN2	KOBHISTB	KOBHISTC	KOBHISTD
KOBHISTL	KOBHLCMD	KOBHLDIR	KOBHLNAV	KOBHLPDF	KOBHLPEC
KOBHLPEF	KOBHLPEX	KOBHLPFK	KOBHLPFW	KOBHLPGL	KOBHLPIE
KOBHLPMT	KOBHLPRR	KOBHLPRT	KOBHLPSU	KOBHLPTO	KOBHLPWN
KOBHLRTR	KOBHLRTT	KOBHTTP$	KOBHTTP#	KOBHTTP@	KOBHTTPL
KOBHTTPS	KOBHTTPW	KOBHUBCK	KOBHUBMP	KOBHUBM1	KOBHUBPR
KOBHUBS	KOBHUB01	KOBHUB02	KOBHUB03	KOBHUB04	KOBHUB05
KOBHUB06	KOBHUB07	KOBHUB08	KOBHUB10	KOBHUB12	KOBHUB2M
KOBHUB8M	KOBH0008	KOBH0011	KOBH0012	KOBICMDM	KOBICM1M
KOBICM2M	KOBICM3M	KOBILCSM	KOBILC1M	KOBINDEX	KOBINITM
KOBINPWM	KOBINP20	KOBINT#M	KOBINTXT	KOBINT1M	KOBINT2T
KOBIPRFM	KOBIPROM	KOBISSSM	KOBITMLG	KOBIVCMM	KOBJAP0
KOBJCA0	KOBJCC0	KOBJCD0	KOBJCG0	KOBJCI0	KOBJCLS
KOBJCM0	KOBJCR0	KOBJCT0	KOBJCW0	KOBJCX0	KOBJLF
KOBJLF00	KOBJLF01	KOBJLG0	KOBJMC0	KOBJMP0	KOBJMS0
KOBJMT0	KOBJ640	KOBLEXCM	KOBLGINI	KOBLGSND	KOBLGSRV
KOBLGWTO	KOBLISTN	KOBLOFLT	KOBLOGCM	KOBLOGON	KOBLOG10
KOBMEMSA	KOBMNT24	KOBMOBEC	KOBMOBE1	KOBMODS	KOBMTCON
KOBMTCUS	KOBMTGRP	KOBMULTI	KOBM5IN1	KOBNAVEA	KOBNAVEB
KOBNAVE5	KOBNAVE8	KOBNAVE9	KOBNAVHS	KOBOBVA$	KOBOBVA@
KOBOBVAP	KOBODAPP	KOBODCOL	KOBODENM	KOBODI	KOBODIL$
KOBODIL@	KOBODILD	KOBODISC	KOBODTAB	KOBODUTL	KOBOECC0
KOBOECC1	KOBOECC2	KOBOECC3	KOBOECC4	KOBOECC5	KOBOEDD0

Figure 39 (Page 3 of 4). SMP/E Elements Not Selected					
KOBOEDD2	KOBOEDD3	KOBOEDN	KOBOEDN1	KOBOEDTF	KOBOEDT1
KOBOESB0	KOBOESB1	KOBOESB3	KOBOESD0	KOBOESD1	KOBOESE0
KOBOESE1	KOBOESE2	KOBOESE3	KOBOESE6	KOBOESG0	KOBOESG1
KOBOESG2	KOBOESG3	KOBOESG4	KOBOESG5	KOBOESG6	KOBOESS3
KOBOESS4	KOBOMIOM	KOBO4SRV	KOBPARS	KOBPDEVT	KOBPDHST
KOBPDSD	KOBPDSI0	KOBPDSS	KOBPDSSC	KOBPEEKT	KOBPPRFM
KOBPRFAU	KOBPRFEX	KOBPRFFI	KOBPRFHB	KOBPRFHS	KOBPRFIS
KOBPRFJS	KOBPRFND	KOBPRFPB	KOBPRFSA	KOBPRFSS	KOBPRFTB
KOBPRFU1	KOBPRFU2	KOBPRFVF	KOBPRFWN	KOBPROFS	KOBPR2TB
KOBPR3TB	KOBREGAP	KOBREGR	KOBREGRF	KOBRES01	KOBRGDRA
KOBRMFAR	KOBRMFBR	KOBRMFCR	KOBRMF5X	KOBRMF6S	KOBRMF7S
KOBRMF8R	KOBRMF9R	KOBROUTM	KOBRRUI$	KOBRRUI@	KOBRRUIA
KOBRRWK$	KOBRRWK@	KOBRRWKR	KOBRSMGR	KOBRSMG1	KOBRXFMT
KOBRXFM0	KOBRXGCV	KOBRXGDR	KOBRXGM	KOBRXGM0	KOBRXPDR
KOBRXQRY	KOBRXSET	KOBRZFM0	KOBRZFNL	KOBRZGDM	KOBRZGDR
KOBRZGFC	KOBRZGM0	KOBRZGNV	KOBRZHSH	KOBRZHST	KOBRZLDR
KOBRZPDR	KOBRZSHW	KOBRZSNV	KOBRZVSR	KOBSAFX0	KOBSAFY0
KOBSCICS	KOBSCTG	KOBSDB2	KOBSEDAA	KOBSEDAB	KOBSEDAC
KOBSEDAD	KOBSEDAE	KOBSEDAF	KOBSEDAG	KOBSEDAP	KOBSEDAQ
KOBSEDAS	KOBSEDCB	KOBSEDCC	KOBSEDCN	KOBSEDCV	KOBSEDD1
KOBSEDD2	KOBSEDD3	KOBSEDEA	KOBSEDEB	KOBSEDEC	KOBSEDED
KOBSEDEE	KOBSEDEF	KOBSEDEG	KOBSEDFE	KOBSEDGV	KOBSEDPA
KOBSEDPD	KOBSEDPJ	KOBSEDPK	KOBSEDPL	KOBSEDPM	KOBSEDPX
KOBSEDPZ	KOBSEDP0	KOBSEDP1	KOBSEDP2	KOBSEDP3	KOBSEDP5
KOBSEDP6	KOBSEDP7	KOBSEDP8	KOBSEDP9	KOBSEDSA	KOBSEDS0
KOBSEDTA	KOBSEDTD	KOBSEDTE	KOBSEDTF	KOBSEDTH	KOBSEDTN
KOBSEDTQ	KOBSEDTR	KOBSEDTU	KOBSEDTZ	KOBSEDT2	KOBSEDXB
KOBSED1	KOBSED5A	KOBSED5B	KOBSED6A	KOBSED6B	KOBSED7A
KOBSED7B	KOBSED9A	KOBSED9B	KOBSELLM	KOBSEPAM	KOBSEUPM
KOBSEVTS	KOBSHART	KOBSHOWD	KOBSIMS	KOBSITD3	KOBSITD4
KOBSITFL	KOBSITLM	KOBSITMN	KOBSITS	KOBSITST	KOBSIT00
KOBSIT02	KOBSJVM	KOBSMFN	KOBSMQ	KOBSPATM	KOBSPAUM
KOBSPF#M	KOBSPSWM	KOBSPVTM	KOBSRBDM	KOBSRT01	KOBSSIM1

Figure 39 (Page 4 of 4). SMP/E Elements Not Selected					
KOBSSNEW	KOBSSTOR	KOBSS03A	KOBSTACK	KOBSTART	KOBSTATB
KOBSTBLD	KOBSTUBM	KOBSUB#M	KOBSUBET	KOBSUBXM	KOBSUB1M
KOBSUB2T	KOBSUB3M	KOBSUB4T	KOBSZOS	KOBTBAPP	KOBTCBFA
KOBTCBS	KOBTCCL$	KOBTCCLA	KOBTERMM	KOBTHRMT	KOBTHRSH
KOBTKJLF	KOBTKMEM	KOBTRCUI	KOBTREET	KOBTREEU	KOBTREEZ
KOBTRESA	KOBTSO#M	KOBUICM0	KOBUICS0	KOBUIEP0	KOBUIFD0
KOBUIFF0	KOBUIGD0	KOBUIGL0	KOBUIGO0	KOBUIGP0	KOBUIGS0
KOBUIHL0	KOBUIHS0	KOBUILG0	KOBUILO0	KOBUIMA0	KOBUIMB0
KOBUIMC0	KOBUIMD0	KOBUIME0	KOBUIMF0	KOBUIMG0	KOBUIML0
KOBUIM10	KOBUIM20	KOBUIM30	KOBUIM40	KOBUIM50	KOBUIM60
KOBUIM70	KOBUIM80	KOBUIM90	KOBUINI0	KOBUINTM	KOBUINV0
KOBUIPA0	KOBUIPS0	KOBUIPT0	KOBUISC0	KOBUISD0	KOBUITK0
KOBUITR0	KOBUIVI0	KOBUIVS0	KOBUIWG0	KOBUI640	KOBUPFCM
KOBUPFDM	KOBUPFIM	KOBUPFSM	KOBUSER	KOBUSERD	KOBUSERS
KOBUSSKM	KOBVARS	KOBVARSO	KOBVARST	KOBVDRVM	KOBVEXIM
KOBVGETM	KOBVINIM	KOBVLOGM	KOBVPUTM	KOBVTCOM	KOBVTENM
KOBVTERM	KOBVTESM	KOBVTEXM	KOBVTLIM	KOBVTLOM	KOBVTMSM
KOBVTM1M	KOBVTPRM	KOBVTSRM	KOBVTSTM	KOBVTSUM	KOBVTTEM
KOBVUTLM	KOBVZAPM	KOBWENUS	KOBWIZNI	KOBWIZRD	KOBWIZTB
KOBWIZ01	KOBWZATB	KOBWZCOL	KOBWZDGS	KOBWZDRA	KOBWZDRG
KOBWZEXI	KOBWZEXN	KOBWZEXP	KOBWZHUB	KOBWZMSD	KOBWZMSL
KOBWZMSN	KOBWZQPO	KOBWZRRD	KOBWZTAB	KOBXACBM	KOBXASBT
KOBXGSWM	KOBXMEMS	KOBXMSDM	KOBXMZPM	KOB3270S	KPQALLOC
KPQBITIX	KPQBSIND	KPQBTREE	KPQBTRIX	KPQCOLLS	KPQCSI0
KPQCTGSA	KPQCTMSG	KPQDBCMD	KPQDMTLI	KPQDMTLT	KPQDTERM
KPQDYNAL	KPQDYNAR	KPQHINIT	KPQHPARM	KPQHSICP	KPQHSMGR
KPQHSODI	KPQHSPDT	KPQHUTIL	KPQIDXT0	KPQMACIR	KPQMACIW
KPQMACON	KPQMACRD	KPQMACUP	KPQMADIS	KPQMADSC	KPQMAEXT
KPQMAFMT	KPQMAUMX	KPQMFCMD	KPQMMAIN	KPQMMGR0	KPQMPOOL
KPQMTLIO	KPQMTLOS	KPQMUTIL	KPQQSAM0	KPQSORT0	KPQSPCMD
KPQSPCMT	KPQSPDSH	KPQSPINI	KPQSPIPR	KPQSPISU	KPQSPITD
KPQSPLPR	KPQSPLSU	KPQSPLTD	KPQSPMGT	KPQSPTRM	KPQSTSYS

After installing new function, you should perform two operations:

1. Create a backup of the updated data sets, including any SMP/E data sets affected, in case something happens to the data sets during the next phase.
2. Do some testing before putting the new function into production.

After you are satisfied that an applied SYSMOD has performed reliably in your target system, you can install it in your distribution libraries using the ACCEPT process.

Another good practice is to accept most SYSMODs, particularly FMIDs, before performing another APPLY process. This provides you the ability to use the RESTORE process of SMP/E and to support the scenario where SMP/E needs to create a new load module from the distribution libraries during the APPLY process.

6.1.12 Perform SMP/E ACCEPT

Edit and submit the generated job KCIJGACC to perform an SMP/E ACCEPT CHECK for Z Storage Management Suite.

If you are not using the generated job, select the sample ACCEPT job for each of the products included. Edit and submit it after making appropriate changes for your environment. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of *errors* but not *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E Commands documentation for details.

Expected Return Codes and Messages from ACCEPT CHECK: 4

After you take actions that are indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

Note: The GROUPEXTEND operand indicates that SMP/E accepts all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

If the BYPASS operand is not included in the control statement when processing a PTF with a ++HOLD statement, the job will get a return code of 12 and the following message.

```
GIM30206E command PROCESSING FAILED FOR SYSMOD sysmod.
          HOLD REASON IDS WERE NOT RESOLVED.
```

If PTFs that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue

messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

Expected Return Codes and Messages from ACCEPT: 4

You can receive many of the following messages depending on your environment. These messages can be ignored, because they will not affect product execution.

```
GIM24701W SMP/E COULD NOT OBTAIN LINK-EDIT PARAMETERS FOR LOAD
       MODULE loadmod FOR SYSMOD sysmod. DEFAULTS WERE USED.
```

Figure 39 on page 50 contains a list of elements that might be marked as not selected during the APPLY and ACCEPT processes. This might occur because a VERSION parameter was supplied in an FMID indicating that it contained a higher level version of the same element provided by another FMID being processed at the same time. The higher version element is selected for processing and the lower version is not selected for processing. It might also occur because maintenance is being installed at the same time as the FMIDs.

6.2 Activating Z Storage Management Suite

Prior to activating the products included in Z Storage Management Suite, IBM recommends you review the Quick Start Guide, **First time deployment guide (FTU installation and configuration tasks)** as well as Planning and Configuring topics if you have not already done so. This documentation focuses on the things you will need to know for a successful deployment of the products included in this package.

Activating the products included in Z Storage Management Suite requires you to use the OMEGAMON shared publications and the configuration guides for each product listed in Figure 1 on page 6.

Links to this documentation can be found online at:

https://www.ibm.com/docs/en/tasmsfz

6.2.1 File System Execution

If you mount the file system in which you have installed OMEGAMON Data Provider component in read-only mode during execution, then you do not have to take further actions.

7.0 Notices

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APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always refer to the instructions in the **Service Recommendation Summary and Service Recommendations** and **Cross Product Dependencies** sections of the **PSP bucket information for IBM Z products** at https://www.ibm.com/support/pages/node/7127792, to ensure you have all required service.

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You can also review the *IBM Software Support Handbook*, which is available on the Web site listed above. An *End of Support Matrix* is provided that tells you when products you are using are nearing the end of support date for a particular version or release.

When you contact IBM Software Support, be prepared to provide identification information for your company so that support personnel can readily assist you. Company identification information might also be needed to access various online services available on the Web site.

The support Web site offers extensive information, including a guide to support services (the *IBM Software Support Handbook*); frequently asked questions (FAQs); and documentation for all products, including Release Notes, Redbooks, and Whitepapers. The documentation for some product releases is available in both PDF and HTML formats. Translated documents are also available for some product releases.

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