IBM

Program Directory for

IBM Z OMEGAMON AI for z/OS

6.1.0

Program Number 5698-008

for use with
z/OS

Document Date: September 2023

GI13-5296-00

> **Note**
>
> Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 45.

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 OMEGAMON AI for z/OS. This publication refers to IBM Z OMEGAMON AI for z/OS as OMEGAMON AI for z/OS.

The Program Directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic program materials and documentation for OMEGAMON AI for z/OS.

- 3.0, "Program Support" on page 6 describes the IBM support available for OMEGAMON AI for z/OS.

- 4.0, "Program and Service Level Information" on page 8 lists the APARs (program level) and PTFs (service level) that have been incorporated into OMEGAMON AI for z/OS.

- 5.0, "Installation Requirements and Considerations" on page 10 identifies the resources and considerations that are required for installing and using OMEGAMON AI for z/OS.

- 6.0, "Installation Instructions" on page 28 provides detailed installation instructions for OMEGAMON AI for z/OS. It also describes the procedures for activating the functions of OMEGAMON AI for z/OS, or refers to appropriate publications.

Before installing OMEGAMON AI for z/OS, 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 6 tells you how to find any updates to the information and procedures in this program directory.

OMEGAMON AI for z/OS 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 OMEGAMON AI for z/OS are included on the CBPDO.

Do not use this program directory if you install OMEGAMON AI for z/OS with a 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 OMEGAMON AI for z/OS Description

The IBM Z OMEGAMON AI for z/OS 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 that includes the capability to stream data outside of the product via the OMEGAMON Data Provider and to dynamically detect historical anomalies via OMEGAMON AI Insights.

The IBM Z OMEGAMON AI for z/OS product package includes the following:

- IBM Z OMEGAMON AI for z/OS 6.1.0:
  - provides detailed monitoring and problem management for IBM Z systems.
  - provides the visibility, usability and performance that are required to make managing these components more efficient and effective, preventing or reducing downtime due to outages.
- IBM Z OMEGAMON Integration Monitor 5.6.0:
  - displays performance information from a variety of sources, including OMEGAMON monitors and third party software, in a singe location single-screen view of all situation alerts to rapidly identify the root-cause of complex issues.
  - provides the capability to make available OMEGAMON data attributes to applications and analytic platforms outside of OMEGAMON.
- IBM Z OMEGAMON AI Insights:
  - receives historical data from OMEGAMON Data Provider for the purposes of using machine learning technology to dynamically detect anomalies with OMEGAMON provided data over an extended timeframe.
- IBM z/OS DLA:
  - discovers z/OS resources and generates XML files.

1.2 OMEGAMON AI for z/OS FMIDs

OMEGAMON AI for z/OS consists of the following FMIDs:

HRKZ610
HKOB750
HKSB750
HIZD320
HRKD560
HKOA110

2.0 Program Materials

An IBM program is identified by a program number. The program number for OMEGAMON AI for z/OS is 5698-008.

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 OMEGAMON AI for z/OS. 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 28 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for OMEGAMON AI for z/OS in the *CBPDO Memo To Users Extension*.

2.2 Program Publications

The following sections identify the basic publications for OMEGAMON AI for z/OS.

Figure 1 identifies the basic unlicensed publications for OMEGAMON AI for z/OS.

The unlicensed documentation for OMEGAMON AI for z/OS can be found on the IBM Documentation at: **https://www.ibm.com/support/knowledgecenter/SS2JNN/welcome**.

Figure 1 (Page 1 of 2). Basic Material: Unlicensed Publications
Publication Title
Planning and Configuration Guide
User's Guide
Troubleshooting Guide
OMEGAMON Realtime Collector User's Guide
OMEGAMON Realtime Collector Command and Keywords Reference
IBM Discovery Library Adapter for z/OS User's Guide & Reference
OMEGAMON and Tivoli Management Services on z/OS shared documentation

Figure 1 (Page 2 of 2). Basic Material: Unlicensed Publications
Publication Title
New in this Release
Overview
Getting started
Planning
Installing
Upgrading
Configuring
Scenarios and how-tos
Reference

Prior to installing OMEGAMON AI for z/OS, IBM recommends you review the OMEGAMON shared documentation 6.3.0 Fix Pack 2 and above, **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, and other IBM product 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 OMEGAMON AI for z/OS.

2.4 Publications Useful During Installation

You might want to use the publications listed in Figure 2 during the installation of OMEGAMON AI for z/OS.

Figure 2. Publications Useful During Installation	
Publication Title	**Form Number**
IBM SMP/E for z/OS User's Guide	SA23-2277
IBM SMP/E for z/OS Commands	SA23-2275
IBM SMP/E for z/OS Reference	SA23-2276
IBM SMP/E for z/OS Messages, Codes, and Diagnosis	GA32-0883

Note: These publications can be found in IBM Documentation. Use a web browser with internet access to refer to: **https://www.ibm.com/docs/en/zos/2.5.0?topic=zos-smpe**

3.0 Program Support

This section describes the IBM support available for OMEGAMON AI for z/OS.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install OMEGAMON AI for z/OS, make sure that you have reviewed the current Preventive Service Planning (PSP) information. Review the PSP Bucket for General Information, Installation Documentation, and the Cross Product Dependencies sections. For the Recommended Service section, instead of reviewing the PSP Bucket, it is recommended you use the IBM.PRODUCTINSTALL-REQUIREDSERVICE fix category in SMP/E to ensure you have all the recommended service installed. Use the **FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE)** operand on the **APPLY CHECK** command. See 6.1.11, "Perform SMP/E APPLY" on page 35 for a sample APPLY command.

If you obtained OMEGAMON AI for z/OS as part of a CBPDO, HOLDDATA is included.

If the CBPDO for OMEGAMON AI for z/OS is older than two weeks by the time you install the product materials, you can obtain the latest PSP Bucket information by searching on the following website:

https://www.ibm.com/support/pages/ibmsearch

You can also contact the IBM Support Center to obtain the latest PSP Bucket information.

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

PSP Buckets are identified by UPGRADEs, which specify product levels; and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for OMEGAMON AI for z/OS are included in Figure 3 on page 7.

This product has an installation requirement for IBM Tivoli Management Services on z/OS 6.3.0 Fix Pack 6 or higher (5698-A79), so you should review the PSP buckets for it as well. Refer to the *Program Directory for IBM Tivoli Management Services on z/OS* (GI11-4105) for those UPGRADE and SUBSET values.

Figure 3. PSP Upgrade and Subset ID		
UPGRADE	**SUBSET**	**Description**
OMEGRKZ610	HRKZ610	OMEGAMON AI for z/OS
	HKOB750	OMNIMON Base
	HKSB750	Shared Probes
ZOSDLA	HIZD320	IBM Discovery Library Adapter for z/OS
OMEGRKD560	HRKD560	OMEGAMON Integration Monitor DE
	HKOA110	OMEGAMON Data Provider

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 4 identifies the component IDs (COMPID) for OMEGAMON AI for z/OS.

Figure 4. Component IDs			
FMID	**COMPID**	**Component Name**	**RETAIN Release**
HRKZ610	5698B6601	OMEGAMON AI for z/OS	610
HKOB750	5608A41OB	OMNIMON Base	750
HKSB750	5608A41SP	Shared Probes	750
HIZD320	5698A4700	IBM Discovery Library Adapter for z/OS	320
HRKD560	5698B6604	OMEGAMON Integration Monitor DE	560
HKOA110	5698B6605	OMEGAMON Data Provider	110

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of OMEGAMON AI for z/OS. 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 OMEGAMON AI for z/OS have been incorporated into this release. They are listed by FMID.

- FMID HRKZ610

  ```
  0A58661 0A58779 0A58885 0A59055 0A59056 0A59094 0A59358 0A59359
  0A59519 0A59993 0A60283 0A60576 0A61164 0A61165 0A61392 0A61614
  0A61791 0A62140 0A62328 0A62558 0A62683 0A62945 0A63270 0A63394
  0A63776 0A63838 0A64278 0A64666
  ```

- FMID HKOB750

  ```
  0A45606 0A45816 0A45821 0A45846 0A46014 0A46177 0A46354 0A46704
  0A46857 0A46860 0A46861 0A46867 0A46911 0A47142 0A47263 0A47617
  0A48029 0A48198 0A48295 0A48532 0A48662 0A48739 0A48917 0A49057
  0A49106 0A49278 0A49686 0A49902 0A49927 0A49966 0A50243 0A50263
  0A50563 0A50894 0A51033 0A51043 0A51357 0A51417 0A51556 0A51564
  0A51646 0A51815 0A51908 0A52016 0A52082 0A52314 0A52323 0A52442
  ```

- FMID HKSB750

  ```
  0A51458 0A51463 0A51955 0A52489 0A52553 0A53084 0A53329 0A53347
  0A53431 0A53714 0A54479 0A54551 0A55263
  ```

- FMID HIZD320

  ```
  0A36070 0A34388 0A40005 0A40585 0A40760 0A41322 0A41662 0A41604
  0A43245 0A42836 0A45275 0A46337 0A46190 0A50377 0A48608 0A48092
  0A46882 0A48660 0A46912 0A47137 0A47264 0A47357 0A47810 0A47844
  0A48106 0A49943 0A48978 0A49050 0A49290 0A50051 0A50811 0A51462
  0A52819 0A53263 0A52105 0A55003 0A56499 0A58571 0A60640 0A60786
  0A61082 0A61550 0A61913 0A62043 0A61655 0A63544
  ```

4.2 Service Level Information

No PTFs against this release of OMEGAMON AI for z/OS have been incorporated into the product package.

Frequently check the OMEGAMON AI for z/OS PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the **FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE)** operand on your **APPLY CHECK** command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating OMEGAMON AI for z/OS. 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 OMEGAMON AI for z/OS.

5.1.1 Machine Requirements

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

5.1.2 Programming Requirements

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	2.4 or higher	N/A	No

Figure 5. Driving System Software Requirements

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 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.

If you plan to install this component in a zFS file system, this requires that zFS 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 OMEGAMON AI for z/OS.

OMEGAMON AI for z/OS 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.

			Minimum Service Level will satisfy these	Included in the shipped
Program Number	Product Name	Minimum VRM	APARs	product?
5650-ZOS	z/OS	2.4 or higher	N/A	No
5698-A79	IBM Tivoli Management Services on z/OS	6.3.0	N/A	No

Figure 6. Target System Mandatory Installation Requisites

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.

OMEGAMON AI for z/OS 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.

Program Number	Product Name and Minimum VRM/Service Level
5650-ZOS	z/OS 2.4 or higher
5698-A79	IBM Tivoli Management Services on z/OS 6.3.0 Fix Pack 6 or higher

Figure 7. Target System Mandatory Operational Requisites

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.

OMEGAMON AI for z/OS has no conditional operational requisites.

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.

OMEGAMON AI for z/OS 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.

OMEGAMON AI for z/OS has no negative requisites.

5.2.3 DASD Storage Requirements

OMEGAMON AI for z/OS 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 OMEGAMON AI for z/OS	
Library Type	**Total Space Required in 3390 Trks**
Target	2545
Distribution	5133
File System(s)	2275

Notes:

1. If you are installing into an existing environment that has the data sets in Figure 11 on page 16 and Figure 13 on page 17 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 32.

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. 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.

Library DDNAME	TYPE	ORG	RECFM	LRECL	Prim No. of 3390 Trks	Sec No. of 3390 Trks	No. of DIR Blks
Figure 9. Storage Requirements for SMP/E Work Data Sets							
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.

Library DDNAME	TYPE	ORG	RECFM	LRECL	Prim No. of 3390 Trks	Sec No. of 3390 Trks	No. of DIR Blks
Figure 10. Storage Requirements for SMP/E Data Sets							
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 on page 16 and Figure 13 on page 17 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 18 for more information.

The storage requirements of OMEGAMON AI for z/OS must be added to the storage required by other programs having data in the same library or path.

Figure 11 (Page 1 of 2). Storage Requirements for OMEGAMON AI for z/OS Target Libraries								
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SIZDEXEC	CLIST	Any	U	PDS	FB	80	6	44
SIZDINST	JCL	Any	U	PDS	FB	80	2	44
SIZDLOAD	Samples	Any	U	PDS	U	0	92	44
SIZDMESG	CLIST	Any	U	PDS	FB	80	2	44
SIZDSAMP	Samples	Any	U	PDS	FB	80	4	44
TKANCLI	CLIST	Any	S	PDS	FB	80	2	44
TKANCMD	Parm	Any	E	PDS	FB	80	17	32
TKANCUS	CLIST	Any	E	PDS	FB	80	64	51
TKANDATV	Data	Any	E	PDS	VB	6160	268	9
TKANEXEC	EXEC	Any	S	PDS	VB	255	28	44
TKANHENU	Help	Any	E	PDS	FB	80	67	40
TKANISP	CLIST	Any	S	PDS	FB	80	2	44
TKANMAC	Macro	Any	E	PDS	FB	80	12	5
TKANMOD	LMOD	Any	E	PDS	U	0	300	41
TKANMODL	LMOD	Any	E	PDS	U	0	492	51
TKANMODP	LMOD	Any	E	PDSE	U	0	707	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	74	56
TKANOSRC	Data	Any	S	PDS	VB	255	5	44
TKANPAR	Parm	Any	E	PDS	FB	80	10	8
TKANPKGI	Data	Any	E	PDS	FB	80	47	8
TKANSAM	Sample	Any	E	PDS	FB	80	13	10
TKANWENU	Panel	Any	S	PDS	FB	80	196	220

Figure 11 (Page 2 of 2). Storage Requirements for OMEGAMON AI for z/OS Target Libraries								
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
TKOBDATF	Data	Any	S	PDS	FB	80	2	44
TKOBHELP	Help	Any	S	PDS	FB	80	19	132
TKOMHELP	Help	Any	U	PDS	FB	80	64	396
TKOMPROC	Panel	Any	U	PDS	FB	80	89	484

Figure 12. OMEGAMON AI for z/OS File System Paths		
DDNAME	T Y P E	Path Name
TKAYHFS	N	/usr/lpp/omdp/bin/IBM

Figure 13 (Page 1 of 2). Storage Requirements for OMEGAMON AI for z/OS Distribution Libraries							
Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
AIZDEXEC	U	PDS	FB	80	6	44
AIZDINST	U	PDS	FB	80	2	44
AIZDLOAD	U	PDS	U	0	92	44
AIZDMESG	U	PDS	FB	80	2	44
AIZDSAMP	U	PDS	FB	80	4	44
DKANCLI	S	PDS	FB	80	2	44
DKANCMD	E	PDS	FB	80	17	32
DKANCUS	E	PDS	FB	80	64	51
DKANDATV	E	PDS	VB	6160	268	9
DKANEXEC	S	PDS	VB	255	28	44
DKANHENU	E	PDS	FB	80	67	40
DKANISP	S	PDS	FB	80	2	44
DKANMAC	E	PDS	FB	80	12	5
DKANMOD	E	PDS	U	0	300	41

Figure 13 (Page 2 of 2). Storage Requirements for OMEGAMON AI for z/OS Distribution Libraries						
Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
DKANMODL	E	PDS	U	0	493	51
DKANMODP	E	PDSE	U	0	707	N/A
DKANMODS	E	PDS	U	0	74	56
DKANOSRC	S	PDS	VB	255	5	44
DKANPAR	E	PDS	FB	80	10	8
DKANPKGI	E	PDS	FB	80	47	8
DKANSAM	E	PDS	FB	80	13	10
DKANWENU	S	PDS	FB	80	196	220
DKAYHFS	U	PDS	VB	32740	2616	N/A
DKOBDATF	S	PDS	FB	80	2	44
DKOBHELP	S	PDS	FB	80	19	132
DKOMHELP	U	PDS	FB	80	64	396
DKOMPROC	U	PDS	FB	80	89	484

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 (Page 1 of 2). Storage Requirements for HRKZ610 Libraries							
Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANCLI	CLIST	Any	S	PDS	FB	80	1	2
TKANCMD	Parm	Any	E	PDS	FB	80	17	32
TKANCUS	CLIST	Any	E	PDS	FB	80	50	34
TKANDATV	Data	Any	E	PDS	VB	6160	261	5
TKANEXEC	EXEC	Any	S	PDS	VB	255	4	9
TKANHENU	Help	Any	E	PDS	FB	80	55	27
TKANISP	CLIST	Any	S	PDS	FB	80	1	2

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
TKANMAC	Macro	Any	E	PDS	FB	80	4	2
TKANMOD	LMOD	Any	E	PDS	U	0	56	15
TKANMODL	LMOD	Any	E	PDS	U	0	447	38
TKANMODP	LMOD	Any	E	PDS	U	0	27	N/A
TKANPAR	Parm	Any	E	PDS	FB	80	9	6
TKANPKGI	Data	Any	E	PDS	FB	80	28	2
TKANSAM	Sample	Any	E	PDS	FB	80	7	5
TKANWENU	Panel	Any	S	PDS	FB	80	97	65
TKOMHELP	Help	Any	U	PDS	FB	80	56	259
TKOMPROC	Panel	Any	U	PDS	FB	80	78	344
DKANCLI			S	PDS	FB	80	1	2
DKANCMD			S	PDS	FB	80	17	32
DKANCUS			E	PDS	FB	80	50	34
DKANDATV			E	PDS	VB	6160	261	5
DKANEXEC			S	PDS	VB	255	4	9
DKANHENU			E	PDS	FB	80	55	27
DKANISP			S	PDS	FB	80	1	2
DKANMAC			E	PDS	FB	80	4	2
DKANMOD			E	PDS	U	0	4	3
DKANMODL			E	PDS	U	0	475	50
DKANMODP			E	PDS	U	0	5	N/A
DKANPAR			E	PDS	FB	80	9	6
DKANPKGI			E	PDS	FB	80	28	2
DKANSAM			E	PDS	FB	80	7	5
DKANWENU			S	PDS	FB	80	97	65
DKOMHELP			U	PDS	FB	80	56	259
DKOMPROC			U	PDS	FB	80	78	344

Figure 14 (Page 2 of 2). Storage Requirements for HRKZ610 Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
					Figure 15 (Page 1 of 2). Storage Requirements for HKOB750 Libraries			

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	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
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

Figure 15 (Page 2 of 2). Storage Requirements for HKOB750 Libraries								
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
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 16. Storage Requirements for HKSB750 Libraries								
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
TKANDATV	Data	Any	E	PDS	VB	6160	6	2
TKANMOD	LMOD	Any	E	PDS	U	0	122	5
TKANMODL	LMOD	Any	E	PDS	U	0	33	11
TKANPKGI	Data	Any	E	PDS	FB	80	3	2
DKANDATV			E	PDS	VB	6160	6	2
DKANMOD			E	PDS	U	0	22	11
DKANMODL			E	PDS	U	0	33	10
DKANPKGI			E	PDS	FB	80	3	2

Figure 17 (Page 1 of 2). Storage Requirements for HIZD320 Libraries								
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	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

Figure 17 (Page 2 of 2). Storage Requirements for HIZD320 Libraries								
Library DDNAME	**Member Type**	**Target Volume**	**T Y P E**	**O R G**	**R E C F M**	**L R E C L**	**No. of 3390 Trks**	**No. of DIR Blks**
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 18. Storage Requirements for HRKD560 Libraries								
Library DDNAME	**Member Type**	**Target Volume**	**T Y P E**	**O R G**	**R E C F M**	**L R E C L**	**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 19. Storage Requirements for HKOA110 Libraries								
Library DDNAME	**Member Type**	**Target Volume**	**T Y P E**	**O R G**	**R E C F M**	**L R E C L**	**No. of 3390 Trks**	**No. of DIR Blks**
TKANMODP	LMOD	Any	E	PDSE	U	0	350	N/A
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

5.3 FMIDs Deleted

Installing OMEGAMON AI for z/OS 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 OMEGAMON AI for z/OS 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 OMEGAMON AI for z/OS 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.

The OMEGAMON Data Provider module KAYSIS01 must be renamed to ZWESIS01 and must not be added into any LINKLIST or LPALIST concatenations. The module MUST be called from a STEPLIB. Failure to do so will result in the following message being issued when the program is executed.

```
ZWES0249E Module ZWESIS01 is loaded from common storage,
 ensure ZWESIS01 is valid in STEPLIB
```

For further instructions, see the OMEGAMON Data Provider product documentation.

If you are currently using RMF as a z/OS priced feature: Ask your asset manager to contact your IBM representative to alert IBM that you are discontinuing use of the MLC feature on a specific machine (as identified by a specific machine serial number), based on your purchase of the IBM Z Monitoring Suite.

If you are not currently using RMF: Enable RMF as described in the z/OS product documentation GA32-0890 z/OS Planning for Installation. The notification requirement to IBM, as described in the z/OS product documentation, is waived. You do not need to ask your asset manager to contact your IBM representative to alert IBM about your usage of RMF.

If you are installing into an existing SMP/E environment ensure that the HKM5550, HKN3550, and HKWO550 product FMIDs are NOT already installed. If any of these FMIDs are already installed, please ensure you have discussed your plans to deploy this Suite of FMIDs with your IBM representative.

The following sample job can be used to query the CSI for the presence of these FMIDs.

```
//SMPLIST JOB 'ACCOUNT INFORMATION','SMPTLIST',NOTIFY=&SYSUID,
//         CLASS=A,MSGCLASS=X,MSGLEVEL=X
//*****************************************************************
//** NOTE:                                                      **
//**    1. Update the job card parameters for your installation. **
//**                                                             **
//**    2. Change all occurrences of the following lowercase    **
//**       variables to values suitable for your installation:  **
//**                                                             **
//**       #globalcsi - The dsname of your global CSI.        **
//**       #tzone - The name of the target zone you are using.  **
//**                                                             **
//*****************************************************************
//S1       EXEC PGM=GIMSMP,REGION=64M,
//         PARM='PROCESS=WAIT',
//         DYNAMNBR=120
//SMPCSI   DD DISP=SHR,DSN=#globalcsi
//SMPOUT   DD SYSOUT=*
//SMPRPT   DD SYSOUT=*
//SMPLIST  DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUT1   DD UNIT=SYSDA,SPACE=(3120,(380,760))
//SYSUT2   DD UNIT=SYSDA,SPACE=(3120,(380,760))
//SYSUT3   DD UNIT=SYSDA,SPACE=(3120,(380,760))
//SYSUT4   DD UNIT=SYSDA,SPACE=(3120,(38,100))
//SMPWRK1  DD UNIT=SYSDA,
//            SPACE=(3120,(364,380,500)),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//SMPWRK2  DD UNIT=SYSDA,
//            SPACE=(3120,(364,380,500)),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//SMPWRK3  DD UNIT=SYSDA,
//            SPACE=(3120,(364,380,500)),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//SMPWRK4  DD UNIT=SYSDA,
//            SPACE=(3120,(364,380,500)),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//SMPWRK6  DD UNIT=SYSDA,
//            SPACE=(3120,(364,380,500)),
//            DCB=(RECFM=FB,BLKSIZE=3120)
//*
//SMPCNTL  DD *
  SET    BOUNDARY (#tzone) .
  LIST   SYSMODS (HKM5550 HKN3550 HKWO550).
/*
```

Prior to installing OMEGAMON AI for z/OS, IBM recommends you review the OMEGAMON shared documentation 6.3.0 Fix Pack 2 and above, **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, and other IBM product 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 - UJ92865
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 UJ93059 (HIZD320 FMID), requires SMP/E SMPTLOAD DDDEF, ensure that SMPTLOAD is defined in the CSI.

The following sample job is provided to make these definitions, 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 OMEGAMON AI for z/OS.

Please note the following points:

- If you want to install OMEGAMON AI for z/OS 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 OMEGAMON AI for z/OS

6.1.1 SMP/E Considerations for Installing OMEGAMON AI for z/OS

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of OMEGAMON AI for z/OS.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 20. 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 20. 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

OMEGAMON AI for z/OS uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When OMEGAMON AI for z/OS is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCEEBND2
- SCEELIB
- SCEELKED
- SCLBSID
- SEZACMTX

Note: CALLLIBS uses the previous DDDEFs only to resolve the link-edit for OMEGAMON AI for z/OS. These data sets are not updated during the installation of OMEGAMON AI for z/OS.

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 at this time 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 totally 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 created for OMEGAMON AI for z/OS. This will require you to research and tailor each of the jobs accordingly.

The sample jobs provided expect a CSI to exist already. The sample installation jobs in Figure 21 are provided as part of the product to help you install OMEGAMON AI for z/OS.

Figure 21. Sample Installation Jobs			
Job Name	**Job Type**	**Description**	**SMPTLIB Data Set**
KM5J3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HRKZ610.F18
KM5J4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HRKZ610.F18
KM5J5REC	RECEIVE	Sample RECEIVE job	IBM.HRKZ610.F18
KM5J6BDI	MKDIR	Sample job to invoke the supplied KAYMKDIR EXEC to allocate file system paths	IBM.HRKZ610.F18
KM5J7APP	APPLY	Sample APPLY job	IBM.HRKZ610.F18
KM5J8ACC	ACCEPT	Sample ACCEPT job	IBM.HRKZ610.F18

The installation of OMEGAMON AI for z/OS 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 33) 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.HRKZ610.F18,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=(KM5J3ALO,KM5J4DDF,KM5J5REC,KM5J6BDI,KM5J7APP,
   KM5J8ACC)
/*
```

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 OMEGAMON AI for z/OS.

If you are not using the generated allocation job, select the sample job KM5J3ALO. 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 OMEGAMON AI for z/OS.

If you are not using the generated job, select the sample job KM5J4DDF. 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 OMEGAMON AI for z/OS as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the OMEGAMON AI for z/OS 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 or the sample job KM5J5REC to perform the SMP/E RECEIVE for OMEGAMON AI for z/OS. 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 component, edit and submit the generated job KCIJGBDI to define the file system paths.

If you are not using the generated job, select the sample job KM5J6BDI. Edit and submit 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 OMEGAMON AI for z/OS, 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 OMEGAMON AI for z/OS.

If you are not using the generated job, select the sample job KM5J7APP to perform an SMP/E APPLY CHECK. 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
http://service.software.ibm.com/holdata/390holddata.html. 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.
```

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

Figure 22 on page 38 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 22 (Page 1 of 4). SMP/E Elements Not Selected					
KAYBNETL	KAYBRP00	KAYB0001	KAYOPEN	KAY11PAX	KAY11SH
KAY11ZIP	KCADEVT0	KCAIMGR4	KCAOSYS0	KCAUCBS0	KCNCFDRP
KCNCPYRM	KDFCEMCT	KDFDBCMD	KDFDCRTR	KDFDEVIN	KDFDEVSU
KDFDEVXT	KDFDICE	KDFDPDEV	KDFDSYM	KDFDSYMR	KDFDSYM5
KDFDSYM6	KDFHSICP	KDFMACON	KDFMUTIL	KDFSESPG	KDFSESPM
KDFSESPP	KDFSPCMT	KDFSPDEV	KDFSPDSH	KDFSPINI	KDFSPIPR
KDFSPISU	KDFSPITD	KDFSPLPR	KDFSPLSU	KDFSPLTD	KDFSPMGT
KDFSPTRM	KDF3CDET	KDF3CDEV	KDF3CSUB	KDF3FNDU	KDF3LCHP
KDF3LDEV	KDF3SEEK	KEBDUMMY	KEBEPLG0	KEBFINT0	KEBFNDD0
KEBFPAR0	KEBFSCR0	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$VERT	KOBABOUT	KOBAG2	KOBALIAS
KOBALTCK	KOBAPPS	KOBBASEM	KOBBCM1M	KOBBLOGM	KOBBMSGM
KOBBR##M	KOBCALLM	KOBCATTC	KOBCBLK$	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	KOBCRACF	KOBCSART	KOBCSOC$	KOBCSOC@	KOBCSOCK
KOBCSTIO	KOBCSTLB	KOBCSTRN	KOBCTHR$	KOBCTHR@	KOBCTHRD
KOBCTIME	KOBCTRAC	KOBCTREE	KOBCTYPE	KOBCUA	KOBCUNIS
KOBCUST	KOBCUXIO	KOBCVSTG	KOBCWTOL	KOBCZDIO	KOBDATA1
KOBDELFM	KOBDEV#T	KOBDFMTM	KOBDIR#T	KOBDSNCK	KOBDSPCT

Figure 22 (Page 2 of 4). SMP/E Elements Not Selected					
KOBDSQZM	KOBENUS	KOBENV#T	KOBERROR	KOBESAIS	KOBEXCDM
KOBEXECS	KOBFILTD	KOBFILTH	KOBFILTN	KOBFILTS	KOBGATW0
KOBGDEL2	KOBGDFNM	KOBGEN1W	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	KOBHLPEX	KOBHLPFK	KOBHLPGL
KOBHLPMT	KOBHLPRR	KOBHLRTT	KOBHTTP$	KOBHTTP#	KOBHTTP@
KOBHTTPL	KOBHTTPS	KOBHTTPW	KOBHUBCK	KOBHUBMP	KOBHUBM1
KOBHUBPR	KOBHUBS	KOBHUB01	KOBHUB02	KOBHUB03	KOBHUB04
KOBHUB05	KOBHUB06	KOBHUB07	KOBHUB08	KOBHUB10	KOBHUB12
KOBHUB2M	KOBHUB8M	KOBH0011	KOBH0012	KOBICMDM	KOBICM1M
KOBICM2M	KOBICM3M	KOBILCSM	KOBILC1M	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
KOBMOBEC	KOBMOBE1	KOBMODS	KOBMTCON	KOBMTCUS	KOBMTGRP
KOBMULTI	KOBM5IN1	KOBNAVE5	KOBOBVA$	KOBOBVA@	KOBOBVAP
KOBODAPP	KOBODCOL	KOBODENM	KOBODI	KOBODIL$	KOBODIL@
KOBODILD	KOBODISC	KOBODTAB	KOBODUTL	KOBOECC0	KOBOECC1
KOBOECC2	KOBOECC3	KOBOECC4	KOBOECC5	KOBOEDD0	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	KOBPEEKT	KOBPPRFM	KOBPRFAU	KOBPRFEX

Figure 22 (Page 3 of 4). SMP/E Elements Not Selected					
KOBPRFFI	KOBPRFHB	KOBPRFHS	KOBPRFIS	KOBPRFJS	KOBPRFND
KOBPRFPB	KOBPRFSA	KOBPRFSS	KOBPRFTB	KOBPRFU1	KOBPRFU2
KOBPRFVF	KOBPRFWN	KOBPROFS	KOBPR2TB	KOBPR3TB	KOBREGAP
KOBREGR	KOBREGRF	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	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	KOBSSIM1
KOBSSNEW	KOBSSTOR	KOBSS03A	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	KOBTSO#M	KOBUICM0
KOBUICS0	KOBUIEP0	KOBUIFD0	KOBUIGD0	KOBUIGL0	KOBUIGO0
KOBUIGP0	KOBUIGS0	KOBUIHL0	KOBUIHS0	KOBUILG0	KOBUILO0

Figure 22 (Page 4 of 4). SMP/E Elements Not Selected					
KOBUIMA0	KOBUIMB0	KOBUIMC0	KOBUIMD0	KOBUIME0	KOBUIMG0
KOBUIML0	KOBUIM10	KOBUIM20	KOBUIM30	KOBUIM40	KOBUIM50
KOBUIM60	KOBUIM70	KOBUIM80	KOBUIM90	KOBUINI0	KOBUINTM
KOBUINV0	KOBUIPA0	KOBUIPS0	KOBUIPT0	KOBUISC0	KOBUISD0
KOBUITK0	KOBUITR0	KOBUIVI0	KOBUIVS0	KOBUIWG0	KOBUPFCM
KOBUPFDM	KOBUPFIM	KOBUPFSM	KOBUSER	KOBUSERD	KOBUSERS
KOBVDRVM	KOBVEXIM	KOBVGETM	KOBVINIM	KOBVLOGM	KOBVPUTM
KOBVTERM	KOBVTM1M	KOBVTSRM	KOBVUTLM	KOBVZAPM	KOBWENUS
KOBWIZNI	KOBWIZRD	KOBWIZTB	KOBWIZ01	KOBWZATB	KOBWZCOL
KOBWZDGS	KOBWZDRA	KOBWZDRG	KOBWZEXI	KOBWZEXN	KOBWZEXP
KOBWZHUB	KOBWZMSL	KOBWZMSN	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 OMEGAMON AI for z/OS.

If you are not using the generated job, select the sample job KM5J8ACC to perform an SMP/E ACCEPT CHECK. 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

Figure 22 on page 38 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 OMEGAMON AI for z/OS

Prior to activating OMEGAMON AI for z/OS, IBM recommends you review the Quick Start Guide, **First time deployment guide (FTU installation and configuration tasks)**, as well as the 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 installation and configuration of this product.

The *Planning and Configuration Guide* documentation contains the step-by-step procedures to activate the functions of OMEGAMON AI for z/OS.

This documentation can be found online at:

https://www.ibm.com/support/knowledgecenter/SS2JFP_6.1.0/

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

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

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 contact the IBM Customer Support Center to obtain the current "PSP Bucket".

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the

> IBM Director of Licensing
> IBM Corporation
> North Castle Drive
> Armonk, New York 10504-1785
> USA

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

> Intellectual Property Licensing
> Legal and Intellectual Property Law
> IBM Japan, Ltd.
> 19-21, Nihonbashi-Hakozakicho, Chuo-ku
> Tokyo 103-8510, Japan

7.1 Trademarks

IBM, the IBM logo, and other IBM trademark listed on the IBM Trademarks List are trademarks or registered trademarks of International Business Machines Corporation, in the United States and/or other countries. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on ibm.com/trademark.

Contacting IBM Software Support

For support for this or any IBM product, you can contact IBM Software Support in one of the following ways:

Submit a problem management record (PMR) electronically at **IBMSERV/IBMLINK**.

Submit a problem management record (PMR) electronically from the support Web site at:

https://www.ibm.com/software/sysmgmt/products/support/

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.

IBM

Printed in Ireland