



**Program Directory for  
IBM Z OMEGAMON AI for Storage**

6.1.0

Program Number 5698-T12

for use with  
z/OS

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**Note**

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 43.

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## 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 Storage. This publication refers to IBM Z OMEGAMON AI for Storage as OMEGAMON AI for Storage.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 4 identifies the basic program materials and documentation for OMEGAMON AI for Storage.
- 3.0, “Program Support” on page 7 describes the IBM support available for OMEGAMON AI for Storage.
- 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 Storage.
- 5.0, “Installation Requirements and Considerations” on page 10 identifies the resources and considerations that are required for installing and using OMEGAMON AI for Storage.
- 6.0, “Installation Instructions” on page 27 provides detailed installation instructions for OMEGAMON AI for Storage. It also describes the procedures for activating the functions of OMEGAMON AI for Storage, or refers to appropriate publications.

OMEGAMON AI for Storage 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 Storage are included on the CBPDO.

Before installing OMEGAMON AI for Storage, 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 7 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 OMEGAMON AI for Storage 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.

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## 1.1 IBM Z OMEGAMON AI for Storage Description

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.

The IBM Z OMEGAMON AI for Storage product package includes the following:

- 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 OMEGAMON AI for Storage 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.
- 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 single 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/OS DLA:
  - discovers z/OS resources and generates XML files.

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## 1.2 OMEGAMON AI for Storage FMIDs

OMEGAMON AI for Storage consists of the following FMIDs:

HKS3610  
HKOB750  
HKSB810  
HIZD320  
HRKD560  
HKOA110

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## 2.0 Program Materials

An IBM program is identified by a program number. The program number for OMEGAMON AI for Storage is 5698-T12.

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 Storage. Ask your IBM representative for this information if you have not already received a copy.

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### 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 27 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 Storage in the *CBPDO Memo To Users Extension*.

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### 2.2 Program Publications

The following sections identify the basic publications for OMEGAMON AI for Storage 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 OMEGAMON AI for Storage.

The unlicensed documentation for OMEGAMON AI for Storage can be found on the IBM Documentation at: <https://www.ibm.com/docs/en/om-stor/>.

<i>Figure 1 (Page 1 of 2). Basic Material: Unlicensed Publications</i>
<b>Publication Title</b>
<i>Planning and Configuration Guide</i>
<i>User's Guide</i>
<i>Tuning Guide</i>
<i>Troubleshooting Guide</i>
<i>Parameter Reference</i>
<i>IBM Discovery Library Adapter for z/OS User's Guide &amp; Reference</i>

<i>Figure 1 (Page 2 of 2). Basic Material: Unlicensed Publications</i>
<b>Publication Title</b>
<b>OMEGAMON and Tivoli Management Services on z/OS shared documentation</b>
<i>New in this Release</i>
<i>Overview</i>
<i>Getting started</i>
<i>Planning</i>
<i>Installing</i>
<i>Upgrading</i>
<i>Configuring</i>
<i>Scenarios and how-tos</i>
<i>Reference</i>

Prior to installing OMEGAMON AI for Storage, 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 this 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.

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## 2.3 Program Source Materials

No program source materials or viewable program listings are provided for OMEGAMON AI for Storage.

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## 2.4 Publications Useful During Installation

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

<i>Figure 2. Publications Useful During Installation</i>
<b>Publication</b>
<i>IBM SMP/E for z/OS User's Guide</i>
<i>IBM SMP/E for z/OS Reference</i>
<i>IBM SMP/E for z/OS Commands</i>
<i>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</i>

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## 3.0 Program Support

This section describes the IBM support available for OMEGAMON AI for Storage.

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### 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 Z OMEGAMON AI for Storage 5698-T12 program number and or related component IDs.

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### 3.2 Preventive Service Planning

Before you install OMEGAMON AI for Storage, 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/>

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### 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 OMEGAMON AI for Storage.

<i>Figure 3. Component IDs</i>			
<b>F MID</b>	<b>COMPID</b>	<b>Component Name</b>	<b>Release</b>
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

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## 4.0 Program and Service Level Information

This section identifies the program and relevant service levels of OMEGAMON AI for Storage. 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.

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### 4.1 Program Level Information

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

- 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 HIZD320

OA36070 OA34388 OA40005 OA40585 OA40760 OA41322 OA41662 OA41604  
OA43245 OA42836 OA45275 OA46337 OA46190 OA50377 OA48608 OA48092  
OA46882 OA48660 OA46912 OA47137 OA47264 OA47357 OA47810 OA47844  
OA48106 OA49943 OA48978 OA49050 OA49290 OA50051 OA50811 OA51462  
OA52819 OA53263 OA52105 OA55003 OA56499 OA58571 OA60640 OA60786  
OA61082 OA61550 OA61913 OA62043 OA61655 OA63544

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## 4.2 Service Level Information

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

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## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating OMEGAMON AI for Storage. 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.

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### 5.1 Driving System Requirements

This section describes the environment of the driving system required to install OMEGAMON AI for Storage.

#### 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.

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## 5.2 Target System Requirements

This section describes the environment of the target system required to install and use OMEGAMON AI for Storage.

OMEGAMON AI for Storage 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.

<i>Figure 5. Target System Mandatory Installation Requisites</i>				
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.

OMEGAMON AI for Storage 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.

<i>Figure 6. Target System Mandatory Operational Requisites</i>	
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
Any <b>one</b> of the following:	

**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.

<i>Figure 7. Target System Conditional Operational Requisites</i>		
<b>Program Number</b>	<b>Product Name and Minimum VRM/Service Level</b>	<b>Function</b>
<i>One or more of the following:</i>		
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.

OMEGAMON AI for Storage 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 Storage has no negative requisites.

## 5.2.3 DASD Storage Requirements

OMEGAMON AI for Storage libraries can reside on all supported DASD types.

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

Library Type	Total Space Required in 3390 Trks
Target	3535
Distribution	5193
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 18 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 31.

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 LNKST 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.

<i>Figure 9 (Page 1 of 2). Storage Requirements for SMP/E Work Data Sets</i>							
<b>Library DDNAME</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>Prim No. of 3390 Trks</b>	<b>Sec No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
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

Figure 9 (Page 2 of 2). Storage Requirements for SMP/E Work Data Sets

Library DDNAME	T Y P E	O R G A N I Z A T I O N	R E C O R D S	L E N G T H	Prim No. of 3390 Trks	Sec No. of 3390 Trks	No. of DIR Blks
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	T Y P E	O R G A N I Z A T I O N	R E C O R D S	L E N G T H	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 18 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 20 for more information.

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

Figure 11. Storage Requirements for OMEGAMON AI for Storage 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
TKANCUS	CLIST	Any	E	PDS	FB	80	63	54
TKANDATR	Data	Any	S	PDS	FB	160	62	88
TKANDATV	Data	Any	E	PDS	VB	6160	601	8
TKANEXEC	EXEC	Any	S	PDS	VB	255	58	88
TKANHENU	Help	Any	E	PDS	FB	80	140	95
TKANISP	CLIST	Any	S	PDS	FB	80	2	44
TKANMAC	Macro	Any	E	PDS	FB	80	8	3
TKANMOD	LMOD	Any	E	PDS	U	0	242	61
TKANMODL	LMOD	Any	E	PDS	U	0	425	56
TKANMODP	LMOD	Any	E	PDSE	U	0	743	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	75	58
TKANOSRC	Data	Any	S	PDS	VB	255	6	44
TKANPAR	Parm	Any	E	PDS	FB	80	9	5
TKANPENU	Panel	Any	E	PDS	FB	80	6	5
TKANPKGI	Data	Any	E	PDS	FB	80	43	9
TKANSAM	Sample	Any	E	PDS	FB	80	19	18
TKANSQL	SQL	Any	E	PDS	FB	80	25	57
TKANWENU	Panel	Any	S	PDS	FB	80	186	220
TKOBDATF	Data	Any	S	PDS	FB	80	2	44
TKOBHELP	Help	Any	S	PDS	FB	80	19	132

Figure 12. OMEGAMON AI for Storage File System Paths

<b>DDNAME</b>	<b>T Y P E</b>	<b>Path Name</b>
TKAYHFS	N	/usr/lpp/omdp/bin/IBM

Figure 13 (Page 1 of 2). Storage Requirements for OMEGAMON AI for Storage Distribution Libraries

<b>Library DDNAME</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
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
DKANCUS	E	PDS	FB	80	63	54
DKANDATR	S	PDS	FB	160	62	88
DKANDATV	E	PDS	VB	6160	601	8
DKANEXEC	S	PDS	VB	255	58	88
DKANHENU	E	PDS	FB	80	140	95
DKANISP	S	PDS	FB	80	2	44
DKANMAC	E	PDS	FB	80	8	3
DKANMOD	E	PDS	U	0	246	134
DKANMODL	E	PDS	U	0	425	58
DKANMODP	E	PDSE	U	0	494	N/A
DKANMODS	E	PDS	U	0	62	5
DKANOSRC	S	PDS	VB	255	6	44
DKANPAR	E	PDS	FB	80	9	5
DKANPENU	E	PDS	FB	80	6	5
DKANPKGI	E	PDS	FB	80	43	9
DKANSAM	E	PDS	FB	80	19	18
DKANSQL	E	PDS	FB	80	25	57
DKANWENU	S	PDS	FB	80	186	220

Figure 13 (Page 2 of 2). Storage Requirements for OMEGAMON AI for Storage 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
DKAYHFS	U	PDSE	VB	32740	2616	N/A
DKOBDATF	S	PDS	FB	80	2	44
DKOBHELP	S	PDS	FB	80	19	132

## 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 HKS3610 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	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	380	47
DKANMODP			E	PDS	U	0	63	N/A
DKANMODS			E	PDS	U	0	1	2

Figure 14 (Page 2 of 2). Storage Requirements for HKS3610 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
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
DKANSAM			E	PDS	FB	80	13	13
DKANSQL			E	PDS	FB	80	25	57
DKANWENU			S	PDS	FB	80	88	73

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

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
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
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 (Page 1 of 2). Storage Requirements for HKSB810 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	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

Figure 16 (Page 2 of 2). Storage Requirements for HKSB810 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	2	2

Figure 17. 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
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 Storage 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 Storage 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 Storage 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 Z OMEGAMON AI for Storage 5698-T12 program number and or related component IDs.**

Prior to installing OMEGAMON AI for Storage, 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 - 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
//*****
//*          Define DDDEF Entries *
//*****
//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 Storage.

Please note the following points:

- If you want to install OMEGAMON AI for Storage 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 Storage

#### 6.1.1 SMP/E Considerations for Installing OMEGAMON AI for Storage

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

#### 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.

<i>Figure 20. SMP/E Options Subentry Values</i>		
<b>Subentry</b>	<b>Value</b>	<b>Comment</b>
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 Storage uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When OMEGAMON AI for Storage is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCEEBND2
- SCEELIB
- SCEELKED
- SCEELKEX
- SCEERUN
- SCEERUN2
- SCLBSID
- SEZACMTX

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

### 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 '&gb1_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 created for OMEGAMON AI for Storage. 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 Storage.

*Figure 21. Sample Installation Jobs*

Job Name	Job Type	Description	SMPTLIB Data Set
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

The installation of OMEGAMON AI for Storage 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 32) 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.HKS3610.F17,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=(KS3J3ALO,KS3J4DDF,KS3J5REC,KS3J6BDI,KS3J7APP,
KS3J8ACC)
/*
```

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 Storage.

If you are not using the generated allocation job, select the sample job KS3J3ALO. 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 Storage.

If you are not using the generated job, select the sample job KS3J4DDF. 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 Storage as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the OMEGAMON AI for Storage 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 KS3J5REC to perform the SMP/E RECEIVE for OMEGAMON AI for Storage. 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 OMEGAMON AI for Storage, 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 Storage.

If you are not using the generated job, select the sample job KS3J7APP 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 <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: 0

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 symbo1 UNRESOLVED. NO AUTOCALL (NCAL) SPECIFIED.

```

Figure 22 on page 37 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*

IZDCDEF	IZDRDB2	IZDRDLA	IZDSSUBI	KAYBNETL	KAYBRP00
KAYB0001	KAYCONN	KAYOPEN	KAYSIP00	KAYSISDL	KAYSIS01
KAY1BDP	KAY1ODP	KAY11PAX	KAY11SH	KAY11ZIP	KAY4BDP
KAY4ODP	KCAALOC0	KCADEV00	KCAIMGR4	KCAMODE0	KCAOSYS0
KCAUCBS0	KCCTDT	KCNCDFRP	KCNCPYRM	KEBCINT0	KEBCPPL0
KEBDUMMY	KEBEPLG0	KEBFINL0	KEBFINT0	KEBFNDD0	KEBFPAR0
KEBFSCR0	KEBGETD0	KEBGID0	KEBICPW0	KEBINIT	KEBLNKA0
KEBLNKC0	KEBMSGF0	KEBMXA14	KEBNVCR0	KEBNVDL0	KEBNVEA0
KEBNVIQ0	KEBNVOP0	KEBNVSU0	KEBNVUD0	KEBPRFE0	KEBROPN0
KEBSMF14	KEBSPFD0	KEBSTAE4	KEBSTAK0	KEBTIOT0	KEBTSO0
KEBVSMC0	KEBWKGT0	KEBWKPT0	KEBZSB10	KEB132F0	KEB2ISPF
KIABGMN	KIACARE	KIACKPG5	KIACMLK5	KIACPUW5	KIADPGN5
KIADWCL5	KIAENQW5	KIAHSP5	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	KOBLOGM
KOBBMSGM	KOBRR##M	KOBCALLM	KOBCATTC	KOBCBLK\$	KOBCBLK@
KOBCBLKQ	KOBCENV\$	KOBCENV@	KOBCENVG	KOBCENVV	KOBCFGAP
KOBCIDSM	KOBCIFCM	KOBCIFEM	KOBCIGCM	KOBCIGEM	KOBCIGLM
KOBCIAR	KOBCIIDR	KOBCIIPM	KOBCIIRR	KOBCIITM	KOBCIUM
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
KOBCUA	KOBCUNIS	KOBCUST	KOBCUXIO	KOBCVSTG	KOBCWTOL
KOBCZDIO	KOBDATAM	KOBDATA1	KOBDELFM	KOBDEV#T	KOBDFMTM
KOBDIR#T	KOBDNSCK	KOBDSPCT	KOBDSQZM	KOBENUS	KOBENV#T
KOBERROR	KOBESAI5	KOBEXCDM	KOBEXECS	KOBFILTD	KOBFILTE
KOBFILTH	KOBFILTN	KOBFILTS	KOBFINPU	KOBGALA	KOBGATW0

Figure 22 (Page 2 of 4). SMP/E Elements Not Selected

KOBGDEL2	KOBGDFNM	KOBGENSA	KOBGEN1W	KOBGMAC	KOBGROUP
KOBGWCND	KOBGWCV\$	KOBGWCV#	KOBGWCV@	KOBGWCVVA	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
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

Figure 22 (Page 3 of 4). SMP/E Elements Not Selected

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	KOBXPDR
KOBXRQRY	KOBXRSET	KOBZRZFM0	KOBZRZFNL	KOBZRZGDM	KOBZRZGDR
KOBZRZGFC	KOBZRZGM0	KOBZRZGNV	KOBZRZSHS	KOBZRZHST	KOBZRZLDR
KOBZRZPDR	KOBZRZSHW	KOBZRZSNV	KOBZRZVSR	KOBZSAFX0	KOBZSAFY0
KOBSCICS	KOBSCCTG	KOBSDDB2	KOBSEDA	KOBSEDA	KOBSEDA
KOBSEDA	KOBSEDAE	KOBSEDAF	KOBSEDA	KOBSEDA	KOBSEDA
KOBSEDA	KOBSEDCB	KOBSEDC	KOBSEDCN	KOBSEDCV	KOBSEDD1
KOBSEDD2	KOBSEDD3	KOBSEDEA	KOBSEDEB	KOBSEDEC	KOBSEDED
KOBSEDEE	KOBSEDEF	KOBSEDEG	KOBSEDFE	KOBSEDEGV	KOBSEDEPA
KOBSEDPD	KOBSEDPJ	KOBSEDPK	KOBSEDP	KOBSEDP	KOBSEDP
KOBSEDPZ	KOBSEDP0	KOBSEDP1	KOBSEDP2	KOBSEDP3	KOBSEDP5
KOBSEDP6	KOBSEDP7	KOBSEDP8	KOBSEDP9	KOBSEDSA	KOBSEDS0
KOBSEDTA	KOBSEDTD	KOBSEDT	KOBSEDTF	KOBSEDT	KOBSEDT
KOBSEDTQ	KOBSEDT	KOBSEDTU	KOBSEDTZ	KOBSEDT2	KOBSEDXB
KOBSED1	KOBSED5A	KOBSED5B	KOBSED6A	KOBSED6B	KOBSED7A
KOBSED7B	KOBSED9A	KOBSED9B	KOBSELLM	KOBSEPAM	KOBSEUPM
KOBSEVTS	KOBSHART	KOBSHOWD	KOBSIMS	KOB SITD3	KOB SITD4
KOB SITFL	KOB SITLM	KOB SITMN	KOB SITS	KOB SITST	KOB SIT00
KOB SIT02	KOB SJVM	KOB SMFN	KOB SMQ	KOB SPATM	KOB SPAUM
KOB SPF#M	KOB SP SWM	KOB SPVTM	KOB SRBDM	KOB SRT01	KOB SSIM1
KOB SSNEW	KOB Sstor	KOB SS03A	KOB STACK	KOB START	KOB STATB
KOB STBLD	KOB STUBM	KOB SUB#M	KOB SUBET	KOB SUBXM	KOB SUB1M
KOB SUB2T	KOB SUB3M	KOB SUB4T	KOB SZOS	KOB TBAPP	KOB TCBA
KOB TCBS	KOB TCCL\$	KOB TCCLA	KOB TERMM	KOB THRMT	KOB THRSH
KOB TKJLF	KOB TKMEM	KOB TRCUI	KOB TREET	KOB TREEU	KOB TREEZ

Figure 22 (Page 4 of 4). SMP/E Elements Not Selected

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	KOBUIVIO	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	KPQBTRIEE	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 Storage.

If you are not using the generated job, select the sample job KS3J8ACC 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: 0

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 37 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.

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## 6.2 Activating OMEGAMON AI for Storage

Prior to activating OMEGAMON AI for Storage, 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 Storage.

Links to this documentation can be found online at:

<https://www.ibm.com/docs/en/om-stor/>

### 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.

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## 7.0 Notices

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