



**Program Directory for
IBM OMEGAMON for Db2 Performance Expert on z/OS**

5.5.0

Program Number 5655-W37

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 44.

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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 OMEGAMON for Db2 Performance Expert on z/OS. This publication refers to IBM OMEGAMON for Db2 Performance Expert on z/OS as OMEGAMON for Db2 PE on z/OS.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 4 identifies the basic program materials and documentation for OMEGAMON for Db2 PE on z/OS.
- 3.0, “Program Support” on page 7 describes the IBM support available for OMEGAMON for Db2 PE on z/OS.
- 4.0, “Program and Service Level Information” on page 9 lists the APARs (program level) and PTFs (service level) that have been incorporated into OMEGAMON for Db2 PE on z/OS.
- 5.0, “Installation Requirements and Considerations” on page 11 identifies the resources and considerations that are required for installing and using OMEGAMON for Db2 PE on z/OS.
- 6.0, “Installation Instructions” on page 28 provides detailed installation instructions for OMEGAMON for Db2 PE on z/OS. It also describes the procedures for activating the functions of OMEGAMON for Db2 PE on z/OS, or refers to appropriate publications.

Before installing OMEGAMON for Db2 PE on 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 7 tells you how to find any updates to the information and procedures in this program directory.

OMEGAMON for Db2 PE on 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 for Db2 PE on z/OS are included on the CBPDO.

Do not use this program directory if you install OMEGAMON for Db2 PE on 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 OMEGAMON for Db2 PE on z/OS Description

IBM introduced significant updates to IBM OMEGAMON Performance Monitors for key System z environments designed to run on IBM Tivoli Monitoring 6.3.0 Fix Pack 7 or higher and deliver enhanced capabilities designed to:

- Improve problem resolution efficiency by requiring fewer steps to isolate root cause performance impact in real time, therefore providing higher availability.
- Improve visibility, control, and automation with the more comprehensive 3270-based user interface (3270UI) capable of viewing the entire enterprise-wide environment from a single 3270 screen.
- Reduce the time required for installation, configuration, and maintenance by utilizing the IBM Z Monitoring Configuration Manager for configuration (besides the still supported PARMGEN configuration tool).

OMEGAMON for Db2 PE on z/OS 5.5.0 enables users to assess the efficiency of Db2 and optimize its performance, combining reporting, monitoring and buffer pool analysis features, as well as expert database analysis functions. OMEGAMON for Db2 PE introduces the following enhancements to support Db2 13:

- Monitoring and reporting on the Db2 SQL Data Insights built-in function. This information includes the amount of CPU usage and IBM Z(R) specialty engine times. This enables you to extract a focused cost analysis for the Db2 SQL Data Insights built-in feature.
- Monitoring and reporting on the IBM z16-based Group Buffer Pool Residency Times for data and directory entries. This helps improve structure sizing and allocation, as well as workload balancing between cache structures.
- Monitoring and reporting on the Application Timeout and Deadlock Control improvement. Improvement includes the new IFCID 437 that provides information on the expected usage results from applications.
- Identifying the Longest Lock/Latch Waiter for each completed transaction to determine which resources and time used. This helps organizations analyze resource usage and potentially address application performance issues.
- Monitoring and reporting on the new DBAT Termination Behavior feature exposed in the Global DDF Activity statistics. This function helps analyze the impact of this feature.
- Monitoring and reporting on the plan authorization cache related improvements. This information can be used to indicate a reduced RACF(R) contention when checking for a plan EXECUTE privilege.
- Reporting on the new Index Split IFICD 396. This helps analyze the impact on application performance.

Other new capabilities:

- Added Db2 Profile warning and exception monitoring (IFCID 402) to the E3270 and Performance Expert Client real-time monitoring interfaces.
- Added Db2 Aggregated Accounting statistics reporting (IFCID 369) to the E3270 realtime monitoring interface.

1.2 OMEGAMON for Db2 PE on z/OS FMIDs

OMEGAMON for Db2 PE on z/OS consists of the following FMIDs:

HKDB550

HKOB750

HIZD310

2.0 Program Materials

An IBM program is identified by a program number. The program number for OMEGAMON for Db2 PE on z/OS is 5655-W37.

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 for Db2 PE on 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 for Db2 PE on z/OS in the *CBPDO Memo To Users Extension*.

2.2 Program Publications

The following sections identify the basic publications for OMEGAMON for Db2 PE on z/OS.

Figure 1 on page 5 identifies the basic unlicensed publications for OMEGAMON for Db2 PE on z/OS.

The unlicensed documentation for OMEGAMON for Db2 PE on z/OS can be

- found in the IBM Documentation at:
<https://www.ibm.com/docs/en/om-db2-pe>
- obtained as pdf file from the IBM Publications Center website at:
<http://www.ibm.com/shop/publications/order>.
- obtained as pdf file from the PDFs and Techdocs on DB2 Tools Product Page, this page lists the Program Directories and the most current versions of the available product publications including updates to these books:
<https://www.ibm.com/support/docview.wss?uid=swg27020910#omegaxepe-lib>

<i>Figure 1. Basic Material: Unlicensed Publications</i>	
Publication Title	Form Number
<i>Report Reference</i>	SH12-7065
<i>Report Command Reference</i>	SH12-7066
<i>Messages</i>	GH12-7067
<i>Monitoring Performance from the OMEGAMON Classic Interface</i>	SH12-7068
<i>Monitoring Performance from Performance Expert Client</i>	SH12-7069
<i>Monitoring Performance from ISPF</i>	SH12-7070
<i>Reporting User's Guide</i>	SH12-7071
<i>Configuration and Customization</i>	GH12-7072
<i>Parameter Reference</i>	SH12-7073
<i>Monitoring Performance from the IBM Tivoli OMEGAMON Enhanced 3270 User Interface</i>	SH12-7074
<i>Buffer Pool Analyzer User's Guide</i>	SH12-7075
OMEGAMON shared documentation	
<i>What's New</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 for Db2 PE on 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>

The **First time deployment guide (FTU installation and configuration tasks)** documentation can be found on the IBM Documentation website at:

<https://www.ibm.com/docs/en/om-shared?topic=guide-ftu-installation-configuration-tasks>

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 for Db2 PE on z/OS.

2.4 Publications Useful During Installation

You might want to use the publications listed in Figure 2 during the installation of OMEGAMON for Db2 PE on z/OS.

Publication Title	Form Number
<i>IBM SMP/E for z/OS User's Guide</i>	SA23-2277
<i>IBM SMP/E for z/OS Commands</i>	SA23-2275
<i>IBM SMP/E for z/OS Reference</i>	SA23-2276
<i>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</i>	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 for Db2 PE on 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 for Db2 PE on 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 6.1.9, “Perform SMP/E APPLY” on page 34 for a sample APPLY command.

If you obtained OMEGAMON for Db2 PE on z/OS as part of a CBPDO, HOLDDATA is included.

If the CBPDO for OMEGAMON for Db2 PE on z/OS is older than two weeks by the time you install the product materials, you can obtain the latest PSP Bucket information by going to the following website:

<http://www14.software.ibm.com/webapp/set2/psearch/search?domain=psp>

You can also use S/390 SoftwareXcel or contact the IBM Support Center to obtain the latest PSP Bucket information.

For program support, access the Software Support Website at **<http://www.ibm.com/support/>**.

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 for Db2 PE on z/OS are included in Figure 3.

This product has an installation requirement for IBM Tivoli Management Services on z/OS 6.3.0 Fix Pack 7 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.

<i>Figure 3. PSP Upgrade and Subset ID</i>		
UPGRADE	SUBSET	Description
5655W37	HKDB550	OMEGAMON for Db2 Performance Expert on z/OS
	HKOB750	OMNIMON Base
ZOSDLA	HIZD310	Tivoli Discovery Library Adapter for z/OS

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 for Db2 PE on z/OS.

<i>Figure 4. Component IDs</i>			
FMID	COMPID	Component Name	RETAIN Release
HKDB550	5655OPE00	OMEGAMON for Db2 Performance Expert on z/OS	550
HKOB750	5608A41OB	OMNIMON Base	750
HIZD310	5698A4700	z/OS DLA	310

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of OMEGAMON for Db2 PE on 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 previous releases of components included with OMEGAMON for Db2 PE on z/OS have been incorporated into this release. They are listed by FMID.

- FMID HKDB550

PH00803 PH00871 PH01386 PH01666 PH01868 PH01934 PH02430 PH02436
PH02595 PH02763 PH03417 PH03588 PH03718 PH04126 PH04190 PH04689
PH05220 PH05274 PH06092 PH06177 PH06621 PH07061 PH07890 PH07891
PH08213 PH08339 PH08490 PH08748 PH08768 PH09361 PH09699 PH10255
PH10285 PH10886 PH11059 PH11239 PH11516 PH11699 PH12122 PH12223
PH12498 PH12500 PH12509 PH13023 PH13026 PH13409 PH14260 PH14386
PH14443 PH14815 PH14816 PH15433 PH16124 PH16135 PH16191 PH16426
PH16514 PH16515 PH16602 PH17426 PH17487 PH17833 PH18512 PH18885
PH19206 PH19208 PH19932 PH20553 PH21595 PH21630 PH22179 PH22582
PH22760 PH22794 PH22811 PH22867 PH22945 PH23077 PH23524 PH23728
PH24061 PH24125 PH24496 PH24498 PH24499 PH24967 PH24996 PH25044
PH25620 PH25623 PH26293 PH26866 PH26923 PH27013 PH27372 PH27402
PH27959 PH28054 PH28083 PH28363 PH28516 PH28529 PH28569 PH28734
PH28821 PH28823 PH28824 PH28891 PH29299 PH29650 PH29675 PH29858
PH30803 PH31787 PH32044 PH32294 PH32878 PH33376 PH33621 PH33881
PH33932 PH33985 PH34207 PH34407 PH35317 PH35334 PH35408 PH35707
PH35917 PH36052 PH36177 PH36586 PH36692 PH36980 PH37137 PH37183
PH37310 PH37634 PH37751 PH37764 PH37847 PH37963 PH37965 PH37974
PH38000 PH38004 PH38332 PH38405 PH39092 PH39326 PH39580 PH39609
PH40014 PH40014 PH40036 PH40091 PH40091 PH40123 PH40970 PH40970
PH41333 PH41353 PH41814 PH42009 PH42012 PH42804 PH42951 PH42996
PH43371 PH43603 PH44092 PI06420 PI42115 PI42125 PI42128 PI42595
PI57505 PI63191 PI66982 PI67765 PI69924 PI69926 PI71869 PI71947
PI72210 PI72295 PI72345 PI72647 PI73001 PI73429 PI73958 PI73992
PI74374 PI74659 PI74795 PI74817 PI74975 PI75122 PI75436 PI75919
PI76009 PI76362 PI76685 PI76689 PI76735 PI76741 PI76748 PI76762
PI76763 PI76765 PI77811 PI78003 PI78063 PI78865 PI78947 PI78965
PI79523 PI79526 PI79867 PI80107 PI80201 PI80296 PI80819 PI81074
PI81098 PI81147 PI81148 PI81149 PI81406 PI81443 PI81844 PI81903
PI82313 PI82669 PI82902 PI84163 PI84612 PI84919 PI85300 PI85464
PI86010 PI86020 PI86238 PI86262 PI87191 PI87208 PI87385 PI88307
PI88630 PI88856 PI88858 PI89338 PI89711 PI89856 PI89860 PI89904

PI90541 PI90585 PI90853 PI90919 PI91046 PI91050 PI91321 PI91432
PI92016 PI92019 PI92156 PI92548 PI92587 PI92651 PI92754 PI93288
PI93498 PI93725 PI93872 PI94231 PI94232 PI94453 PI94822 PI94829
PI94904 PI95172 PI95314 PI95385 PI95388 PI95503 PI95504 PI95702
PI95808 PI95888 PI97225 PI97359 PI97398 PI97457 PI97891 PI98095
PI98240 PI98389 PI98435 PI98449 PI98474 PI98625 PI98627 PI98788
PI99189 PI99569 PI99774

- 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

4.2 Service Level Information

No PTFs against this release of OMEGAMON for Db2 PE on z/OS have been incorporated into the product package.

Frequently check the OMEGAMON for Db2 PE on 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-REQUIRESERVICE)** 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 for Db2 PE on 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 for Db2 PE on 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

Figure 5. 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	2.3 or higher	N/A	No

Note: SMP/E is a requirement for Installation and is an element of z/OS.

Note: Installation might require migration to new z/OS releases to be service supported. See <https://www.ibm.com/support/lifecycle/>.

5.2 Target System Requirements

This section describes the environment of the target system required to install and use OMEGAMON for Db2 PE on z/OS.

OMEGAMON for Db2 PE on 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.

Figure 6. Target System Mandatory Installation Requisites

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	2.3 or higher	N/A	No
5698-A79	IBM Tivoli Management Services on z/OS	6.3.0	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 for Db2 PE on 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.

<i>Figure 7. Target System Mandatory Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
5650-ZOS	z/OS 2.3 or higher
5698-A79	IBM Tivoli Management Services on z/OS 6.3.0 Fix Pack 7 or higher
Any one of the following:	
5650-DB2	IBM DB2 for z/OS 12.1.0
5698-DB2	IBM Db2 13 for z/OS 13.1.0
5770-AF3	IBM DB2 Value Unit Edition 12.1.0
5698-DBV	IBM Db2 13 for z/OS Value Unit Edition 13.1.0

Note: Code related to Db2 11 has not been removed from OMEGAMON for Db2 5.5.0 and may continue to work in some scenarios however new APARs related to Db2 11 environments will not be accepted.

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 8. Target System Conditional Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
<i>One or more of the following:</i>	
5655-Y04	CICS Transaction Server for z/OS 5.4.00 or higher
5635-A06	IBM IMS 15.1.0 or higher

Note: 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 for Db2 PE on 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 for Db2 PE on z/OS has no negative requisites.

5.2.3 DASD Storage Requirements

OMEGAMON for Db2 PE on z/OS libraries can reside on all supported DASD types.

Figure 9 lists the total space that is required for each type of library.

<i>Figure 9. Total DASD Space Required by OMEGAMON for Db2 PE on z/OS</i>	
Library Type	Total Space Required in 3390 Trks
Target	3650
Distribution	3340

Notes:

1. If you are installing into an existing environment that has the data sets in Figure 12 on page 17 and Figure 13 on page 19 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 33.

4. 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.
5. 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.
6. 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 10. Check the corresponding DDDEF entries in all zones because use of values lower than these can result in failures in the installation process. Refer to the SMP/E manuals for instructions on updating DDDEF entries.

Figure 10. 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
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 11. Check the space and directory block allocation and reallocate the data sets, if necessary.

Figure 11. 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 12 and Figure 13 on page 19 describe the target and distribution libraries 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 21 for more information.

The storage requirements of OMEGAMON for Db2 PE on z/OS must be added to the storage required by other programs having data in the same library or path.

Figure 12 (Page 1 of 2). Storage Requirements for OMEGAMON for Db2 PE on 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	89	44
SIZDMAPS	CLIST	Any	U	PDS	VB	1024	11	44
SIZDMESG	CLIST	Any	U	PDS	FB	80	2	44
SIZDSAMP	Samples	Any	U	PDS	FB	80	29	44
TKANCLI	CLIST	Any	S	PDS	FB	80	2	44
TKANCUS	CLIST	Any	E	PDS	FB	80	77	22
TKANDATV	Data	Any	E	PDS	VB	6160	263	5
TKANEXEC	EXEC	Any	S	PDS	VB	255	41	44
TKANHENU	Help	Any	E	PDS	FB	80	144	38
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	949	508
TKANMODL	LMOD	Any	E	PDS	U	0	207	19
TKANMODP	LMOD	Any	S	PDSE	U	0	379	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	74	56
TKANOSRC	Data	Any	S	PDS	VB	255	6	44
TKANPAR	Parm	Any	E	PDS	FB	80	20	4
TKANPKGI	Data	Any	E	PDS	FB	80	54	4
TKANSAM	Sample	Any	E	PDS	FB	80	10	6
TKANSAMF	Sample	Any	S	PDS	FB	132	16	N/A
TKANWENU	Panel	Any	S	PDS	FB	80	223	220
TKOBDATF	Data	Any	S	PDS	FB	80	2	44
TKOBHELP	Help	Any	S	PDS	FB	80	19	132
TKO2DATA	Data	Any	S	PDS	VB	9072	5	44
TKO2DBRM	Data	Any	S	PDS	FB	80	59	44
TKO2EXEC	EXEC	Any	S	PDS	FB	80	37	44
TKO2HELP	Help	Any	S	PDS	FB	80	18	176

Figure 12 (Page 2 of 2). Storage Requirements for OMEGAMON for Db2 PE on 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
TKO2MENU	Message	Any	S	PDS	FB	80	8	44
TKO2PENU	Panel	Any	S	PDS	FB	80	165	396
TKO2PROC	Panel	Any	S	PDS	FB	80	197	1100
TKO2SAMP	Sample	Any	S	PDS	FB	80	197	88
TKO2SLIB	Sample	Any	S	PDS	FB	80	4	44
TKO2TENU	Table	Any	S	PDS	FB	80	10	44
TKO2WS01	Data	Any	S	PDS	VB	256	42	44

Figure 13 (Page 1 of 2). Storage Requirements for OMEGAMON for Db2 PE on 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	89	44
AIZDMAPS	U	PDS	VB	1024	11	44
AIZDMESG	U	PDS	FB	80	2	44
AIZDSAMP	U	PDS	FB	80	29	44
DKANCLI	S	PDS	FB	80	2	44
DKANCUS	E	PDS	FB	80	77	22
DKANDATV	E	PDS	VB	6160	263	5
DKANEXEC	S	PDS	VB	255	41	44
DKANHENU	E	PDS	FB	80	144	38
DKANISP	S	PDS	FB	80	2	44
DKANMAC	E	PDS	FB	80	8	3
DKANMOD	E	PDS	U	0	953	579
DKANMODL	E	PDS	U	0	207	19
DKANMODP	S	PDSE	U	0	93	N/A
DKANMODS	E	PDS	U	0	61	3

Figure 13 (Page 2 of 2). Storage Requirements for OMEGAMON for Db2 PE on 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
DKANOSRC	S	PDS	VB	255	6	44
DKANPAR	E	PDS	FB	80	20	4
DKANPKGI	E	PDS	FB	80	54	4
DKANSAM	E	PDS	FB	80	10	6
DKANSAMF	S	PDS	FB	132	16	N/A
DKANWENU	S	PDS	FB	80	223	220
DKOBDATF	S	PDS	FB	80	2	44
DKOBHELP	S	PDS	FB	80	19	132
DKO2DATA	S	PDS	VB	9072	5	44
DKO2DBRM	S	PDS	FB	80	59	44
DKO2EXEC	S	PDS	FB	80	37	44
DKO2HELP	S	PDS	FB	80	18	176
DKO2MENU	S	PDS	FB	80	8	44
DKO2PENU	S	PDS	FB	80	165	396
DKO2PROC	S	PDS	FB	80	197	1100
DKO2SAMP	S	PDS	FB	80	197	88
DKO2SLIB	S	PDS	FB	80	4	44
DKO2TENU	S	PDS	FB	80	10	44
DKO2WS01	S	PDS	VB	256	42	44

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 HKDB550 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
TKANCLI	CLIST	Any	S	PDS	FB	80	2	1
TKANCUS	CLIST	Any	E	PDS	FB	80	64	7
TKANDATV	Data	Any	E	PDS	VB	6160	262	3
TKANEXEC	EXEC	Any	S	PDS	VB	255	15	15
TKANHENU	Help	Any	E	PDS	FB	80	132	25
TKANMOD	LMOD	Any	E	PDS	U	0	828	489
TKANMODL	LMOD	Any	E	PDS	U	0	195	17
TKANOSRC	Data	Any	S	PDS	VB	255	6	44
TKANPAR	Parm	Any	E	PDS	FB	80	19	2
TKANPKGI	Data	Any	E	PDS	FB	80	39	2
TKANSAM	Sample	Any	E	PDS	FB	80	7	3
TKANSAMF	Sample	Any	S	PDS	FB	132	14	N/A
TKANWENU	Panel	Any	S	PDS	FB	80	120	81
TKO2DATA	Data	Any	S	PDS	VB	9072	5	1
TKO2DBRM	Data	Any	S	PDS	FB	80	52	23
TKO2EXEC	EXEC	Any	S	PDS	FB	80	33	8
TKO2HELP	Help	Any	S	PDS	FB	80	16	108
TKO2MENU	Message	Any	S	PDS	FB	80	7	19
TKO2PENU	Panel	Any	S	PDS	FB	80	144	257
TKO2PROC	Panel	Any	S	PDS	FB	80	172	782
TKO2SAMP	Sample	Any	S	PDS	FB	80	172	53
TKO2SLIB	Sample	Any	S	PDS	FB	80	4	3
TKO2TENU	Table	Any	S	PDS	FB	80	9	3
TKO2WS01	Data	Any	S	PDS	VB	256	37	1
DKANCLI			S	PDS	FB	80	2	1

Figure 14 (Page 2 of 2). Storage Requirements for HKDB550 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	64	7
DKANDATV			E	PDS	VB	6160	262	3
DKANEXEC			S	PDS	VB	255	15	15
DKANHENU			E	PDS	FB	80	132	25
DKANMOD			E	PDS	U	0	828	489
DKANMODL			E	PDS	U	0	195	17
DKANOSRC			S	PDS	VB	255	6	44
DKANPAR			E	PDS	FB	80	19	2
DKANPKGI			E	PDS	FB	80	39	2
DKANSAM			E	PDS	FB	80	7	3
DKANSAMF			S	PDS	FB	132	14	N/A
DKANWENU			S	PDS	FB	80	120	81
DKO2DATA			S	PDS	VB	9072	5	1
DKO2DBRM			S	PDS	FB	80	52	23
DKO2EXEC			S	PDS	FB	80	33	8
DKO2HELP			S	PDS	FB	80	16	108
DKO2MENU			S	PDS	FB	80	7	19
DKO2PENU			S	PDS	FB	80	144	257
DKO2PROC			S	PDS	FB	80	172	782
DKO2SAMP			S	PDS	FB	80	172	53
DKO2SLIB			S	PDS	FB	80	4	3
DKO2TENU			S	PDS	FB	80	9	3
DKO2WS01			S	PDS	VB	256	37	1

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 O R D I N G	L E N G T H	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	9	4
TKANHENU	Help	Any	E	PDS	FB	80	3	4
TKANISP	CLIST	Any	S	PDS	FB	80	2	1
TKANMAC	Macro	Any	E	PDS	FB	80	8	3
TKANMOD	LMOD	Any	E	PDS	U	0	104	17
TKANMODL	LMOD	Any	E	PDS	U	0	12	2
TKANMODP	LMOD	Any	S	PDSE	U	0	313	N/A
TKANMODS	LMOD	Any	E	PDS	U	0	74	56
TKANOSRC	Data	Any	S	PDS	VB	255	3	5
TKANPAR	Parm	Any	E	PDS	FB	80	1	2
TKANPKGI	Data	Any	E	PDS	FB	80	13	2
TKANSAM	Sample	Any	E	PDS	FB	80	3	3
TKANWENU	Panel	Any	S	PDS	FB	80	21	27
TKOBDATF	Data	Any	S	PDS	FB	80	1	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	9	4
DKANHENU			E	PDS	FB	80	3	4
DKANISP			S	PDS	FB	80	1	2
DKANMAC			E	PDS	FB	80	8	3
DKANMOD			E	PDS	U	0	108	88
DKANMODL			E	PDS	U	0	12	2
DKANMODP			S	PDSE	U	0	69	N/A
DKANMODS			E	PDS	U	0	61	3
DKANOSRC			S	PDS	VB	255	3	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	13	2
DKANSAM			E	PDS	FB	80	3	3
DKANWENU			S	PDS	FB	80	21	27
DKOBDATF			S	PDS	FB	80	1	2
DKOBHELP			S	PDS	FB	80	17	66

Figure 16. Storage Requirements for HIZD310 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
SIZDINST	JCL	Any	U	PDS	FB	80	3	3
SIZDSAMP	Samples	Any	U	PDS	FB	80	25	3
SIZDEXEC	CLIST	Any	U	PDS	FB	80	20	3
SIZDLOAD	Samples	Any	U	PDS	U	0	65	12
SIZDMAPS	CLIST	Any	U	PDS	VB	1024	8	3
SIZDMESG	CLIST	Any	U	PDS	FB	80	3	3
AIZDINST			U	PDS	FB	80	3	3
AIZDSAMP			U	PDS	FB	80	25	3
AIZDEXEC			U	PDS	FB	80	20	3
AIZDLOAD			U	PDS	U	0	65	12
AIZDMAPS			U	PDS	VB	1024	8	3
AIZDMESG			U	PDS	FB	80	3	5

5.3 FMIDs Deleted

Installing OMEGAMON for Db2 PE on 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 for Db2 PE on 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 for Db2 PE on 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.

Prior to installing OMEGAMON for Db2 PE on 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>

The **First time deployment guide (FTU installation and configuration tasks)** documentation can be found on the IBM Documentation website at:

<https://www.ibm.com/docs/en/om-shared?topic=guide-ftu-installation-configuration-tasks>

In preparation for the Java 7 EoS later this quarter;

- The Java Runtime Environment (JRE) packages that are shipped with IBM Tivoli Monitoring have been upgraded to the following:
 - **1.8.0 SR7 FP5 for CANDLEHOME on AIX, Linux, Solaris amd64 and Windows.**

For more explicit information, See: <https://www.ibm.com/support/pages/node/6563281>

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 - UJ07786
HKDS630 - UJ07787
HKLV630 - UJ07235
HKOB750 - UJ07994
```

PTF UA78769 (HIZD310 FMID), applying this ptf requires the use of the SMP/E SMPTLOAD DDDEF statement, ensure that SMPTLOAD is defined in the CSI.

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

```
#globalcsi - The dsname of your global CSI.
#tzone - The name of the SMP/E target zone.
#dzone - The name of the SMP/E distribution zone.

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

Consider the following items when using shared CSI zones.

- You must specify the same high-level qualifier for the target and distribution libraries as the other products in the same zones for the configuration tool to work correctly.
- If you install a product into an existing CSI that contains a previous version of the same product, SMP/E deletes the previous version during the installation process. To maintain multiple product versions concurrently, they must be installed into separate CSI zones.
- If you install into an existing environment, you might need to remove data set references from the installation jobs to avoid errors because the data sets already exist.
- If you are installing into an existing environment that has the data sets already allocated, ensure sufficient space and directory blocks are available to support the requirement listed in the DASD tables. This might require you to reallocate some data sets to avoid x37 abends.
- If you want OMEGAMON for Db2 PE on z/OS and the Data Studio Workbench feature of Db2 Accessories Suite to coexist, ensure they are installed in different CSI target zones. Then separate run-time environments of OMEGAMON for Db2 PE and Data Studio Workbench can be configured to coexist in a given LPAR.

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 for Db2 PE on z/OS.

Please note the following points:

- If you want to install OMEGAMON for Db2 PE on 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 for Db2 PE on z/OS

6.1.1 SMP/E Considerations for Installing OMEGAMON for Db2 PE on z/OS

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of OMEGAMON for Db2 PE on z/OS.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 17. 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 17. 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 for Db2 PE on z/OS uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When OMEGAMON for Db2 PE on z/OS is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCEEBND2
- SCEELIB
- SCLBSID
- SEZACMTX

Note: CALLLIBS uses the previous DDDEFs only to resolve the link-edit for OMEGAMON for Db2 PE on z/OS. These data sets are not updated during the installation of OMEGAMON for Db2 PE on 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_hi1ev.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.

Note: Install Job Generator (JOBGEN) output library: You can specify the Install Job Generator (JOBGEN) output library during the PARMGEN "KCIJPCFG Set up/Refresh PARMGEN work environment" configuration processing to reuse parameter values such as the jobcard and CSI values related to CALLLIBS and USS install directory override data.

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 for Db2 PE on 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 18 are provided as part of the product to help you install OMEGAMON for Db2 PE on z/OS.

<i>Figure 18. Sample Installation Jobs</i>			
Job Name	Job Type	Description	SMPTLIB Data Set
KDBJ3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKDB550.F25
KDBJ4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKDB550.F25
KDBJ5REC	RECEIVE	Sample RECEIVE job	IBM.HKDB550.F25
KDBJ6APP	APPLY	Sample APPLY job	IBM.HKDB550.F25
KDBJ7ACC	ACCEPT	Sample ACCEPT job	IBM.HKDB550.F25

The installation of OMEGAMON for Db2 PE on 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.HKDB550.F25,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=(KDBJ3ALO,KDBJ4DDF,KDBJ5REC,KDBJ6APP,KDBJ7ACC)
/*
```

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 for Db2 PE on z/OS.

If you are not using the generated allocation job, select the sample job KDBJ3ALO. 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 for Db2 PE on z/OS.

If you are not using the generated job, select the sample job KDBJ4DDF. 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 for Db2 PE on z/OS as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the OMEGAMON for Db2 PE on 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 KDBJ5REC to perform the SMP/E RECEIVE for OMEGAMON for Db2 PE on z/OS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: 0

6.1.9 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 for Db2 PE on z/OS.

If you are not using the generated job, select the sample job KDBJ6APP 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.

The latest HOLDDATA is available through several different portals, including <http://service.software.ibm.com/holddata/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 you process a PTF with a ++HOLD statement, you may receive a return code of 4 and the following message when the BYPASS operand is used.

```
GIM42001W THE FOLLOWING CONDITIONS FOR SYSMOD sysmod
          WERE NOT SATISFIED, BUT WERE IGNORED BECAUSE THE
          BYPASS OPERAND WAS SPECIFIED. PROCESSING CONTINUES.
```

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

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

Expected Return Codes and Messages from APPLY: 4

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

```
GIM23913W LINK-EDIT PROCESSING FOR SYSMOD aaaaaaa
          WAS SUCCESSFUL FOR MODULE bbbbbbbb IN
          LMOD cccccccc IN THE dddddddd LIBRARY. THE
          RETURN CODE WAS ee. DATE yy.ddd -- TIME
          hh:mm:ss -- SEQUENCE NUMBER nnnnnn --
          SYSPRINT FILE ffffffff.
GIM43401W elmtime elmtime IN SYSMOD sysmod WAS NOT INSTALLED IN
          ANY TARGET LIBRARY.
```

Figure 19 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.

<i>Figure 19 (Page 1 of 4). SMP/E Elements Not Selected</i>					
DGOADIST	DGOPAA10	DGOPSA10	FPEITASC	FPEITASU	FPEITASV
FPEKITQ	FPEVSIM	FPEVUAM	IZDCDEF	IZDCICSA	IZDCICSC
IZDCICSD	IZDCICSF	IZDCICSI	IZDCICSM	IZDCICSO	IZDCICSP
IZDCICSS	IZDCICST	IZDIRSC	IZDIRSCJ	IZDIRSCX	IZDISDBD
IZDISDPD	IZDISPRD	IZDISSD	IZDISTRD	IZDMCMDI	IZDRDLA
IZDSNETS	IZDSSUBI	IZDUSTRN	KCADEVT0	KCAIMGR4	KCAOSYS0
KCAUCBS0	KCNCFDRP	KCNCPYRM	KDPPIR00	KDPPLEX	KDPPRH00
KDPSNM00	KD5ACINO	KD5ACMD	KD5ACT@S	KD5ACT00	KD5AGAVT
KD5ASSCT	KD5AUTOD	KD5AUTO0	KD5DCIFP	KD5DCIF0	KD5DSPLY
KD5DSPL0	KD5HUB0H	KD5HUB00	KD5INI0H	KD5INI00	KD5IRA00
KD5IRH00	KD5KFA0H	KD5KFA00	KD5LRDEL	KD5LRGET	KD5LRNEW
KD5LRREL	KD5SNM00	KD5SRV00	KD5SUBIP	KD5SUBIQ	KD5SUBJP
KD5SUBJQ	KD5WTO00	KEBDUMMY	KEBEPLG0	KEBFINT0	KEBFNDD0
KEBFPAR0	KEBFSCR0	KEBGTID0	KEBICPW0	KEBINIT	KEBLNKA0
KEBLNKC0	KEBMSGF0	KEBMXA14	KEBNVCR0	KEBNVDL0	KEBNVEA0
KEBNVIQ0	KEBNVOP0	KEBNVSU0	KEBNVUD0	KEBPRFE0	KEBROPN0
KEBSMF14	KEBSPFD0	KEBSTAE4	KEBSTAK0	KEBTIOT0	KEBTSO0
KEBVMC0	KEBWKGT0	KEBWKPT0	KEBZSB10	KEB132F0	KEB2ISPF
KIABGMN	KIACARE	KIACKPG5	KIACMLK5	KIACPUW5	KIADPGN5
KIADWCL5	KIAENQW5	KIAHSKP5	KIAIAFM	KIAIAJ25	KIAIAMD

Figure 19 (Page 2 of 4). SMP/E Elements Not Selected

KIAIANL5	KIAIANZ	KIAMDCL5	KIAMDIN5	KIAMNTP0	KIAMSELO
KIAPGSW5	KIAQIOW5	KIARCOL5	KIARECD5	KIARECV5	KIARSMS5
KIASORT0	KIASRMD5	KOB\$VERT	KOBABOUT	KOBAG2	KOBALTCK
KOBBASEM	KOBBCM1M	KOBLOGM	KOBMSGM	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	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	KOBDSPT	KOBDSQZM	KOBENUS	KOBENV#T
KOBERROR	KOBESAIS	KOBEXCDM	KOBFILTD	KOBFILTH	KOBFILT
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	KOBHLPFK
KOBHLPMT	KOBHLPRR	KOBHLRTT	KOBHTT\$	KOBHTT#	KOBHTT@
KOBHTTPL	KOBHTT\$	KOBHTT\$PW	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	KOBINPMM
KOBINP20	KOBINT#M	KOBINTXT	KOBINT1M	KOBINT2T	KOBIPRFM
KOBIPROM	KOBISSSM	KOBITMLG	KOBIVCMM	KOBJAP0	KOBJCA0
KOBJCC0	KOBJCD0	KOBJCG0	KOBJCI0	KOBJCM0	KOBJCR0
KOBJCT0	KOBJCW0	KOBJCX0	KOBJLF	KOBJLF00	KOBJLF01

Figure 19 (Page 3 of 4). SMP/E Elements Not Selected

KOBLG0	KOBLJMC0	KOBLJMP0	KOBLJMS0	KOBLJMT0	KOBLJ640
KOBLEXCM	KOBLGINI	KOBLGSND	KOBLGSRV	KOBLGWTO	KOBLISTN
KOBLOFLT	KOBLOGCM	KOBLOGON	KOBLOG10	KOBMEMSA	KOBMOBEC
KOBMOBE1	KOBMODS	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	KOBPDEVT	KOBPDHST
KOBPDS	KOBPDSI0	KOBPEEKT	KOBPPRFM	KOBPRFIS	KOBPRFJS
KOBPRFND	KOBPRFPB	KOBPRFSA	KOBPRFSS	KOBPRFTB	KOBPRFVF
KOBPRFWN	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	KOBXPDR
KOBXRQRY	KOBXRSET	KOBZRZFM0	KOBZRZFNL	KOBZRZGDM	KOBZRZGDR
KOBZRZGFC	KOBZRZGM0	KOBZRZGNV	KOBZRZSH	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	KOBSEDD2
KOBSEDD3	KOBSEDEA	KOBSEDEB	KOBSEDEC	KOBSEDED	KOBSEDEE
KOBSEDEF	KOBSEDEG	KOBSEDFE	KOBSEDEGV	KOBSEDEPA	KOBSEDEPD
KOBSEDPJ	KOBSEDPK	KOBSEDP	KOBSEDP	KOBSEDPX	KOBSEDPZ
KOBSEDP0	KOBSEDP1	KOBSEDP2	KOBSEDP3	KOBSEDP5	KOBSEDP6
KOBSEDP7	KOBSEDP8	KOBSEDP9	KOBSEDSA	KOBSEDS0	KOBSEDTA
KOBSEDTD	KOBSEDETE	KOBSEDTF	KOBSEDT	KOBSEDTN	KOBSEDTQ
KOBSEDT	KOBSEDTU	KOBSEDTZ	KOBSEDT2	KOBSEDT1	KOBSEDT5A
KOBSEDT5B	KOBSEDT6A	KOBSEDT6B	KOBSEDT7A	KOBSEDT7B	KOBSEDT9A

Figure 19 (Page 4 of 4). SMP/E Elements Not Selected

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	KOB SZOS	KOB TBAPP
KOBTCBFA	KOBTCBS	KOBTCCL\$	KOBTCCLA	KOBTERMM	KOBTHRMT
KOBTHRSH	KOBTKJLF	KOBTRCUI	KOB TREET	KOB TREEU	KOB TREEZ
KOBTSO#M	KOBUICM0	KOBUICS0	KOBUIEP0	KOBUIFD0	KOBUIGD0
KOBUIGL0	KOBUIGO0	KOBUIGP0	KOBUIGS0	KOBUIHL0	KOBUIHS0
KOBUILG0	KOBUILO0	KOBUIMA0	KOBUIMB0	KOBUIMC0	KOBUIMD0
KOBUIME0	KOBUIMG0	KOBUIML0	KOBUIM10	KOBUIM20	KOBUIM30
KOBUIM40	KOBUIM50	KOBUIM60	KOBUIM70	KOBUIM80	KOBUIM90
KOBUIIN0	KOBUINTM	KOBUIINV0	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	KOBWIZNI	KOBWIZRD	KOBWIZTB	KOBWIZ01	KOBWZATB
KOBWZDGS	KOBWZDRG	KOBWZHUB	KOBWZTAB	KOBXACBM	KOBXASBT
KOBXGSWM	KOBXMEMS	KOBXMSDM	KOBXMZPM	KOB3270S	KO2CIMSC
KO2CIMSD	KO2CIMSE	KO2DCINB	KO2DXSTB	KO2HHCPB	KO2ITABB
KO2RDUMP	KO2UKEY	KO2XDDSA	KO2XDDS4	KO2XDDS5	KO2XDDS6
KO2XDDS7	KO2XDDS8	KO2XIMSC	KO2XIMSD	KO2XIMSE	KPQALLOC
KPQBITIX	KPQBSIND	KPQBTRIEE	KPQBTRIX	KPQCOLLS	KPQCSI0
KPQCTGSA	KPQCTMSG	KPQDMTLI	KPQDYNAL	KPQDYNAR	KPQH Parm
KPQHSICP	KPQHSMGR	KPQHSODI	KPQHSPDT	KPQHUTIL	KPQIDXT0
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.

6.1.10 Perform SMP/E ACCEPT

Edit and submit the generated job KCIJGACC to perform an SMP/E ACCEPT CHECK for OMEGAMON for Db2 PE on z/OS.

If you are not using the generated job, select the sample job KDBJ7ACC 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 you process a PTF with a ++HOLD statement, you may receive a return code of 4 and the following message when the BYPASS operand is used.

```
GIM42001W THE FOLLOWING CONDITIONS FOR SYSMOD sysmod
          WERE NOT SATISFIED, BUT WERE IGNORED BECAUSE THE
          BYPASS OPERAND WAS SPECIFIED. PROCESSING CONTINUES.
```

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 19 on page 36 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.

6.1.11 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs

The following file system paths, which were created and used by previous releases of this product, are no longer used in this release. You can delete these obsolete file system paths after you delete the previous release from your system.

- #hfmdir/usr/lpp/opmei/v540/lib/IBM
- #hfmdir/usr/lpp/opmei/v540/lib
- #hfmdir/usr/lpp/opmei/v540
- #hfmdir/usr/lpp/opmei/v530/lib/IBM
- #hfmdir/usr/lpp/opmei/v530/lib
- #hfmdir/usr/lpp/opmei/v530
- #hfmdir/usr/lpp/opmei/v520/lib/IBM
- #hfmdir/usr/lpp/opmei/v520/lib
- #hfmdir/usr/lpp/opmei/v520
- #hfmdir/usr/lpp/opmei/v511/lib/IBM
- #hfmdir/usr/lpp/opmei/v511/lib
- #hfmdir/usr/lpp/opmei/v511
- #hfmdir/usr/lpp/opmei/v510/lib/IBM
- #hfmdir/usr/lpp/opmei/v510/lib
- #hfmdir/usr/lpp/opmei/v510

6.2 Activating OMEGAMON for Db2 PE on z/OS

Prior to activating OMEGAMON for Db2 PE on 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.

Note: Install Job Generator (JOBGEN) output library: You can specify the Install Job Generator (JOBGEN) output library during the PARMGEN "KCIJPCFG Set up/Refresh PARMGEN work environment" configuration processing to reuse parameter values such as the jobcard and CSI values related to CALLLIBS and USS install directory override data.

The *Planning, configuration, and Migration* documentation contains the step-by-step procedures to activate the functions of OMEGAMON for Db2 PE on z/OS.

This documentation can be found online at:

<https://www.ibm.com/docs/en/om-db2-pe>

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