



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

V5.4.0

Program Number 5655-W37

for use with
z/OS

Document Date: February 2021

GI19-5019-01

Note

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 41.

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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 Tivoli OMEGAMON XE for Db2 Performance Expert on z/OS. This publication refers to IBM Tivoli OMEGAMON XE for Db2 Performance Expert on z/OS as OMEGAMON XE 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 XE for Db2 PE on z/OS.
- 3.0, “Program Support” on page 7 describes the IBM support available for OMEGAMON XE 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 XE for Db2 PE on z/OS.
- 5.0, “Installation Requirements and Considerations” on page 10 identifies the resources and considerations that are required for installing and using OMEGAMON XE for Db2 PE on z/OS.
- 6.0, “Installation Instructions” on page 25 provides detailed installation instructions for OMEGAMON XE for Db2 PE on z/OS. It also describes the procedures for activating the functions of OMEGAMON XE for Db2 PE on z/OS, or refers to appropriate publications.

Before installing OMEGAMON XE 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 and this program directory; then keep them for future 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 XE for Db2 PE on z/OS is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The program directory on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for OMEGAMON XE for Db2 PE on z/OS are included on the CBPDO tape.

Do not use this program directory if you install OMEGAMON XE for Db2 PE on z/OS with a Solution Pack. 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 XE for Db2 PE on z/OS Description

IBM Tivoli introduces significant updates to IBM Tivoli OMEGAMON Performance Monitors for key System z environments designed to run on IBM Tivoli Monitoring V6.3.0 Fix Pack 2 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 enhanced IBM Tivoli Monitoring and PARMGEN configuration tool functions. If you previously configured and deployed this product using the ICAT Configuration Tool, you must migrate and upgrade your existing RTE from ICAT to PARMGEN mode (at APAR OA50912 level, HKCI310 PTF UA82508) since the ICAT Configuration Tool support was removed starting in the OMEGAMON Family V530 releases.

OMEGAMON XE for Db2 PE on z/OS V5.4 includes an end-to-end response time measurement capability, materializing Db2 for z/OS SQL metrics, making it IBM's most comprehensive Db2 application performance assessment tool. You can use OMEGAMON to evaluate the efficiency of, and optimize the performance of, your Db2 for z/OS database across your heterogeneous application environment. It offers all of the capabilities of IBM Tivoli OMEGAMON XE for Db2 Performance Monitor on z/OS, in addition to its own unique capabilities including the Buffer Pool Analyzer for z/OS component. As part of the IBM Tivoli OMEGAMON family of performance monitors for key System z environments, OMEGAMON XE for Db2 PE on z/OS advances the enhanced 3270UI with this release. The advanced 3270UI improves DBAs and other technical professionals' ability to monitor, analyze, and optimize the performance of Db2 databases and Db2 on z/OS applications online in real time.

This release provides features that improve the integration between other IBM performance products: IBM Tivoli OMEGAMON XE for CICS on z/OS, V5.3 (5698-T07) and Db2 Query Monitor for z/OS, V3.2 (5655-V42). There is additional support for Db2 Analytics Accelerator to optimize customer's Db2 Analytics Accelerator usage for greater acceleration and reduction of system resources. Customers using the Management Console for IMS and Db2 for z/OS, V1.1 (5655-TAC) will be able to view key performance indicators about Db2 for z/OS subsystems for the overall enterprise from a centralized console. OMEGAMON product family history support has been added as well as 3270UI cross-monitor linking with embedded data integration. Complete SQL text is provided for key thread displays to simplify problem identification and resolution for the user.

1.2 OMEGAMON XE for Db2 PE on z/OS FMIDs

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

- HKDB54X
- HKDB540
- HKOB730
- HPMZ540

2.0 Program Materials

An IBM program is identified by a program number. The program number for OMEGAMON XE 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 XE 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 25 for more information about how to install the program.

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for OMEGAMON XE for Db2 PE on z/OS.

2.3 Program Publications

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

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

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

- found on the IBM Knowledge Center at: https://www.ibm.com/support/knowledgecenter/SSUSPS/kc_pe_master_welcome.htm
- obtained as pdf file from the IBM Publications Center website at: <https://www-05.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>
- 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/pages/node/599777#omegaxepe-lib>

<i>Figure 1. Basic Material: Unlicensed Publications</i>	
Publication Title	Form Number
<i>Quick Start Guide for the SQL Dashboard and the end-to-end SQL monitoring functions</i>	GH12-7064
<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
<i>Buffer Pool Analyzer Configuration Guide</i>	SH12-7076
OMEGAMON XE and Tivoli Management Services on z/OS shared documentation	
<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 XE for Db2 PE on z/OS, IBM recommends you review the Quick Start Guide, **What's new & PDFs, 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 **OMEGAMON XE and Tivoli Management Services on z/OS** shared documentation, and other IBM product documentation can be found at the IBM Knowledge Center URL listed below:

https://www.ibm.com/support/knowledgecenter/SSAUBV/com.ibm.omegamon_share.doc_6.3.0.2/shared_welcome/welcome.htm

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

https://www.ibm.com/support/knowledgecenter/SSAUBV/com.ibm.omegamon_share.doc_6.3.0.2/ftu/ftu_cfg_intro.htm

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.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for OMEGAMON XE for Db2 PE on z/OS.

2.5 Publications Useful During Installation

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

<i>Figure 2. Publications Useful During Installation</i>	
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

These publications can be obtained from the IBM Publications Center website at https://www.ibm.com/support/knowledgecenter/SSLTBW_2.1.0/com.ibm.zos.v2r1.gim/gim.html

3.0 Program Support

This section describes the IBM support available for OMEGAMON XE 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 XE 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 6.1.11, “Perform SMP/E APPLY” on page 33 for a sample APPLY command.

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

If the CBPDO for OMEGAMON XE 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 <https://www.ibm.com/support/home>.

PSP Buckets are identified by UPGRADEs, which specify product levels; and SUBSETs, which specify the FMIDs for a product level. The PSP SUBSET name reflects the FMID that was updated and the corresponding CBPDO weekly service tape that was used to supply the integrated PTFs, (for example: FMID/YYWW, where YY is the year and WW is the week of the CBPDO weekly service tape).

The UPGRADE and SUBSET values for OMEGAMON XE for Db2 PE on z/OS are included in Figure 3 on page 8.

This product has an installation requirement for IBM Tivoli Management Services on z/OS V6.3.0 Fix Pack 2 or higher (5698-A79), so you should review the PSP buckets for it as well. Refer to the *Program Directory for IBM Tivoli Management Services on z/OS* (GI11-4105) for those UPGRADE and SUBSET values.

Figure 3. PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
5655W37	HKDB54X/2042	OMEGAMON XE for Db2 PE License Key
	HKDB540/2042	OMEGAMON XE for Db2 PE BASE
	HKOB730/2042	OMNIMON Base
	HPMZ540/2042	IBM InfoSphere Optim Data Tools Runtime Client

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 XE for Db2 PE on z/OS.

Figure 4. Component IDs

FMID	COMPID	Component Name	RETAIN Release
HKDB54X	5655OPE00	OMEGAMON XE for Db2 PE License Key	54X
HKDB540	5655OPE00	OMEGAMON XE for Db2 PE BASE	540
HKOB730	5608A41OB	OMNIMON Base	730
HPMZ540	5724Y9401	IBM InfoSphere Optim Data Tools Runtime Client	540

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of OMEGAMON XE 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

APAR fixes against this release of OMEGAMON XE for Db2 PE on z/OS have been incorporated into this product package. For a list of included fixes, examine the ++VER statement in the product's SMPMCS.

4.2 Service Level Information

PTFs containing APAR fixes against this release of OMEGAMON XE for Db2 PE on z/OS have been incorporated into this product package. For a list of included PTFs, examine the ++VER statement in the product's SMPMCS.

Frequently check the OMEGAMON XE 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 XE 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.
- *Target system*: the system on which the program is configured and run.

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 XE 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	V02.02.00 or higher	N/A	No

Note: SMP/E is a requirement for Installation and is an element of z/OS but can also be ordered as a separate product, 5655-G44, minimally V03.06.00.

Note: Installation might require migration to new z/OS releases to be service supported. See <https://www.ibm.com/it-infrastructure/z/zos>

The IBM InfoSphere Optim Data Tools Runtime Client component is installed into a file system, either HFS or zFS. Before installing this component, you must ensure that the target system file system data sets are available for processing on the driving system. OMVS must be active on the driving system and the target system file data sets must be mounted on the driving system.

If you plan to install this component in a zFS file system, this requires that zFS be active on the driving system. Information on activating and using zFS can be found in z/OS Distributed File Service zSeries File System Administration, SC24-5989.

5.2 Target System Requirements

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

OMEGAMON XE 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.

<i>Figure 6. Target System Mandatory Installation Requisites</i>				
Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	V02.02.00 or higher	N/A	No
5698-A79	IBM Tivoli Management Services on z/OS	V06.03.00	N/A	No

Note: Installation might require migration to new z/OS releases to be service supported. See <https://www.ibm.com/it-infrastructure/z/zos>

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 XE 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 (Page 1 of 2). Target System Mandatory Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
5650-ZOS	z/OS V02.02.00 or higher
5698-A79	IBM Tivoli Management Services on z/OS V06.03.00 or higher
Any one of the following:	

<i>Figure 7 (Page 2 of 2). Target System Mandatory Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
5615-DB2	IBM Db2 for z/OS V11.01.00
5650-DB2	IBM Db2 for z/OS V12.01.00
5697-P43	Db2 for z/OS Value Unit Edition V11.00.00
5770-AF3	Db2 for z/OS Value Unit Edition V12.01.00

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-S97	CICS Transaction Server for z/OS V04.01.00 or higher
5655-Y04	CICS Transaction Server for z/OS V05.01.00 or higher
5635-A04	IBM IMS V13.01.00
5635-A05	IBM IMS V14.01.00

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

5.2.3 DASD Storage Requirements

OMEGAMON XE 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 XE for Db2 PE on z/OS</i>	
Library Type	Total Space Required in 3390 Trks
Target	14040
Distribution	13966
File System	200

Notes:

1. If you are installing into an existing environment that has the data sets in Figure 12 on page 16 and Figure 14 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. Use system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, a block size of 32760 is recommended, which is the most efficient from a 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 30.

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.

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.
- These data sets can be in the LNKLST except for TKANMODR and TKANMODS.

If you are installing into an existing environment, ensure the values used for the SMP/E work datasets 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.

<i>Figure 10. Storage Requirements for SMP/E Work Data Sets</i>							
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 Trks	Sec No. of 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 on page 16. 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 14 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 19 for more information.

The storage requirements of OMEGAMON XE 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 XE for Db2 PE on z/OS Target Libraries

Library DDNAME	Member Type	Target Volume	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	No. of 3390 Trks	No. of DIR Blks
SEIWPKGI	Data	Any	U	PDS	FB	80	2	44
TKANCLI	CLIST	Any	S	PDS	FB	80	2	44
TKANCMD	EXEC	Any	E	PDS	FB	80	23	88
TKANCUS	CLIST	Any	E	PDS	FB	80	1836	1100
TKANDATV	Data	Any	E	PDS	VB	6160	825	88
TKANEXEC	EXEC	Any	S	PDS	VB	255	41	44
TKANHENU	Help	Any	E	PDS	FB	80	775	704
TKANISP	CLIST	Any	S	PDS	FB	80	2	44

Figure 12 (Page 2 of 2). Storage Requirements for OMEGAMON XE 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
TKANMAC	Macro	Any	E	PDS	FB	80	34	44
TKANMOD	LMOD	Any	E	PDS	U	0	1717	440
TKANMODL	LMOD	Any	E	PDS	U	0	3522	660
TKANMODP	LMOD	Any	S	PDSE	U	0	359	n/a
TKANMODS	LMOD	Any	E	PDS	U	0	306	220
TKANOSRC	Data	Any	S	PDS	VB	255	8	44
TKANPAR	Data	Any	E	PDS	FB	80	153	88
TKANPENU	Panel	Any	E	PDS	FB	80	1596	3080
TKANPKGI	Data	Any	E	PDS	FB	80	201	88
TKANSAM	Sample	Any	E	PDS	FB	80	632	300
TKANSAMF	Sample	Any	S	PDS	FB	132	13	44
TKANSAMV	Sample	Any	S	PDS	VB	255	11	44
TKANSQL	Data	Any	E	PDS	FB	80	33	88
TKANWENU	Panel	Any	S	PDS	FB	80	235	132
TKCIINST	Exec	Any	E	PDS	FB	80	112	132
TKNSLOCL	Data	Any	E	PDS	VB	6160	71	88
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	8	44
TKO2DBRM	Data	Any	S	PDS	FB	80	60	44
TKO2EXEC	EXEC	Any	S	PDS	FB	80	39	44
TKO2HELP	Help	Any	S	PDS	FB	80	33	132
TKO2MENU	Message	Any	S	PDS	FB	80	8	44
TKO2PENU	Panel	Any	S	PDS	FB	80	266	748
TKO2PROC	Panel	Any	S	PDS	FB	80	500	900
TKO2SAMP	Sample	Any	S	PDS	FB	80	277	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	305	44

Figure 13. OMEGAMON XE for Db2 PE on z/OS File System Paths

DDNAME	T Y P E	Path Name
SEIWLIB	N	/usr/lpp/opmei/v540/lib/IBM

Figure 14 (Page 1 of 2). Storage Requirements for OMEGAMON XE 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
AEIWLIB	U	PDS	VB	255	169	44
AEIWPKGI	U	PDS	FB	80	2	44
DKANCLI	S	PDS	FB	80	2	44
DKANCMD	E	PDS	FB	80	23	88
DKANCUS	E	PDS	FB	80	1836	1100
DKANDATV	E	PDS	VB	6160	825	88
DKANEXEC	S	PDS	VB	255	41	44
DKANHENU	E	PDS	FB	80	775	704
DKANISP	S	PDS	FB	80	2	44
DKANMAC	E	PDS	FB	80	34	44
DKANMOD	E	PDS	U	0	1717	880
DKANMODL	E	PDS	U	0	3524	660
DKANMODP	S	PDSE	U	0	114	n/a
DKANMODS	E	PDS	U	0	306	220
DKANOSRC	S	PDS	VB	255	8	44
DKANPAR	E	PDS	FB	80	153	88
DKANPENU	E	PDS	FB	80	1596	3080
DKANPKGI	E	PDS	FB	80	201	88
DKANSAM	E	PDS	FB	80	632	300
DKANSAMF	S	PDS	FB	132	13	44
DKANSAMV	S	PDS	VB	255	11	44
DKANSQL	E	PDS	FB	80	33	88
DKANWENU	S	PDS	FB	80	235	132

Figure 14 (Page 2 of 2). Storage Requirements for OMEGAMON XE 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
DKCIINST	E	PDS	FB	80	112	132
DKNSLOCL	E	PDS	VB	6160	71	88
DKOBDATF	S	PDS	FB	80	2	44
DKOBHELP	S	PDS	FB	80	19	132
DKO2DATA	S	PDS	VB	9072	8	44
DKO2DBRM	S	PDS	FB	80	60	44
DKO2EXEC	S	PDS	FB	80	39	44
DKO2HELP	S	PDS	FB	80	33	132
DKO2MENU	S	PDS	FB	80	8	44
DKO2PENU	S	PDS	FB	80	266	748
DKO2PROC	S	PDS	FB	80	500	900
DKO2SAMP	S	PDS	FB	80	277	88
DKO2SLIB	S	PDS	FB	80	4	44
DKO2TENU	S	PDS	FB	80	10	44
DKO2WS01	S	PDS	VB	256	305	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 15 (Page 1 of 2). Storage Requirements for HKDB54X 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	1836	1100
TKANMOD	LMOD	Any	E	PDS	U	0	1717	440
TKANPKGI	Data	Any	E	PDS	FB	80	201	88
DKANCUS			E	PDS	FB	80	1836	1100
DKANMOD			E	PDS	U	0	1717	880

Figure 15 (Page 2 of 2). Storage Requirements for HKDB54X 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
DKANPKG1			E	PDS	FB	80	201	88

Figure 16 (Page 1 of 2). Storage Requirements for HKDB540 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	44
TKANCUS	CLIST	Any	E	PDS	FB	80	1836	1100
TKANDATV	Data	Any	E	PDS	VB	6160	825	88
TKANEXEC	EXEC	Any	S	PDS	VB	255	41	44
TKANHENU	Help	Any	E	PDS	FB	80	775	704
TKANMOD	LMOD	Any	E	PDS	U	0	1717	440
TKANMODL	LMOD	Any	E	PDS	U	0	3522	660
TKANOSRC	Data	Any	S	PDS	VB	255	8	44
TKANPAR	Data	Any	E	PDS	FB	80	153	88
TKANPKG1	Data	Any	E	PDS	FB	80	201	88
TKANSAM	Sample	Any	E	PDS	FB	80	632	300
TKANSAMF	Sample	Any	S	PDS	FB	132	13	44
TKANSAMV	Sample	Any	S	PDS	VB	255	11	44
TKANWENU	Panel	Any	S	PDS	FB	80	235	132
TKO2DATA	Data	Any	S	PDS	VB	9072	8	44
TKO2DBRM	Data	Any	S	PDS	FB	80	60	44
TKO2EXEC	EXEC	Any	S	PDS	FB	80	39	44
TKO2HELP	Help	Any	S	PDS	FB	80	33	132
TKO2MENU	Message	Any	S	PDS	FB	80	8	44
TKO2PENU	Panel	Any	S	PDS	FB	80	266	748
TKO2PROC	Panel	Any	S	PDS	FB	80	500	900
TKO2SAMP	Sample	Any	S	PDS	FB	80	277	88
TKO2SLIB	Sample	Any	S	PDS	FB	80	4	44

Figure 16 (Page 2 of 2). Storage Requirements for HKDB540 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
TKO2TENU	Table	Any	S	PDS	FB	80	10	44
TKO2WS01	Data	Any	S	PDS	VB	256	305	44
DKANCLI			S	PDS	FB	80	2	44
DKANCUS			E	PDS	FB	80	1836	1100
DKANDATV			E	PDS	VB	6160	825	88
DKANEXEC			S	PDS	VB	255	41	44
DKANHENU			E	PDS	FB	80	775	704
DKANMOD			E	PDS	U	0	1717	880
DKANMODL			E	PDS	U	0	3524	660
DKANOSRC			S	PDS	VB	255	8	44
DKANPAR			E	PDS	FB	80	153	88
DKANPKGI			E	PDS	FB	80	201	88
DKANSAM			E	PDS	FB	80	632	300
DKANSAMF			S	PDS	FB	132	13	44
DKANSAMV			S	PDS	VB	255	11	44
DKANWENU			S	PDS	FB	80	235	132
DKO2DATA			S	PDS	VB	9072	8	44
DKO2DBRM			S	PDS	FB	80	60	44
DKO2EXEC			S	PDS	FB	80	39	44
DKO2HELP			S	PDS	FB	80	33	132
DKO2MENU			S	PDS	FB	80	8	44
DKO2PENU			S	PDS	FB	80	266	748
DKO2PROC			S	PDS	FB	80	500	900
DKO2SAMP			S	PDS	FB	80	277	88
DKO2SLIB			S	PDS	FB	80	4	44
DKO2TENU			S	PDS	FB	80	10	44
DKO2WS01			S	PDS	VB	256	305	44

Figure 17 (Page 1 of 2). Storage Requirements for HKOB730 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	1836	1100
TKANEXEC	EXEC	Any	S	PDS	VB	255	41	44
TKANHENU	Help	Any	E	PDS	FB	80	775	704
TKANISP	CLIST	Any	S	PDS	FB	80	2	44
TKANMAC	Macro	Any	E	PDS	FB	80	34	44
TKANMOD	LMOD	Any	E	PDS	U	0	1717	440
TKANMODL	LMOD	Any	E	PDS	U	0	3522	660
TKANMODP	LMOD	Any	S	PDSE	U	0	359	n/a
TKANMODS	LMOD	Any	E	PDS	U	0	306	220
TKANOSRC	Data	Any	S	PDS	VB	255	8	44
TKANPAR	Data	Any	E	PDS	FB	80	153	88
TKANPKGI	Data	Any	E	PDS	FB	80	201	88
TKANSAM	Sample	Any	E	PDS	FB	80	632	300
TKANWENU	Panel	Any	S	PDS	FB	80	235	132
TKOBDATF	Data	Any	S	PDS	FB	80	2	44
TKOBHELP	Help	Any	S	PDS	FB	80	19	132
DKANCUS			E	PDS	FB	80	1836	1100
DKANEXEC			S	PDS	VB	255	41	44
DKANHENU			E	PDS	FB	80	775	704
DKANISP			S	PDS	FB	80	2	44
DKANMAC			E	PDS	FB	80	34	44
DKANMOD			E	PDS	U	0	1717	880
DKANMODL			E	PDS	U	0	3524	660
DKANMODP			S	PDSE	U	0	114	n/a
DKANMODS			E	PDS	U	0	306	220
DKANOSRC			S	PDS	VB	255	8	44
DKANPAR			E	PDS	FB	80	153	88
DKANPKGI			E	PDS	FB	80	201	88
DKANSAM			E	PDS	FB	80	632	300

Figure 17 (Page 2 of 2). Storage Requirements for HKOB730 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
DKANWENU			S	PDS	FB	80	235	132
DKOBDATF			S	PDS	FB	80	2	44
DKOBHELP			S	PDS	FB	80	19	132

Figure 18. Storage Requirements for HPMZ540 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
SEIWPKGI	Data	Any	U	PDS	FB	80	2	44
AEIWLIB			U	PDS	VB	255	169	44
AEIWPKGI			U	PDS	FB	80	2	44

5.3 FMIDs Deleted

Installing OMEGAMON XE 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 XE 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 XE 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 XE for Db2 PE on z/OS, IBM recommends you review the Quick Start Guide, **What's new & PDFs, 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 **OMEGAMON XE and Tivoli Management Services on z/OS** shared documentation, and other Tivoli product documentation can be found at the IBM Knowledge Center URL listed below:

https://www.ibm.com/support/knowledgecenter/SSAUBV/com.ibm.omegamon_share.doc_6.3.0.2/shared_welcome/welcome.htm

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

https://www.ibm.com/support/knowledgecenter/SSAUBV/com.ibm.omegamon_share.doc_6.3.0.2/ftu/ftu_cfg_intro.htm

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 - UA82508
HKDS630 - UA70675 UA70678
HKLV630 - UA70676 UA70677 UA81711
HKOB730 - UA82170

Note: Reference and review the HOLDDATA for PTF UA76751 for instructions on adding the CALLLIBS definitions required to install this and other HKOB730 PTFs.

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 XE for Db2 PE on z/OS.

Please note the following points:

- If you want to install OMEGAMON XE for Db2 PE on z/OS into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMP/CSI and the SMP/E control data sets. Additionally, to assist you in doing this, IBM has provided samples to help you create an SMP/E environment at the following URL:

<https://www.ibm.com/support/pages/node/661681>

- 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 XE for Db2 PE on z/OS

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

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of OMEGAMON XE 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 19. 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 19. SMP/E Options Subentry Values</i>		
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 XE for Db2 PE on z/OS uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When OMEGAMON XE 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 XE for Db2 PE on z/OS. These data sets are not updated during the installation of OMEGAMON XE 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 have to be installed to get the latest updates for the product 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 Configuration Tool component of the Tivoli Management Services on z/OS product, which is a requisite of this product. This utility is enhanced thru 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 product 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 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 at this time. 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 XE 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 20 are provided as part of the product to help you install OMEGAMON XE for Db2 PE on z/OS.

<i>Figure 20 (Page 1 of 2). Sample Installation Jobs</i>			
Job Name	Job Type	Description	RELFILE
KDBX3ALO	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HKDB54X.F4
KDBX4DDF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HKDB54X.F4
KDBX5REC	RECEIVE	Sample RECEIVE job	IBM.HKDB54X.F4

Figure 20 (Page 2 of 2). Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
KDBX6BDI	MKDIR	Sample job to invoke the supplied EIWMKDIR EXEC to allocate file system paths	IBM.HKDB54X.F4
KDBX7APP	APPLY	Sample APPLY job	IBM.HKDB54X.F4
KDBX8ACC	ACCEPT	Sample ACCEPT job	IBM.HKDB54X.F4

The installation of OMEGAMON XE 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 30) then copy the jobs from the relfiles to a work data set for editing and submission. See Figure 20 on page 28 to find the appropriate relfile data set.

You can also copy the sample installation jobs from the tape or product files by submitting the following job. Depending on your distribution medium, use either the //TAPEIN or the //FILEIN DD statement and comment out or delete the other statement. 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=*
//TAPEIN DD DSN=IBM.HKDB54X.F4,UNIT=tunit,
// VOL=SER=volser,LABEL=(x,SL),
// DISP=(OLD,KEEP)
//FILEIN DD DSN=IBM.HKDB54X.F4,UNIT=SYSALLDA,DISP=SHR,
// VOL=SER=filevol
//OUT DD DSNAME=jc1-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=xxxxIN,OUTDD=OUT
SELECT MEMBER=(KDBX3ALO,KDBX4DDF,KDBX5REC,KDBX7APP,KDBX8ACC)
SELECT MEMBER=(KDBX6BDI)
/*
```

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

TAPEIN:

tunit is the unit value that matches the product package.

volser is the volume serial that matches the product package.

x is the tape file number that indicates the location of the data set name on the tape.

See the documentation that is provided by CBPDO for the location of IBM.HKDB54X.F4 is on the tape.

FILEIN:

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.

SYSIN:

xxxxIN is either TAPEIN or FILEIN depending on your input DD statement.

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 XE for Db2 PE on z/OS.

If you are not using the generated allocation job, select the sample job KDBX3ALO. 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 XE for Db2 PE on z/OS.

If you are not using the generated job, select the sample job KDBX4DDF. 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 XE 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 XE 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 KDBX5REC to perform the SMP/E RECEIVE for OMEGAMON XE 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 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/opmei.
          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.PFCTL 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 IBM InfoSphere Optim Data Tools Runtime Client component, edit and submit the generated job KCIJGBDI to define the file system paths.

If you are not using the generated job, select the sample job KDBX6BDI. 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 EIWMKDIR exec must be available prior to running this job. The Relfile needed is HPMZ540.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 resource profile 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 XE for Db2 PE on z/OS, consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This action can be helpful if an IPL occurs before the installation is completed.

Expected Return Codes and Messages: 0

6.1.11 Perform SMP/E APPLY

Ensure that you have the latest HOLDDATA, then edit and submit the generated job KCIJGAPP to perform an SMP/E APPLY CHECK for OMEGAMON XE for Db2 PE on z/OS.

If you are not using the generated job, select the sample job KDBX7APP 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 the IBM InfoSphere Optim Data Tools Runtime Client 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 resource profile 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 unpx.
3. The file system must be in read/write mode before this job is run.

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 aaaaaa
          WAS SUCCESSFUL FOR MODULE bbbbbbb IN
          LMOD ccccccc IN THE ddddddd 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 21 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 21 (Page 1 of 3). SMP/E Elements Not Selected</i>					
KCADEVT0	KCAOSYS0	KCAUCBS0	KCCDGN	KCCENV	KCCIDC
KCCMSG	KCCRTR	KCCTAB	KCCTDS	KCCTDT	KCCTIM
KCCTRC	KCCUCB4	KCCVCT	KCNCFINP	KCNCPYRM	KCNMAINM
KCNUTLIM	KEBDUMMY	KEBEPLG0	KEBFINT0	KEBFPAR0	KEBFSCR0
KEBGTID0	KEBICPW0	KEBINIT	KEBLNKA0	KEBLNKC0	KEBMSGF0
KEBMXA14	KEBNVCR0	KEBNVDL0	KEBNVEA0	KEBNVIQ0	KEBNVOPO
KEBNVSU0	KEBNVUD0	KEBPRFE0	KEBROPN0	KEBSMF14	KEBSPFD0
KEBSTAE4	KEBSTAK0	KEBTSO0	KEBVSMC0	KEBWKGT0	KEBWKPT0
KEBZSB10	KEB132F0	KEB2ISPF	KIABGMN	KIACARE	KIACKPG5
KIACMLK5	KIACPUW5	KIADPGN5	KIADWCL5	KIAENQW5	KIAHSKP5
KIAIAFM	KIAIAJ25	KIAIAMD	KIAIANL5	KIAIANZ	KIAMDCL5
KIAMDIN5	KIAMNTP0	KIAMSELO	KIAPGSW5	KIAQIOW5	KIARCOL5
KIARECD5	KIARECV5	KIARSMS5	KIASORT0	KIASRMD5	KOB\$VERT
KOBABOUT	KOBACMDS	KOBAFF01	KOBAG2	KOBBASEM	KOBBCM1M
KOBBLOGM	KOBBMSGM	KOBBR##M	KOBCALLM	KOBCATTC	KOBCBLK\$
KOBCBLK@	KOBCBLKQ	KOBCENV\$	KOBCENV@	KOBCENVG	KOBCENVV
KOBCFGAP	KOBCIDSM	KOBCIFCM	KOBCIFEM	KOBCIGCM	KOBCIGEM
KOBCIGLM	KOBCIIAR	KOBCIIDR	KOBCIIPM	KOBCIIRR	KOBCIITM
KOBCIIUM	KOBCIOBE	KOBCIOST	KOBCIPRR	KOBCIROM	KOBCISDR
KOBCISRM	KOBCITRM	KOBCJUMP	KOBCLOCK	KOBCMAP\$	KOBCMAP@
KOBCMAPI	KOBCMDDM	KOBCMDVM	KOBCRACF	KOBCSART	KOBCSOC\$
KOBCSOC@	KOBCSOCK	KOBCSTIO	KOBCSTLB	KOBCSTRN	KOBCTHR\$

Figure 21 (Page 2 of 3). SMP/E Elements Not Selected

KOBCTHR@	KOBCTHRD	KOBCTIME	KOBCTRAC	KOBCTREE	KOBCTYPE
KOBBCUA	KOBBCULKS	KOBBCUNIS	KOBBCUXIO	KOBBCVSTG	KOBBCWTOL
KOBBCZDIO	KOBBCDATA1	KOBBCDELFM	KOBBCDEV#T	KOBBCDFMTM	KOBBCDIR#T
KOBBCDSPCT	KOBBCDSQZM	KOBBCDSSYS	KOBBCENUS	KOBBCENV#T	KOBBCESAIS
KOBBCEXCDM	KOBBCGATW0	KOBBCGDFNM	KOBBCGWCND	KOBBCGWCV\$	KOBBCGWCV#
KOBBCGWCV@	KOBBCGWCVVA	KOBBCGWLPA	KOBBCGWOBV	KOBBCGWRE\$	KOBBCGWRE@
KOBBCGWREG	KOBBCHASH1	KOBBCHBCOL	KOBBCHBGET	KOBBCHBMSL	KOBBCHBTPO
KOBBCHISN1	KOBBCHISN2	KOBBCHISN4	KOBBCHISTC	KOBBCHLAUT	KOBBCHLCMD
KOBBCHLDIR	KOBBCHLICO	KOBBCHLREF	KOBBCHLRTR	KOBBCHTT\$	KOBBCHTT#
KOBBCHTT@	KOBBCHTTPL	KOBBCHTT\$PS	KOBBCHTT\$PW	KOBBCHUBCK	KOBBCHUBIN
KOBBCHUBPR	KOBBCHUBS	KOBBCHUB07	KOBBCH0012	KOBBCICMDM	KOBBCICM1M
KOBBCICM2M	KOBBCICM3M	KOBBCILCSM	KOBBCILC1M	KOBBCINDEX	KOBBCINITM
KOBBCINPWM	KOBBCINT#M	KOBBCINTXT	KOBBCINT1M	KOBBCINT2T	KOBBCIPRFM
KOBBCIPROM	KOBBCISSSM	KOBBCIVCMM	KOBBCJAP0	KOBBCJCA0	KOBBCJCC0
KOBBCJCD0	KOBBCJCG0	KOBBCJCI0	KOBBCJCM0	KOBBCJCR0	KOBBCJCT0
KOBBCJCW0	KOBBCJCX0	KOBBCJLF	KOBBCJLG0	KOBBCJMC0	KOBBCJMP0
KOBBCJMS0	KOBBCJMT0	KOBBCJOIN1	KOBBCJ640	KOBBCLEXCM	KOBBCLGINI
KOBBCLGSND	KOBBCLGSRV	KOBBCLGTBL	KOBBCLGWTO	KOBBCLISTN	KOBBCLOFLT
KOBBCLOGCM	KOBBCLOG10	KOBBCMEM	KOBBCMODS	KOBBCM5IN1	KOBBCOBVA\$
KOBBCOBVA@	KOBBCOBVAP	KOBBCODAPP	KOBBCODCOL	KOBBCODENM	KOBBCODI
KOBBCODIL\$	KOBBCODIL@	KOBBCODILD	KOBBCODISC	KOBBCODTAB	KOBBCODUTL
KOBBCOMIOM	KOBBCO4H01	KOBBCO4SRV	KOBBCOPARS	KOBBCOPDEV	KOBBCOPDHST
KOBBCOPDSD	KOBBCOPDSI0	KOBBCOPDSS	KOBBCOPPEKT	KOBBCOPPRFM	KOBBCOPRFAU
KOBBCOPRFCL	KOBBCOPRFDT	KOBBCOPRFHB	KOBBCOPRFHS	KOBBCOPRFIP	KOBBCOPRFIS
KOBBCOPRFSS	KOBBCOPRFTB	KOBBCOPRFWN	KOBBCOPR2TB	KOBBCOPQRYEX	KOBBCOPREGAP
KOBBCRES01	KOBBCBRGDRA	KOBBCBRMFAR	KOBBCBRMFBR	KOBBCBRMF5X	KOBBCBRMF5X
KOBBCBRMF6S	KOBBCBRMF7S	KOBBCBRMF8R	KOBBCBRMF9R	KOBBCBROUTM	KOBBCBRRUI\$
KOBBCBRRUI@	KOBBCBRRUIA	KOBBCBRRWK\$	KOBBCBRRWK@	KOBBCBRRWKR	KOBBCBRSMGR
KOBBCBRSMG1	KOBBCBRXFM	KOBBCBRXFMT	KOBBCBRXFM0	KOBBCBRXGDR	KOBBCBRXGEN
KOBBCBRXGFC	KOBBCBRXGM	KOBBCBRXGNV	KOBBCBRXL0D	KOBBCBRXPDR	KOBBCBRXQRY
KOBBCBRXSET	KOBBCBRZFM0	KOBBCBRZFNL	KOBBCBRZGDM	KOBBCBRZGDR	KOBBCBRZGFC
KOBBCBRZGM0	KOBBCBRZGNV	KOBBCBRZHST	KOBBCBRZLDR	KOBBCBRZPDR	KOBBCBRZSNV
KOBBCBSCICS	KOBBCBCTG	KOBBCBDB2	KOBBCBSELLM	KOBBCBSEPAM	KOBBCBSEUPM

Figure 21 (Page 3 of 3). SMP/E Elements Not Selected

KOBSHART	KOBSIMS	KOBSITA	KOBSITAL	KOBSITD	KOBSITDB
KOBSITD0	KOBSITD1	KOBSITD2	KOBSITD3	KOBSITD4	KOBSITEI
KOBSITI	KOBSITMG	KOBSITMN	KOBSITP	KOBSITS	KOBSITST
KOBSITT1	KOBSITT2	KOBSIT00	KOBSIT01	KOBSIT02	KOBSIT03
KOBSJVM	KOBSMFN	KOBSMQ	KOBSPATM	KOBSPAUM	KOBSPF#M
KOBSPSWM	KOBSPVTM	KOBSRBDM	KOBSRT01	KOBSSTOR	KOBSS005
KOBSTART	KOBSTBLD	KOBSTOR	KOBSTUBM	KOB SUB#M	KOB SUBET
KOB SUBXM	KOB SUB1M	KOB SUB2M	KOB SUB3M	KOB SUB4T	KOB SZOS
KOBTBL01	KOBTCBFA	KOBT CBS	KOBT CCL\$	KOBT CCLA	KOBT ERMM
KOBTHRMT	KOBTHRSH	KOBTKACT	KOBTKJLX	KOBTKMEM	KOBTKSTG
KOBTKTCB	KOBT SO#M	KOBUICM0	KOBUICS0	KOBUIEP0	KOBUIFD0
KOBUIGD0	KOBUIGL0	KOBUIGO0	KOBUIGP0	KOBUIGS0	KOBUIHL0
KOBUIHS0	KOBUILG0	KOBUILO0	KOBUIMC0	KOBUIMG0	KOBUIML0
KOBUIM10	KOBUIM20	KOBUIM30	KOBUIM40	KOBUIM50	KOBUIM60
KOBUIM70	KOBUIM80	KOBUINI0	KOBUINTM	KOBUINV0	KOBUIPA0
KOBUIPS0	KOBUIPT0	KOBUISC0	KOBUISD0	KOBUITK0	KOBUITR0
KOBUIVI0	KOBUIVS0	KOBUIWG0	KOBUPFCM	KOBUPFDM	KOBUPFIM
KOBUPFSM	KOBUSERD	KOBUSERS	KOBUTFMT	KOBUTSET	KOBVDRVM
KOBVEXIM	KOBVGETM	KOBVINIM	KOBVLOGM	KOBVPUTM	KOBVTERM
KOBVTM1M	KOBVTSRM	KOBVUTLM	KOBVZAPM	KOBXACBM	KOBXASBT
KOBXGSWM	KOBXMSDM	KOBXMZPM	KOB3270S		

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 XE for Db2 PE on z/OS.

If you are not using the generated job, select the sample job KDBX8ACC 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 21 on page 35 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.

6.1.13 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/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/v410/lib/IBM
- #hfmdir/usr/lpp/opmei/v410/lib
- #hfmdir/usr/lpp/opmei/v410

However, in order to keep the existing configuration file (pdq.properties) you might want to copy this file into the new "/usr/lpp/opmei/v540/lib/IBM" path before you delete the obsolete file system paths. The alternative is to create the same configuration again in the new path.

6.2 Activating OMEGAMON XE for Db2 PE on z/OS

Prior to activating OMEGAMON XE 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 *Configuration and Customization* documentation contains the step-by-step procedures to activate the functions of OMEGAMON XE for Db2 PE on z/OS.

This documentation can be found online at:

https://www.ibm.com/support/knowledgecenter/SSUSPS_5.4.0/kdp54/kdp54_welcome.html

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Printed in USA

GI19-5019-01

