Program Directory for
IBM DB2 Performance Toolkit for z/OS
The SAP Edition

V02.05.00
Program Number 5697-M32

for Use with
z/OS

Document Date: June 2015
Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 54.
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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 DB2 Performance Toolkit for z/OS. This publication refers to IBM DB2 Performance Toolkit for z/OS as DB2 Performance Toolkit.

The Program Directory contains the following sections:

- **2.0, “Program Materials” on page 4** identifies the basic program materials and documentation for DB2 Performance Toolkit.

- **3.0, “Program Support” on page 8** describes the IBM support available for DB2 Performance Toolkit.

- **4.0, “Program and Service Level Information” on page 10** lists the APARs (program level) and PTFs (service level) that have been incorporated into DB2 Performance Toolkit.

- **5.0, “Installation Requirements and Considerations” on page 13** identifies the resources and considerations that are required for installing and using DB2 Performance Toolkit.

- **6.0, “Installation Instructions” on page 30** provides detailed installation instructions for DB2 Performance Toolkit. It also describes the procedures for activating the functions of DB2 Performance Toolkit, or refers to appropriate publications.

Before installing DB2 Performance Toolkit, 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; then keep them for future reference. Section **3.2, “Preventive Service Planning” on page 8** tells you how to find any updates to the information and procedures in this program directory.

DB2 Performance Toolkit is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The program directory that is provided in softcopy format on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for DB2 Performance Toolkit are included on the CBPDO tape.

Do not use this program directory if you install DB2 Performance Toolkit with a SystemPac or 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 DB2 Performance Toolkit Description

IBM DB2 Performance Toolkit for z/OS the SAP Edition, V02.05.00 (5697-M32) offers features, functions, and processes that DBAs can use to more effectively identify, diagnose, and solve performance challenges across DB2 for z/OS databases within SAP ERP environments, as well as help prevent them from reoccurring in the future. DB2 Performance Toolkit for z/OS the SAP Edition, V02.05.00 is composed of the following tools:

- **DB2 Query Monitor for z/OS, V03.02.00 (5655-V42)** enables users to identify problem SQL activity and includes robust statistics for SQL tuning. It can work with InfoSphere Optim Query Workload Tuner for DB2 for z/OS and DB2 SQL Performance Analyzer for z/OS to enable users to customize and tune the poorly performing SQL statement or workload and to support the effectiveness of DB2 subsystems and improve overall performance.
  - Monitors SQL activities and delivers automatic alerts to exceptional events on a monitored DB2 subsystem in real time.
  - Monitors DB2 commands, host variables, and SQL CA and SQL code in real time
  - Includes user-friendly ISPF, GUI, and web interfaces with SQL statistics of multiple DB2 subsystems
  - Integrates with other DB2 Tools to reduce resource consumption
  - Supports single sign-on for the ISPF view of data sharing group

- **Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS, V05.03.00 (5655-W37)** is a single tool that enables you to monitor, analyze, and tune the performance of DB2 for z/OS and IBM DB2 applications. It helps you detect performance problems so they can be isolated and resolved more quickly. Version 5.3 introduces the following functionality to the enhanced 3270:
  - Complete SQL text available for key thread displays
  - Support for OMEGAMON family history
  - New cross-monitor linking with embedded data integration in the enhanced 3270
  - Seamless integration of monitoring data from related IBM performance monitoring and analysis: integration initially provided for Tivoli OMEGAMON XE for CICS on z/OS, V05.03.00 (5698-T07), and DB2 Query Monitor for z/OS, V03.02.00 (5655-V42) initially
  - Integration with Management Console for IMS and DB2 for z/OS, V01.01.00 (5655-TAC)
  - Key performance indicators about DB2 for z/OS subsystems known to the management Console
  - Support for IBM DB2 Analytics Accelerator, Accelerator for z/OS, V04.01.00 (5697-DAB)
1.2 DB2 Performance Toolkit FMIDs

DB2 Performance Toolkit consists of the following FMIDs:

- IBM DB2 Query Monitor for z/OS
  - H238320
  - H238KY0
  - H25F132

- IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS
  - HKDB530
  - HKDB53X
  - HKDBKY0
  - HKOB730
  - HPMZ530
2.0 **Program Materials**

An IBM program is identified by a program number. The program number for DB2 Performance Toolkit is 5697-M32.

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 DB2 Performance Toolkit. 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 30 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for DB2 Performance Toolkit in the *CBPDO Memo To Users Extension*.

2.2 **Optional Machine-Readable Material**

No optional machine-readable materials are provided for DB2 Performance Toolkit.

2.3 **Program Publications**

The following sections identify the basic publications for DB2 Performance Toolkit.

Figure 1 identifies the basic unlicensed publications for DB2 Performance Toolkit. Those that are in softcopy format publications can be obtained from the IBM Publications Center website at:


<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM DB2 Performance Toolkit for z/OS License Information</td>
<td>GC18-9965</td>
<td><a href="http://www.ibm.com/software/sla/sladb.nsf">http://www.ibm.com/software/sla/sladb.nsf</a></td>
</tr>
</tbody>
</table>
Note:

- DB2 Query Monitor for z/OS product manuals can be found at the IBM web site:


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:

  http://www.ibm.com/support/knowledgecenter/OMXEDB2PE530/com.ibm.omegamon.xe.pe_db2.doc_5.3.0/ko2welcome_pe.htm

- obtained as pdf file from the IBM Publications Center website at:


- 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

Figure 2 (Page 2 of 2). Basic Material: Unlicensed for DB2 Performance Toolkit

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
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</thead>
<tbody>
<tr>
<td>IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS Program Directory</td>
<td>GI19-5014</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2 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:

  http://www.ibm.com/support/knowledgecenter/OMXEDB2PE530/com.ibm.omegamon.xe.pe_db2.doc_5.3.0/ko2welcome_pe.htm

- obtained as pdf file from the IBM Publications Center website at:


- 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

Figure 2 (Page 1 of 2). Basic Material: Unlicensed for OMEGAMON XE for DB2 PE on z/OS

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Start Guide for the SQL Dashboard and the end-to-end SQL monitoring functions</td>
<td>GH12-7046</td>
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</tr>
<tr>
<td>Report Reference</td>
<td>SH12-7047</td>
<td></td>
</tr>
<tr>
<td>Report Command Reference</td>
<td>SH12-7048</td>
<td></td>
</tr>
<tr>
<td>Messages</td>
<td>GH12-7049</td>
<td></td>
</tr>
<tr>
<td>Monitoring Performance from the OMEGAMON Classic Interface</td>
<td>SH12-7050</td>
<td></td>
</tr>
</tbody>
</table>
Notes:

- 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:

  http://www.ibm.com/support/knowledgecenter/SSAUBV/welcome

- Prior to installing DB2 Performance Toolkit, IBM recommends you review the Quick Start guide as well as the Planning and Configuration guides 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.

- 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.
• Other Tivoli product manuals can be found at the Tivoli Information Center web site:
  http://publib.boulder.ibm.com/infocenter/tivihelp/v15r1/index.jsp

2.3.1 Optional Program Publications

No optional publications are provided for DB2 Performance Toolkit.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for DB2 Performance Toolkit.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 4 during the installation of DB2 Performance Toolkit.

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
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</tr>
</tbody>
</table>
3.0 Program Support

This section describes the IBM support available for DB2 Performance Toolkit.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install DB2 Performance Toolkit, 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 6.1.12, "Perform SMP/E APPLY" on page 36 for a sample APPLY command.

If you obtained DB2 Performance Toolkit as part of a CBPDO, HOLDDATA is included.

If the CBPDO for DB2 Performance Toolkit 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:


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-01.ibm.com/software/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 DB2 Performance Toolkit are included in Figure 5.

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
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<tbody>
<tr>
<td>5655V42</td>
<td>H238320</td>
<td>DB2 Query Monitor</td>
</tr>
<tr>
<td>5697E67</td>
<td>H238KY0</td>
<td>DB2 Query Monitor Toolkit Edition Identifier</td>
</tr>
<tr>
<td>5697P45</td>
<td>H25F132</td>
<td>FEC Common Code</td>
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<tr>
<td>5655W37</td>
<td>HKDB530</td>
<td>OMEGAMONXE for DB2 PE BASE</td>
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</tbody>
</table>
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 6 identifies the component IDs (COMPID) for DB2 Performance Toolkit.

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655W37</td>
<td>HKDB53X</td>
<td>OMEGAMON XE for DB2 PE License Key</td>
</tr>
<tr>
<td>5655OPE</td>
<td>HKDBKY0</td>
<td>OMEGAMON Toolkit Edition Identifier</td>
</tr>
<tr>
<td>5655W37</td>
<td>HKOB730</td>
<td>OMNIMON Base</td>
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<td>5655W37</td>
<td>HPMZ530</td>
<td>IBM InfoSphere Optim Data Tools Runtime Client</td>
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</table>
4.0 Program and Service Level Information

This section identifies the program and relevant service levels of DB2 Performance Toolkit. 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 DB2 Performance Toolkit have been incorporated into this release. They are listed by FMID.

- FMID H238310

<table>
<thead>
<tr>
<th>PM39680</th>
<th>PM53471</th>
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</table>
4.2 Service Level Information

No PTFs against this release of DB2 Performance Toolkit have been incorporated into the product package.

Frequently check the DB2 Performance Toolkit PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the ***FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE)*** operand on your APPLY CHECK command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.
5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating DB2 Performance Toolkit. 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 DB2 Performance Toolkit.

5.1.1 Machine Requirements

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

5.1.2 Programming Requirements
### Target System Requirements

This section describes the environment of the target system required to install and use DB2 Performance Toolkit.

DB2 Performance Toolkit installs in the DBS (P115) SREL.

OMEGAMON XE for DB2 PE on z/OS installs in the z/OS (Z038) SREL.

#### 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.

Note: Installation might require migration to new z/OS releases to be service supported. See http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html.

Note: H25F132 has been included in this shipment for your convenience. You may already have this FMID from another product.

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.

DB2 Performance Toolkit 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.
Note: * IBM Tools Base for z/OS, (5655-V93) is a mandatory operational requisite for DB2 Query Monitor. IBM Tools Base for z/OS is a no-charge product that must be separately ordered. Tools Base contains IBM Tools Customizer for z/OS, FMID HTCZ110, which must be installed in order to customize DB2 Query Monitor. Refer to the IBM Tools Base for z/OS, Program Directory (GI10-8819) for installation instructions.

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.

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.

DB2 Performance Toolkit 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.

DB2 Performance Toolkit has no negative requisites.

5.2.3 **DASD Storage Requirements**

DB2 Performance Toolkit libraries can reside on all supported DASD types.

Figure 11 lists the total space that is required for each type of library.

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Total Space Required in 3390 Trks</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>7839 for DB2 Query Monitor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>96 for FEC Common Code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3890 for OMEGAMON XE for DB2 PE on z/OS</td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td>9533 for DB2 Query Monitor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>97 for FEC Common Code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3770 for OMEGAMON XE for DB2 PE on z/OS</td>
<td></td>
</tr>
<tr>
<td>File System</td>
<td>200 for OMEGAMON XE for DB2 PE on z/OS</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. 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.

2. 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).
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 6.1.8, “Allocate SMP/E
Target and Distribution Libraries” on page 34

3. 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.

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

- The default name of the data set can be changed.
- The default block size of the data set can be changed.
- The data set can be merged with another data set that has equivalent characteristics.
- The data set can be either a PDS or a PDSE except: TKANMODP, DKANMPDP, SCQMLOAD
  and ACQMLOAD which must be PDSEs.

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
- These data sets can be in the LNKLST except for TKANMODR and TKANMODS.
- DB2 Performance Toolkit requires that the SMPLTS data set must be a PDSE. If your existing
  SMPLTS is a PDS, you will need to allocate a new PDSE and copy your existing SMPLTS into it
  and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.
- The DB2 Query Monitor requires the following:
  - These data sets can be in the LPA, but they are not required to be in the LPA.
  - These data sets can be in the LNKLST.
  - SCQMLOAD and SFECLOAD must be APF-authorized.

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 12. 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.
If you are installing into an existing environment, ensure the current SMP/E support dataset allocations reflect the minimum values shown in Figure 13. Check the space and directory block allocation and reallocate the data sets, if necessary.

The following figures describe the target and distribution libraries required to install DB2 Performance Toolkit. The storage requirements of DB2 Performance Toolkit must be added to the storage required by other programs that have data in the same library.

**Note:** Use the data in these tables to determine which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.
### Figure 14. Storage Requirements for DB2 Query Monitor Target Libraries

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>T Y P O R E C R E C M L</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCQMDBRM</td>
<td>Macro</td>
<td>any U PDS FB</td>
<td>80</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>SCQMDLOAD</td>
<td>LMOD</td>
<td>any U PDSE U</td>
<td>0</td>
<td>334</td>
<td>n/a</td>
</tr>
<tr>
<td>SCQMDENU</td>
<td>DATA</td>
<td>any U PDS FB</td>
<td>80</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>SCQMDFORM</td>
<td>DATA</td>
<td>any U PDS VB</td>
<td>251</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>SCQMMENU</td>
<td>MSG</td>
<td>any U PDS FB</td>
<td>80</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>SCQMQRY</td>
<td>DATA</td>
<td>any U PDS FB</td>
<td>79</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>SCQMNOTC</td>
<td>DATA</td>
<td>any U PDS VB</td>
<td>256</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>SCQMPENU</td>
<td>Panel</td>
<td>any U PDS FB</td>
<td>80</td>
<td>193</td>
<td>100</td>
</tr>
<tr>
<td>SCQMSAMP</td>
<td>Sample</td>
<td>any U PDS FB</td>
<td>80 41</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>SCQMTRAN</td>
<td>DATA</td>
<td>any U PDS VB</td>
<td>256 7251</td>
<td>5</td>
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</tr>
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### Figure 15. Storage Requirements for FEC Common Code Target Libraries

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>T Y P O R E C R E C M L</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFECDBRM</td>
<td>Macro</td>
<td>any S PDS FB</td>
<td>80</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>SFECLOAD</td>
<td>LMOD</td>
<td>any S PDS U</td>
<td>0</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td>SFECMENU</td>
<td>MSG</td>
<td>any S PDS FB</td>
<td>80 6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>SFECPENU</td>
<td>Panel</td>
<td>any S PDS FB</td>
<td>80 36</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>SFECSAMPLE</td>
<td>Sample</td>
<td>any S PDS FB</td>
<td>80 6</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### Figure 16 (Page 1 of 3). Storage Requirements for OMEGAMON XE for DB2 PE on z/OS Target Libraries

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>T Y P O R E C R E C M L</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEIWPKGI</td>
<td>Data</td>
<td>Any U PDS FB</td>
<td>80</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>TKANCLI</td>
<td>CLIST</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>TKANCUS</td>
<td>CLIST</td>
<td>Any E PDS FB</td>
<td>80 78</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>
### Figure 16 (Page 2 of 3). Storage Requirements for OMEGAMON XE for DB2 PE on z/OS Target Libraries

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKANDATV</td>
<td>Data</td>
<td>Any E PDS VB</td>
<td>6160</td>
<td>206</td>
</tr>
<tr>
<td>TKANEXEC</td>
<td>EXEC</td>
<td>Any S PDS VB</td>
<td>255</td>
<td>20</td>
</tr>
<tr>
<td>TKANHENU</td>
<td>Help</td>
<td>Any E PDS FB</td>
<td>80</td>
<td>150</td>
</tr>
<tr>
<td>TKANISP</td>
<td>CLIST</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>TKANMAC</td>
<td>Macro</td>
<td>Any E PDS FB</td>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td>TKANMOD</td>
<td>LMOD</td>
<td>Any E PDS U</td>
<td>0</td>
<td>928</td>
</tr>
<tr>
<td>TKANMODL</td>
<td>LMOD</td>
<td>Any E PDS U</td>
<td>0</td>
<td>142</td>
</tr>
<tr>
<td>TKANMODP</td>
<td>LMOD</td>
<td>Any S PDSE U</td>
<td>0</td>
<td>359</td>
</tr>
<tr>
<td>TKANMODS</td>
<td>LMOD</td>
<td>Any E PDS U</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>TKANOSRC</td>
<td>Data</td>
<td>Any S PDS VB</td>
<td>255</td>
<td>3</td>
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<tr>
<td>TKANPAR</td>
<td>Parm</td>
<td>Any E PDS FB</td>
<td>80</td>
<td>15</td>
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<tr>
<td>TKANPENU</td>
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<td>592</td>
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<tr>
<td>TKANPKGI</td>
<td>Data</td>
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<td>51</td>
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<tr>
<td>TKANSAM</td>
<td>Sample</td>
<td>Any E PDS FB</td>
<td>80</td>
<td>11</td>
</tr>
<tr>
<td>TKANSAMF</td>
<td>Sample</td>
<td>Any S PDS VB</td>
<td>132</td>
<td>11</td>
</tr>
<tr>
<td>TKANSAMV</td>
<td>Sample</td>
<td>Any S PDS VB</td>
<td>255</td>
<td>11</td>
</tr>
<tr>
<td>TKANWENU</td>
<td>Panel</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>120</td>
</tr>
<tr>
<td>TKOBDATF</td>
<td>Data</td>
<td>Any S PDS VB</td>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>TKOBHELP</td>
<td>Help</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>19</td>
</tr>
<tr>
<td>TKO2DATA</td>
<td>Data</td>
<td>Any S PDS VB</td>
<td>9072</td>
<td>8</td>
</tr>
<tr>
<td>TKO2DBRM</td>
<td>Data</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>TKO2EXEC</td>
<td>EXEC</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>37</td>
</tr>
<tr>
<td>TKO2HELP</td>
<td>Help</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>18</td>
</tr>
<tr>
<td>TKO2MENU</td>
<td>Message</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td>TKO2PENU</td>
<td>Panel</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>266</td>
</tr>
<tr>
<td>TKO2PROC</td>
<td>Panel</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>190</td>
</tr>
<tr>
<td>TKO2SAMP</td>
<td>Sample</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>179</td>
</tr>
<tr>
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<td>Sample</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>3</td>
</tr>
<tr>
<td>TKO2TENU</td>
<td>Table</td>
<td>Any S PDS FB</td>
<td>80</td>
<td>10</td>
</tr>
</tbody>
</table>

Installation Requirements and Considerations 21
Figure 16 (Page 3 of 3). Storage Requirements for OMEGAMON XE for DB2 PE on z/OS Target Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>Member</th>
<th>Type</th>
<th>Target</th>
<th>Volume</th>
<th>No. of Trks</th>
<th>No. of Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKO2WS01</td>
<td>Data</td>
<td>Any</td>
<td>S</td>
<td>PDS</td>
<td>256</td>
<td>305</td>
</tr>
</tbody>
</table>

Figure 17. DB2 Query Monitor File System Paths

<table>
<thead>
<tr>
<th>DDNAME</th>
<th>TYP</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCQMBIN</td>
<td>N</td>
<td>/usr/lpp/cqmv3r2/bin/IBM/</td>
</tr>
<tr>
<td>SCQMCLS</td>
<td>N</td>
<td>/usr/lpp/cqmv3r2/classes/IBM/</td>
</tr>
<tr>
<td>SCQMLIB</td>
<td>N</td>
<td>/usr/lpp/cqmv3r2/lib/IBM/</td>
</tr>
</tbody>
</table>

Figure 18. OMEGAMON XE for DB2 PE on z/OS File System Paths

<table>
<thead>
<tr>
<th>DDNAME</th>
<th>TYP</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEIWLIB</td>
<td>N</td>
<td>/usr/lpp/opmei/v530/lib/IBM</td>
</tr>
</tbody>
</table>

Figure 19 (Page 1 of 2). Storage Requirements for DB2 Query Monitor Distribution Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>TYP</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACQMBIN</td>
<td>U</td>
<td>PDS</td>
</tr>
<tr>
<td>ACQMCLS</td>
<td>U</td>
<td>PDS</td>
</tr>
<tr>
<td>ACQMDENU</td>
<td>U</td>
<td>PDS</td>
</tr>
<tr>
<td>ACQMDBRM</td>
<td>U</td>
<td>PDS</td>
</tr>
<tr>
<td>ACQFORM</td>
<td>U</td>
<td>PDS</td>
</tr>
<tr>
<td>ACQMLIB</td>
<td>U</td>
<td>PDS</td>
</tr>
<tr>
<td>ACQMMENU</td>
<td>U</td>
<td>PDSE</td>
</tr>
</tbody>
</table>

ACQMMENU is DB2 Performance Toolkit Program Directory.
### Figure 19 (Page 2 of 2). Storage Requirements for DB2 Query Monitor Distribution Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>DDNAME</th>
<th>Type</th>
<th>Location</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACQMQRY</td>
<td>U PDS FB</td>
<td>T</td>
<td>E</td>
<td>79</td>
<td>3</td>
</tr>
<tr>
<td>ACQMNOTC</td>
<td>U PDS VB</td>
<td>Y</td>
<td>C</td>
<td>256</td>
<td>3</td>
</tr>
<tr>
<td>ACQMPENU</td>
<td>U PDS FB</td>
<td>P</td>
<td>F</td>
<td>80</td>
<td>133</td>
</tr>
<tr>
<td>ACQMSAMP</td>
<td>U PDS FB</td>
<td>E</td>
<td>G</td>
<td>80</td>
<td>31</td>
</tr>
<tr>
<td>ACQMTRAN</td>
<td>U PDS VB</td>
<td>O</td>
<td>R</td>
<td>256</td>
<td>7251</td>
</tr>
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</table>

### Figure 20. Storage Requirements for FEC Common Code Distribution Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>DDNAME</th>
<th>Type</th>
<th>Location</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFECDBRM</td>
<td>S PDS FB</td>
<td>T</td>
<td>E</td>
<td>80</td>
<td>6</td>
</tr>
<tr>
<td>AFECLOAD</td>
<td>S PDS U</td>
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<td>C</td>
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<td>41</td>
</tr>
<tr>
<td>AFECMENU</td>
<td>S PDS FB</td>
<td>P</td>
<td>F</td>
<td>80</td>
<td>6</td>
</tr>
<tr>
<td>AFECPPENU</td>
<td>S PDS FB</td>
<td>E</td>
<td>G</td>
<td>80</td>
<td>38</td>
</tr>
<tr>
<td>AFECSPAMP</td>
<td>S PDS FB</td>
<td>O</td>
<td>R</td>
<td>80</td>
<td>6</td>
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### Figure 21 (Page 1 of 2). Storage Requirements for OMEGAMON XE for DB2 PE on z/OS Distribution Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>DDNAME</th>
<th>Type</th>
<th>Location</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEIWLIB</td>
<td>U PDS VB</td>
<td>T</td>
<td>E</td>
<td>255</td>
<td>169</td>
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<td>R</td>
<td>6160</td>
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Installation Requirements and Considerations 23
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<th>Library DDNAME</th>
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<th>No. of DIR Blks</th>
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<td>S PDS VB</td>
<td>256</td>
<td>305</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>
5.3 FMIDs Deleted

Installing the DB2 Performance Toolkit 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 DB2 Performance Toolkit 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 book for details.

5.4 Special Considerations

DB2 Performance Toolkit has a number of special considerations.

PDSE Considerations:

DB2 Performance Toolkit uses the "partitioned data set extended" or PDSE format for the SCQMLOAD target library. There are some operational differences between PDS and PDSE data sets. The PDS format may be shared by more than one z/OS system and no special precautions are necessary. However the PDSE format may only be shared by z/OS systems which are part of a sysplex or which are connected using Global Resource Serialization (are in a GRS complex). If z/OS systems share use of a PDSE data set outside of a sysplex or GRS environment, you may experience severe problems when the data set is updated. This is due to the fact that PDSE directory information is cached in storage, and when the data set is updated from one system the other system(s) have no knowledge of the update, and their cached directory information will be incorrect.

You must take care not to share the SCQMLOAD and ACQMLOAD data sets between z/OS systems unless they are in a sysplex or are connected in a GRS complex. If you need to share the content of the SCQMLOAD and ACQMLOAD data sets, a separate copy must be created for each z/OS system.

FEC Common Code

FMID H25F132 Considerations for the DB2 Query Monitor Feature:

1. It is strongly recommended to install all the DB2 tools that share the same common code FMID into the same SMP/E target and distribution zones. Several of the DB2 tools will be delivering common code, shipping the same FMID. You will only be required to install the common code FMID once. If you use different SMP/E target and distribution zones, you will have to install and maintain multiple instances of the same FMID, which will increase your maintenance and DASD requirements.

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 install multiple products which require the DB2 Data Access Common Collector for z/OS (5639-OLC) use shared CSI zones.

The installation of DB2 Performance Toolkit requires the DB2 Data Access Common Collector for z/OS (5639-OLC) be installed in the CSI. Refer to the Program Directory for DB2 Data Access Common Collector for z/OS (GI10-8973) for installation instructions of its product components.

Consider the following items when using shared CSI zones.

- 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.

When DB2 Performance Toolkit is used with InfoSphere Guardium S-TAP for DB2 on z/OS, V9.1 (5655-STR) and later releases or InfoSphere Optim Workload Replay for DB2 for z/OS V2.1 (5655-O18), and later releases, they should all be installed in the same CSI target and distribution zones. This ensures the maintenance level of the products and collector components are at a compatible level. If they are installed in different CSI zones, you must check to ensure the maintenance levels of the product and collector component in each zone are at a compatible level.

The PSP bucket will have the most current information and must be reviewed before installation.

SREL and SMP/E Considerations:

DB2 Performance Toolkit will be installed in two different SRELs, and these SRELs need to be installed into different SMP/E target and distribution zones. See 5.2, “Target System Requirements” on page 14 for further information.

SMP/E ++VER DELETE Considerations:

As DB2 Performance Toolkit installs into different SMP/E zones, be aware that one would have to manage the ++VER(sysrel) DELETE(fmid) statements, in the SMPMCS data sets, as the FMID(s) may now be in different SMP/E Zones. It is possible that the DELETE operation will fail due to the prior release of DB2 PE being installed into a different pair of zones, in which case deleting the prior release will require additional actions by the installer.

DB2 Query Monitor Feature Considerations:
The following are the operating system and environment requirements for DB2 Performance Toolkit's mainframe components.

The monitoring agent, Query Monitor subsystem, ISPF Client, and CAE Agent run on a mainframe system and require the following operating system and environment:

- If you wish to run the CAE Server under USS, the most current maintenance of (31 bit) Java 1.6 (including all prerequisites) must be installed on your mainframe. 64-bit Java is not supported.
  - This requirement applies to running the CAE Server under USS and is not required if you only plan to run the CAE Agent on an LPAR.
  - Java builds are available at: http://www-03.ibm.com/systems/z/os/zos/tools/java/
- z/OS support for Unicode
  - Installation of z/OS support for Unicode with SMP/E is described in z/OS Planning for Installation (GA22-7504). Please refer to this document to find a complete list of the necessary steps.
- DB2 Query Monitor supports IBM SQL Performance Analyzer (SQL/PA) Versions 2.1, 2.2 and higher.
- DB2 Query Monitor requires that the HFS in which the CAE Server components are installed must be on DASD that is shared between primary and backup servers (to support failover server capability in the CAE).
- The total capacity of the two ZFS or HFS file systems used by the CAE Server under USS (if you choose to run the server under USS) should be 1 GB (1200 cylinders).
- The user ID that the CAE Agent runs under must have an OMVS segment.

For CAE Server host:
- Operating System: Windows XP, Windows 7
- RAM: 1GB
- Disk Space: 1 GB free
- Processor Speed: Pentium IV, 1 GHz
- Network Access Speed: LAN, T1, DSL, or cable modem
- Network Protocols: TCP/IP
- Display Requirements: SVGA monitor; 256 colors or greater

For CAE Browser Client:
- Firefox 2.0.0.13 or later
- Internet Explorer V8 or later
- Adobe Flash Player 10

Note:

The disk space required by DB2 Query Monitor includes:
- 768 MB RAM, 1 GB for the CAE Server
- There are no disk space requirements for the CAE Browser Client
**OMEGAMON XE Feature 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 DB2 Performance Toolkit requires the Tivoli Enterprise Monitoring Server on z/OS be installed in the CSI. Refer to the *Program Directory for IBM Tivoli Management Services on z/OS* (GI11-4105) for installation instructions of its product components.

The OMEGAMON 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:


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.

- HKC1310  - UA76853
- HKDS630  - UA70675 UA70678
- HKLV630  - UA70676 UA70677

IBM Tivoli Monitoring V6.3.0 Fix Pack 3 is recommended for a number of APAR fixes, including Java 6 & 7 security support and Persistent Datastore APAR OA44915: MULTIPLE ABENDS DUE TO PERSISTENT DATASTORE FACILITY OVERLAY.

Recommended maintenance for enhanced 3270UI integration with Tivoli OMEGAMON XE for CICS on z/OS V5.3 and DB2 Query Monitor for z/OS V3.2.

- HKC5530  - UA76976
- H238320  - PI33220 APAR

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 XE 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 XE 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 DB2 Performance Toolkit.

Please note the following points:

- If you want to install DB2 Performance Toolkit 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.

- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

- 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 SMPCSI 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:

  http://www.ibm.com/support/docview.wss?rs=660&context=SSZJDU&uid=swg21066230

6.1 Installing DB2 Performance Toolkit

6.1.1 SMP/E Considerations for Installing DB2 Performance Toolkit

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of DB2 Performance Toolkit.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 22. 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.

<table>
<thead>
<tr>
<th>Subentry</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSSPACE</td>
<td>(500,500,500)</td>
<td>3390 DASD tracks</td>
</tr>
<tr>
<td>PEMAX</td>
<td>SMP/E Default</td>
<td>IBM recommends using the SMP/E default for PEMAX.</td>
</tr>
</tbody>
</table>
6.1.3 SMP/E CALLLIBS Processing

DB2 Performance Toolkit uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When DB2 Performance Toolkit is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCEECPP
- SCEELIB
- SCEELKED
- SCEELKEX
- SCEELOAD
- SDSNLOAD
- SISPLOAD

Note: CALLLIBS uses the previous DDDEFs only to resolve the link-edit for DB2 Performance Toolkit. These data sets are not updated during the installation of DB2 Performance Toolkit.

6.1.4 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install DB2 Performance Toolkit:

<table>
<thead>
<tr>
<th>Job Name</th>
<th>Job Type</th>
<th>Description</th>
<th>RELFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQMALA</td>
<td>SMP/E</td>
<td>Sample job to allocate and initialize a new SMP/E CSI data set (Optional)</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>CQMALB</td>
<td>SMP/E</td>
<td>Sample job to allocate SMP/E data sets (Optional)</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>CQMRECEV</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for DB2 Query Monitor</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>CQMRECE1</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for DB2 Query Monitor Toolkit Edition Identifier</td>
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<tr>
<td>CQMRECE2</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for FEC Common Code</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>CQMALLOC</td>
<td>ALLOCATE</td>
<td>Sample job to allocate target and distribution libraries for DB2 Query Monitor</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>CQMALLO2</td>
<td>ALLOCATE</td>
<td>Sample job to allocate target and distribution libraries for FEC Common Code</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>CQMISMKD</td>
<td>MKDIR</td>
<td>Sample job to invoke the supplied CQMMKDIR EXEC to allocate file system paths</td>
<td>IBM.H238320.F3</td>
</tr>
<tr>
<td>COMDDDEF</td>
<td>DDDEF</td>
<td>Sample job to define SMP/E DDDEFs for DB2 Query Monitor</td>
<td>IBM.H238320.F3</td>
</tr>
</tbody>
</table>
You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.7, “Perform SMP/E RECEIVE” on page 34) then copy the jobs from the RELFILES to a work data set for editing and submission. See Figure 23 on page 31 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
//SYSPRINT DD SYSOUT=/c5197
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=volser,LABEL=(x,SL),
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=volser,LABEL=(x,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=23832/zerodot,F3,UNIT=tunit,
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=238KY0,LABEL=(4,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=23832/zerodot,F3,UNIT=tunit,
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=238KY0,LABEL=(4,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=23832/zerodot,F3,UNIT=tunit,
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=238KY0,LABEL=(4,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=23832/zerodot,F3,UNIT=tunit,
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=238KY0,LABEL=(4,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=23832/zerodot,F3,UNIT=tunit,
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=238KY0,LABEL=(4,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
///c5197TAPEIN DD DSN=IBM.H23832/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=23832/zerodot,F3,UNIT=tunit,
///c5197 DISP=(OLD,KEEP)
///c5197TAPEIN2 DD DSN=IBM.H238KY/zerodot.F3,UNIT=tunit,
///c5197 VOL=SER=238KY0,LABEL=(4,SL),
///c5197 DISP=(OLD,KEEP)
///c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197 ... 97/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197/c5197
```
See the following information to update the statements in the previous sample:

TAPEIN/TAPEIN2:
- `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.H238320.F3, and IBM.H238KY0.F3. on the tape.

FILEIN/FILEIN2:
- `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.
- `yyyyIN` is either TAPEIN2 or FILEIN2 depending on your input DD statement.

### 6.1.5 Allocate SMP/E CSI (Optional)

If you are using an existing CSI, do not execute this job.

If you are allocating a new SMP/E data set for this install, edit and submit sample job CQMALA to allocate the SMP/E data set for DB2 Performance Toolkit. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages**: You will receive a return code of 0 if this job runs correctly.
6.1.6 Initialize CSI zones (Optional)

If you are using an existing CSI, do not execute this job.

Edit and submit sample job CQMALB to initialize SMP/E zones for DB2 Performance Toolkit. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

6.1.7 Perform SMP/E RECEIVE

If you have obtained DB2 Performance Toolkit as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the DB2 Performance Toolkit 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 sample job CQMRECEV to perform the SMP/E RECEIVE for DB2 Query Monitor. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

You can also choose to edit and submit sample job CQMRECE1 to perform the SMP/E RECEIVE for DB2 Query Monitor Toolkit Edition Identifier. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

You can also choose to edit and submit sample job CQMRECE2 to perform the SMP/E RECEIVE for FEC Common Code. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

6.1.8 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job CQMALLOC to allocate the SMP/E target and distribution libraries for DB2 Query Monitor. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

Edit and submit sample job CQMALLO2 to allocate the SMP/E target and distribution libraries for FEC Common Code. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.
6.1.9 Allocate, create and mount ZFS Files (Optional)

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

If you plan to install DB2 Performance Toolkit into a new z/OS UNIX file system, you can edit and submit the optional CQMZFS job to perform the following tasks:

- Create the z/OS UNIX file system
- Create a mount point
- Mount the z/OS UNIX file system on the mountpoint

Consult the instructions in the sample job for more information.

The recommended z/OS UNIX file system type is zFS. The recommended mount point is /usr/lpp/cqmv3r2.

Before running the sample job to create the z/OS UNIX file system, you must ensure that OMVS is active on the driving system. zFS must be active on the driving system if you are installing DB2 Performance Toolkit into a file system that is zFS.

If you create a new file system for this product, 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.

MOUNT FILESYSTEM('dsn')
MOUNTPOINT('/usr/lpp/cqmv3r2')
MODE(RDRW) /* can be MODE(READ) */
TYPE(ZFS) PARM('AGGRGROW') /* zFS, with extents */

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

#dsn is the name of the data set holding the z/OS UNIX file system.
/usr/lpp/cqmv3r2 is the name of the mount point where the z/OS UNIX file system will be mounted.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

6.1.10 Allocate File System Paths

The target system HFS or zFS data set must be mounted on the driving system when running the sample CQMISMKD job since the job will create paths in the HFS or zFS.

Before running the sample job to create the paths in the file system, you must ensure that OMVS is active on the driving system and that the target system's HFS or zFS file system is mounted to the driving system. zFS must be active on the driving system if you are installing DB2 Performance Toolkit into a file system that is zFS.

If you plan to install DB2 Performance Toolkit into a new HFS or zFS file system, you must create the mountpoint and mount the new file system to the driving system for DB2 Performance Toolkit.
The recommended mountpoint is `/usr/lpp/lpp/cqmv3r2`.

Edit and submit sample job CQMISMKD to allocate the HFS or zFS paths for DB2 Query Monitor. Consult the instructions in the sample job for more information.

If you create a new file system for this product, 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:** You will receive a return code of 0 if this job runs correctly.

### 6.1.11 Create DDDEF Entries

Edit and submit sample job CQMDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for DB2 Query Monitor. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

Edit and submit sample job CQMDDDE2 to create DDDEF entries for the SMP/E target and distribution libraries for FEC Common Code. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.12 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job CQMAPPLY to perform an SMP/E APPLY CHECK for DB2 Performance Toolkit. 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:
a. 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.

b. 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),HOLDFIXCAT).
```

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.

2. 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.

**Expected Return Codes and Messages from APPLY CHECK:** You will receive a return code of 0 if this job runs correctly.
**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

3. If you are installing DB2 Query Monitor Toolkit Edition Identifier, edit and submit sample job CQMAPPL1 to perform the APPLY WITH CHECK for DB2 Query Monitor Toolkit Edition Identifier. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages from APPLY WITH CHECK:** You will receive a return code of 0 if this job runs correctly.

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

**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

### 6.1.13 Perform SMP/E ACCEPT

Edit and submit sample job CQMACCEP to perform an SMP/E ACCEPT CHECK for DB2 Performance Toolkit. 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 book for details.

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.

**Expected Return Codes and Messages from ACCEPT CHECK:** You will receive a return code of 0 if this job runs correctly.

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:** You will receive a return code of 0 if this job runs correctly.
If you are installing &COMPAN2., edit and submit sample job CQMACCE1 to perform the ACCEPT WITH CHECK for DB2 Query Monitor Toolkit Edition Identifier Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages from ACCEPT WITH CHECK:** You will receive a return code of 0 if this job runs correctly.

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

**Expected Return Codes and Messages from ACCEPT:** You will receive a return code of 0 if this job runs correctly.

### 6.1.14 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command identifies requisites for products that are installed in separate zones. This command also creates APPLY and ACCEPT commands in the SMPPUNCH data set. You can use the APPLY and ACCEPT commands to install those cross-zone requisites that the SMP/E REPORT CROSSZONE command identifies.

After you install DB2 Performance Toolkit, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries that describe all the target and distribution libraries to be reported on.

For more information about REPORT CROSSZONE, see the SMP/E manuals.
6.2 Installing OMEGAMON XE for DB2 PE on z/OS

6.2.1 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.

6.2.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 22 on page 30. 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 24. SMP/E Options Subentry Values](file:images/figure24.png)

<table>
<thead>
<tr>
<th>Subentry</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSSPACE</td>
<td>300,1200,1200</td>
<td>Use 1200 directory blocks</td>
</tr>
<tr>
<td>PEMAX</td>
<td>SMP/E Default</td>
<td>IBM recommends using the SMP/E default for PEMAX.</td>
</tr>
</tbody>
</table>

6.2.3 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
- SCEELKED
- SCEERUN
- SDSNLOAD
- 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.

6.2.4 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 'hilev.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.

### 6.2.4.1 Introduction to the Job Generator:

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

**Processing Steps**

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

**Process Log**

- One of the members of the generated job library is KCIJGLOG, which is the process log.
- This member shows the generating parameters and internal lists that were used to create the batch jobs.
- It also indicates which jobs were actually produced and need to be run. Note that the RECEIVE, APPLY, and ACCEPT jobs are always generated even if the selected products are already in the target CSI. In that case, the jobs install additional maintenance when available.
6.2.4.2 **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.

6.2.4.3 **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.

6.2.4.4 **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.

6.2.5 **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 23 on page 31 are provided as part of the product to help you install OMEGAMON XE for DB2 PE on z/OS.
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 \textit{6.1.7, “Perform SMP/E RECEIVE” on page 34}) then copy the jobs from the relfiles to a work data set for editing and submission. See Figure 23 on page 31 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 \texttt{TAPEIN} or the \texttt{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.

\begin{verbatim}
//STEP1 EXEC PGM=IEBCOPY,REGION=4M
//SYSPRINT DD SYSOUT=*
//TAPEIN DD DSN=IBM.HKDB53X.F4,UNIT=tunit,
//   VOL=SER=volser,LABEL=(5,SL),
//   DISP=(OLD,KEEP)
//TAPEIN2 DD DSN=IBM.HKDBKY0.F3,UNIT=tunit,
//   VOL=SER=volser,LABEL=(4,SL),
//   DISP=(OLD,KEEP)
//FILEIN DD DSN=IBM.HKDB53X.F4,UNIT=SYSALLDA,DISP=SHR,
//   VOL=SER=filevol
//FILEIN2 DD DSN=IBM.HKDBKY0.F3,UNIT=SYSALLDA,DISP=SHR,
//   VOL=SER=filevol
//OUT DD DSNNAME=jcl-library-name,
//   DISP=(NEW,CATLG,DELETE),
\end{verbatim}

\begin{table}[h]
\centering
\begin{tabular}{|l|l|p{14cm}|}
\hline
\textbf{Job Name} & \textbf{Job Type} & \textbf{Description} & \textbf{RELFILE} \\
\hline
KDBX3ALO & ALLOCATE & Sample job to allocate target and distribution libraries & IBM.HKDB53X.F4 \\
KDBX4DDF & DDDEF & Sample job to define SMP/E DDDEFs & IBM.HKDB53X.F4 \\
KDBX5REC & RECEIVE & Sample RECEIVE job & IBM.HKDB53X.F4 \\
KDBJXRE1 & RECEIVE & Sample RECEIVE job for OMEGAMON Toolkit Edition Identifier & IBM.HKDBKY0.F3 \\
KDBX6BDI & MKDIR & Sample job to invoke the supplied EIWMKDIR EXEC to allocate file system paths & IBM.HKDB53X.F4 \\
KDBX7APP & APPLY & Sample APPLY job & IBM.HKDB53X.F4 \\
KDBJXAP1 & APPLY & Sample APPLY job for OMEGAMON Toolkit Edition Identifier & IBM.HKDBKY0.F3 \\
KDBX8ACC & ACCEPT & Sample ACCEPT job & IBM.HKDB53X.F4 \\
KDBJXAC1 & ACCEPT & Sample ACCEPT job for OMEGAMON Toolkit Edition Identifier & IBM.HKDBKY0.F3 \\
\hline
\end{tabular}
\caption{Sample Installation Jobs}
\end{table}
// 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
// COPY INDD=yyyyIN,OUTDD=OUT
/*
See the following information to update the statements in the previous sample:

TAPEIN/TAPEIN2:
- **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.HKDB53X.F4 and IBM.HKDBKY0.F3 on the tape.

FILEIN/FINEIN2:
- **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.
- **yyyyIN** is either TAPEIN2 or FILEIN2 depending on your input DD statement.

### 6.2.6 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**
6.2.7 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

6.2.8 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 may 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

You may also choose to edit and submit the sample job KDBJXRE1 to perform the SMP/E RECEIVE for OMEGAMON Toolkit Edition Identifier. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: 0

6.2.9 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 zFS directory tree is case sensitive. Ensure #zfsdir is an absolute path name and begins with a slash (/).
///c5197 ALLOCZ This step allocates your zFS data set. /c5197
///c5197 EXEC PGM=IDCAMS
///c5197 SYSPRINT DD SYSOUT=
///c5197 SYSIN DD /
DEFINE CLUSTER(NAME(#zfsdsn) -
    LINEAR CYLINDERS(15 5) SHAREOPTIONS(3) VOLUMES(#volser))
/*

///c5197 FORMAT This step formats your newly created zFS data set. */
///c5197 When executing the IOEAGFMT program you must have
///c5197 superuser authority (UID 0) or READ authority to the
///c5197 SUPERUSER.FILESYS.PFSCTL profile in the UNIXPRIV class. */
///c5197 EXEC PGM=IOEAGFMT,REGION=/zerodot,
///c5197 PARM=('-aggregate #zfsdsn -compat')
///c5197 STEPLIB DD DSN=IOE.SIOELMOD,DISP=SHR
///c5197 SYSPRINT DD SYSOUT=/c5197
///c5197 MAKEDIR This step creates the directory path for your
///c5197 Mount Point
///c5197 EXEC PGM=IKJEFT/zerodot1
///c5197 SYSTSPRT DD SYSOUT=/c5197
///c5197 MOUNT This step MOUNTS your newly created zFS File System
///c5197 using the AGGRGROW parameter.
///c5197 EXEC PGM=IKJEFT01
///c5197 SYSTSPRT DD SYSOUT=
///c5197 *PROFILE WTPMSG MSGID
///c5197 MKDIR '#zfsdir' MODE(7,5,5)
///c5197 PROFILE
/*

///c5197 MOUNT FILESYSTEM('#zfsdsn') +
///c5197 TYPE(ZFS) MODE(RDWR) PARM('AGGRGROW') +
///c5197 MOUNTPOINT('#zfsdir')
/*

Expected Return Codes and Messages: 0
6.2.10 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 HPMZ530.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

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

The latest HOLDDATA is available through several different portals, including
http://service.software.ibm.com/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 SYMMOD 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/c5197)
   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 ERRSYMMSYSMODS 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 you process a PTF with a ++HOLD statement, you will 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.
IEW2454W SYMBOL symbol UNRESOLVED. NO AUTOCALL (NCAL) SPECIFIED.
Figure 26 on page 50 contains a list of elements that might be marked as not selected during the APPLY and ACCEPT processes. This might occur because a VERSION parameter was supplied in an FMID indicating that it contained a higher level version of the same element provided by another FMID being processed at the same time. The higher version element is selected for processing and the lower version is not selected for processing. It might also occur because maintenance is being installed at the same time as the FMIDs.

<table>
<thead>
<tr>
<th>Figure 26. SMP/E Elements Not Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCCDG\N</td>
</tr>
<tr>
<td>KCC\CTD\S</td>
</tr>
<tr>
<td>K\CNC\PY\RM</td>
</tr>
<tr>
<td>KOB\CB\L$</td>
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<tr>
<td>KOB\C\NV\V</td>
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<td>KOB\CM\AP\I</td>
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<td>KOB\C\THR$</td>
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<tr>
<td>KOB\CU\N\IS</td>
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<tr>
<td>KOB\G\AT\W\0</td>
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<td>KOB\G\W\L\PA</td>
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<td>KOB\H\T\PS\S</td>
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<tr>
<td>KOB\R\R\U\I\A</td>
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<td>KOB\R\Z\H\ST</td>
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<tr>
<td>KOB\T\R\H\R\H</td>
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<td>KOB\U\I\G\0</td>
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<td>KOB\U\I\L\0</td>
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<tr>
<td>KOB\U\I\M\3\0</td>
</tr>
<tr>
<td>KOB\U\I\N\V\0</td>
</tr>
<tr>
<td>KOB\U\I\T\K\0</td>
</tr>
</tbody>
</table>

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.

Once you have run the KDBX7APP job, you will be required to run sample job KDBJXAP1 to perform the SMP/E APPLY CHECK for the OMEGAMON Toolkit Edition Identifier. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages APPLY CHECK: 0**

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

**Expected Return Codes and Messages APPLY: 0**

### 6.2.12 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 book 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 will receive a return code of 4 and the following message when the BYPASS operand is used.
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 26 on page 50 contains a list of elements that might be marked as not selected during the APPLY and ACCEPT processes. This might occur because a VERSION parameter was supplied in an FMID indicating that it contained a higher level version of the same element provided by another FMID being processed at the same time. The higher version element is selected for processing and the lower version is not selected for processing. It might also occur because maintenance is being installed at the same time as the FMIDs.

Once you have run the KDBX8ACC job, you will be required to run sample job KDBJXAC1 to perform the SMP/E ACCEPT CHECK for the OMEGAMON Toolkit Edition Identifier. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages ACCEPT CHECK: 0**

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

**Expected Return Codes and Messages APPLY: 0**

### 6.2.13 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.

- /bulletmed/#hfsdir/usr/lpp/opmei/v520/lib/IBM
- /bulletmed/#hfsdir/usr/lpp/opmei/v520/lib
- /bulletmed/#hfsdir/usr/lpp/opmei/v511/lib/IBM
- /bulletmed/#hfsdir/usr/lpp/opmei/v511/lib
- /bulletmed/#hfsdir/usr/lpp/opmei/v520
However, in order to keep the existing configuration file (pdq.properties) you might want to copy this file into the new "/usr/lpp/opmei/v530/lib/IBM" path before you delete the obsolete file system paths. The alternative is to create the same configuration again in the new path.

6.3 Activating DB2 Performance Toolkit

6.3.1 Product Customization

The publication *DB2 Performance Toolkit User’s Guide (SC19-4143)* contains the necessary information to customize and use DB2 Performance Toolkit.

6.4 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, the PARMGEN reference manual as well as the Planning and Configuration guides 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 *DB2 Performance Toolkit User’s Guide* 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:

http://www.ibm.com/support/knowledgecenter/OMXEDB2PE530/com.ibm.omegamon.xe.pe_db2.doc_5.3.0/ko2welcome_pe.htm
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APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the IBM Customer Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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Reader's Comments

Program Directory for IBM DB2 Performance Toolkit for z/OS, June 2015

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