Contacting BMC Software

You can access the BMC Software website at http://www.bmc.com. From this website, you can obtain information about the company, its products, corporate offices, special events, and career opportunities.

United States and Canada

**Address**
BMC SOFTWARE INC
2101 CITYWEST BLVD
HOUSTON TX 77042-2827
USA

**Telephone**
713 918 8800 or 800 841 2031

**Fax**
713 918 8000

Outside United States and Canada

**Telephone**
(01) 713 918 8800

**Fax**
(01) 713 918 8000
Customer support

You can obtain technical support by using the BMC Software Customer Support website or by contacting Customer Support by telephone or e-mail. To expedite your inquiry, see “Before contacting BMC.”

Support website

You can obtain technical support from BMC 24 hours a day, 7 days a week at http://www.bmc.com/support. From this website, you can

- read overviews about support services and programs that BMC offers
- find the most current information about BMC products
- search a database for issues similar to yours and possible solutions
- order or download product documentation
- download products and maintenance
- report an issue or ask a question
- subscribe to receive proactive e-mail alerts when new product notices are released
- find worldwide BMC support center locations and contact information, including e-mail addresses, fax numbers, and telephone numbers

Support by telephone or e-mail

In the United States and Canada, if you need technical support and do not have access to the web, call 800 537 1813 or send an e-mail message to customer_support@bmc.com. (In the subject line, enter SupID:<yourSupportContractID>, such as SupID:12345). Outside the United States and Canada, contact your local support center for assistance.

Before contacting BMC

Have the following information available so that Customer Support can begin working on your issue immediately:

- product information
  - product name
  - product version (release number)
  - license number and password (trial or permanent)
- operating system and environment information
  - machine type
  - operating system type, version, and service pack or other maintenance level such as PUT or PTF
  - system hardware configuration
  - serial numbers
  - related software (database, application, and communication) including type, version, and service pack or maintenance level
- sequence of events leading to the issue
- commands and options that you used
- messages received (and the time and date that you received them)
  - product error messages
  - messages from the operating system, such as file system full
  - messages from related software
License key and password information

If you have questions about your license key or password, use one of the following methods to get assistance:

- Send an e-mail message to customer_support@bmc.com.
# Contents

**About this book**

Summary of changes ........................................... 11

**Chapter 1**  
Introduction  
Overview .................................................. 21
Installation methods ...................................... 23
Maintenance methods ...................................... 24

**Chapter 2**  
BMC solutions for DB2  
Solution overview ......................................... 25
Administrative Assistant for DB2 ...................... 28
Database Administration for DB2 .................... 32
Database Performance for DB2 ....................... 36
Recovery Management for DB2 ....................... 40
SQL Performance for DB2 ............................... 45
System Performance for DB2 ......................... 50

**Chapter 3**  
BMC products for DB2  
Product overview ......................................... 57
ALTER for DB2 .............................................. 61
APPTUNE for DB2 ........................................... 64
BMCDSN Command Processor ......................... 68
CATALOG MANAGER for DB2 ....................... 71
CHANGE MANAGER for DB2 ............................ 74
CHECK PLUS for DB2 ....................................... 77
COPY PLUS for DB2 ......................................... 80
DASD MANAGER PLUS for DB2 ..................... 83
EXTENDED BUFFER MANAGER for DB2 ........ 86
LOADPLUS for DB2 .......................................... 88
Log Master for DB2 ......................................... 91
MainView for DB2 ........................................... 94
OPERTUNE for DB2 ......................................... 98
PACLOG for DB2 ............................................ 101
Pool Advisor for DB2 ...................................... 104
R+/CHANGE ACCUM for DB2 ..................... 108
RECOVER PLUS for DB2 .................................. 111
RECOVERY MANAGER for DB2 .................... 114
# Tables

Terminology for BMC products, solutions, and technologies .......................... 22  
BMC solutions for DB2 and their components ........................................... 27  
Administrative Assistant for DB2 components .......................................... 28  
Installation documentation for Administrative Assistant ........................... 31  
Database Administration for DB2 components ......................................... 33  
Installation documentation for Database Administration ............................ 35  
Database Performance for DB2 components ............................................. 37  
Installation documentation for Database Performance ............................... 39  
Recovery Management for DB2 components ............................................. 41  
Installation documentation for Recovery Management ............................... 43  
SQL Performance for DB2 components ..................................................... 46  
Installation documentation for SQL Performance ....................................... 47  
System Performance for DB2 components ................................................. 51  
Installation documentation for System Performance .................................. 53  
BMC DB2 products and their components ............................................... 59  
ALTER for DB2 components .................................................................... 61  
Installation documentation for ALTER ..................................................... 63  
APPTUNE for DB2 components .................................................................. 64  
Installation documentation for APPTUNE .................................................. 66  
BMCDSN components .............................................................................. 68  
Installation documentation for BMCDSN .................................................. 69  
CATALOG MANAGER for DB2 components ............................................. 71  
Installation documentation for CATALOG MANAGER ............................... 73  
CHANGE MANAGER for DB2 components ............................................... 74  
Installation documentation for CHANGE MANAGER ................................. 76  
CHECK PLUS for DB2 components ......................................................... 77  
Installation documentation for CHECK PLUS .......................................... 78  
COPY PLUS for DB2 components ............................................................. 80  
Installation documentation for COPY PLUS ............................................. 81  
DASD MANAGER PLUS for DB2 components .......................................... 83  
Installation documentation for DASD MANAGER PLUS ............................ 84  
EXTENDED BUFFER MANAGER for DB2 components ............................ 86  
Installation documentation for EXTENDED BUFFER MANAGER .......... 87  
LOADPLUS for DB2 components ............................................................. 88  
Installation documentation for LOADPLUS .............................................. 89  
Log Master for DB2 components .............................................................. 91  
Installation documentation for Log Master .............................................. 92  
MainView for DB2 components ............................................................... 94  
Installation documentation for MainView for DB2 ................................... 96  
OPERTUNE for DB2 components ............................................................. 98
Installation documentation for OPERTUNE .................................................. 99
PACLOG for DB2 components ................................................................. 101
Installation documentation for PACLOG .................................................... 102
Pool Advisor for DB2 components ............................................................. 104
Installation documentation for Pool Advisor .............................................. 105
R+/CHANGE ACCUM for DB2 components ................................................ 108
Installation documentation for R+/CHANGE ACCUM .................................. 110
RECOVER PLUS for DB2 components ......................................................... 111
Installation documentation for RECOVER PLUS ......................................... 113
RECOVERY MANAGER for DB2 components ............................................. 114
Installation documentation for RECOVERY MANAGER .............................. 115
REORG PLUS for DB2 components ............................................................ 117
Installation documentation for REORG PLUS ............................................ 118
SNAPSHOT UPGRADE FEATURE for DB2 components .............................. 121
Installation documentation for SNAPSHOT UPGRADE FEATURE .................. 122
SQL Explorer for DB2 components ......................................................... 123
Installation documentation for SQL Explorer .......................................... 124
UNLOAD PLUS for DB2 components ....................................................... 126
Installation documentation for UNLOAD PLUS ........................................ 128
BMC technologies for DB2 and their products and solutions ....................... 131
High-speed Apply Engine components .................................................... 142
Documentation for BMC solutions, products, and technologies .................. 151
Figures

Relationship between the Administrative Assistant for DB2 components .............. 30
Relationship between the Database Administration for DB2 components .............. 34
Relationship between the Database Performance for DB2 components ................. 38
Relationship between the Recovery Management for DB2 components ................. 42
Relationship between the SQL Performance for DB2 components ...................... 47
Relationship between the System Performance for DB2 components .................... 52
Relationship between the ALTER for DB2 components .................................. 62
Relationship between the APPTUNE for DB2 components ................................ 65
Relationship between the BMCDSN components ............................................ 69
Relationship between the CATALOG MANAGER for DB2 components ................. 72
Relationship between the CHANGE MANAGER for DB2 components ................. 75
Relationship between the CHECK PLUS for DB2 components .......................... 78
Relationship between the COPY PLUS for DB2 components ............................. 81
Relationship between the DASD MANAGER PLUS for DB2 components .............. 84
Relationship between the EXTENDED BUFFER MANAGER for DB2 components 87
Relationship between the LOADPLUS for DB2 components ............................ 89
Relationship between the Log Master for DB2 components .............................. 92
Relationship between the OPERTUNE for DB2 components ............................ 98
Relationship between the PACLOG for DB2 components ................................ 102
Relationship between the Pool Advisor for DB2 components .......................... 105
Relationship between the R+/CHANGE ACCUM for DB2 components .............. 109
Relationship between the RECOVER PLUS for DB2 components ...................... 112
Relationship between the RECOVERY MANAGER for DB2 components ............. 115
Relationship between the REORG PLUS for DB2 components .......................... 118
Relationship between the SNAPSHOT UPGRADE FEATURE for DB2 ......... 121
components .......................................................................................... 121
Relationship between the SQL Explorer for DB2 components ....................... 124
Relationship between the UNLOAD PLUS for DB2 components ...................... 127
About this book

This book contains information about the components of BMC products and solutions for DB2®. It is intended for system administrators and database administrators (DBAs) to help you understand the relationships between the products and solutions and plan their installation in your environment.

Like most BMC documentation, this book is available in printed and online formats. To request printed books or to view online books and notices (such as release notes and technical bulletins), see the Customer Support website at http://www.bmc.com/support. Most product shipments also include the online books on a documentation CD.

**NOTE**

Online books are formatted as PDF or HTML files. To view, print, or copy PDF books, use the free Adobe Reader from Adobe Systems. If your product installation does not install the reader, you can obtain the reader at http://www.adobe.com.

For a complete listing of publications for the products and solutions described in this book, see Appendix A, “Related publications.”

Summary of changes

This section summarizes changes to the functionality of the products and solutions, listing the changes by product version and release date. The summary includes product enhancements and any major changes to the documentation.

In this book, change bars highlight new information or changes to existing information. This book does not use change bars for editorial changes unless those changes significantly affect your use of the information.
April 2011

This version of the BMC Products and Solutions for DB2 for z/OS Installation Planning Guide contains the following changes:

- Adds the BMC Common Statistics component, FMID ZATSxxx, to Database Administration for DB2 (page 32) and LOADPLUS (page 88)

- Adds the SAS transient library, FMID BBASCxx, to LOADPLUS (page 88) and REORG PLUS (page 117)

- Adds Next Generation Logger (NGL) (page 145), FMID ZNGLxxx, to the following solutions and products:
  - APPTUNE (page 64)
  - Pool Advisor (page 104)
  - SQL Performance for DB2 (page 45)
  - System Performance for DB2 (page 50)

- Adds DB2 Product Configuration technology (page 139), FMID ZLGCxxx, to the following solutions and products:
  - APPTUNE (page 64)
  - Pool Advisor (page 104)
  - SQL Performance for DB2 (page 45)
  - System Performance for DB2 (page 50)

- Adds DB2 Component Services (DBC) (page 138), FMID ZDBCxxx, to the following solutions and products:
  - APPTUNE (page 64)
  - Pool Advisor (page 104)
  - SQL Performance for DB2 (page 45)
  - System Performance for DB2 (page 50)

- Adds the BMC Runtime Component System (RTCS) (page 147), FMIDs ZOSZxxx and LOSZxxx, to the following solutions and products:
  - APPTUNE (page 64)
  - Pool Advisor (page 104)
  - SQL Performance for DB2 (page 45)
  - System Performance for DB2 (page 50)
- Adds the Rules Engine (page 147), FMID ZMRExxx, to the following solutions and products:
  - APPTUNE (page 64)
  - SQL Explorer (page 123)
  - SQL Performance for DB2 (page 45)
  - System Performance for DB2 (page 50)

- Changes DATA PACKER to DATA ACCELERATOR Compression (page 138).
  This change has been made throughout this book.

- Adds User Interface Middleware (UIM) Common Services (page 148), FMID ZUSCxxx, to the following solutions and products:
  - APPTUNE (page 64)
  - SQL Performance for DB2 (page 45)

- Adds the System Performance component, FMID ZSPDxxx, to the System Performance solution.

- Adds the new book *BMC Common Components Messages Manual* to Appendix A, “Related publications” for the following solutions and products:
  - SQL Performance
  - System Performance
  - APPTUNE
  - Pool Advisor
  - SQL Explorer

- Adds the new book *BMC Runtime Component System Configuration and Administration Guide* to Appendix A, “Related publications” for the following solutions and products:
  - SQL Performance
  - System Performance
  - APPTUNE
  - Pool Advisor
Summary of changes

- Removes the Common Data Collector component from this book. The FMID for this component was ZDCCxxx. The Common Data Collector was listed as a component for the following products and solutions:
  - APPTUNE (page 64)
  - Pool Advisor (page 104)
  - SQL Performance for DB2 (page 45)
  - System Performance for DB2 (page 50)

- Removes the Automation component from this book. The FMID for this component was ZBMUxxx. The Automation component was listed as a component for the DASD MANAGER PLUS product and for the Database Performance solution. The Automation for DB2 User Guide has been removed from Appendix A, “Related publications.”

- Removes the CONTROL-M for z/OS component from this book. The FMID for this component was CTMxxx. The CONTROL-M for z/OS component was listed as a component for the Database Performance solution. The CONTROL-M for z/OS and INCONTROL for z/OS documentation has been removed from Appendix A, “Related publications.”

- Version 2.3.10 of the Installation System includes the following changes:
  - The Product Customization menus accommodate new features, such as the DB2 Product Configuration technology, the DB2 Component Services (DBC), and the Next Generation Logger (NGL). Some MainView products and the System and SQL Performance products use this technology.
  - You can use a new feature, BMC Internet Service Retrieval (ISR). BMC ISR identifies and applies fixes to all products that you install via the Installation System. For more information, see the “Applying maintenance” chapter of your product or solution installation guide.

November 2010

This version of the BMC Products and Solutions for DB2 for z/OS Installation Planning Guide contains the following changes:

- Adds the UIM Common Services (USC) technology, with an FMID of ZUSCxxx, to RECOVERY MANAGER for DB2.

- Removes the following obsolete books from Appendix A, “Related publications”:
  - MainView for DB2 Master Index
  - MainView Summary Reference
■ Removes “Appendix B, Merged and non-merged installation, user libraries, and BMCPSWD” from this book. This information is now in the product and solution installation guides.

■ Version 2.3.00 of the Installation System (released September 2010) included the following enhancements:

■ **Installation System enhancements**

— The Main Menu has changed:

■ **Product Customization** menus now direct you to select to execute from runtime data sets or from SMP/E target-zone data sets. Subsequent menus have also changed.

■ **Additional Options** menus no longer list cloning and catalog indirection options. Those options are now offered during the customization process.

■ **Runtime Enablement** menus are now offered during the customization process.

■ **What’s New** is a new option that provides information about the current release.

— When customizing products using OZI Customization, you can use the new SHOWINFO command to view the names of the profile data sets and JCL libraries. If you are customizing products to execute from runtime data sets, SHOWINFO also provides information such as the row ID of the runtime enablement (RTE) or target destination system (TDS) instance, the sysplex name, and the system name.

— You can use the WHATSNEW command at any time to display additional information about changes to the Installation System.

■ **Installation enhancements**

— For BMC Data Management products for DB2® and for IMS™, you can select a merged or non-merged installation. MainView products support only a merged installation with the exception of MainView for DB2, which also supports a non-merged installation.

— The documentation includes a new section that describes how several installers can install and customize the products by sharing an installation profile.

— If you use the Express installation method, you must set up the SMP/E environment by running the $B90SMPE job (for JES2) or $B90SMPE and $B91SMPE (for JES3).
Summary of changes

- **Customization enhancements**

  — The Installation System can customize your BMC products to execute from *runtime data sets* or from *SMP/E target-zone data sets*. Many of the related processes are now automated.

  — Version 2.2.90 and earlier of the Installation System used Deployment Assister to aid in product deployment. Version 2.3.00 provides enhanced functionality to customize and transport the runtime data sets to target destination systems (TDSs). The Installation System panels no longer refer to Deployment Assister.

  — To deploy products in version 2.2.90 and earlier of the Installation System, you had to copy a profile and then manually transport the necessary data sets and the Installation System. In version 2.3.00, the Installation System uses new customization panels to automate this process.

  — The Installation System guides you through allocating and managing the profile and JCL data sets and provides a new transport feature. The transport process packages data sets on the system of origin, transports them to TDSs, and unpackages them. You can then perform additional customization on the TDSs, as needed.

  — To support deployment, the Installation System allows you to specify product passwords when invoked from within the Product Customization menus on the Main Menu. The procedure for applying product passwords during customization is different from the procedure for applying passwords outside of customization.

  — You can now change runtime data set sizing.

  — During customization, you can change the low-level qualifiers (LLQs) for the RTE data sets for a given type of data set (such as CLIB, CNFG, or LINK) to values that are appropriate for your environment.

  — For data sets that contain similar data control blocks, you can now consolidate the data sets (for example, you can consolidate BMCCLIB and BMCREXX into one data set). The exception to this is the BBPROC data set which cannot be combined with any other similar data control block data sets.

  — You can now use RTE with MainView products. Now, all products that are installed using the Installation System can use the RTE functions.

  — To customize MainView products, you can now use MainView Customization or AutoCustomization. The Installation System continues to support AutoCustomization in this release, but will end support in a future release.
— MainView Customization is a new direction for customizing the MainView environment and products. MainView Customization assigns the initial operating parameter values to products, enforces BMC best practice recommendations, and provides synchronization between parameter values, data set names, and operating PROCs.

— (BMC products for DB2) Cloning and Catalog indirection are no longer options listed on the Additional Options menu. They are now options listed within the customization process menus. In addition, you no longer need to copy profiles manually for product cloning or catalog indirection. The Installation System now controls the names of the JCL data sets automatically.

These changes are documented in a technical bulletin released on September 22, 2010 and in the product installation guides released in November 2010.

Version 2.2.90 of the Installation System (released May 2010) included the following enhancements:

— A new Category Selection panel now categorizes the products and solutions by product line, helping you to filter the list of products and solutions to install.

— The BMC PUT Image Files panel now includes the year and quarter to help identify which PUT images you should apply.

— A new JCL member (FTPCNTL) collects installation information that you can submit to BMC Customer Support to help troubleshoot installation issues.

These changes are documented in a technical bulletin released on May 19, 2010 and in the product installation guides released in November 2010.

**December 2009**

This version of the book contains the following changes:

- DB2 Component Services (DBC) technology has been added as a component to RECOVERY MANAGER and Recovery Management. The FMID is ZDBCxxx. The following changes have been made in this book:

  — DBC was added to Table 2 on page 27, Table 15 on page 59, and Table 60 on page 131.
  — DBC was added as a component in Table 9 on page 41 and in Table 50 on page 114.
  — The DBC description was added in “DB2 Component Services” on page 138.
Dignus C runtimes and C++ objects technology, which has an FMID of ZDIGxxx, has been added as a component to all BMC solutions and products for DB2 except the following products:

- BMCDSN
- EXTENDED BUFFER MANAGER for DB2
- OPERTUNE
- PACLOG
- SNAPSHOT UPGRADE FEATURE for DB2

BMC Common Statistics (page 133), which has an FMID of ZATSxxx, has been added as a component to Database Performance for DB2 (page 36), DASD MANAGER PLUS (page 83), and REORG PLUS (page 117).

The name of the DB2 Statistics Common Code component (FMID ZASHxxx) has been changed to BMC Space Estimation Common Code throughout this book.

The DB2 Statistics Common Code component (FMID ZASHxxx) has been removed from the listing of components for the System Performance solution in Table 13 on page 51.

The transient version of the SAS Runtime Library Support (BBASCxx FMID) has been removed from CATALOG MANAGER (Table 22 on page 71).

The Database Administration feature for large object (LOB) data unloading and loading has changed. You can also use the UNLOAD PLUS and LOADPLUS utilities to unload and load LOB data.

The following product documentation is no longer produced and references to these books have been removed from this book:

- Backup and Recovery Products for DB2 Reference Summary
- BMCSORT Reference Manual
- CATALOG MANAGER for DB2 Quick Reference Cards
- OS/390 and z/OS Installer Guide
- Utility Products for DB2 Quick Reference Cards

The new book, MainView Installation Guide, has been added to the installation documentation for MainView for DB2 and System Performance for DB2. This book has also been added to the table in Appendix A, “Related publications.”

In the tables showing solution and product components, the column indicating if SMP/E maintenance is used has been removed because all components now use SMP/E maintenance. Each of these tables now has a sentence in the paragraph above it indicating that all components use SMP/E maintenance.
■ Product authorization messages have been removed from the contents of installation documentation. These messages are now in the product messages manuals. The tables relating to installation documentation in this book have been modified to reflect this change.

■ Versions 2.2.60 through 2.2.80 of the Installation System include the following enhancements:

— Beginning with version 2.2.80, product media will no longer be distributed on 3480 tapes.

— *(Custom installation)* To provide additional control over when specific SMP/E processes execute, the APPLY and ACCEPT jobs are now separate. The separation allows you to process functions independently from service maintenance (PTFs and APARs).

The new jobs replace the previous jobs ($B75APCK, $B76APLY, $B80ACCK, and $B81ACPT) that combined function and service maintenance processing.

— The Installation System now consolidates several $B jobs into $B05SMPE and $B06SMPE to create the SMP/E environment. $B05SMPE includes the following jobs as job steps:

—— $B05CGBL
—— $B10CCSI
—— $B15CSMP
—— $B18ALOC

$B06SMPE includes the following jobs as job steps, depending on the type of installation:

—— $B20RELT
—— $B25RELT
—— $B27FSET
—— $B70DDEF

— The Installation System now supports hierarchical file system (HFS) and IBM® zSeries® File Systems (zFS). If you have a product that uses an HFS or zFS file structure, observe the following guidelines for a Custom installation:

—— Before running the APPLY job, mount the file system.

—— Before applying PUT maintenance, mount all file systems for products that use an HFS or zFS file structure.

—— *(BMC products for IBM DB2 and IMS™ subsystems only)* The Copy Install Profile panel includes an additional option to support the Deployment Assister.

—— The **Firewall Free Form Input Template Specifications** panel now supports up to five user DDs for FTP connectivity.
Summary of changes

— Service media is now distributed as a product-family image file for the supported function IDs (FMIDs).

For each product family, the corresponding image file is included with the product media set or on the electronic software distribution (ESD) site.

— (BMC products for IBM DB2 and IMS subsystems only) With Deployment Assister (a runtime enablement option), you can use a copy of an installation profile and RTE data sets with a different high-level qualifier (HLQ) to tailor subsequent installations.

— The path specified for the FTP site in the section “To download base libraries from the ESD site by using a web browser” has changed. The new path is ftp://epddownload.bmc.com/bmc/esd/ozi/bmcozi-vversionNumber-image.bin.
Introduction

Overview

BMC offers both products and solutions for DB2® to address specific areas of DB2 data management. Most of the products and solutions include the use of technologies to ensure their full functionality.

Technologies

The BMC technologies are often referred to as technology components because they are automatically installed when you install many of the products and solutions from BMC. They are not stand-alone products.

Several products or solutions often share the use of a technology component. When this occurs, the technology component is called a shared component.

Technology components are described in Chapter 4, “BMC technologies for DB2.” They are also shown with the products and solutions in which they are included in succeeding chapters.
**Products**

The BMC products for DB2 provide many features and functionality for working with DB2 data. Products are selected from the product and solution list in the Installation System and have their own passwords.

BMC products are described in Chapter 3, “BMC products for DB2.” Products that are components in solutions are also shown in the solution descriptions.

**Solutions**

The BMC solutions for DB2 combine various BMC products and technologies. In a solution, the products are referred to as product components and the technologies are called technology components.

When you choose a solution from the product and solution list in the Installation System, all of the components of the solution are automatically installed. Solutions have their own passwords and often offer capabilities above those provided by the individual components of the solution. BMC solutions are described in Chapter 2, “BMC solutions for DB2.”

**Quick reference for terminology**

Table 1 provides a quick reference to the terminology that is often associated with products, solutions, and technologies from BMC.

<table>
<thead>
<tr>
<th>Term</th>
<th>Usage</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>product component</td>
<td>a product that is included in a solution</td>
<td>CHANGE MANAGER for DB2 is a product component of the Database Administration for DB2 solution.</td>
</tr>
<tr>
<td>product</td>
<td>a product offered by BMC</td>
<td>CHANGE MANAGER for DB2 is also sold as a stand-alone product.</td>
</tr>
<tr>
<td></td>
<td>Products have their own passwords.</td>
<td></td>
</tr>
<tr>
<td>shared component</td>
<td>a component that is used by several products or solutions</td>
<td>DB2 Common Code (SCC) is a shared component because it is used by both COPY PLUS and UNLOAD PLUS (as well as other DB2 products).</td>
</tr>
</tbody>
</table>
Installation methods

You install technologies, products, and solutions with the Installation System from BMC that supports the following methods of installation:

- **Express installation:** The Express installation provides an IBM® System Modification Program Extended (SMP/E) installation that uses IEBCOPY to copy the product data sets, and sets up an SMP/E maintenance environment by using predefined SMP/E zones and libraries. The Express installation method includes steps for unloading, customizing, and executing BMC products. You may want to use the Express installation method under the following circumstances:

  — to quickly install products into a new SMP/E environment
  — to install products for a trial or demo system
- **Custom installation**: The Custom installation uses the full SMP/E product installation and maintenance program. SMP/E product distribution files contain modification control statements (MCSs) and relative files (RELFILEs) for SMP/E product installation and maintenance.

  The Custom installation method is required if you are adding a product to an existing SMP/E installation.

  Regardless of which method you choose, the Installation System guides you through the installation process, allowing you to accept or change defaults along the way. You can readily access Help from each panel by pressing F1.

  Detailed information about the Installation System is in the installation documentation for the products, technologies, and solutions. See Table 62 on page 151 for a complete listing of the documentation available, including the installation documentation.

---

**Maintenance methods**

The current releases of all BMC products, solutions, and technologies for DB2 are SMP/E-enabled. Maintenance is handled with PTFs.

More information about maintenance is in the installation documentation for the products, solutions, and technologies. See Table 62 on page 151 for a complete listing of the documentation available, including the installation documentation.
BMC solutions for DB2

This chapter presents the following topics:

Solution overview ................................................................. 25
Administrative Assistant for DB2 .............................................. 28
Database Administration for DB2 ........................................... 32
Database Performance for DB2 .............................................. 36
Recovery Management for DB2 .............................................. 40
SQL Performance for DB2 .................................................... 45
System Performance for DB2 ................................................. 50

Solution overview

The BMC solutions for DB2® combine various BMC products and technologies to address specific areas of DB2 data management. The solutions are packages of BMC products and their technologies that are grouped together to perform a specific data management task.

In a solution, the products are referred to as product components and technologies are called technology components.

In many cases, several product components share the use of a technology component, which is then often referred to as a shared component.

When you choose a solution from the product and solution list in the Installation System, all of the components of the solution are automatically installed.

Solutions have their own passwords. When you use the solution password, you can take advantage of additional features that are available when one solution component can rely on the presence of other components.
BMC offers the following solutions for DB2:

- Administrative Assistant for DB2 (page 28)
- Database Administration for DB2 (page 32)
- Database Performance for DB2 (page 36)
- Recovery Management for DB2 (page 40)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Descriptions of the solutions in this chapter include the following information:

- solution features
- product components
- technology components
- relationships between the components
- maintenance information
- installation documentation

Table 2 on page 27 shows all of the solutions and their components.

**NOTE**

Information about components and FMIDs is available in the release notes for the solutions.

Additionally, a report listing version-specific information for the products and solutions and their components as well as FMID information is available on the BMC ESD site at ftp://epddownload.bmc.com/bmc/esd/ozi/ in the cxx_ozi_tape_product_list.txt file. (Related files for the other installation tapes are prefixed with bxx, mxx, and ixx.) You will need to contact Customer Support for a password to access this information.

Similar information is located on file 5 on each of the product installation tapes.
### BMC solutions for DB2 and their components

<table>
<thead>
<tr>
<th>Solution name</th>
<th>Administrative Assistant for DB2</th>
<th>Database Administration for DB2</th>
<th>Database Performance for DB2</th>
<th>Recovery Management for DB2</th>
<th>SQL Performance for DB2</th>
<th>System Performance for DB2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTER for DB2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>APPTUNE for DB2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CATALOG MANAGER PLUS for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>LOADPLUS for DB2</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MainView for DB2a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALTER for DB2 for DR2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPTUNE for DB2 for DR2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATALOG MANAGER PLUS for DB2 for DR2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOADPLUS for DB2 for DR2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 for DR2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECOVER PLUS for DB2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>R+/CHANGE ACCUM for DB2</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SNAPSHOT UPGRADE FEATURE (SU) for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQL Explorer for DB2</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Log Master for DB2</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MainView for DB2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>OPERTUNE for DB2</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pool Advisor for DB2</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>R+/CHANGE ACCUM for DB2b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECOVER PLUS for DB2b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Assistant Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Common Code (DBC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Component Services for DR2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Utilities Common Code (20U)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNA Host Services (DHS) and DNA Core</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-speed Apply Engine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next Generation Logger (NGL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option Value Migration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rules Engine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Runtime Component System (RTCS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Performance component</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Interface Middleware (UIM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Interface Middleware (UIM) Server</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- **a** MainView for DB2 includes the Data Collector and the CATALOG MANAGER for DB2 (Browse).
- **b** R+/CHANGE ACCUM is automatically installed with RECOVER PLUS. However, you must have an R+/CHANGE ACCUM or Recovery Management password to use R+/CHANGE ACCUM. Note that R+/CHANGE ACCUM is under controlled availability.
- **c** These components provide value as part of the indicated solutions and their product components (not as stand-alone components).
- **d** The full functionality of RECOVER PLUS is not available when it is installed with Administrative Assistant.
- **e** The full functionality of UNLOAD PLUS and BASIC UNLOAD is not available when they are installed with Administrative Assistant.
- **f** The full functionality of RECOVER PLUS is not available when it is installed with Database Administration.
Administrative Assistant for DB2

The Administrative Assistant solution enables users of all experience levels to navigate through the DB2 catalog and to manage a complex DB2 environment.

Features

The Administrative Assistant solution provides the following features:

- analysis of the effects of changes to database structures
- automation of creating, altering, and dropping DB2 objects
- easy navigation and management of the DB2 catalog
- generation of object lists and display of object attributes
- execution of commands, and saving and retrieval of SQL
- aid for developing schema changes for application development and production maintenance

NOTE

These features are available when you have installed all of the components of the solution, regardless of whether you have a password for the solution.

Components

The Administrative Assistant for DB2 solution consists of the BMC components in Table 3 (listed alphabetically), all of which are installed if you choose the solution from the product and solution list in the Installation System. All components use SMP/E maintenance.

Table 3  Administrative Assistant for DB2 components (part 1 of 2)

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTER for DB2</td>
<td>ZACMxxx</td>
<td>product</td>
<td>page 61</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxxx</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxxx</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>BMCSORTb</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>CATALOG MANAGER for DB2</td>
<td>ZACTxxx</td>
<td>product</td>
<td>page 71</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSxxx</td>
<td>technology</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)c</td>
<td>ZD2Uxxx</td>
<td>technology</td>
<td>page 141</td>
</tr>
</tbody>
</table>
### Table 3  Administrative Assistant for DB2 components (part 2 of 2)

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEExxx</td>
<td>technology</td>
<td>page 144</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>page 146</td>
</tr>
<tr>
<td>RECOVER PLUS for DB2</td>
<td>ZAFRxxy</td>
<td>product&lt;sup&gt;d&lt;/sup&gt;</td>
<td>page 111</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx BBASCxx&lt;sup&gt;e&lt;/sup&gt;</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td>UNLOAD PLUS for DB2</td>
<td>ZADUxxx</td>
<td>product&lt;sup&gt;d&lt;/sup&gt;</td>
<td>page 126</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.

<sup>b</sup> BMCSORT is installed with RECOVER PLUS and UNLOAD PLUS.

<sup>c</sup> D2U is installed with UNLOAD PLUS.

<sup>d</sup> The full functionality of RECOVER PLUS and UNLOAD PLUS is not available when they are installed with Administrative Assistant.

<sup>e</sup> BBASC is not used for CATALOG MANAGER.
The functional relationship between the components is shown in Figure 1.

**Figure 1** Relationship between the Administrative Assistant for DB2 components
Documentation

All documentation for Administrative Assistant and its components is listed in Table 62 on page 151. Installation documentation for Administrative Assistant is included in the *Administrative Assistant for DB2 Installation Guide*. Table 4 gives the contents of this book.

### Table 4  Installation documentation for Administrative Assistant

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part</th>
<th>Part title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *Administrative Assistant for DB2 Installation Guide* | Part 1    | Preparing for installation     | ■ Installation overview  
■ Installation requirements and considerations  
■ Installation worksheets |
|                                 | Part 2    | Installing the Administrative Assistant solution | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the solution  
■ Applying passwords  
■ Applying maintenance |
|                                 | Part 3    | Configuring the Administrative Assistant solution | ■ Configuring the components  
■ Cloning the products on multiple systems |
|                                 | Part 4    | Installation options           | ■ Installation option descriptions for  
■ ALTER  
■ CATALOG MANAGER  
■ BMCSORT  
■ JCL Generation  
■ RECOVER PLUS  
■ UNLOAD PLUS |
|                                 | Part 5    | Appendixes                     | ■ Migration to a different version of DB2  
■ Merged and non-merged installations  
■ Batch migration of option values  
■ Enhanced HOLDDATA  
■ Common utility tables  
■ Component uninstallation  
■ Typical installation jobs |
Database Administration for DB2

You can use the Database Administration for DB2 solution to manage your DB2 databases quickly, efficiently, and effectively.

Features

The following features are available only with the solution password:

- execute portions of the worklist concurrently, thus reducing the elapsed time required for executing a worklist that CHANGE MANAGER generates
- unload and load LOB data by using the LOB DATA MOVER program

The following features are provided by the components of the Database Administration for DB2 solution:

- analyze the effects of changes to database structures
- automate creating, altering, and dropping DB2 objects
- provide easy navigation and management of the DB2 catalog
- aid in developing schema changes for application development and production maintenance
- increase application availability and optimizes resources by reducing the time that it takes to perform changes and to administer multiple DB2 environments
- maintain referential integrity and data integrity
- complete complex structure changes to databases quickly and accurately
- use the fastest, most efficient utilities available to copy, unload, and reload data
- unload and load large object (LOB) and XML data
Components

The Database Administration for DB2 solution consists of the BMC components in Table 5 (listed alphabetically), all of which are installed if you choose the solution from the product and solution list in the Installation System. All components use SMP/E maintenance.

Table 5 Database Administration for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC Common Statistics (ATS)b</td>
<td>ZATSxxx</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxxx</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>BMCSORTc</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>CATALOG MANAGER for DB2</td>
<td>ZACTxxx</td>
<td>product</td>
<td>page 71</td>
</tr>
<tr>
<td>CHANGE MANAGER for DB2</td>
<td>ZACMxxx</td>
<td>product</td>
<td>page 74</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSxxx</td>
<td>technology</td>
<td>page 137</td>
</tr>
<tr>
<td>COPY PLUS for DB2</td>
<td>ZACPxxx</td>
<td>product</td>
<td>page 80</td>
</tr>
<tr>
<td>Cross-System Image Manager (XIM)</td>
<td>BBYXMxx</td>
<td>technology</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)d</td>
<td>ZD2Uxxx</td>
<td>technology</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>High-speed Apply Engine</td>
<td>ZAPTxxx</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEXxxx</td>
<td>technology</td>
<td>page 144</td>
</tr>
<tr>
<td>LOADPLUS for DB2</td>
<td>ZAMUxxxx</td>
<td>product</td>
<td>page 88</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>page 146</td>
</tr>
<tr>
<td>RECOVER PLUS for DB2e</td>
<td>ZAFRxxx</td>
<td>product</td>
<td>page 111</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx BBASCxx</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td>SNAPSHOT UPGRADE FEATURE (SUF) for DB2</td>
<td>ZXBMxxx</td>
<td>product</td>
<td>page 120</td>
</tr>
<tr>
<td>UNLOAD PLUS for DB2</td>
<td>ZADUxxx</td>
<td>product</td>
<td>page 126</td>
</tr>
</tbody>
</table>

a  An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.

b  ATS is installed with LOADPLUS.

c  BMCSORT is installed with LOADPLUS, UNOAD PLUS, and RECOVER PLUS.

d  D2U is installed with LOADPLUS and UNLOAD PLUS.

e  R+/CHANGE ACCUM is automatically installed with RECOVER PLUS, but not used by the solution. To use this product, you must have a separate password.

f  The full functionality of RECOVER PLUS is not available when it is installed with Database Administration for DB2.
The functional relationship between the components is shown in Figure 2.

**Figure 2  Relationship between the Database Administration for DB2 components**
All documentation for Database Administration and its components is listed in Table 62 on page 151. Installation documentation for Database Administration is included in the *Database Administration for DB2 Installation Guide*. Table 6 gives the contents of this book.

### Table 6  Installation documentation for Database Administration

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *Database Administration for DB2 Installation Guide* | Part 1                     | Preparing for installation                  | • Installation overview  
• Installation requirements and considerations  
• Installation worksheets                                          |
|                                 | Part 2                     | Installing the Database Administration solution | • Setting up the Installation System  
• Installing product libraries  
• Customizing the solution  
• Applying passwords  
• Applying maintenance |
|                                 | Part 3                     | Configuring the Database Administration solution | • Configuring the components  
• Cloning the components on multiple systems |
|                                 | Part 4                     | Installation options                         | Installation option descriptions for  
• CATALOG MANAGER  
• CHANGE MANAGER  
• COPY PLUS  
• LOADPLUS  
• UNLOAD PLUS  
• BMCSORT  
• Cross-System Image Manager  
• High-speed Apply Engine  
• JCL Generation  
• RECOVER PLUS |
|                                 | Part 5                     | Appendixes                                   | • Migration to a different version of DB2  
• Merged and non-merged installations  
• Batch migration of option values  
• Enhanced HOLDDATA  
• Common utility tables  
• Component uninstallation  
• Typical installation jobs |
Database Performance for DB2

The Database Performance for DB2 solution helps DBAs determine the maintenance tasks that are required on their DB2 objects and then optionally automates the execution of those tasks.

Features

The following features are available only with the solution password:

- use of the value BMC on the CONDEXEC installation or command option to instruct REORG PLUS to use the DASD MANAGER PLUS exceptions table to determine whether an object should be reorganized

- use of the value BMCSTATS on the ANALYZE command option to enhance the performance of REORG PLUS because REORG PLUS uses the statistics already gathered by BMCSTATS instead of gathering the statistics itself

The following features are provided by the components of the Database Performance for DB2 solution:

- automation to determine when an exception warrants corrective action

- automation to determine when to perform a corrective action and to complete the action

- comprehensive statistics gathering

- database change monitoring

- trend analysis and space requirements estimation

- conditional reorganizations based on triggers and statistics

- online reorganizations
Components

The Database Performance for DB2 solution consists of the BMC components in Table 7 (listed alphabetically), all of which are installed if you choose the solution from the product and solution list in the Installation System. All components use SMP/E maintenance.

Table 7 Database Performance for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID</th>
<th>Type of component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC Common Statistics (ATS)</td>
<td>ZATSxxx</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxxx</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSxxx</td>
<td>technology</td>
<td>page 137</td>
</tr>
<tr>
<td>DASD MANAGER PLUS for DB2</td>
<td>ZASUxxx</td>
<td>product</td>
<td>page 83</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)</td>
<td>ZD2Uxxx</td>
<td>technology</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEXxxx</td>
<td>technology</td>
<td>page 144</td>
</tr>
<tr>
<td>Mainframe Host Services (DHS) and Mainframe DNA</td>
<td>ZDHSxxx</td>
<td>technology</td>
<td>page 145</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>page 146</td>
</tr>
<tr>
<td>REORG PLUS for DB2</td>
<td>ZARUxxx</td>
<td>product</td>
<td>page 117</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td>SNAPSHOT UPGRADE FEATURE for DB2</td>
<td>ZXBMxxx</td>
<td>product</td>
<td>page 120</td>
</tr>
<tr>
<td>User Interface Middleware Server (UIM)</td>
<td>ZUIMxxx</td>
<td>technology</td>
<td>page 148</td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxxx, xxx, or xx represents release number information.
The functional relationship between the components is shown in Figure 3.

**Figure 3  Relationship between the Database Performance for DB2 components**
All documentation for Database Performance and its components is listed in Table 62 on page 151. Installation documentation for Database Performance is shown in Table 8.

### Table 8  Installation documentation for Database Performance

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Database Performance for DB2 Installation Guide | Part 1 | Preparing for installation | - Installation overview  
- Installation requirements and considerations  
- Installation worksheets |
| Part 2 | Installing Database Performance | - Setting up the Installation System  
- Installing product libraries  
- Customizing the Database Performance solution  
- Applying passwords  
- Applying maintenance |
| Part 3 | Configuring Database Performance | - Configuring the Database Performance solution  
- Cloning the products |
| Part 4 | Appendixes | - Migration to a different version of DB2  
- Merged and non-merged installation and user libraries  
- Batch migration of option values  
- Enhanced HOLDDATA  
- Database Performance uninstallation  
- Typical installation jobs |
| REORG PLUS Reference Manual | Appendix A | REORG PLUS installation options | Installation option descriptions for REORG PLUS |
| DASD MANAGER PLUS for DB2 User Guide | Chapter 3 | Setting up DASD MANAGER PLUS | Installation option descriptions for DASD MANAGER PLUS |
Recovery Management for DB2

The Recovery Management for DB2 solution provides automation and recovery optimization. Using BMC recovery technology maximizes application availability, decreases costs, and ensures the fastest and most efficient recoveries possible. The features and functionality of the Recovery Management for DB2 solution ensure that you will be able to meet your recovery goals.

Features

The following features are available only with the solution password:

- backout to forward recovery strategy (BACKOUT AUTO)
- inflight resolution technology and timestamp recovery
- disaster recovery data collection and reporting
- recovery estimation
- recovery simulation
- automated five-level Hardware Mirroring support
- full and incremental encrypted copies and their recovery
- online consistent copies and their recovery

The following features are provided by the components of the Recovery Management for DB2 solution:

- recovery automation and data collection functions
- function-rich backup capabilities
- backout recovery capabilities
- Instant Snapshot backup and recovery
- high-speed, online transaction level recovery
- high-speed apply capabilities
- enhanced recovery point selection
- recovery avoidance using changed object detection
- recovery without outages to other DB2 applications
- full disaster recovery support including recovery of DB2 subsystems
- automated drop recovery
- automatic index copies based on size threshold
- automatic index recovery to rebuild
- volume recovery
- transforms that allow some changes to DB2 structures and data with little or no outage
## Components

The Recovery Management for DB2 solution consists of the BMC components in Table 9 (listed alphabetically), all of which are installed if you choose the solution from the product and solution list in the Installation System. All components use SMP/E maintenance.

### Table 9  Recovery Management for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID(^a)</th>
<th>Type of component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW(__x)</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUP(___)</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>COPY PLUS for DB2</td>
<td>ZACP(___)</td>
<td>product</td>
<td>page 80</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCC(___)</td>
<td>technology</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Component Services (DBC)</td>
<td>ZDBC(___)</td>
<td>technology</td>
<td>page 138</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIG(___)</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>High-speed Apply Engine</td>
<td>ZAPT(___)</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAIN(___)</td>
<td>technology</td>
<td>page 143</td>
</tr>
<tr>
<td>Log Master for DB2</td>
<td>ZALP(___)</td>
<td>product</td>
<td>page 91</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIO(___)</td>
<td>technology</td>
<td>page 146</td>
</tr>
<tr>
<td>R+/CHANGE ACCUM for DB2(^b)</td>
<td>ZAFR(___)</td>
<td>product</td>
<td>page 108</td>
</tr>
<tr>
<td>RECOVER PLUS for DB2</td>
<td>ZAFR(___)</td>
<td>product</td>
<td>page 111</td>
</tr>
<tr>
<td>RECOVERY MANAGER for DB2</td>
<td>ZARM(___)</td>
<td>product</td>
<td>page 114</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASAR(___)</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td>SNAPSHOT UPGRADE FEATURE (SUF) for DB2</td>
<td>ZXBM(___)</td>
<td>product</td>
<td>page 120</td>
</tr>
<tr>
<td>User Interface Middleware (UIM) Common Services</td>
<td>ZUSC(___)</td>
<td>technology</td>
<td>page 148</td>
</tr>
</tbody>
</table>

\(^a\) An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable \(\_\_xx\) or \(\_x\_xx\) represents release number information.

\(^b\) If R+/CHANGE ACCUM is not installed with the Recovery Management solution, it is automatically installed with RECOVER PLUS. However, to use R+/CHANGE ACCUM, you must have a Recovery Management password or an R+/CHANGE ACCUM password.
The functional relationship between the components is shown in Figure 4.

Figure 4  Relationship between the Recovery Management for DB2 components
Documentation

All documentation for Recovery Management and its components is listed in Table 62 on page 151. Installation documentation for Recovery Management is shown in Table 10.

Table 10  Installation documentation for Recovery Management

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Recovery Management for DB2 Installation Guide | Part 1 | Preparing for installation | ■ Installation overview  
 ■ Installation requirements and considerations |
|                                       | Part 2 | Installing Recovery Management and its components | ■ Setting up the Installation System  
 ■ Installing product libraries  
 ■ Customizing the Recovery Management solution and its components  
 ■ Applying passwords  
 ■ Applying maintenance |
|                                       | Part 3 | Configuring Recovery Management and its components | ■ Configuring Recovery Management components  
 ■ Cloning the product on multiple systems |
|                                       | Part 4 | Appendixes                   | ■ Migration to a different version of DB2  
 ■ Merged and non-merged installation  
 ■ Batch migration of option values  
 ■ Enhanced HOLDDATA  
 ■ Common utility tables  
 ■ BMC Common DB2 repository  
 ■ ARMBREP - Repository migration program  
 ■ Recovery Management for DB2 uninstallation  
 ■ Typical installation jobs |
| COPY PLUS Reference Manual            | Appendix A | COPY PLUS installation options | Installation option descriptions for COPY PLUS |
| High-speed Apply Engine Reference Manual | Appendix B | Installing High-speed Apply on mainframe targets | Installation option descriptions for High-speed Apply Engine |
| Log Master Reference Manual           | Chapter 1 | Operational considerations and installation | Installation option descriptions for Log Master |
| R+/CHANGE ACCUM User Guide           | Appendix B | Installation options | Installation option descriptions for R+/CHANGE ACCUM |
### Table 10  Installation documentation for Recovery Management

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECOVER PLUS Reference Manual</td>
<td>Appendix B</td>
<td>RECOVER PLUS installation options</td>
<td>Installation option descriptions for RECOVER PLUS</td>
</tr>
<tr>
<td>RECOVERY MANAGER User Guide</td>
<td>Appendix A</td>
<td>Control file and installation</td>
<td>Installation option descriptions for RECOVERY MANAGER</td>
</tr>
</tbody>
</table>
SQL Performance for DB2

The SQL Performance for DB2 solution enables DBAs, application developers, and system programmers to identify and correct performance problems in DB2 applications that run in CICS, IMS, and OS/390 environments. This solution provides application efficiency through a set of tools that allow an application to be fine-tuned from planning through growth to retirement.

Features

The comprehensive index reporting function is available only with the solution password. The Index Component automatically collects and displays actual access counts for each unique SQL statement (table and index, and predicate usage frequencies). A What-If Index analysis lets you model changes to indexes. The Index Component provides on-demand, dynamic data collection of index dependencies and catalog statistics. Table and index reports provide quick access to listings of the most-used object based on getpage volume or ratio.

The following features are provided by the components of the SQL Performance for DB2 solution:

- complete SQL capture
- SQL-level statistics
- application groups and application profiles
- IN-SQL measurements
- intuitive interface
- explain function
- SQL error reporting
- display of the current status of DB2
- object reports
- analysis of dynamic SQL from trace data sets
- support for static and dynamic SQL
- specification of analysis criteria
- graphical data reporting option
- variable and fixed-length collection intervals
- historical analysis of data set archiving
- listing of all archived data sets and the IFCIDs they contain
- support for multiple DB2 subsystems
- fully functional administrative facility
The SQL Performance for DB2 solution consists of the BMC components in Table 11 (listed alphabetically), all of which are installed if you choose the solution from the product and solution list in the Installation System. All components use SMP/E maintenance.

### Table 11  SQL Performance for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPTUNE for DB2</td>
<td>ZIODxxx</td>
<td>product</td>
<td>page 64</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>Common Explain</td>
<td>ZPSSxxx</td>
<td>technology</td>
<td>page 136</td>
</tr>
<tr>
<td>Common Infrastructure</td>
<td>ZDOMxxx</td>
<td>technology</td>
<td>page 136</td>
</tr>
<tr>
<td>DB2 Assist Services</td>
<td>ZDASxxx</td>
<td>technology</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Component Services (DBC)</td>
<td>ZDBCxxx</td>
<td>technology</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Product Configuration</td>
<td>ZLGCxxx</td>
<td>technology</td>
<td>page 139</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDICxxx</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>page 143</td>
</tr>
<tr>
<td>Next Generation Logger (NGL)</td>
<td>ZNGLxxx</td>
<td>technology</td>
<td>page 145</td>
</tr>
<tr>
<td>Rules Engine</td>
<td>ZMRExxx</td>
<td>technology</td>
<td>page 147</td>
</tr>
<tr>
<td>Runtime Component System (RTCS)</td>
<td>LOSZxxx</td>
<td>technology</td>
<td>page 147</td>
</tr>
<tr>
<td></td>
<td>ZOSZxxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td>SQL Explorer for DB2</td>
<td>ZPSExxx</td>
<td>product</td>
<td>page 123</td>
</tr>
<tr>
<td>User Interface Middleware (UIM) Common Services</td>
<td>ZUSCxxx</td>
<td>technology</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.

The functional relationship between the components is shown in Figure 5.
Figure 5  Relationship between the SQL Performance for DB2 components

Documentation

All documentation for SQL Performance and its components is listed in Table 62 on page 151. Installation documentation for SQL Performance is shown in Table 12.

Table 12  Installation documentation for SQL Performance  (part 1 of 3)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| System and SQL Performance for DB2 Installation Guide | Part 1                      | Preparing for installation                  | ■ Installation overview  
■ Installation requirements and considerations |
|                                                     | Part 2                      | Installing the System and SQL Performance products for DB2 | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the solutions and their components  
■ Applying passwords  
■ Applying maintenance |
### Table 12  Installation documentation for SQL Performance (part 2 of 3)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>System and SQL Performance for DB2 Installation Guide (continued)</td>
<td>Part 3</td>
<td>Configuring the System and SQL Performance products for DB2</td>
<td>- Configuring the solution components</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Cloning the product on multiple systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Deploying the product on multiple systems</td>
</tr>
<tr>
<td>Part 4</td>
<td>Appendixes</td>
<td></td>
<td>- Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Merged and non-merged installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Product authorization messages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Typical installation jobs</td>
</tr>
<tr>
<td>System and SQL Performance for DB2 Administrator Guide</td>
<td>Chapter 1</td>
<td>Administration overview</td>
<td>- Accessing the administration function</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Administration menu</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Navigation</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>User profiles</td>
<td></td>
<td>- User profile administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Session control</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Session options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Presentation options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Function keys</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>DOMPLEX profiles</td>
<td></td>
<td>- DOMPLEX profile administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- DOMPLEX parameters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- DOMPLEX data collector list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- DOMPLEX DB2 list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Output groups</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>Global options and installation data sets</td>
<td></td>
<td>- Viewing and changing global options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Viewing installation data sets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Changing installation data sets</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>Diagnostic and maintenance procedures</td>
<td></td>
<td>- Zap maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Producing a dump</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Reporting problems</td>
</tr>
<tr>
<td>Document title</td>
<td>Part, chapter, or appendix</td>
<td>Part title or chapter title</td>
<td>Contents</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------</td>
<td>-----------------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>System and SQL Performance for DB2 Administrator Guide (continued)</strong></td>
<td>Chapter 6</td>
<td>Collecting and filtering SQL data for reporting</td>
<td>Setting the default collection options, Using filter profiles, Selecting intervals, APPTUNE and SQL Performance records, Filtering records</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Batch utilities</td>
<td></td>
<td>DOMBSWIT utility, DCCARCI utility, DCCARC utility</td>
</tr>
<tr>
<td>Appendixes</td>
<td></td>
<td></td>
<td>Output group considerations, APPTUNE and Pool Advisor exits</td>
</tr>
<tr>
<td><strong>BMC Runtime Component System Configuration and Administration Guide</strong></td>
<td>Chapter 1</td>
<td>Understanding the RTCS Infrastructure</td>
<td>Introduction, RTCS components</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>Using RTCS Product Libraries</td>
<td></td>
<td>Library categories, RTCS target libraries</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Configuring a Target MVS Image for RTCS Execution</td>
<td></td>
<td>Target system configuration overview, Manually configuring an MVS image to run RTCS</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>RTCS Administration</td>
<td></td>
<td>Continuous system operation, RTCS system registry, Starting RTCS, Stopping RTCS, RTCS operator commands, RTCS Security Manager</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>RTCS Registry Import Utility</td>
<td></td>
<td>Registry basics, Executing the RTCS RIU, Required data definition names, Control statements</td>
</tr>
<tr>
<td>Appendixes</td>
<td></td>
<td></td>
<td>Sample JCL and MVS Image Configuration Members, RTCS Initialization member</td>
</tr>
</tbody>
</table>
System Performance for DB2

The System Performance for DB2 solution helps you optimize and manage current DB2 performance by tuning your DB2 system dynamically and automatically as workloads change.

Features

The following features are available only with the solution password:

- a common interface

  You can access all System Performance components through a common interface, and you do not need to know which component to use to solve a problem. When the solution detects a problem, it guides you to the information you need to solve that problem, using the appropriate components to gather the information and make the needed changes.

- a supplemental report set

  The System Performance report set combines the reporting abilities of the MainView for DB2 and Pool Advisor components with a supplemental set of comprehensive reports on all aspects of DB2. From one central report, you can quickly hyperlink to other reports about specific data if an anomalous value is highlighted.

The following features are provided by the components of the System Performance for DB2 solution:

- advisor technology
- automatic detection and correction system problems
- tuning wizards
- customizable displays
- extended I/O analysis
- intelligent real-time management and tuning of DB2 system resources and parameters that can adversely affect performance

Components

The System Performance for DB2 solution consists of the BMC components in Table 13 on page 51 (listed alphabetically), all of which are installed if you choose the solution from the product and solution list in the Installation System. All components use SMP/E maintenance.
### Table 13  System Performance for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID(^a)</th>
<th>Type of component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW(xxx)</td>
<td>technology</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASH(xxx)</td>
<td>technology</td>
<td>page 134</td>
</tr>
<tr>
<td>CATALOG MANAGER for DB2</td>
<td>ZACT(xxx)</td>
<td>product</td>
<td>page 71</td>
</tr>
<tr>
<td>Common Explain</td>
<td>ZPSS(xxx)</td>
<td>technology</td>
<td>page 136</td>
</tr>
<tr>
<td>Common Infrastructure</td>
<td>ZDOM(xxx)</td>
<td>technology</td>
<td>page 136</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACS(xxx)</td>
<td>technology</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Assist Services</td>
<td>ZDAS(xxx)</td>
<td>technology</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Component Services (DBC)</td>
<td>ZDBC(xxx)</td>
<td>technology</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Product Configuration</td>
<td>ZLGC(xxx)</td>
<td>technology</td>
<td>page 139</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCC(xxx)</td>
<td>technology</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIG(xxx)</td>
<td>technology</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAIN(xxx)</td>
<td>technology</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEX(xxx)</td>
<td>technology</td>
<td>page 144</td>
</tr>
<tr>
<td>MainView for DB2(^b)</td>
<td>ZBD2(xxx)</td>
<td>product</td>
<td>page 94</td>
</tr>
<tr>
<td>OPERTUNE for DB2</td>
<td>ZDDT(xxx)</td>
<td>product</td>
<td>page 98</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIO(xxx)</td>
<td>technology</td>
<td>page 146</td>
</tr>
<tr>
<td>Pool Advisor for DB2</td>
<td>ZPMD(xxx)</td>
<td>product</td>
<td>page 104</td>
</tr>
<tr>
<td>Next Generation Logger (NGL)</td>
<td>ZNGL(xxx)</td>
<td>technology</td>
<td>page 145</td>
</tr>
<tr>
<td>Rules Engine</td>
<td>ZMR(Exxx)</td>
<td>technology</td>
<td>page 147</td>
</tr>
<tr>
<td>Runtime Component System (RTCS)</td>
<td>LOSZ(xxx)</td>
<td>technology</td>
<td>page 147</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASAR(xxx)</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td></td>
<td>BBASC(xx)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Performance component</td>
<td>ZSPD(xxx)</td>
<td>technology</td>
<td>page 148</td>
</tr>
<tr>
<td>User Interface Middleware (UIM) Common Services</td>
<td>ZUSC(xxx)</td>
<td>technology</td>
<td>page 148</td>
</tr>
</tbody>
</table>

\(^a\) An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable \(xxx\) or \(xx\) represents release number information.

\(^b\) MainView for DB2 includes the Data Collector and the CATALOG MANAGER for DB2 (Browse).
The functional relationship between the components is shown in Figure 6.

**Figure 6  Relationship between the System Performance for DB2 components**

Documentation

All documentation for System Performance and its components is listed in Table 62 on page 151. Installation documentation for System Performance is shown in Table 14 on page 53.
Table 14  Installation documentation for System Performance (part 1 of 3)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| System and SQL Performance for DB2 Installation Guide | Part 1 | Preparing for installation | Installation overview  
Installation requirements and considerations |
| | Part 2 | Installing the System and SQL Performance products for DB2 | Setting up the Installation System  
Installing product libraries  
Customizing the solutions and their components  
Applying passwords  
Applying maintenance |
| | Part 3 | Configuring the System and SQL Performance products for DB2 | Configuring the solution components  
Cloning the product on multiple systems  
Deploying the product on multiple systems |
| | Part 4 | Appendixes | Migration to a different version of DB2  
Merged and non-merged installations  
Enhanced HOLDDATA  
Product authorization messages  
Typical installation jobs |
| System and SQL Performance for DB2 Administrator Guide | Chapter 1 | Administration overview | Accessing the administration function  
Administration menu  
Navigation |
| | Chapter 2 | User profiles | User profile administration  
Authorization  
Session control  
Session options  
Presentation options  
Function keys |
| | Chapter 3 | DOMPLEX profiles | DOMPLEX profile administration  
DOMPLEX parameters  
DOMPLEX data collector list  
DOMPLEX DB2 list  
Output groups |
| | Chapter 4 | Global options and installation data sets | Viewing and changing global options  
Viewing installation data sets  
Changing installation data sets |
### Table 14  Installation documentation for System Performance (part 2 of 3)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| **System and SQL Performance for DB2 Administrator Guide** (continued)         | Chapter 5                    | Diagnostic and maintenance procedures           | • Zap maintenance  
• Producing a dump  
• Reporting problems |
|                                                                               | Chapter 6                    | Collecting and filtering SQL data for reporting  | • Setting the default collection options  
• Using filter profiles  
• Selecting intervals  
• APPTUNE and SQL Performance records  
• Filtering records          |
|                                                                               | Chapter 7                    | Batch utilities                                  | • DOMBSWIT utility  
• DCCARCI utility  
• DCCARCB utility                 |
| Appendixes                                                                    |                             |                                                  | • Output group considerations  
• APPTUNE and Pool Advisor exits |
| **Administrative Products for DB2 Installation Guide** (for the CATALOG MANAGER Browse function) | Part 1                       | Preparing for installation                       | • Installation overview  
• Installation requirements and considerations  
• Installation Worksheets |
|                                                                               | Part 2                       | Installing the products                          | • Setting up the Installation System  
• Installing product libraries  
• Customizing the products  
• Applying passwords  
• Applying maintenance |
|                                                                               | Part 3                       | Configuring the S products                       | • Configuring the products  
• Cloning the products on multiple systems |
|                                                                               | Part 4                       | Installation options                             | Installation option descriptions for  
• CATALOG MANAGER  
• CHANGE MANAGER  
• JCL Generation  
• Cross-System Image Manager |
|                                                                               | Part 5                       | Appendixes                                       | • Migration to a different version of DB2  
• Merged and non-merged installations  
• Batch migration of options values  
• Enhanced HOLDDATA  
• Common utility tables  
• Product uninstallation  
• Typical installation jobs |
<p>| <strong>MainView Administration Guide</strong>                                             |                             | provides information about MainView operations, targets, single-system image contexts, data sets, view customization, and diagnostic facilities |</p>
<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>MainView Alarm Management Guide</td>
<td></td>
<td></td>
<td>explains how to create and install alarm definitions that indicate when exceptions occur in a sysplex</td>
</tr>
<tr>
<td>MainView Alternate Access Implementation and User Guide (optional)</td>
<td></td>
<td></td>
<td>explains how to configure, start, and stop VTAM and EXCP AutoLogon sessions to access MainView products without TSO communication support</td>
</tr>
<tr>
<td>MainView Common Customization Guide</td>
<td></td>
<td></td>
<td>provides instructions for manually customizing the MainView environment for your products</td>
</tr>
<tr>
<td>MainView Installation Guide</td>
<td></td>
<td></td>
<td>provides instructions for installing MainView products</td>
</tr>
<tr>
<td>MainView Reference Summary</td>
<td></td>
<td></td>
<td>provides a summary of commands that can be used to navigate and manage the MainView environment</td>
</tr>
<tr>
<td>MainView Security Guide (optional)</td>
<td></td>
<td></td>
<td>describes the basics of how to define security for MainView products with an external security manager (ESM)</td>
</tr>
<tr>
<td>MainView Security Reference Manual (optional)</td>
<td></td>
<td></td>
<td>provides complete information about the MainView security interfaces for windows mode, full-screen mode, and MainView Alternate Access</td>
</tr>
<tr>
<td>MainView for DB2 Customization Guide</td>
<td></td>
<td></td>
<td>provides procedures for customizing the MainView for DB2 product to your site’s needs and details how to modify the basic MainView for DB2 product installation to include more functions or site-specific changes</td>
</tr>
</tbody>
</table>
| BMC Runtime Component System Configuration and Administration Guide |                             |                                                                                             | INTRODUCTION  
■ Introduction  
■ RTCS components  
Chapter 1 Understanding the RTCS Infrastructure  
Chapter 2 Using RTCS Product Libraries  
Chapter 3 Configuring a Target MVS Image for RTCS Execution  
Chapter 4 RTCS Administration  
Chapter 5 RTCS Registry Import Utility  
Appendixes  
■ Sample JCL and MVS Image Configuration Members  
■ RTCS Initialization member  
■ Continuous system operation  
■ RTCS system registry  
■ Starting RTCS  
■ Stopping RTCS  
■ RTCS operator commands  
■ RTCS Security Manager  
■ Target system configuration overview  
■ Manually configuring an MVS image to run RTCS  
■ Library categories  
■ RTCS target libraries  
■ Registry basics  
■ Executing the RTCS RIU  
■ Required data definition names  
■ Control statements |
BMC products for DB2

This chapter presents the following topics:

- Product overview ............................................................... 58
- ALTER for DB2 ................................................................. 61
- APPTUNE for DB2 ............................................................. 64
- BMCDSN Command Processor ........................................... 68
- CATALOG MANAGER for DB2 ............................................ 71
- CHANGE MANAGER for DB2 ............................................. 74
- CHECK PLUS for DB2 ........................................................ 77
- COPY PLUS for DB2 .......................................................... 80
- DASD MANAGER PLUS for DB2 ........................................ 83
- EXTENDED BUFFER MANAGER for DB2 ......................... 86
- LOADPLUS for DB2 .......................................................... 88
- Log Master for DB2 .......................................................... 91
- MainView for DB2 ............................................................ 94
- OPERTUNE for DB2 ........................................................... 98
- PACLOG for DB2 .............................................................. 101
- Pool Advisor for DB2 ......................................................... 104
- R+/CHANGE ACCUM for DB2 ........................................... 108
- RECOVER PLUS for DB2 .................................................... 111
- RECOVERY MANAGER for DB2 ........................................ 114
- REORG PLUS for DB2 ........................................................ 117
- SNAPSHOT UPGRADE FEATURE for DB2 ....................... 120
- SQL Explorer for DB2 ........................................................ 123
- UNLOAD PLUS for DB2 ...................................................... 126
Product overview

BMC offers products for DB2® that provide features to help you with your DB2 data management tasks. Many of these products include technology components from BMC, which are automatically installed to provide the full functionality of the product. Technology components are described in Chapter 4, “BMC technologies for DB2.”

In many cases, several products share the use of a technology component, which is then often referred to as a shared component.

Most of the products and their technology components are also components in one or more of the BMC solutions for DB2 as shown in Table 2 on page 27 in Chapter 2, “BMC solutions for DB2.” In a solution, the products are referred to as product components.

Table 15 on page 59 shows the BMC products for DB2 and any components used by the products.

NOTE

Information about components and FMIDs is available in the release notes for the products. Additionally, a report listing version-specific information for the products and their components as well as FMID information is available on the BMC ESD site at ftp://epddownload.bmc.com/bmc/esd/ozi/ in the cxx_ozi_tape_product_list.txt file. (Related files for the other installation tapes are prefixed with bxx, mxx, and ixx.) You will need to contact Customer Support for a password to access this information.

Similar information is located on File 5 on each of the product installation tapes.
Table 15  BMC DB2 products and their components

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTER for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPTUNE for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMCDSN</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATALOG MANAGER for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHANGE MANAGER for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECK PLUS for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COPY PLUS for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DASD MANAGER PLUS for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXTENDED BUFFER MANAGER for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOADPLUS for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Master for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MainView for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPERTUNE for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PACLOG for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pool Advisor for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R+/CHANGE ACCUM</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECOVER PLUS for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECOVERY MANAGER for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REORG PLUS for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNAPSHOT UPGRADE FEATURE for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQL Explorer for DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNLOAD PLUS for DB2</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a These components are not stand-alone components and are installed with the products that use them.
b You can also install BMCSORT or DB2 Common Code (SCC) separately by choosing them from the product and solution list in the Installation System.

c The D2U component is automatically installed as a separate component with the REORG PLUS, CHECK PLUS, DASD MANAGER PLUS, LOADPLUS, and UNLOAD PLUS products.

d ALTER and CHANGE MANAGER use some of the functionality of RECOVER PLUS and UNLOAD PLUS. RECOVER PLUS and UNLOAD PLUS are automatically installed with ALTER and CHANGE MANAGER. (ALTER and CHANGE MANAGER also receive BMCSORT and D2U at installation because these components are installed with RECOVER PLUS, UNLOAD PLUS, or both.)

e BMCDSN is a product that you can install free-of-charge for use with CHECK PLUS, COPY PLUS, LOADPLUS, RECOVER PLUS, REORG PLUS, and UNLOAD PLUS.

f MainView for DB2 includes the CATALOG MANAGER for DB2 Browse component.

g R+/CHANGE ACCUM is automatically installed with RECOVER PLUS. However, you must have an R+/CHANGE ACCUM or Recovery Management password to use R+/CHANGE ACCUM. As a product, R+/CHANGE ACCUM is under controlled availability.
ALTER for DB2

The ALTER product provides a powerful solution to the problems of managing your DB2 environment. With ALTER you can quickly and accurately create and modify application data structures and migrate them to other DB2 subsystems.

ALTER uses the BMC components in Table 16. All components use SMP/E maintenance.

Table 16  ALTER for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTER</td>
<td>ZACMxxx</td>
<td>product</td>
<td>no</td>
<td>page 61</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>BMCSORTb</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)c</td>
<td>ZD2Uxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEXxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 144</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>RECOVER PLUS for DB2d,e</td>
<td>ZAFRxxx</td>
<td>product</td>
<td>yes</td>
<td>page 111</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx BBASCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>UNLOAD PLUS for DB2e,f</td>
<td>ZADUxxx</td>
<td>product</td>
<td>yes</td>
<td>page 126</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.</td>
</tr>
<tr>
<td>b BMCSORT is installed with UNLOAD PLUS and RECOVER PLUS.</td>
</tr>
<tr>
<td>c D2U is installed with UNLOAD PLUS.</td>
</tr>
<tr>
<td>d R+/CHANGE ACCUM for DB2 is also installed as part of the installation of the RECOVER PLUS for DB2. ALTER does not use the R+/CHANGE ACCUM product.</td>
</tr>
<tr>
<td>e ALTER uses some of the functionality of RECOVER PLUS and UNLOAD PLUS. RECOVER PLUS and UNLOAD PLUS are automatically installed with ALTER.</td>
</tr>
<tr>
<td>f UNLOAD PLUS is required by ALTER for unloading DB2 data with the BASIC UNLOAD utility when ALTER is used on DB2 Version 8 or later.</td>
</tr>
</tbody>
</table>
The functional relationship between the components is shown in Figure 7.

**Figure 7  Relationship between the ALTER for DB2 components**

In addition to being a stand-alone product, ALTER is also a product component in the Administrative Assistant for DB2 solution (see page 28).

All documentation for the ALTER product is listed in Table 62 on page 151. Installation documentation for ALTER is shown in Table 17 on page 63.
Table 17   Installation documentation for ALTER

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Administrative Products for DB2 Installation Guide  | Part 1                     | Preparing for installation  | ■ Installation overview  
■ Installation requirements and considerations  
■ Installation worksheets |
|                                                     | Part 2                     | Installing the Administrative products | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the products  
■ Applying passwords  
■ Applying maintenance |
|                                                     | Part 3                     | Configuring the Administrative products | ■ Configuring the products  
■ Cloning the products on multiple systems |
|                                                     | Part 4                     | Installation options        | Installation option descriptions for  
■ ALTERTER  
■ CATALOG MANAGER  
■ CHANGE MANAGER  
■ DASD MANAGER PLUS  
■ JCL Generation |
|                                                     | Part 5                     | Appendixes                  | ■ Migration to a different version of DB2  
■ Merged and non-merged installations  
■ Batch migration of option values  
■ Enhanced HOLDDATA  
■ Common utility tables  
■ Product uninstallation  
■ Typical installation jobs |
The APPTUNE product is an application performance and resource analysis facility that gathers and displays data from a single SQL statement or a set of SQL statements. The gathered data provides valuable information about the performance and resource use by DB2 applications. APPTUNE collects all relevant performance measures in real time for every SQL statement executed in one or more DB2 subsystems. The collected data is then summarized and stored for analysis.

APPTUNE uses the BMC components in Table 18. All components use SMP/E maintenance.

### Table 18  APPTUNE for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPTUNE ZIOD</td>
<td>ZIODxxx</td>
<td>product</td>
<td>no</td>
<td>page 64</td>
</tr>
<tr>
<td>BMC Password Security System BBAPW</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>Common Explain ZPSS</td>
<td>ZPSSxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 136</td>
</tr>
<tr>
<td>Common Infrastructure ZDOM</td>
<td>ZDOMxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 136</td>
</tr>
<tr>
<td>DB2 Assist Services ZDAS</td>
<td>ZDASxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Component Services (DBC) ZDBC</td>
<td>ZDBCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Product Configuration ZLGC</td>
<td>ZLGCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 139</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC) ZSCC</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects ZDIG</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN) ZAIN</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Next Generation Logger (NGL) ZNGL</td>
<td>ZNGLxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 145</td>
</tr>
<tr>
<td>Rules Engine ZMRE</td>
<td>ZMRExxx</td>
<td>technology</td>
<td>yes</td>
<td>page 147</td>
</tr>
<tr>
<td>Runtime Component System (RTCS) LOSZ</td>
<td>LOSZxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 147</td>
</tr>
<tr>
<td>SAS Runtime Library Support ASAR</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>User Interface Middleware (UIM) Common Services</td>
<td>ZUSCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 8.

**Figure 8** Relationship between the APPTUNE for DB2 components

In addition to being a stand-alone product, APPTUNE is also a product component in the SQL Performance for DB2 solution (see page 45).

All documentation for the APPTUNE product is listed in Table 62 on page 151. Installation documentation for APPTUNE is shown in Table 19.
### Table 19  Installation documentation for APPTUNE (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| System and SQL Performance for DB2 Installation Guide                         | Part 1                      | Preparing for installation                                                           | ■ Installation overview  
■ Installation requirements and considerations                                                                                     |
|                                                                                 | Part 2                      | Installing the System and SQL Performance products for DB2                           | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the solutions and their components  
■ Applying passwords  
■ Applying maintenance                                                                                                                |
|                                                                                 | Part 3                      | Configuring the System and SQL Performance products for DB2                           | ■ Configuring the solution components  
■ Cloning the product on multiple systems  
■ Deploying the product on multiple systems                                                                                              |
|                                                                                 | Part 4                      | Appendixes                                                                           | ■ Migration to a different version of DB2  
■ Merged and non-merged installations  
■ Enhanced HOLDDATA  
■ Product authorization messages  
■ Typical installation jobs                                                                                                              |
| System and SQL Performance for DB2 Administrator Guide                        | Chapter 1                   | Administration overview                                                              | ■ Accessing the administration function  
■ Administration menu  
■ Navigation                                                                                                                             |
|                                                                                 | Chapter 2                   | User profiles                                                                         | ■ User profile administration  
■ Authorization  
■ Session control  
■ Session options  
■ Presentation options  
■ Function keys                                                                                                                          |
|                                                                                 | Chapter 3                   | DOMPLEX profiles                                                                     | ■ DOMPLEX profile administration  
■ DOMPLEX parameters  
■ DOMPLEX data collector list  
■ DOMPLEX DB2 list  
■ Output groups                                                                                                                            |
|                                                                                 | Chapter 4                   | Global options and installation data sets                                             | ■ Viewing and changing global options  
■ Viewing installation data sets  
■ Changing installation data sets                                                                                                          |
|                                                                                 | Chapter 5                   | Diagnostic and maintenance procedures                                               | ■ Zap maintenance  
■ Producing a dump  
■ Reporting problems                                                                                                                      |
### Table 19  Installation documentation for APPTUNE (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| System and SQL Performance for DB2 Administrator Guide (continued)             | Chapter 6                   | Collecting and filtering SQL data for reporting                 |  ■ Setting the default collection options  
  ■ Using filter profiles  
  ■ Selecting intervals  
  ■ APPTUNE and SQL Performance records  
  ■ Filtering records |
|                                                                               | Chapter 7                   | Batch utilities                                                |  ■ DOMBSWIT utility  
  ■ DCCARCI utility  
  ■ DCCARCBI utility |
|                                                                               | Appendixes                  |                                                                 |  ■ Output group considerations  
  ■ APPTUNE and Pool Advisor exits |
| BMC Runtime Component System Configuration and Administration Guide           | Chapter 1                   | Understanding the RTCS Infrastructure                         |  ■ Introduction  
  ■ RTCS components |
|                                                                               | Chapter 2                   | Using RTCS Product Libraries                                  |  ■ Library categories  
  ■ RTCS target libraries |
|                                                                               | Chapter 3                   | Configuring a Target MVS Image for RTCS Execution              |  ■ Target system configuration overview  
  ■ Manually configuring an MVS image to run RTCS |
|                                                                               | Chapter 4                   | RTCS Administration                                            |  ■ Continuous system operation  
  ■ RTCS system registry  
  ■ Starting RTCS  
  ■ Stopping RTCS  
  ■ RTCS operator commands  
  ■ RTCS Security Manager |
|                                                                               | Chapter 5                   | RTCS Registry Import Utility                                  |  ■ Registry basics  
  ■ Executing the RTCS RIU  
  ■ Required data definition names  
  ■ Control statements |
|                                                                               | Appendixes                  |                                                                 |  ■ Sample JCL and MVS Image Configuration Members  
  ■ RTCS Initialization member |
BMCDSN Command Processor

The BMC command processor, BMCDSN, lets you monitor and control BMC utilities that are executed against your DB2 databases. In addition, you can use BMCDSN to monitor and control IBM® DB2 utilities, just as the DB2-supplied DSN command processor does. You can invoke BMCDSN through a TSO session (CLIST or REXX), the system console, or batch.

BMCDSN is a product component that you can install free-of-charge for use with the following products:

- CHECKPLUS for DB2
- COPY PLUS for DB2
- LOADPLUS for DB2
- RECOVERY MANAGER for DB2
- RECOVER PLUS for DB2
- REORG PLUS for DB2
- UNLOAD PLUS for DB2

BMCDSN uses the BMC components in Table 20. All components use SMP/E maintenance.

Table 20 BMCDSN components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMCDSN</td>
<td>ZABUxxx</td>
<td>product</td>
<td>no</td>
<td>page 68</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

*An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.*
The functional relationship between the components is shown in Figure 9.

Figure 9  Relationship between the BMCDSN components

All documentation for the BMCDSN product is listed in Table 62 on page 151. Installation documentation for BMCDSN is shown in Table 21.

Table 21  Installation documentation for BMCDSN (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *Utility Products for DB2*       | Part 1                      | Preparing for installation                       | ■ Installation overview  
 ■ Installation requirements and considerations |
| *Installation Guide*             | Part 2                      | Installing the Utility products for DB2           | ■ Setting up the Installation System  
 ■ Installing product libraries  
 ■ Customizing the Utility products for DB2  
 ■ Applying Utility product passwords  
 ■ Applying maintenance |
### Table 21  Installation documentation for BMCDSN (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Utility Products for DB2 Installation Guide (continued) | Part 3                     | Configuring the Utility products for DB2 | - Configuring the Utility products for DB2  
- Cloning the Utility products for DB2                      |
|                                                     | Part 4                     | Appendixes                  | - Migration to a different version of DB2  
- Merged and non-merge installations  
- Batch migration of option values  
- Enhanced HOLDDATA  
- Utility products uninstallation  
- Typical installation jobs |
| BMCDSN Command Processor Reference Manual             | Appendix A                 | BMCDSN installation options | Installation option descriptions for BMCDSN                              |
CATALOG MANAGER for DB2

The CATALOG MANAGER product facilitates the day-to-day tasks that are associated with administering a DB2 environment. CATALOG MANAGER features highly productive methods for creating and managing your DB2 databases. The product provides interactive access to catalog information through easy-to-use menus, dialog panels, and online Help.

CATALOG MANAGER uses the BMC components in Table 22. All components use SMP/E maintenance.

Table 22  CATALOG MANAGER for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATALOG MANAGER</td>
<td>ZACTxxx</td>
<td>product</td>
<td>no</td>
<td>page 71</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEXxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 144</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx BBASCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 10.

In addition to being a stand-alone product, CATALOG MANAGER is also a product component in the following BMC solutions for DB2:

- Administrative Assistant for DB2 (see page 28)
- Database Administration for DB2 (see page 32)
All documentation for the CATALOG MANAGER product is listed in Table 62 on page 151. Installation documentation for CATALOG MANAGER is shown in Table 23.

### Table 23  Installation documentation for CATALOG MANAGER

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Products for DB2</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>Installation overview</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installation requirements and considerations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installation worksheets</td>
</tr>
<tr>
<td>Administrative Products for DB2</td>
<td>Part 2</td>
<td>Installing the Administrative products</td>
<td>Setting up the Installation System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installing product libraries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Customizing the products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Applying passwords</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Applying maintenance</td>
</tr>
<tr>
<td>Administrative Products for DB2</td>
<td>Part 3</td>
<td>Configuring the Administrative products</td>
<td>Configuring the products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cloning the products on multiple systems</td>
</tr>
<tr>
<td>Administrative Products for DB2</td>
<td>Part 4</td>
<td>Installation options</td>
<td>Installation option descriptions for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ALTER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CATALOG MANAGER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CHANGE MANAGER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DASD MANAGER PLUS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>JCL Generation</td>
</tr>
<tr>
<td>Administrative Products for DB2</td>
<td>Part 5</td>
<td>Appendixes</td>
<td>Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Merged and non-merged installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Batch migration of option values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Common utility tables</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Product uninstallation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Typical installation jobs</td>
</tr>
</tbody>
</table>
CHANGE MANAGER for DB2

The CHANGE MANAGER product enables the DBA to deal effectively with the demands of a constantly changing environment that involves multiple DB2 subsystems. CHANGE MANAGER provides all of the capability that ALTER provides, as well as functions that go beyond altering and migrating database objects. In addition to providing support within a subsystem, CHANGE MANAGER manages the change and migration of data structures, data, and changes to data structures across multiple DB2 subsystems.

CHANGE MANAGER uses the BMC components in Table 24. All components use SMP/E maintenance.

Table 24  CHANGE MANAGER for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGE MANAGER</td>
<td>ZACMxxx</td>
<td>product</td>
<td>no</td>
<td>page 74</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>BMCSORTb</td>
<td>ZAUPxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)c</td>
<td>ZD2Uxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEXxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 144</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>RECOVER PLUS for DB2d</td>
<td>ZAFRxxx</td>
<td>product</td>
<td>yes</td>
<td>page 111</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx BBASCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>UNLOAD PLUS for DB2f</td>
<td>ZADUxxx</td>
<td>product</td>
<td>yes</td>
<td>page 126</td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.

b BMCSORT is installed with UNLOAD PLUS and RECOVER PLUS.

c D2U is installed with UNLOAD PLUS.

d The R+/CHANGE ACCUM product is also installed as part of the installation of the RECOVER PLUS product. CHANGE MANAGER does not use the R+/CHANGE ACCUM product.

e CHANGE MANAGER does not use the full functionality of RECOVER PLUS and UNLOAD PLUS. RECOVER PLUS and UNLOAD PLUS are automatically installed with CHANGE MANAGER.
UNLOAD PLUS is required by ALTER for unloading DB2 data with the BASIC UNLOAD utility when ALTER is used on DB2 Version 8 or later.

The functional relationship between the components is shown in Figure 11.

Figure 11  Relationship between the CHANGE MANAGER for DB2 components

In addition to being a stand-alone product, CHANGE MANAGER is also a product component in the Database Administration for DB2 solution (see page 32).
All documentation for CHANGE MANAGER is listed in Table 62 on page 151. Installation documentation for CHANGE MANAGER is shown in Table 25.

### Table 25  Installation documentation for CHANGE MANAGER

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *Administrative Products for DB2 Installation Guide* | Part 1 | Preparing for installation | - Installation overview  
- Installation requirements and considerations  
- Installation worksheets |
| | Part 2 | Installing the Administrative products | - Setting up the Installation System  
- Installing product libraries  
- Customizing the products  
- Applying passwords  
- Applying maintenance |
| | Part 3 | Configuring the Administrative products | - Configuring the products  
- Cloning the products on multiple systems |
| | Part 4 | Installation options | Installation option descriptions for  
- ALTER  
- CATALOG MANAGER  
- CHANGE MANAGER  
- DASD MANAGER PLUS  
- JCL Generation |
| | Part 5 | Appendixes | - Migration to a different version of DB2  
- Merged and non-merged installations  
- Batch migration of option values  
- Enhanced HOLDDATA  
- Common utility tables  
- Product uninstallation  
- Typical installation jobs |
CHECK PLUS for DB2

The CHECK PLUS product is a high-performance utility that provides a full range of integrity checking functions. CHECK PLUS addresses the following types of integrity checking needed to fully support critical DB2 applications:

- checking the structural integrity of the data sets that contain DB2 objects
- verifying that indexes and the data to which they refer are consistent
- verifying that data in DB2 tables does not violate referential integrity (RI) constraints or table check constraints

CHECK PLUS combines these integrity-checking functions, replacing functions provided by the CHECK option of the DSN1COPY stand-alone DB2 utility, and by the DB2 CHECK INDEX and CHECK DATA utilities. CHECK PLUS also provides the increased flexibility of allowing you to specify which of the checks should be performed.

In addition to performing the standard RI-checking functions, CHECK PLUS can check referential constraints that are not defined within the DB2 subsystem and perform column data verifications. This functionality gives you the advantage of checking business rules without paying the performance penalty of processing with referential constraints defined.

CHECK PLUS uses the BMC components shown in Table 26. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHECK PLUS</td>
<td>ZACKxxx</td>
<td>product</td>
<td>no</td>
<td>page 77</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)</td>
<td>ZD2Uxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 12.

**Figure 12  Relationship between the CHECK PLUS for DB2 components**

CHECK PLUS is not a component in any of the BMC solutions for DB2.

All documentation for CHECK PLUS is listed in Table 62 on page 151. Installation documentation for CHECK PLUS is shown in Table 27:

**Table 27  Installation documentation for CHECK PLUS (part 1 of 2)**

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Products for DB2 Installation Guide</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>■ Installation overview</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installation requirements and considerations</td>
</tr>
<tr>
<td></td>
<td>Part 2</td>
<td>Installing the products</td>
<td>■ Setting up the Installation System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installing product libraries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Customizing the Utility products for DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying Utility product passwords</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying maintenance</td>
</tr>
<tr>
<td>Document title</td>
<td>Part, chapter, or appendix</td>
<td>Part title or chapter title</td>
<td>Contents</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Utility Products for DB2 Installation Guide (continued)</td>
<td>Part 3</td>
<td>Configuring Utility products for DB2</td>
<td>■ Configuring the Utility products for DB2</td>
</tr>
<tr>
<td></td>
<td>Part 4</td>
<td>Appendixes</td>
<td>■ Cloning the Utility products for DB2</td>
</tr>
<tr>
<td>CHECK PLUS for DB2 Reference Manual</td>
<td>Appendix A</td>
<td>CHECK PLUS installation options</td>
<td>■ Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Merged and non-merge installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Batch migration of option values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Utility products uninstallation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Typical installation jobs</td>
</tr>
</tbody>
</table>
The COPY PLUS product is a fast, function-rich image copy utility for table spaces and indexes. Its many advanced features are needed to effectively prepare for a fast DB2 recovery. COPY PLUS gives you the speed you need to compensate for a shrinking batch window and growing table spaces. This enables you to make frequent image copies so you can perform a faster recovery.

COPY PLUS provides a smarter way to back up your table spaces and indexes by automating much of the effort and by copying the minimum amount of necessary data, which increases data availability and performance.

COPY PLUS uses the BMC components shown in Table 28. All components use SMP/E maintenance.

### Table 28  COPY PLUS for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPY PLUS</td>
<td>ZACPxx</td>
<td>product</td>
<td>no</td>
<td>page 80</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

a  An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 13.

**Figure 13**  Relationship between the COPY PLUS for DB2 components

In addition to being a stand-alone product, COPY PLUS is also a product component in the following BMC solutions for DB2:

- Database Administration for DB2 (see page 32)
- Recovery Management for DB2 (see page 40)

All documentation for COPY PLUS is listed in Table 62 on page 151. Installation documentation for COPY PLUS is shown in Table 29 on page 81.

**Table 29**  Installation documentation for COPY PLUS (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backup and Recovery Products for DB2</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>■ Installation overview</td>
</tr>
<tr>
<td>Installation Guide</td>
<td></td>
<td></td>
<td>■ Installation requirements and considerations</td>
</tr>
<tr>
<td>Part 2</td>
<td></td>
<td>Installing the products</td>
<td>■ Setting up the Installation System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installing product libraries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Customizing the products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying passwords</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying maintenance</td>
</tr>
</tbody>
</table>
To produce Snapshot copies and Instant Snapshot copies, COPY PLUS works with SNAPSHOT UPGRADE FEATURE (page 120), for which you must also have a license. For more information about SUF, see the EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE User Guide.

### Table 29  Installation documentation for COPY PLUS (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Backup and Recovery Products for DB2 Installation Guide (continued) | Part 3                      | Configuring the products   | ■ Configuring the products  
                                                   ■ Cloning the products on multiple systems |
|                                                 | Part 4                      | Appendixes                 | ■ Migration to a different version of DB2  
                                                   ■ Merged and non-merged installations  
                                                   ■ Batch migration of option values  
                                                   ■ Enhanced HOLDDATA  
                                                   ■ Common utility tables  
                                                   ■ BMC Common DB2 repository  
                                                   ■ Backup and Recovery Products for DB2 uninstallation  
                                                   ■ Typical installation jobs  
                                                   ■ ARMBREP—Repository migration program |
| COPY PLUS Reference Manual                      | Appendix A                  | COPY PLUS installation options | Installation option descriptions for COPY PLUS |
DASD MANAGER PLUS for DB2

The DASD MANAGER PLUS product is a comprehensive DB2 database-management tool that automates utility generation, gathers comprehensive statistics, monitors changes in the database, and enables you to perform maintenance based on the condition of the data instead of a rigid schedule. In addition, DASD MANAGER PLUS provides various trend analysis functions and estimates space requirements.

DASD MANAGER PLUS uses the BMC components in Table 30. All components use SMP/E maintenance.

Table 30 DASD MANAGER PLUS for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID(^a)</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASD MANAGER PLUS</td>
<td>ZASU(xxx)</td>
<td>product</td>
<td>no</td>
<td>page 83</td>
</tr>
<tr>
<td>BMC Common Statistics</td>
<td>ZATS(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW(xx)</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASH(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACS(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCC(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)</td>
<td>ZD2U(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIG(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAIN(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEX(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 144</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIO(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>AASAR(xxx) BBASC(xx)</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

\(^a\) An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable \(xxx\) or \(xx\) represents release number information.
The functional relationship between the components is shown in Figure 14.

**Figure 14  Relationship between the DASD MANAGER PLUS for DB2 components**

In addition to being a stand-alone product, DASD MANAGER PLUS is also a product component in the Database Performance for DB2 solution (see page 36).

All documentation for DASD MANAGER PLUS is listed in Table 62 on page 151. Installation documentation for DASD MANAGER PLUS is shown in Table 31.

**Table 31  Installation documentation for DASD MANAGER PLUS (part 1 of 2)**

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Products for DB2 Installation Guide</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>■ Installation overview</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installation requirements and considerations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installation worksheets</td>
</tr>
<tr>
<td></td>
<td>Part 2</td>
<td>Installing the products</td>
<td>■ Setting up the Installation System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installing product libraries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Customizing the products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying passwords</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying maintenance</td>
</tr>
<tr>
<td></td>
<td>Part 3</td>
<td>Configuring the products</td>
<td>■ Configuring the products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Cloning the products on multiple systems</td>
</tr>
</tbody>
</table>
Table 31  Installation documentation for DASD MANAGER PLUS (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Products for DB2 Installation Guide (continued)</td>
<td>Part 4</td>
<td>Installation options</td>
<td>Installation option descriptions for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- ALTER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- CATALOG MANAGER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- CHANGE MANAGER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- DASD MANAGER PLUS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- JCL Generation</td>
</tr>
<tr>
<td></td>
<td>Part 5</td>
<td>Appendixes</td>
<td>• Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Merged and non-merged installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Batch migration of option values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Common utility tables</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Product uninstallation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Typical installation jobs</td>
</tr>
</tbody>
</table>
EXTENDED BUFFER MANAGER for DB2

The EXTENDED BUFFER MANAGER (XBM) product improves performance by reducing the number of physical read I/Os that are performed in accessing data. XBM achieves this reduction in physical I/O by caching data in central or expanded storage. This area of expanded storage is called the extended buffer. When data stored in the extended buffer is requested, the request is satisfied without performing a physical I/O to read the data from direct access storage devices (DASD). Reduced I/O improves performance system-wide.

XBM improves system performance through the following ways:

- performance of specific applications
- queries for specific DB2 Universal Database for z/OS and OS/390 tables
- response time for IMS VSAM, OSAM, and Fast Path databases
- performance of DB2 ad hoc query systems
- performance of IMS online transactions
- performance of IMS batch operations
- access time of all applications
- overall performance of your MVS system

Additionally, the XBM products work with selected BMC high-performance utilities to provide increased data availability. XBM also integrates with other BMC products to let you proactively manage system-wide performance and data availability.

XBM uses the BMC components in Table 32. All components use SMP/E maintenance.

Table 32  EXTENDED BUFFER MANAGER for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENDED BUFFER MANAGER</td>
<td>ZXBMxxx</td>
<td>product</td>
<td>no</td>
<td>page 86</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

* An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 15.

**Figure 15** Relationship between the EXTENDED BUFFER MANAGER for DB2 components

XBM is not a component in any of the BMC solutions for DB2. However, its licensed component, SNAPSHOT UPGRADE FEATURE (see page 120) is a component in several of the solutions.

All documentation for EXTENDED BUFFER MANAGER is listed in Table 62 on page 151. Installation documentation for EXTENDED BUFFER MANAGER is shown in Table 33.

**Table 33** Installation documentation for EXTENDED BUFFER MANAGER

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE Installation Guide | Part 1 | Preparing for installation | - Installation overview  
- Installation requirements and considerations |
| | Part 2 | Installing the product | - Setting up the Installation System  
- Installing product libraries  
- Customizing XBM  
- Applying passwords  
- Applying maintenance |
| | Part 3 | Configuring the product | - Configuring XBM |
| | Part 4 | Appendixes | - Merged and non-merged installations  
- Enhanced HOLDDATA  
- Installation utilities  
- Typical installation jobs |
LOADPLUS for DB2

The LOADPLUS product is a high-performance load utility that loads data from a variety of sources into DB2 tables. LOADPLUS provides the following benefits over other load utilities:

- shortened elapsed and CPU time and greater data availability

LOADPLUS provides these benefits by taking advantage of multiple processors, multitasking, and parallel and online processing.

- a robust set of functionality that eliminates the need to write special application code or to perform additional tasks before and after the load

Some of this enhanced functionality includes:

- a comprehensive set of data type conversions
- optional preload verification
- optional embedded sort and copy functionality
- optional dynamic file allocation
- optional integration with other BMC products

LOADPLUS uses the BMC components Table 34. All components use SMP/E maintenance.

Table 34  LOADPLUS for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOADPLUS</td>
<td>ZAMUxx</td>
<td>product</td>
<td>no</td>
<td>page 88</td>
</tr>
<tr>
<td>BMC Common Statistics</td>
<td>ZATSxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)</td>
<td>ZD2Uxx</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>High-speed Apply Engine for DB2 for OS/390</td>
<td>ZAPTxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZI0xx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxx, BBASCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

a  An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 16.

**Figure 16  Relationship between the LOADPLUS for DB2 components**

In addition to being a stand-alone product, LOADPLUS is also a product component in the Database Administration for DB2 solution (see page 32).

All documentation for LOADPLUS is listed in Table 62 on page 151. Installation documentation for LOADPLUS is shown in Table 35.

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Utility Products for DB2 Installation Guide | Part 1 | Preparing for installation | - Installation overview  
- Installation requirements and considerations |
| Part 2 | Installing the Utility products for DB2 | - Setting up the Installation System  
- Installing product libraries  
- Customizing the Utility products for DB2  
- Applying Utility product passwords  
- Applying maintenance |
### Table 35  Installation documentation for LOADPLUS (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Utility Products for DB2 Installation Guide (continued) | Part 3                      | Configuring the Utility products for DB2 | - Configuring the Utility products for DB2  
- Cloning the Utility products for DB2 |
|                                                     | Part 4                      | Appendixes                               | - Migration to a different version of DB2  
- Merged and non-merged installations  
- Batch migration of option values  
- Enhanced HOLDDATA  
- Utility products for DB2 uninstallation  
- Typical installation jobs |
| High-speed Apply Engine Reference Manual            | Appendix C                  | Installing High-speed Apply on mainframe targets | Installation option descriptions for High-speed Apply Engine |
| LOADPLUS for DB2 Reference Manual                   | Appendix A                  | LOADPLUS installation options            | Installation option descriptions for LOADPLUS |
Log Master for DB2

The Log Master product provides sophisticated log analysis that enables you to fully and easily use information contained in the database and transaction logs to locate and correct specific transaction errors without employing time-consuming and expensive programming resources. Log Master maintains business availability and minimizes revenue loss by ensuring fast application recoveries.

Log Master for DB2 allows you to analyze and back out problem transactions using reports and SQL statements generated from the information in your logs. You can migrate data from your production database to other databases for backup, historical use, or data warehousing. With Log Master, you can audit database activity for changes to key database structures.

High-speed Apply Engine (formerly Apply Plus) is packaged with Log Master to provide high-speed processing of SQL generated for transaction backouts.

Log Master uses the BMC components in Table 36. All components use SMP/E maintenance.

### Table 36 Log Master for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Master</td>
<td>ZALP&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>product</td>
<td>no</td>
<td>page 91</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW&lt;sup&gt;xx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUP&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCC&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIG&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>High-speed Apply Engine for DB2 for OS/390</td>
<td>ZAPT&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAIN&lt;sup&gt;xx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIO&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASAR&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>User Interface Middleware (UIM) Common Services</td>
<td>ZUSC&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable <sup>xxx</sup> or <sup>xx</sup> represents release number information.
The functional relationship between the components is shown in Figure 17.

**Figure 17** Relationship between the Log Master for DB2 components

In addition to being a stand-alone product, Log Master is also a product component in the Recovery Management for DB2 solution (see page 40).

All documentation for Log Master is listed in Table 62 on page 151. Installation documentation for Log Master is shown in Table 37 on page 92.

**Table 37** Installation documentation for Log Master (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Backup and Recovery Products for DB2 Installation Guide | Part 1 | Preparing for installation | ■ Installation overview  
 ■ Installation requirements and considerations |
| | Part 2 | Installing the products | ■ Setting up the Installation System  
 ■ Installing product libraries  
 ■ Customizing the products  
 ■ Applying passwords  
 ■ Applying maintenance |
## Table 37  
Installation documentation for Log Master (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backup and Recovery Products for DB2 Installation Guide (continued)</td>
<td>Part 3</td>
<td>Configuring the products</td>
<td>- Configuring the products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Cloning the products on multiple systems</td>
</tr>
<tr>
<td></td>
<td>Part 4</td>
<td>Appendixes</td>
<td>- Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Merged and non-merge installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Batch migration of option values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Utility products uninstallation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Typical installation jobs</td>
</tr>
<tr>
<td>Log Master Reference Manual</td>
<td>Chapter 1</td>
<td>Operational considerations and installation</td>
<td>Installation option descriptions for Log Master</td>
</tr>
</tbody>
</table>
MainView for DB2 provides real-time application performance analysis and monitoring for effective DB2 subsystem management. It comprises an easy-to-use, comprehensive set of services for database administrators, applications developers, and system programmers to track DB2 activity and status. Users can easily access any number of DB2 subsystems on multiple OS/390 systems in local and remote locations from a single terminal session, which can run under TSO, TSO/ISPF, VTAM or batch with an EXCP-supported terminal. It provides the following features:

- online performance analysis and exception monitoring
- DB2 application tuning and workload analysis
- historical reporting
- DB2 operations control
- MainView product integration

The MainView for DB2 product includes the Data Collector feature that is used by the System Performance for DB2 solution (page 50). When installed, this feature provides additional functionality within the MainView for DB2 environment, as well as hyperlink integration to reports.

MainView for DB2 also includes the CATALOG MANAGER for DB2 (Browse) feature that is used by System Performance for DB2.

See the entry for the System Performance for DB2 solution in Table 62 on page 151 for a complete list of the documentation needed to learn about and install MainView for DB2.

MainView for DB2 is SMP/E-enabled.

MainView for DB2 uses the BMC components in Table 38. All components use SMP/E maintenance.

**Table 38  MainView for DB2 components (part 1 of 2)**

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBI2 Infrastructure subsystem</td>
<td>BBISSxx</td>
<td>See the MainView documentation.</td>
</tr>
<tr>
<td>BBX Subsystem Services</td>
<td>BBBBXxx</td>
<td></td>
</tr>
<tr>
<td>Common menu function</td>
<td>BBACMxx</td>
<td></td>
</tr>
<tr>
<td>Common release elements</td>
<td>BBACMxx</td>
<td></td>
</tr>
<tr>
<td>Dynamic area manager</td>
<td>BBGADxx</td>
<td></td>
</tr>
<tr>
<td>Global installation and customization</td>
<td>BBAAAxx</td>
<td></td>
</tr>
<tr>
<td>IMF Service Point</td>
<td>BBLBQxx</td>
<td></td>
</tr>
<tr>
<td>Integrated subsystem</td>
<td>BBIISSxx</td>
<td></td>
</tr>
</tbody>
</table>
All documentation for MainView for DB2 is listed in Table 62 on page 151.
Installation documentation for MainView for DB2 is shown in Table 39.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEGRATION MANAGER for Z/OS</td>
<td>BBOIxx</td>
<td></td>
</tr>
<tr>
<td>INTEGRATION MANAGER for Z/OS</td>
<td>BBOIMxx</td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 BBI3 component</td>
<td>BBDDBxx</td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 BBI2 component</td>
<td>BBDDZxx</td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 Data Collector</td>
<td>ZBD2xxx</td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 monitors</td>
<td>BBDDSxx</td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 Perf Reporter</td>
<td>BBDDPxx</td>
<td></td>
</tr>
<tr>
<td>MainView infrastructure</td>
<td>BBYZZxx</td>
<td></td>
</tr>
<tr>
<td>MVI STUBS</td>
<td>BBYZXXx</td>
<td></td>
</tr>
<tr>
<td>MainView TCP/IP interface</td>
<td>BBTTCxx</td>
<td></td>
</tr>
<tr>
<td>MainView for DB2 release component</td>
<td>BBDDxxx</td>
<td></td>
</tr>
<tr>
<td>SAS C V5</td>
<td>LSCRxxI</td>
<td></td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH)</td>
<td>ZASHxx</td>
<td>page 134</td>
</tr>
<tr>
<td>CATALOG MANAGER</td>
<td>ZACTxx</td>
<td>page 71</td>
</tr>
<tr>
<td>Common Explain</td>
<td>ZPSSxxx</td>
<td>page 136</td>
</tr>
<tr>
<td>Common Infrastructure</td>
<td>ZDOMxxx</td>
<td>page 136</td>
</tr>
<tr>
<td>Common SQL (ACS)</td>
<td>ZACSSxx</td>
<td>page 137</td>
</tr>
<tr>
<td>DB2 Assist Services</td>
<td>ZDASxxx</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>page 143</td>
</tr>
<tr>
<td>JCL Generation and Execution</td>
<td>ZAEXXXx</td>
<td>page 144</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>page 146</td>
</tr>
<tr>
<td>Runtime Component System (RTCS)</td>
<td>LOSZxxx</td>
<td>page 147</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident and transient versions)</td>
<td>ASARxxx</td>
<td>page 148</td>
</tr>
<tr>
<td></td>
<td>BBASCxx</td>
<td></td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
### Table 39  Installation documentation for MainView for DB2 (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MainView Administration Guide</strong></td>
<td></td>
<td>provides information about MainView operations, targets, single-system image contexts, data sets, view customization, and diagnostic facilities</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Alarm Management Guide</strong></td>
<td></td>
<td>explains how to create and install alarm definitions that indicate when exceptions occur in a sysplex</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Alternate Access Implementation and User Guide (optional)</strong></td>
<td></td>
<td>explains how to configure, start, and stop VTAM and EXCP AutoLogon sessions to access MainView products without TSO communication support</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Common Customization Guide</strong></td>
<td></td>
<td>provides instructions for manually customizing the MainView environment for your products</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Installation Guide</strong></td>
<td></td>
<td>provides instructions for installing the MainView products</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Reference Summary</strong></td>
<td></td>
<td>provides a summary of commands that can be used to navigate and manage the MainView environment</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Security Guide (optional)</strong></td>
<td></td>
<td>describes the basics of how to define security for MainView products with an external security manager (ESM)</td>
<td></td>
</tr>
<tr>
<td><strong>MainView Security Reference Manual (optional)</strong></td>
<td></td>
<td>provides complete information about the MainView security interfaces for windows mode, full-screen mode, and MainView Alternate Access</td>
<td></td>
</tr>
<tr>
<td><strong>MainView for DB2 Customization Guide</strong></td>
<td></td>
<td>provides procedures for customizing the MainView for DB2 product to your site’s needs and details how to modify the basic MainView for DB2 product installation to include more functions or site-specific changes</td>
<td></td>
</tr>
</tbody>
</table>
| **Administrative Products for DB2 Installation Guide (for the CATALOG MANAGER Browse function)** | Part 1                      | Preparing for installation                                                              | ■ Installation overview  
■ Installation requirements and considerations  
■ Installation worksheets |
|                                                      | Part 2                      | Installing the products                                                                   | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the products  
■ Applying passwords  
■ Applying maintenance |
|                                                      | Part 3                      | Configuring the Administrative Assistant products                                         | ■ Configuring the products  
■ Cloning the products on multiple systems |
<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Products for DB2 Installation Guide (for the CATALOG MANAGER Browse function), continued</td>
<td>Part 4</td>
<td>Installation options</td>
<td>Installation option descriptions for ALTER, CATALOG MANAGER, CHANGE MANAGER, DASD MANAGER PLUS, BMCSORT, JCL Generation, RECOVER PLUS, UNLOAD PLUS</td>
</tr>
<tr>
<td></td>
<td>Part 5</td>
<td>Appendixes</td>
<td>Migration to a different version of DB2, Merged and non-merged installations, Batch migration of option values, Enhanced HOLDDATA, Common utility tables, Product uninstallation, Typical installation jobs</td>
</tr>
</tbody>
</table>
OPERTUNE for DB2

The OPERTUNE product provides a variety of features that allow for the dynamic modification of DB2 subsystems and DB2 data sharing groups. OPERTUNE has the following basic classes of features:

- Parameter elements provide for the modification of subsystem parameters (mostly ZPARMs), affecting items such as castout reverse threshold, dual archiving mode, and buffer pool configuration.

- Operational assists provide extra help with frequently encountered operational problems such as canceling threads and maintaining archives.

OPERTUNE uses the BMC components in Table 40. All components use SMP/E maintenance.

### Table 40  OPERTUNE for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERTUNE</td>
<td>ZDDT&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>product</td>
<td>no</td>
<td>page 98</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW&lt;sup&gt;xx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASAR&lt;sup&gt;xxx&lt;/sup&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable <sup>xxx</sup> or <sup>xx</sup> represents release number information.

The functional relationship between the components is shown in Figure 18.

### Figure 18  Relationship between the OPERTUNE for DB2 components
In addition to being a stand-alone product, OPERTUNE is also a product component in the System Performance for DB2 solution (see page 50).

All documentation for OPERTUNE is listed in Table 62 on page 151. Installation documentation for OPERTUNE is shown in Table 41.

Table 41  Installation documentation for OPERTUNE (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| System and SQL Performance for DB2 Installation Guide | Part 1 | Preparing for installation | ■ Installation overview  
■ Installation requirements and considerations |
| | Part 2 | Installing the System and SQL Performance products for DB2 | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the solutions and their components  
■ Applying passwords  
■ Applying maintenance |
| | Part 3 | Configuring the System and SQL Performance products for DB2 | ■ Configuring the solution components  
■ Cloning the product on multiple systems  
■ Deploying the product on multiple systems |
| | Part 4 | Appendixes | ■ Migration to a different version of DB2  
■ Merged and non-merged installations  
■ Enhanced HOLDDATA  
■ Product authorization messages  
■ Typical installation jobs |
| System and SQL Performance for DB2 Administrator Guide | Chapter 1 | Administration overview | ■ Accessing the administration function  
■ Administration menu  
■ Navigation |
| | Chapter 2 | User profiles | ■ User profile administration  
■ Authorization  
■ Session control  
■ Session options  
■ Presentation options  
■ Function keys |
| | Chapter 3 | DOMPLEX profiles | ■ DOMPLEX profile administration  
■ DOMPLEX parameters  
■ DOMPLEX data collector list  
■ DOMPLEX DB2 list  
■ Output groups |
### Table 41  Installation documentation for OPERTUNE (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>System and SQL Performance for DB2 Administrator Guide</em> (continued)</td>
<td>Chapter 4</td>
<td>Global options and installation data sets</td>
<td>- Viewing and changing global options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Viewing installation data sets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Changing installation data sets</td>
</tr>
<tr>
<td>Chapter 5</td>
<td></td>
<td>Diagnostic and maintenance procedures</td>
<td>- Zap maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Producing a dump</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Reporting problems</td>
</tr>
<tr>
<td>Chapter 6</td>
<td></td>
<td>Collecting and filtering SQL data for reporting</td>
<td>- Setting the default collection options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Using filter profiles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Selecting intervals</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- APPTUNE and SQL Performance records</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Filtering records</td>
</tr>
<tr>
<td>Chapter 7</td>
<td></td>
<td>Batch utilities</td>
<td>- DOMBSWIT utility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- DCCARCI utility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- DCCARCB utility</td>
</tr>
<tr>
<td>Appendixes</td>
<td></td>
<td></td>
<td>- Output group considerations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- APPTUNE and Pool Advisor exits</td>
</tr>
</tbody>
</table>
The PACLOG product is a DB2 log management batch utility that provides substantial storage media savings while preserving the integrity of all archived log data that might be needed for recovery. The product assists the database administrator (DBA) in determining what data is retained in archive log data sets and in choosing the archive log storage media. It also provides statistics useful in the management of archive log data sets.

PACLOG uses the BMC components in Table 42. All components use SMP/E maintenance.

Table 42  PACLOG for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACLOG</td>
<td>ZALMxxx</td>
<td>product</td>
<td>no</td>
<td>page 101</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Primary Subsystem</td>
<td>BBBBPxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Subsystem</td>
<td>BBBCSxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>DATA ACCELERATOR Compression</td>
<td>ZDC2xxx</td>
<td>technology</td>
<td>yes</td>
<td>page 138</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxxx, xxx, or xx represents release number information.
The functional relationship between the components is shown in Figure 19.

**Figure 19  Relationship between the PACLOG for DB2 components**

PACLOG is not a component in any of the BMC solutions for DB2.

All documentation for PACLOG is listed in Table 62 on page 151. Installation documentation for PACLOG is shown in Table 43.

**Table 43  Installation documentation for PACLOG (part 1 of 2)**

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *Backup and Recovery Products for DB2 Installation Guide* | Part 1                     | Preparing for installation   | ■ Installation overview  
■ Installation requirements and considerations |
|                                                  | Part 2                     | Installing the products      | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the products  
■ Applying passwords  
■ Applying maintenance |
<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Backup and Recovery Products for DB2 Installation Guide (continued) | Part 3                     | Configuring the products            | • Configuring the products  
• Cloning the products on multiple systems                                      |
|                                                    | Part 4                     | Appendixes                          | • Migration to a different version of DB2  
• Merged and non-merged installations  
• Batch migration of option values  
• Enhanced HOLDDATA  
• Common utility tables  
• BMC Common DB2 repository  
• Backup and Recovery Products for DB2 uninstallation  
• Typical installation jobs  
• ARMBREP—Repository migration program                                                           |
| PACLOG for DB2 Reference Manual                    | Appendix A                 | PACLOG installation                 | • Installing PACLOG on multiple systems  
• Integrating PACLOG with RECOVERY MANAGER  
• Sample ALMSOPTS file  
• PACLOG memory requirements  
• PACLOG installation options                                                                 |

Table 43 Installation documentation for PACLOG (part 2 of 2)
Pool Advisor for DB2

The Pool Advisor product provides a fast, accurate means of monitoring DB2 storage resources to help you identify and resolve problems as they occur. Pool Advisor enables you to monitor the performance of DB2 activities in real time and display data about the performance of the system in a readable, usable format.

Pool Advisor uses an advisor-driven system for retrieving pool-related data from DB2, reporting that data, detecting potential performance-related problems, and recommending actions to prevent those problems. Pool Advisor can operate under native TSO and ISPF.

Pool Advisor for DB2 uses the BMC components in Table 44. All components use SMP/E maintenance.

### Table 44 Pool Advisor for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of Component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pool Advisor</td>
<td>ZPMD&lt;var&gt;xxx&lt;/var&gt;</td>
<td>product</td>
<td>no</td>
<td>page 104</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW&lt;var&gt;xx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>Common Infrastructure</td>
<td>ZDOM&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 136</td>
</tr>
<tr>
<td>DB2 Assist Services</td>
<td>ZDAS&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Component Services (DBC)</td>
<td>ZDBC&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Product Configuration</td>
<td>ZLGC&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 139</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCC&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIG&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAIN&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Next Generation Logger (NGL)</td>
<td>ZNGL&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 145</td>
</tr>
<tr>
<td>Runtime Component System (RTCS)</td>
<td>LOSZ&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 147</td>
</tr>
<tr>
<td></td>
<td>ZOSZ&lt;var&gt;xxx&lt;/var&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASAR&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>User Interface Middleware (UIM)</td>
<td>ZUSC&lt;var&gt;xxx&lt;/var&gt;</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>Common Services</td>
<td>ZUSC&lt;var&gt;xxx&lt;/var&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable <var>xxx</var> or <var>xx</var> represents release number information.
The functional relationship between the components is shown in Figure 20.

**Figure 20  Relationship between the Pool Advisor for DB2 components**

In addition to being a stand-alone product, Pool Advisor is also a product component in the System Performance for DB2 solution (see page 50).

All documentation for Pool Advisor is listed in Table 62 on page 151. Installation documentation for Pool Advisor is shown in Table 45.

**Table 45  Installation documentation for Pool Advisor (part 1 of 3)**

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>System and SQL Performance for DB2</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>■ Installation overview</td>
</tr>
<tr>
<td>Installation Guide</td>
<td></td>
<td></td>
<td>■ Installation requirements and considerations</td>
</tr>
<tr>
<td></td>
<td>Part 2</td>
<td>Installing the System and SQL Performance products for DB2</td>
<td>■ Setting up the Installation System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Installing product libraries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Customizing the solutions and their components</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying passwords</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Applying maintenance</td>
</tr>
</tbody>
</table>
### Table 45  Installation documentation for Pool Advisor (part 2 of 3)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| System and SQL Performance for DB2 Installation Guide (continued)               | Part 3                     | Configuring the System and SQL Performance products for DB2                                  | - Configuring the solution components  
- Cloning the product on multiple systems                                                                                                          |
|                                                                                | Part 4                     | Appendixes                                                                                  | - Migration to a different version of DB2  
- Merged and non-merged installations  
- Enhanced HOLDDATA  
- Product authorization messages  
- Typical installation jobs                                                                                                                   |
| System and SQL Performance for DB2 Administrator Guide                          | Chapter 1                  | Administration overview                                                                     | - Accessing the administration function  
- Administration menu  
- Navigation                                                                                                                                     |
|                                                                                | Chapter 2                  | User profiles                                                                                | - User profile administration  
- Authorization  
- Session control  
- Session options  
- Presentation options  
- Function keys                                                                                                                                   |
|                                                                                | Chapter 3                  | DOMPLEX profiles                                                                             | - DOMPLEX profile administration  
- DOMPLEX parameters  
- DOMPLEX data collector list  
- DOMPLEX DB2 list  
- Output groups                                                                                                                                       |
|                                                                                | Chapter 4                  | Global options and installation data sets                                                     | - Viewing and changing global options  
- Viewing installation data sets  
- Changing installation data sets                                                                                                               |
|                                                                                | Chapter 5                  | Diagnostic and maintenance procedures                                                        | - Zap maintenance  
- Producing a dump  
- Reporting problems                                                                                                                             |
|                                                                                | Chapter 6                  | Collecting and filtering SQL data for reporting                                              | - Setting the default collection options  
- Using filter profiles  
- Selecting intervals  
- APPTUNE and SQL Performance records  
- Filtering records                                                                                                                             |
|                                                                                | Chapter 7                  | Batch utilities                                                                              | - DOMBSWIT utility  
- DCCARCI utility  
- DCCARCB utility                                                                                                                                  |
|                                                                                | Appendixes                 |                                                                                             | - Output group considerations  
- APPTUNE and Pool Advisor exits                                                                                                                  |
<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *BMC Runtime Component System Configuration and Administration Guide*          | Chapter 1                  | Understanding the RTCS Infrastructure                                                          | ■ Introduction  
■ RTCS components                                                        |
|                                                                               | Chapter 2                  | Using RTCS Product Libraries                                                                 | ■ Library categories  
■ RTCS target libraries                                                    |
|                                                                               | Chapter 3                  | Configuring a Target MVS Image for RTCS Execution                                              | ■ Target system configuration overview  
■ Manually configuring an MVS image to run RTCS                               |
|                                                                               | Chapter 4                  | RTCS Administration                                                                           | ■ Continuous system operation  
■ RTCS system registry  
■ Starting RTCS  
■ Stopping RTCS  
■ RTCS operator commands  
■ RTCS Security Manager                                                        |
|                                                                               | Chapter 5                  | RTCS Registry Import Utility                                                                   | ■ Registry basics  
■ Executing the RTCS RIU  
■ Required data definition names  
■ Control statements                                                           |
|                                                                               | Appendixes                 |                                                                                                | ■ Sample JCL and MVS Image Configuration Members  
■ RTCS Initialization member                                                   |
R+/CHANGE ACCUM for DB2

The R+/CHANGE ACCUM product extracts and sorts updates from the DB2 log for a designated group of spaces and stores the updates in a file. This file, called a change accumulation file, provides an efficient alternative recovery resource for RECOVER PLUS to use instead of DB2 log data sets.

R+/CHANGE ACCUM is composed of an interactive ISPF interface and a batch utility. You can use the interface to define and create change accumulation groups. A change accumulation group can include any number of table spaces, partitions, or data sets, as long as you specify a sufficient amount of REGION on the EXEC statement. The R+/CHANGE ACCUM repository stores the group definitions. You can include the indexes that are associated with table spaces in the change accumulation processing for the group.

You use the R+/CHANGE ACCUM batch utility to generate change accumulation files routinely.

The R+/CHANGE ACCUM for DB2 product is installed as part of the installation of the RECOVER PLUS product. However, you need an R+/CHANGE ACCUM or Recovery Management for DB2 password to use R+/CHANGE ACCUM.

R+/CHANGE ACCUM uses the BMC components in Table 46. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID(^a)</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R+/CHANGE ACCUM</td>
<td>ZAFR(xxx)</td>
<td>product</td>
<td>no(^b)</td>
<td>page 108</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW(xx)</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCC(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIG(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAIN(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIO(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASAR(xxx)</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

\(^a\) An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable \(xxx\) or \(xx\) represents release number information.

\(^b\) R+/CHANGE ACCUM is installed with RECOVER PLUS. You must pick RECOVER PLUS (or Recovery Management) from the list of products in the Installation system to install R+/CHANGE ACCUM.
The functional relationship between the components is shown in Figure 21.

Figure 21  Relationship between the R+/CHANGE ACCUM for DB2 components

In addition to being a stand-alone product, R+/CHANGE ACCUM is also a product component in the Recovery Management for DB2 solution (see page 40).

All documentation for R+/CHANGE ACCUM is listed in Table 62 on page 151. Installation documentation for R+/CHANGE ACCUM is shown in Table 47.
### Table 47  Installation documentation for R+/CHANGE ACCUM

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Backup and Recovery Products for DB2 Installation Guide  | Part 1                     | Preparing for installation  | ■ Installation overview  
 ■ Installation requirements and considerations |  
|                                                          | Part 2                     | Installing the products     | ■ Setting up the Installation System  
 ■ Installing product libraries  
 ■ Customizing the products  
 ■ Applying passwords  
 ■ Applying maintenance |  
|                                                          | Part 3                     | Configuring the products    | ■ Configuring the products  
 ■ Cloning the products on multiple systems |  
|                                                          | Part 4                     | Appendixes                  | ■ Migration to a different version of DB2  
 ■ Merged and non-merged installations  
 ■ Batch migration of option values  
 ■ Enhanced HOLDDATA  
 ■ Common utility tables  
 ■ BMC Common DB2 repository  
 ■ Backup and Recovery Products for DB2 uninstallation  
 ■ Typical installation jobs  
 ■ ARMBREP—Repository migration program |  
| R+/CHANGE ACCUM for DB2 User Guide                       | Appendix B                 | Installation options        | descriptions of the R+/CHANGE ACCUM installation options |
RECOVER PLUS for DB2

The RECOVER PLUS product is a batch utility that runs outside the DB2 subsystem and provides fast execution through advanced I/O techniques and the use of alternate recovery strategies.

RECOVER PLUS offers enhanced concurrency when accessing DB2 resources and provides additional options to improve processing efficiency. The ability of RECOVER PLUS to analyze and report planned recovery activity provides a high degree of confidence in the predictability of the recovery process.

The R+/CHANGE ACCUM for DB2 product is also installed as part of the installation of the RECOVER PLUS product. However, you need an R+/CHANGE ACCUM or Recovery Management for DB2 password to use R+/CHANGE ACCUM.

RECOVER PLUS uses the BMC components in Table 48. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECOVER PLUSb</td>
<td>ZAFRxxx</td>
<td>product</td>
<td>no</td>
<td>page 111</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.

b R+/CHANGE ACCUM is installed with RECOVER PLUS, but you must have an R+/CHANGE ACCUM or Recovery Management password to use R+/CHANGE ACCUM.
The functional relationship between the components is shown in Figure 22.

**Figure 22  Relationship between the RECOVER PLUS for DB2 components**

In addition to being a stand-alone product, RECOVER PLUS is also a product component in the Recovery Management for DB2 solution (see page 40).

RECOVER PLUS is also automatically installed with ALTER (page 61) and CHANGE MANAGER (page 74). These products use a portion of the RECOVER PLUS functionality to migrate data from image copy data sets. Because ALTER and CHANGE MANAGER are components in the following solutions, RECOVER PLUS is also installed with these solutions:

- Administrative Assistant for DB2 (page 28)
- Database Administration for DB2 (page 32)

All documentation for RECOVER PLUS is listed in Table 62 on page 151. Installation documentation for RECOVER PLUS is shown in Table 49 on page 113.
## Table 49  Installation documentation for RECOVER PLUS

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| *Backup and Recovery Products for DB2 Installation Guide* | Part 1                     | Preparing for installation                              | ■ Installation overview  
■ Installation requirements and considerations |
|                                                      | Part 2                     | Installing the products                                  | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the products  
■ Applying passwords  
■ Applying maintenance |
|                                                      | Part 3                     | Configuring the products                                 | ■ Configuring the products  
■ Cloning the products on multiple systems |
|                                                      | Part 4                     | Appendixes                                               | ■ Migration to a different version of DB2  
■ Merged and non-merged installations  
■ Batch migration of option values  
■ Enhanced HOLDDATA  
■ Common utility tables  
■ BMC Common DB2 repository  
■ Backup and Recovery Products for DB2 uninstallation  
■ Typical installation jobs  
■ ARMBREP—Repository migration program |
| *RECOVER PLUS for DB2 Reference Manual*             | Appendix B                 | RECOVER PLUS installation options                       | descriptions of the RECOVER PLUS installation options |
RECOVERY MANAGER for DB2

The RECOVERY MANAGER (RMGR) product automates and simplifies the recovery planning process for the DB2 environment, regardless of the size of table spaces, complexity of structures, or frequency of backups.

You can quickly and easily create recovery planning structures that group logically-related database objects according to any criteria that you specify. Then you can perform recovery actions against these groups to simplify the process and improve the accuracy of recovery. Performing recoveries against these groups of DB2 structures can significantly decrease data loss and the amount of time spent performing recoveries.

RECOVERY MANAGER uses the BMC components in Table 50. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECOVERY MANAGER</td>
<td>ZARMxxx</td>
<td>product</td>
<td>no</td>
<td>page 114</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>DB2 Component Services (DBC)</td>
<td>ZDBCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 138</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>User Interface Middleware (UIM)</td>
<td>ZUSCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 23.

**Figure 23** Relationship between the RECOVERY MANAGER for DB2 components

In addition to being a stand-alone product, RECOVERY MANAGER is also a product component in the Recovery Management for DB2 solution (see page 40).

All documentation for RECOVERY MANAGER is listed in Table 62 on page 151. Installation documentation for RECOVERY MANAGER is shown in Table 51.

**Table 51** Installation documentation for RECOVERY MANAGER (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Backup and Recovery Products for DB2 Installation Guide | Part 1 | Preparing for installation | ■ Installation overview  
■ Installation requirements and considerations |
| | Part 2 | Installing the products | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the products  
■ Applying passwords  
■ Applying maintenance |
### Table 51  Installation documentation for RECOVERY MANAGER (part 2 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Backup and Recovery Products for DB2 Installation Guide (continued) | Part 3 | Configuring the products | - Configuring the products  
- Cloning the products on multiple systems |
| | Part 4 | Appendixes | - Migration to a different version of DB2  
- Merged and non-merged installations  
- Batch migration of option values  
- Enhanced HOLDDATA  
- Common utility tables  
- BMC Common DB2 repository  
- Backup and Recovery Products for DB2 uninstallation  
- Typical installation jobs  
- ARMBREP—Repository migration program |
| RECOVERY MANAGER User Guide | Appendix A | Control file and installation | Installation option descriptions for RECOVERY MANAGER |
The REORG PLUS product is a high-performance reorganization utility that offers the following significant benefits over other reorganization utilities:

- shortened elapsed and CPU time and greater data availability

REORG PLUS provides these benefits by taking advantage of multiple processors, multitasking, and parallel and online processing.

- a robust set of functionality that eliminates the need to perform additional tasks before and after the reorganization

Some of this enhanced functionality includes

- embedded sort and copy functionality
- dynamic file allocation
- conditional reorganization based on statistics
- integration with other BMC products

REORG PLUS uses the BMC components in Table 52. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMIDa</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REORG PLUS</td>
<td>ZARUxx</td>
<td>product</td>
<td>no</td>
<td>page 117</td>
</tr>
<tr>
<td>BMC Common Statistics</td>
<td>ZATSxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxX</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)</td>
<td>ZD2Uxx</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support (resident</td>
<td>ASARxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>and transient versions)</td>
<td>BBASCxx</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 24.

**Figure 24  Relationship between the REORG PLUS for DB2 components**

In addition to being a stand-alone product, REORG PLUS is also a product component in the Database Performance for DB2 solution (see page 36).

All documentation for REORG PLUS is listed in Table 62 on page 151. Installation documentation for REORG PLUS is shown in Table 53.

**Table 53  Installation documentation for REORG PLUS (part 1 of 2)**

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Utility Products for DB2        | Part 1                     | Preparing for installation               | ■ Installation overview  
■ Installation requirements and considerations                           |
| Installation Guide              |                            |                                            |                                                                         |
|                                 | Part 2                     | Installing the Utility products for DB2   | ■ Setting up the Installation System  
■ Installing product libraries  
■ Customizing the Utility products for DB2  
■ Applying Utility product passwords  
■ Applying maintenance             |
**Table 53  Installation documentation for REORG PLUS (part 2 of 2)**

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Products for DB2</td>
<td>Part 3</td>
<td>Configuring the Utility products for DB2</td>
<td>■ Configuring the Utility products for DB2</td>
</tr>
<tr>
<td>Installation Guide (continued)</td>
<td></td>
<td></td>
<td>■ Cloning the Utility products for DB2</td>
</tr>
<tr>
<td></td>
<td>Part 4</td>
<td>Appendixes</td>
<td>■ Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Merged and non-merge installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Batch migration of option values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Utility products uninstallation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Typical installation jobs</td>
</tr>
<tr>
<td>REORG PLUS for DB2 Reference Manual</td>
<td>Appendix A</td>
<td>REORG PLUS installation options</td>
<td>Installation option descriptions for REORG PLUS</td>
</tr>
</tbody>
</table>
SNAPSHOT UPGRADE FEATURE for DB2

The SNAPSHOT UPGRADE FEATURE (SUF) product is a licensed component of the EXTENDED BUFFER MANAGER for DB2 product. (See “EXTENDED BUFFER MANAGER for DB2” on page 86.)

XBM increases data availability when used with supported BMC utilities to create snapshots. XBM increases data availability by using these methods:

- software snapshots
- hardware (SSI-assisted) snapshots
- Instant Snapshots

Software and hardware snapshots are also called *traditional snapshots*. A traditional snapshot allows the supported utility to process data while the database remains available for updates. When the snapshot process starts, the database takes a brief outage to establish a point of consistency. At this point, XBM starts to provide data to the supported utility:

- For software snapshots, XBM monitors write requests to the database for the data objects that are being processed. When a record changes, XBM stores a preimage of the record in its software cache.

- For hardware snapshots, XBM uses intelligent storage to provide preimage records from a “frozen” copy of the database to the utility.

As the utility reads database records during its job, XBM satisfies the read request of the utility with the preimage from either the hardware device or software cache. In this manner the data read by the utility for that database is as it existed when the point of consistency was established, while the source database continues to be updated.

Instant Snapshots are significantly different from traditional snapshots. When processing an Instant Snapshot, XBM uses the appropriate intelligent storage interface to create (or *snap*) a copy of physical data on a storage device to a different location on the same device (or on another device within the same control unit or frame). A copy of the data remains on the storage device after the utility finishes processing the job. XBM can also snap, or reapply, this copied data back to the original location for recovery.

XBM works with supported BMC utilities to create this physical data copy and recover by using the copy. Instant Snapshots derive their name from the speed at which the copy and recovery occur: Instant Snapshots require no host I/O to copy the data set.
SUF uses the BMC components in Table 54 on page 121. All components use SMP/E maintenance.

### Table 54  SNAPSHOT UPGRADE FEATURE for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID(^a)</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAPSHOT UPGRADE FEATURE</td>
<td>ZXBM:xxx</td>
<td>product</td>
<td>no</td>
<td>page 120</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPW:xx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASAR:xx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

\(^a\) An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.

The functional relationship between the components is shown in Figure 25.

### Figure 25  Relationship between the SNAPSHOT UPGRADE FEATURE for DB2 components

![Diagram showing relationships between components](image)

You can license SUF and use it with the supported BMC utilities to perform snapshot processing. SUF as a stand-alone component is available for DB2, IMS, and VSAM.

SUF is included as a product component in the following BMC solutions for DB2:

- Database Administration for DB2 (page 32)
- Recovery Management for DB2 (page 40)
- Database Performance for DB2 (page 36)
All documentation for SNAPSHOT UPGRADE FEATURE is listed in Table 62 on page 151. Installation documentation for SNAPSHOT UPGRADE FEATURE is shown in Table 55.

Table 55  Installation documentation for SNAPSHOT UPGRADE FEATURE

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE Installation Guide</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>Installation overview</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installation requirements and considerations</td>
</tr>
<tr>
<td></td>
<td>Part 2</td>
<td>Installing the product</td>
<td>Setting up the Installation System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installing product libraries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Customizing XBM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Applying passwords</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Applying maintenance</td>
</tr>
<tr>
<td></td>
<td>Part 3</td>
<td>Configuring the product</td>
<td>Configuring XBM</td>
</tr>
<tr>
<td></td>
<td>Part 4</td>
<td>Appendixes</td>
<td>Merged and non-merged installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enhanced HODDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installation utilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Typical installation jobs</td>
</tr>
</tbody>
</table>
SQL Explorer for DB2

The SQL Explorer product is an SQL analysis tool that enables you to solve performance problems resulting from inefficient SQL statements.

You can tailor the expert rules used in SQL Explorer to your particular environment or technical audience. For example, you can modify rules to enforce installation standards and to detect SQL statements that should be avoided in certain circumstances.

When writing SQL statements, application developers can use SQL Explorer to correct performance problems before they reach production. The product enables DBAs to identify and manage SQL performance impacts resulting from data structure changes, before those changes are implemented in production. Other SQL Explorer facilities act as powerful tools to help resolve problems already in production.

SQL Explorer uses the BMC components in Table 56. All components use SMP/E maintenance.

Table 56   SQL Explorer for DB2 components

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQL Explorer</td>
<td>ZPSExxx</td>
<td>product</td>
<td>no</td>
<td>page 123</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>Common Explain</td>
<td>ZPSSxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 136</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Rules Engine</td>
<td>ZMRExxx</td>
<td>technology</td>
<td>yes</td>
<td>page 147</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

<sup>a</sup> An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 26.

Figure 26  Relationship between the SQL Explorer for DB2 components

In addition to being a stand-alone product, SQL Explorer is also a product component in the SQL Performance for DB2 solution (see page 45).

All documentation for SQL Explorer is listed in Table 62 on page 151. Installation documentation for SQL Explorer is shown in Table 57.

Table 57  Installation documentation for SQL Explorer (part 1 of 2)

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>System and SQL Performance for DB2 Installation Guide</td>
<td>Part 1</td>
<td>Preparing for installation</td>
<td>■ Installation overview&lt;br&gt;■ Installation requirements and considerations</td>
</tr>
<tr>
<td></td>
<td>Part 2</td>
<td>Installing the System and SQL Performance products for DB2</td>
<td>■ Setting up the Installation System&lt;br&gt;■ Installing product libraries&lt;br&gt;■ Customizing the solutions and their components&lt;br&gt;■ Applying passwords&lt;br&gt;■ Applying maintenance</td>
</tr>
<tr>
<td>Document title</td>
<td>Part, chapter, or appendix</td>
<td>Part title or chapter title</td>
<td>Contents</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>System and SQL Performance for DB2 Installation Guide (continued)</td>
<td>Part 3</td>
<td>Configuring the System and SQL Performance products for DB2</td>
<td>■ Configuring the solution components</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Cloning the product on multiple systems</td>
</tr>
<tr>
<td></td>
<td>Part 4</td>
<td>Appendixes</td>
<td>■ Migration to a different version of DB2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Merged and non-merged installations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Enhanced HOLDDATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Product authorization messages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Typical installation jobs</td>
</tr>
<tr>
<td>System and SQL Performance for DB2 Administrator Guide</td>
<td>Chapter 1</td>
<td>Administration overview</td>
<td>■ Accessing the administration function</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Administration menu</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Navigation</td>
</tr>
<tr>
<td>Chapter 2 User profiles</td>
<td></td>
<td></td>
<td>■ User profile administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Session control</td>
</tr>
<tr>
<td>Chapter 3 DOMPLEX profiles</td>
<td></td>
<td></td>
<td>■ DOMPLEX profile administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ DOMPLEX parameters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ DOMPLEX data collector list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ DOMPLEX DB2 list</td>
</tr>
<tr>
<td>Chapter 4 Global options and installation data sets</td>
<td></td>
<td></td>
<td>■ Viewing and changing global options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Viewing installation data sets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Changing installation data sets</td>
</tr>
<tr>
<td>Chapter 5 Diagnostic and maintenance procedures</td>
<td></td>
<td></td>
<td>■ Zap maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Producing a dump</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Reporting problems</td>
</tr>
<tr>
<td>Chapter 6 Collecting and filtering SQL data for reporting</td>
<td></td>
<td></td>
<td>■ Setting the default collection options</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Using filter profiles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Selecting intervals</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ APPTUNE and SQL Performance records</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ Filtering records</td>
</tr>
<tr>
<td>Chapter 7 Batch utilities</td>
<td></td>
<td></td>
<td>■ DOMBSWIT utility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ DCCARCI utility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ DCCARCB utility</td>
</tr>
<tr>
<td>Appendixes</td>
<td></td>
<td></td>
<td>■ Output group considerations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>■ APPTUNE and Pool Advisor exits</td>
</tr>
</tbody>
</table>
The UNLOAD PLUS product is a flexible, high-performance unload utility that unloads data from DB2 table spaces, image copies, or VSAM linear data sets to a variety of output types. UNLOAD PLUS provides the following benefits over other unload utilities:

- shortened elapsed and CPU time and greater data availability

UNLOAD PLUS provides these benefits by taking advantage of multiple processors, multitasking, and parallel and online processing.

- a robust set of functionality that eliminates the need to write special application code or to perform additional tasks before and after the unload

Some of this enhanced functionality includes

- a comprehensive set of data type conversions
- powerful, easy-to-use SELECT-like syntax for specifying the data to unload
- optional dynamic file allocation
- optional integration with other BMC products

UNLOAD PLUS uses the BMC components in Table 58. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Name</th>
<th>FMID</th>
<th>Type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNLOAD PLUS</td>
<td>ZADUxx</td>
<td>product</td>
<td>no</td>
<td>page 126</td>
</tr>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U)</td>
<td>ZD2Uxx</td>
<td>technology</td>
<td>yes</td>
<td>page 141</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxx</td>
<td>technology</td>
<td>yes</td>
<td>page 146</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

a An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
The functional relationship between the components is shown in Figure 27.

**Figure 27**  Relationship between the UNLOAD PLUS for DB2 components

In addition to being a stand-alone product, UNLOAD PLUS is also a product component in the Database Administration for DB2 solution (see page 32).

On a DB2 Version 8 (or later) subsystem, UNLOAD PLUS is automatically installed with ALTER (page 61) and CHANGE MANAGER (page 74). These products use a portion of the UNLOAD PLUS functionality for unloading DB2 data. Because ALTER is also part of Administrative Assistant for DB2 (page 28), UNLOAD PLUS is also installed with this solution when it is used for DB2 Version 8 (or later).

All documentation for UNLOAD PLUS is listed in Table 62 on page 151. Installation documentation for UNLOAD PLUS is shown in Table 59 on page 128.
## Table 59  Installation documentation for UNLOAD PLUS

<table>
<thead>
<tr>
<th>Document title</th>
<th>Part, chapter, or appendix</th>
<th>Part title or chapter title</th>
<th>Contents</th>
</tr>
</thead>
</table>
| Utility Products for DB2 Installation Guide | Part 1                     | Preparing for installation                                                                 | ▪ Installation overview  
▪ Installation requirements and considerations                           |
|                                        | Part 2                     | Installing the Utility products for DB2                                                    | ▪ Setting up the Installation System  
▪ Installing product libraries  
▪ Customizing the Utility products for DB2  
▪ Applying Utility product passwords  
▪ Applying maintenance            |
|                                        | Part 3                     | Configuring the Utility products for DB2                                                   | ▪ Configuring the Utility products for DB2  
▪ Cloning the Utility products for DB2                                         |
|                                        | Part 4                     | Appendixes                                                                                   | ▪ Migration to a different version of DB2  
▪ Merged and non-merge installations  
▪ Batch migration of option values  
▪ Enhanced HOLDDATA  
▪ Utility products uninstallation  
▪ Typical installation jobs                                                               |
| UNLOAD PLUS for DB2 Reference Manual   | Appendix A                 | UNLOAD PLUS installation options                                                             | Installation option descriptions for UNLOAD PLUS                          |
# BMC technologies for DB2

This chapter presents the following topics:

- Technology overview ......................................................... 130
- BMC Common Statistics ..................................................... 133
- BMC Password Security System ........................................... 133
- BMC Primary Subsystem and BMC Subsystem ........................ 133
- BMC Space Estimation Common Code ................................. 134
- BMCSORT ................................................................. 134
- Common Explain .......................................................... 136
- Common Infrastructure .................................................... 136
- Common SQL ............................................................... 136
- Cross-System Image Manager ............................................. 137
- DATA ACCELERATOR Compression ..................................... 138
- DB2 Assist Services ....................................................... 138
- DB2 Component Services ................................................. 138
- DB2 Product Configuration ............................................... 139
- DB2 Solution Common Code ............................................. 139
- DB2 Utilities Common Code ............................................. 141
- Dignus C runtimes and C++ objects ................................. 142
- High-speed Apply Engine ................................................ 142
- Install Execution Code ................................................... 143
- JCL Generation and Execution ........................................... 144
- Mainframe Host Services ................................................. 145
- Next Generation Logger ................................................ 145
- Option Value Migration .................................................. 146
- Rules Engine .............................................................. 147
- Runtime Component System ............................................. 147
- SAS Runtime Library Support ........................................... 148
- System Performance component ...................................... 148
- User Interface Middleware Common Services ..................... 148
- User Interface Middleware Server .................................... 149
Technology overview

Most of the BMC products and solutions for DB2® include the use of technologies that are referred to as technology components. These technology components ensure the full functionality of the products and solutions in which they are included.

In many cases, several products or solutions share the use of a technology component, which is then often referred to as a shared component.

This chapter provides a description of each of the technology components that are included with products and solutions from BMC.

Table 60 on page 131 shows the technologies with the products and solutions that use them.

---

NOTE

Information about components and FMIDs is available in the release notes for the products and solutions.

Additionally, a report listing version-specific information for the products and solutions and their technology components as well as FMID information is available on the BMC ESD site at ftp://epddownload.bmc.com/bmc/esd/ozi/ in the cxx_ozi_tape_product_list.txt file. (Related files for the other installation tapes are prefixed with bxx, mxx, and ixx.) You will need to contact Customer Support for a password to access this information.

Similar information is located on File 5 on each of the product installation tapes.
### Table 60  BMC technologies for DB2 and their products and solutions (part 1 of 2)

<table>
<thead>
<tr>
<th>Technology</th>
<th>Administrative Assistant for DB2</th>
<th>ALTER for DB2</th>
<th>APP TUNE for DB2</th>
<th>BMC DSNa</th>
<th>DATABASE MANAGER for DB2</th>
<th>CHANGE PLUS for DB2</th>
<th>CHECK PLUS for DB2</th>
<th>COPY PLUS for DB2</th>
<th>DATABASE Administration for DB2</th>
<th>EXTENDED BUFFER MANAGER for DB2</th>
<th>LOG Master for DB2</th>
<th>MAINVIEW for DB2</th>
<th>OPERTUNE for DB2</th>
<th>PACLOG for DB2</th>
<th>POOL Advisor for DB2</th>
<th>R+/CHANGE ACCUM for DB2</th>
<th>RECOVERY PLUS for DB2</th>
<th>REORG PLUS for DB2</th>
<th>SNAPSHOT UPGRADE FEATURE for DB2</th>
<th>SQL Explorer for DB2</th>
<th>SQL Performance for DB2</th>
<th>UNLOAD PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC Common Statistics (ATS) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BMC Password Security System d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BMC Primary Subsystem and BMC Subsystem d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BMC Space Estimation Common Code (ASH) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BMCSORT d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Common Explain</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Common Infrastructure d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Common SQL (ACS) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Common SQL Infrastructure d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cross-System Image Manager d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DATA ACCELERATOR Compression (DAC) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DB2 Assist Services d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DB2 Component Services (DBC) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DB2 Product Configuration d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DB2 Utilities Common Code (D2U) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dignus C runtimes and C++ objects d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>High-speed Apply Engine d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Install Execution Code (AIN) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>JCL Generation and Execution d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mainframe Host Services (DHS) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Next Generation Logger (NGL) d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Option Value Migration d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Rules Engine d</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
### Table 60  BMC technologies for DB2 and their products and solutions (part 2 of 2)

| Technology                                             | Administrative Assistant for DB2 | ALTER for DB2 | APPTUNE for DB2 | BMCDSNa | CATALOG MANAGER for DB2 | CHECK PLUS for DB2 | COPY PLUS for DB2 | DASD MANAGER PLUS for DB2 | Database Performance for DB2 | EXTEND PLUS for DB2 | LOADPLUS for DB2 | Log Master for DB2 | MainView for DB2 | OPERTUNE for DB2 | Pool Advisor for DB2 | Recovery PLUS for DB2c | Recovery MANAGEMENT for DB2 | REORG PLUS for DB2 | SNAPSHOT UPGRADE FEATURE for DB2 | SQL Explorer for DB2 | SQL Performance for DB2 | SYSTEM PERFORMANCE for DB2 | UNLOAD PLUS |
|--------------------------------------------------------|----------------------------------|---------------|-----------------|---------|------------------------|-------------------|-----------------|-----------------------------|-------------------------------|-------------------|----------------|-------------------|------------------|----------------|-------------------|------------------------|--------------------------|-----------------|------------------------|------------------|----------------|
| Runtime Component System (RTCS)d                       | X                               | X             |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |
| RECOVER PLUSe                                          | X X                             | X             |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |
| SAS Runtime Library Supportd                           | X X X X X X X X X X X X X X     | X             |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |
| System Performance componentd                          | X X X X X X X X X X X X X X     | X             |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |
| UNLOAD PLUSe,f                                          | X                               | X             |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |
| User Interface Middleware Common Services (USC)d       | X                               | X             |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |
| User Interface Middleware Server (UIM)d                | X                               |               |                 |         |                        |                   |                 |                             |                               |                  |               |                   |                  |               |                    |                        |                          |                 |                        |                  |               |

a  BMCDSN is product that you can install free-of-charge for use with CHECK PLUS, COPY PLUS, LOADPLUS, RECOVER PLUS, RECOVERY MANAGEMENT, REORG PLUS, and UNLOAD PLUS.

b  MainView for DB2 includes the Data Collector and the CATALOG MANAGER for DB2 (Browse).

c  R+/CHANGE ACCUM is automatically installed with RECOVER PLUS. However, you must have an R+/CHANGE ACCUM or Recovery Management password to use R+/CHANGE ACCUM. As a product, R+/CHANGE ACCUM is under controlled availability.

d  These components are available only as part of the indicated product or solution (not as stand-alone components).

e  Although RECOVER PLUS and UNLOAD PLUS are products, they are automatically installed with some products and solutions as shown in this table. In these cases, the full functionality of the RECOVER PLUS and UNLOAD PLUS products is not available.

f  UNLOAD PLUS is installed with versions of ALTER and CHANGE MANAGER that run on DB2 Version 8 or later.
BMC Common Statistics

The BMC Common Statistics component is a technology that collects statistics and updates repository tables for DASD MANAGER PLUS. The BMC Common Statistics component is automatically installed with the following solutions and products:

- DASD MANAGER PLUS (page 83)
- Database Administration for DB2 (page 32)
- Database Performance for DB2 (page 36)
- LOADPLUS (page 88)
- REORG PLUS (page 117)

Maintenance for the BMC Common Statistics component is delivered through SMP/E. The FMID is ZATSxxx where xxx represents the release number information.

BMC Password Security System

The BMC Password Security System is a technology component that is used to verify and use product passwords. This technology is automatically installed with all of the BMC products and solutions for DB2, with the exception of BMCDSN. There is no menu selection for this technology in the Installation System and no documentation specific to this technology. However, you can find more information about the BMC Product Authorization utility in all of the installation guides for BMC products and solutions for DB2.

Maintenance for the BMC Password Security System is delivered through SMP/E. The FMID is BBAPWxx where xx represents release number information.

BMC Primary Subsystem and BMC Subsystem

The BMC Primary Subsystem and BMC Subsystem are technologies that are automatically installed when you install the PACLOG for DB2 product (page 101). There is no documentation specific to these technologies.

Maintenance for these technologies is delivered through SMP/E. The FMIDs are

- BBBBPxx for the BMC Primary Subsystem
- BBBCSxx for the BMC Subsystem

The xx represents release number information.
BMC Space Estimation Common Code

The BMC Space Estimation Common Code (ASH) is a set of technologies that uses statistics to provide space estimation for several products and solutions. There is no documentation specific to this technology. BMC Space Estimation Common Code is automatically installed with the following solutions and products:

- Administrative Assistant for DB2 (page 28)
- ALTER for DB2 (page 61)
- CATALOG MANAGER for DB2 (page 71)
- CHANGE MANAGER for DB2 (page 74)
- DASD MANAGER PLUS for DB2 (page 83)
- Database Administration for DB2 (page 32)
- Database Performance for DB2 (page 36)

Maintenance for the BMC Space Estimation Common Code component is delivered through SMP/E. The FMID is ZASHxxx where xxx represents release number information.

Installation information about BMC Space Estimation Common Code is in the following installation guides:

- Administrative Assistant for DB2 Installation Guide
- Administrative Products for DB2 Installation Guide
- Database Administration for DB2 Installation Guide
- Database Performance for DB2 Installation Guide

BMCSORT

In addition to providing sort processing for the invoking product, BMCSORT can dynamically allocate the sort work files that it needs. The sort work files that BMCSORT allocates are in addition to any that the invoking product allocates. By invoking BMCSORT rather than an external sort routine, the products that use BMCSORT gain the following benefits:

- faster sort processing, resulting in better product performance
efficient sort processing and allocation of sort work files, resulting in better use of resources

more control of the sort process, helping prevent memory-related problems

BMCSORT is installed automatically when you install the following products and solutions:

- Administrative Assistant for DB2 (page 28)
- ALTER for DB2 (page 61)
- CHANGE MANAGER for DB2 (page 74)
- CHECK PLUS for DB2 (page 77)
- Database Administration for DB2 (page 32)
- Database Performance for DB2 (page 36)
- LOADPLUS for DB2 (page 88)
- Log Master for DB2 (page 91)
- RECOVER PLUS for DB2 (page 111)
- Recovery Management for DB2 (page 40)
- REORG PLUS for DB2 (page 117)
- UNLOAD PLUS for DB2 (page 126)

You can also install BMCSORT separately by choosing BMCSORT from the product and solution list in the Installation System.

Maintenance for BMCSORT is delivered through SMP/E. The FMID is ZAUPxxx where xxx represents release number information.

For more information about how to use BMCSORT, see the product documentation for products that use this technology.

Installation information about BMCSORT is in the following installation guides:

- Administrative Assistant for DB2 Installation Guide
- Administrative Products for DB2 Installation Guide
- Backup and Recovery Products for DB2 Installation Guide
- Database Administration for DB2 Installation Guide
- Recovery Management for DB2 Installation Guide
- Utility Products for DB2 Installation Guide
Common Explain

The Common Explain technology enables you to Explain dynamic and static SQL statements, providing both statistical and textual information about the access path, with suggestions on how to improve SQL statement performance. This technology is automatically installed with the following solutions and products:

- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)
- APPTUNE for DB2 (page 64)
- SQL Explorer for DB2 (page 123)

Maintenance for the Common Explain component is delivered through SMP/E. The FMID is ZPSSxxx where xxx represents release number information.

Installation information for the Common Explain technology is in the System and SQL Performance for DB2 Installation Guide.

Common Infrastructure

The Common Infrastructure technology supports report functions. There is no documentation specific to this technology. This technology is automatically installed with the following solutions and products:

- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)
- APPTUNE for DB2 (page 64)
- Pool Advisor for DB2 (page 104)

Maintenance for the Common Infrastructure component is delivered through SMP/E. The FMID is ZDOMxxx where xxx represents release number information.

Installation information for the Common Infrastructure technology is in the System and SQL Performance for DB2 Installation Guide.
Common SQL

The Common SQL (ACS) is a set of technologies that provide common SQL for the JCL Generation component. Common SQL is automatically installed with the following solutions and products:

- Administrative Assistant for DB2 (page 28)
- ALTER for DB2 (page 61)
- CATALOG MANAGER for DB2 (page 71)
- CHANGE MANAGER for DB2 (page 74)
- DASD MANAGER PLUS for DB2 (page 83)
- Database Administration for DB2 (page 32)
- System Performance for DB2 (page 50)

Maintenance for the Common SQL component is delivered through SMP/E. The FMID is ZACSxxx where xxx represents release number information.

Installation information about the Common SQL component is in the following installation guides:

- Administrative Assistant for DB2 Installation Guide
- Administrative Products for DB2 Installation Guide
- Database Administration for DB2 Installation Guide

Cross-System Image Manager

The BMC Cross-System Image Manager (XIM) technology provides sysplex performance improvements by enabling the distribution and management of discrete units of work (UOWs) across one or more OS/390 or z/OS systems. BMC products that exploit XIM can divide single, long-running tasks into multiple parallel tasks to be run across multiple machines in the sysplex, decreasing the overall elapsed time.

XIM is automatically installed when you install Database Administration for DB2 (page 32). XIM is also selectable for installation from the list of products in the Installation System.

Maintenance for the XIM component is delivered through SMP/E. The FMID is BBYXMxx where xx represents release number information.

For more information, see the Cross-System Image Manager User Guide. For information about installing XIM, see the Database Administration for DB2 Installation Guide.
DATA ACCELERATOR Compression

The DATA ACCELERATOR Compression (DAC) technology provides advanced compression routines. This technology is automatically installed with the PACLOG for DB2 product (page 101). DAC is also selectable for installation from the list of products and solutions in the Installation System. The following documentation is available for this technology:

- DATA ACCELERATOR Compression Installation Guide
- DATA ACCELERATOR Compression Reference Manual
- DATA ACCELERATOR Compression Messages Manual

Maintenance for the DAC component is delivered through SMP/E. The FMID is ZDC2xxx where xxx represents release number information.

DB2 Assist Services

The DB2 Assist Services technology establishes exits in DB2. There is no documentation specific to this technology. This technology is automatically installed with the following solutions and products:

- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)
- APPTUNE for DB2 (page 64)
- Pool Advisor for DB2 (page 104)

Maintenance for the DB2 Assist Services component is delivered through SMP/E. The FMID is ZDASxxx where xxx represents release number information.

Installation information for the DB2 Assist Services technology is in the System and SQL Performance for DB2 Installation Guide.

DB2 Component Services

The DB2 Component Services (DBC) technology provides a persistent z/OS subsystem address space into which enabled BMC products can dynamically initialize their own product services:

- Through an XML messaging protocol, DBC provides a non-authorized, loosely coupled, sysplex-enabled communication channel to product services.
DBC hosts common services for DB2 subsystem discovery and command execution.

DBC offers additional services that allow BMC products to define operator commands, and to subscribe to and publish user events dynamically.

All product services hosted within the DBC infrastructure inherit a Security Access Facility (SAF) interface to ensure compliance with the relevant site’s security requirements.

This technology is automatically installed with the following solutions and products:

- APPTUNE (page 64)
- Pool Advisor (page 104)
- Recovery Management for DB2 (page 40)
- RECOVERY MANAGER for DB2 (page 114)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Maintenance for the DB2 Component Services component is delivered through SMP/E. The FMID is ZDBC.xxx where xxx represents release number information.

Installation information for the DB2 Component Services technology is in the following installation guides:

- Backup and Recovery Products for DB2 Installation Guide
- Recovery Management for DB2 Installation Guide
- System and SQL Performance for DB2 Installation Guide

**DB2 Product Configuration**

DB2 Product Configuration technology separates product (or solution) installation from configuration. Through its online interface, DB2 Product Configuration simplifies configuration by setting default option values for you. (You can change the values, if needed.)

DB2 Product Configuration panels simplify navigation by allowing you to expand or contract sections as needed. Also, you can link to DB2 Product Configuration from within your product or solution, thus maintaining a consistent look and feel, and retaining your changes from version to version.
DB2 Product Configuration is available with the following solutions and products:

- APPTUNE (page 64)
- Pool Advisor (page 104)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Maintenance for DB2 Product Configuration is delivered through SMP/E. The FMID is ZLGCxxx where xxx represents release number information.

Installation information about DB2 Product Configuration is in the *System and SQL Performance for DB2 Installation Guide*.

**DB2 Solution Common Code**

DB2 Solution Common Code (SCC) is a set of technologies that provides common processes for many BMC products for DB2.

The SCC component is automatically installed when you install any of the products listed in Chapter 3, “BMC products for DB2” or any of the BMC solutions for DB2 listed in Chapter 2, “BMC solutions for DB2” with the following exceptions:

- BMCDSN
- EXTENDED BUFFER MANAGER for DB2
- MainView for DB2
- OPERTUNE
- PACLOG for DB2
- SNAPSHOT UPGRADE FEATURE for DB2

You can also install SCC separately by choosing DB2 Solution Common Code from the product and solution list in the Installation System.
There is no separate documentation for SCC. Installation information about SCC is in the following installation guides:

- *Administrative Assistant for DB2 Installation Guide*
- *Administrative Products for DB2 Installation Guide*
- *Backup and Recovery Products for DB2 Installation Guide*
- *Database Administration for DB2 Installation Guide*
- *Database Performance for DB2 Installation Guide*
- *Utility Products for DB2 Installation Guide*
- *Recovery Management for DB2 Installation Guide*
- *System and SQL Performance for DB2 Customization Guide*

Maintenance for the SCC component is delivered through SMP/E. The FMID is ZSCCxxx where xxx represents release number information.

## DB2 Utilities Common Code

The DB2 Utilities Common Code (D2U) is a set of technologies that provides common processes. The D2U component is automatically installed with the following products and solutions:

- *Administrative Assistant* (page 28)
- *CHECK PLUS* (page 77)
- *DASD MANAGER PLUS* (page 83)
- *Database Administration* (page 32)
- *Database Performance* (page 36)
- *LOADPLUS* (page 88)
- *REORG PLUS* (page 117)
- *UNLOAD PLUS* (page 126)

There is no separate documentation for the DB2 Utilities Common Code. Installation information about D2U is in the following installation guides:

- *Administrative Assistant for DB2 Installation Guide*
- *Administrative Products for DB2 Installation Guide*
- *Database Administration for DB2 Installation Guide*
- *Database Performance for DB2 Installation Guide*
- *Utility Products for DB2 Installation Guide*

Maintenance for the DB2 Utilities Common Code is delivered through SMP/E. The FMID is ZD2Uxxx where xxx represents release number information.
Dignus C runtimes and C++ objects

The Dignus C runtimes and C++ objects are a collection of subroutines, called by C and C++ programs, for string manipulation, file access, dynamic allocation, time and date management, and other functions.

There is no menu selection for this technology in the Installation System and no documentation specific to this technology. Dignus support is automatically installed when you install any of the products listed in Chapter 3, “BMC products for DB2” or any of the BMC solutions for DB2 listed in Chapter 2, “BMC solutions for DB2.”

Maintenance for the Dignus support is delivered through SMP/E. The FMID is ZDIGxxx. The xxx represents release number information.

High-speed Apply Engine

The High-speed Apply Engine is a component of the BMC Log Master for DB2 product that provides high-speed processing of SQL generated for transaction backouts.

High-speed Apply Engine uses the components in Table 61. All components use SMP/E maintenance.

<table>
<thead>
<tr>
<th>Component</th>
<th>FMID(^a)</th>
<th>type of component</th>
<th>Automatically installed?</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC Password Security System</td>
<td>BBAPWxx</td>
<td>technology</td>
<td>yes</td>
<td>page 133</td>
</tr>
<tr>
<td>BMCSORT</td>
<td>ZAUPxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 134</td>
</tr>
<tr>
<td>DB2 Solution Common Code (SCC)</td>
<td>ZSCCxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 140</td>
</tr>
<tr>
<td>Dignus C Runtimes and C++ Objects</td>
<td>ZDIGxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 142</td>
</tr>
<tr>
<td>Install Execution Code (AIN)</td>
<td>ZAINxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 143</td>
</tr>
<tr>
<td>Option Value Migration</td>
<td>ZZIOxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
<tr>
<td>SAS Runtime Library Support</td>
<td>ASARxxx</td>
<td>technology</td>
<td>yes</td>
<td>page 148</td>
</tr>
</tbody>
</table>

\(^a\) An FMID pattern is provided for SMP/E-maintained components. The prefix shown remains constant from one release to the next, but the variable xxx or xx represents release number information.
High-speed Apply Engine is automatically installed when you install the following solutions and products from BMC:

- Database Administration for DB2 (page 32)
- LOADPLUS for DB2 (page 88)
- Log Master for DB2 (page 91)
- Recovery Management for DB2 (page 40)

For more information, see the High-speed Apply Engine Reference Manual. For information about installing the High-speed Apply Engine, see one of the following guides:

- Backup and Recovery Products for DB2 Installation Guide
- Database Administration for DB2 Installation Guide
- Recovery Management for DB2 Installation Guide
- Utility Products for DB2 Installation Guide

Maintenance for the High-speed Apply Engine is delivered through SMP/E. The FMID is ZAPTxxx where xxx represents release number information.

Install Execution Code

Install Execution Code (AIN) is technology that enables the Installation System to create objects for DB2. AIN is used during the customization phase of the installation.

There is no menu selection for this technology in the Installation System and no documentation specific to this technology. AIN is automatically installed when you install any of the products listed in Chapter 3, “BMC products for DB2” or any of the BMC solutions for DB2 listed in Chapter 2, “BMC solutions for DB2” with the following exceptions:

- EXTENDED BUFFER MANAGER for DB2
- MainView for DB2
- OPERTUNE for DB2
- SNAPSHOT UPGRADE FEATURE for DB2
Installation information about Install Execution Code is in

- Administrative Assistant for DB2 Installation Guide
- Administrative Products for DB2 Installation Guide
- Backup and Recovery Products for DB2 Installation Guide
- Database Administration for DB2 Installation Guide
- Database Performance for DB2 Installation Guide
- System and SQL Performance for DB2 Installation Guide
- Recovery Management for DB2 Installation Guide
- Utility Products for DB2 Installation Guide

Maintenance for AIN is delivered through SMP/E. The FMID is ZAINxxx where xxx represents release number information.

**JCL Generation and Execution**

The JCL Generation technology creates JCL to run utilities or DB2 commands using the Execution Monitor program or stand-alone utilities. JCL Generation also creates either worklist or standard JCL format for the DASD MANAGER PLUS BMCTRIG program. The Execution technology processes DB2 commands, and runs BMC and IBM® DB2 utilities.

There is no menu selection for this technology in the Installation System and no documentation specific to this technology. JCL Generation and Execution is automatically installed when you install

- Administrative Assistant for DB2 (page 28)
- ALTER for DB2 (page 61)
- CATALOG MANAGER for DB2 (page 71)
- CHANGE MANAGER for DB2 (page 74)
- DASD MANAGER PLUS for DB2 (page 83)
- Database Administration for DB2 (page 32)
- Database Performance for DB2 (page 36)
- System Performance for DB2 (page 50)

Installation information about JCL Generation and Execution is included in

- Administrative Assistant for DB2 Installation Guide
- Administrative Products for DB2 Installation Guide
- Database Administration for DB2 Installation Guide
- Database Performance for DB2 Installation Guide
Mainframe Host Services

The Mainframe DNA Host Services (DHS) component provides services in the UIM Server that support other (mostly DB2) functions.

The DHS component is installed automatically with the Database Performance for DB2 solution (page 36).

You can also install DHS separately by choosing BMC Mainframe DNA (IMS/DB2 or DB2 Only) from the product and solution list in the Installation System.

Information about DHS is available in the Database Performance for DB2 Installation Guide.

Maintenance for DHS is delivered through SMP/E. The FMIDS are

- ZDHSxxx for Mainframe DNA Host Services
- ZSMFxxx for Mainframe DNA

The xxx represents release number information.

Next Generation Logger

Next Generation Logger (NGL) is a technology that manages logging and retrieval functions including allocating, initializing, and managing log files. NGL minimizes the cost of logging and the potential for resource contention. NGL is available with the following solutions and products:

- APPTUNE (page 64)
- Pool Advisor (page 104)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Maintenance for NGL is delivered through SMP/E. The FMID is ZNGLxxx where xxx represents release number information.

Installation information about NGL is in the System and SQL Performance for DB2 Installation Guide.
Option Value Migration

Option Value Migration is a technology that migrates the values of the installation options from the previous release of a product to the current release. Option Value Migration is available with the following solutions and products:

- Administrative Assistant for DB2 (page 28)
- ALTER for DB2 (page 61)
- CATALOG MANAGER for DB2 (page 71)
- CHANGE MANAGER for DB2 (page 74)
- CHECK PLUS for DB2 (page 77)
- COPY PLUS for DB2 (page 80)
- DASD MANAGER PLUS for DB2 (page 83)
- Database Administration for DB2 (page 32)
- Database Performance for DB2 (page 36)
- High-speed Apply Engine (page 142)
- LOADPLUS for DB2 (page 88)
- Log Master for DB2 (page 91)
- R+/CHANGE ACCUM for DB2 (page 108)
- RECOVER PLUS for DB2 (page 111)
- Recovery Management for DB2 (page 40)
- RECOVERY MANAGER for DB2 (page 114)
- REORG PLUS for DB2 (page 117)
- System Performance for DB2 (page 50)
- UNLOAD PLUS for DB2 (page 126)

**NOTE**

Before you can migrate your installation option values from a previous product version, you must run all of the $B-prefixed jobs prior to and including the $B05UNLD job (Express installation) or the $B76APLY job (Custom installation) to unload the load modules into your HLQ.DBLINK library.

Maintenance for the Option Value Migration component is delivered through SMP/E. The FMID is ZZIOxxx where xxx represents release number information.
Rules Engine

The Rules Engine technology provides a general rules engine so that BMC products can provide sophisticated rules processing logic. The Rules Engine is available with the following solutions and products:

- APPTUNE (page 64)
- SQL Explorer (page 123)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Maintenance for the Rules Engine is delivered through SMP/E. The FMID is ZMRExxx where xxx represents release number information.

There is no menu selection for this technology in the Installation System and no documentation specific to this technology. The Rules Engine is automatically installed with the products that use it.

Runtime Component System

The Runtime Component System (RTCS) is an infrastructure technology that uses the latest z/OS system facilities to take advantage of modern enterprise servers. RTCS supports component-based programming, as well as traditional procedural programming. RTCS simplifies product installation and configuration. Other products can make use of the services and components made available by RTCS to support additional functions, replace or update functions, or extend existing functions. provides reliable authorized system runtime services.

- APPTUNE (page 64)
- Pool Advisor (page 104)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Maintenance for RTCS is delivered through SMP/E. The FMIDs are ZOSZxxx and LOSZxxx where xxx represents release number information.

Installation information about RTCS is in the following books:

- System and SQL Performance for DB2 Installation Guide (installation)
- BMC Runtime Component System Configuration and Administration Guide (customization)
SAS Runtime Library Support

The SAS Runtime Library Support (resident and transient) is a collection of subroutines, called by C and C++ programs, for string manipulation, file access, dynamic allocation, time and date management, and other functions.

There is no menu selection for this technology in the Installation System and no documentation specific to this technology. SAS Runtime Library Support is automatically installed when you install any of the products listed in Chapter 3, “BMC products for DB2” or any of the BMC solutions for DB2 listed in Chapter 2, “BMC solutions for DB2.”

Information about installing the SAS Runtime Library Support is available in the product and solution installation guides.

Maintenance for the SAS Runtime Library Support is delivered through SMP/E. The FMIDS are

- ASARxxx for the resident version of SAS Runtime Library Support
- BBASCxx for the transient version of SAS Runtime Library Support

The xxx and xx represents release number information.

System Performance component

The System Performance component is installed with the System Performance for DB2 solution. Maintenance is delivered through SMP/E. The FMID is ZSPDxxx where xxx represents release number information.

There is no menu selection for this component in the Installation System and no documentation specific to this technology.

User Interface Middleware Common Services

The User Interface Middleware Common Services (USC) technology has an XML parser.
The USC technology is installed automatically with the following products and solutions:

- APPTUNE for DB2 (page 64)
- Log Master for DB2 (page 91)
- Pool Advisor for DB2 (page 104)
- Recovery Management for DB2 (page 40)
- RECOVERY MANAGER for DB2 (page 114)
- SQL Performance for DB2 (page 45)
- System Performance for DB2 (page 50)

Maintenance for UIM Common Services is delivered through SMP/E. The FMID is ZUSCxxx where xxx represents release number information.

**User Interface Middleware Server**

User Interface Middleware (UIM) Server is a TCP/IP application that facilitates communication between distributed systems components and mainframe components, and between logical partitions (LPARs).

The UIM Server component is installed automatically with the Database Performance for DB2 solution (page 36).

You can also install UIM separately by choosing BMC Mainframe DNA (IMS/DB2 or DB2 Only) from the product and solution list in the Installation System.

Information about the UIM Server is available in the *Database Performance for DB2 Installation Guide*.

Maintenance for the UIM Server is delivered through SMP/E. The FMID is ZUIMxxx where xxx represents release number information.
# Related publications

Table 62 provides a list of the related publications that supplement this book. All of these publications are available on the BMC support website at [http://www.bmc.com/support_home](http://www.bmc.com/support_home).

## Table 62  Documentation for BMC solutions, products, and technologies (part 1 of 5)

<table>
<thead>
<tr>
<th>Solution, product, or technology</th>
<th>Documents</th>
</tr>
</thead>
</table>
| Administrative Assistant for DB2 |  - Administrative Assistant for DB2 Installation Guide  
   - Administrative Products for DB2 Messages Manual  
   - ALTER and CHANGE MANAGER for DB2 Getting Started Guide  
   - ALTER and CHANGE MANAGER for DB2 Reference Manual  
   - ALTER and CHANGE MANAGER for DB2 User Guide  
   - Backup and Recovery Products for DB2 Messages Manual  
   - CATALOG MANAGER for DB2 User Guide  
   - RECOVER PLUS for DB2 Reference Manual  
   - UNLOAD PLUS for DB2 Reference Manual  
   - Utility Products for DB2 Messages Manual |
| ALTER for DB2                     |  - Administrative Products for DB2 Installation Guide  
   - Administrative Products for DB2 Messages Manual  
   - ALTER and CHANGE MANAGER for DB2 Getting Started Guide  
   - ALTER and CHANGE MANAGER for DB2 Reference Manual  
   - ALTER and CHANGE MANAGER for DB2 User Guide |
| APPTUNE for DB2                   |  - APPTUNE for DB2 User Guide  
   - BMC Common Components Messages Manual  
   - BMC Runtime Component System Configuration and Administration Guide  
   - System and SQL Performance for DB2 Administrator Guide  
   - System and SQL Performance for DB2 Installation Guide |
| BMCDSN Command Processor          |  - BMCDSN Command Processor Reference Manual  
   - Utility Products for DB2 Installation Guide  
   - Utility Products for DB2 Messages Manual |
| BMCSORT                           |  - Backup and Recovery Products for DB2 Installation Guide |
| CATALOG MANAGER for DB2           |  - Administrative Products for DB2 Installation Guide  
   - Administrative Products for DB2 Messages Manual  
   - CATALOG MANAGER for DB2 User Guide |
<table>
<thead>
<tr>
<th>Solution, product, or technology</th>
<th>Documents</th>
</tr>
</thead>
</table>
| CHANGE MANAGER for DB2           | ■ Administrative Products for DB2 Installation Guide  
■ Administrative Products for DB2 Messages Manual  
■ ALTER and CHANGE MANAGER for DB2 Getting Started Guide  
■ ALTER and CHANGE MANAGER for DB2 Reference Manual  
■ ALTER and CHANGE MANAGER for DB2 User Guide |
| CHECK PLUS for DB2               | ■ CHECK PLUS for DB2 Reference Manual  
■ Utility Products for DB2 Installation Guide  
■ Utility Products for DB2 Messages Manual |
| COPY PLUS for DB2                | ■ Backup and Recovery Products for DB2 Messages Manual  
■ Backup and Recovery Products for DB2 Installation Guide  
■ COPY PLUS for DB2 Reference Manual |
| Cross-System Image Manager       | ■ Cross-System Image Manager (XIM) User Guide  
■ Database Administration for DB2 Installation Guide |
| DASD MANAGER PLUS for DB2        | ■ Administrative Products for DB2 Messages Manual  
■ Administrative Products for DB2 Installation Guide  
■ DASD MANAGER PLUS for DB2 Reference Manual  
■ DASD MANAGER PLUS for DB2 User Guide |
| DATA ACCELERATOR Compression     | ■ DATA ACCELERATOR Compression Installation Guide  
■ DATA ACCELERATOR Compression Reference Manual  
■ DATA ACCELERATOR Compression Messages Manual |
| Database Administration for DB2  | ■ Administrative Products for DB2 Messages Manual  
■ ALTER and CHANGE MANAGER for DB2 Getting Started Guide  
■ ALTER and CHANGE MANAGER for DB2 Reference Manual  
■ ALTER and CHANGE MANAGER for DB2 User Guide  
■ Backup and Recovery Products for DB2 Messages Manual  
■ CATALOG MANAGER for DB2 User Guide  
■ COPY PLUS for DB2 Reference Manual  
■ Cross-System Image Manager (XIM) User Guide  
■ Database Administration for DB2 Installation Guide  
■ EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE User Guide  
■ High-speed Apply Engine Reference Manual  
■ LOADPLUS for DB2 Reference Manual  
■ RECOVER PLUS for DB2 Reference Manual  
■ UNLOAD PLUS for DB2 Reference Manual  
■ Utility Products for DB2 Messages Manual |
| Database Performance for DB2     | ■ Administrative Products for DB2 Messages Manual  
■ DASD MANAGER PLUS for DB2 Reference Manual  
■ DASD MANAGER PLUS for DB2 User Guide  
■ Database Performance for DB2 Installation Guide  
■ EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE User Guide  
■ REORG PLUS for DB2 Reference Manual  
■ Utility Products for DB2 Messages Manual |
| EXTENDED BUFFER MANAGER for DB2  | ■ EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE Installation Guide  
■ EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE User Guide |
<table>
<thead>
<tr>
<th>Solution, product, or technology</th>
<th>Documents</th>
</tr>
</thead>
</table>
| High-speed Apply Engine         | - Backup and Recovery Products for DB2 Installation Guide  
                                | - Backup and Recovery Products for DB2 Messages Manual  
| LOADPLUS for DB2                | - High-speed Apply Engine Reference Manual  
                                | - LOADPLUS for DB2 Reference Manual  
                                | - Utility Products for DB2 Installation Guide  
                                | - Utility Products for DB2 Messages Manual |
| Log Master for DB2              | - Backup and Recovery Products for DB2 Installation Guide  
                                | - Backup and Recovery Products for DB2 Messages Manual  
                                | - Log Master for DB2 Reference Manual  
                                | - Log Master for DB2 User Guide |
| MainView for DB2                | - Administrative Products for DB2 Installation Guide  
                                | - MainView Administration Guide  
                                | - MainView Alarm Management Guide  
                                | - MainView Alternate Access Implementation and User Guide  
                                | - MainView Common Customization Guide  
                                | - MainView Installation Guide  
                                | - MainView Security Guide  
                                | - MainView User Guide  
                                | - MainView for DB2 Customization Guide  
                                | - MainView for DB2 Getting Started  
                                | - MainView for DB2 Performance Reporter User Guide  
                                | - MainView for DB2 User Guide  
                                | - System and SQL Performance for DB2 Administrator Guide  
                                | - System and SQL Performance for DB2 Customization Guide |
| OPERTUNE for DB2                | - OPERTUNE for DB2 Reference Manual  
                                | - OPERTUNE for DB2 Reference Summary  
                                | - System and SQL Performance for DB2 Installation Guide |
| PACLOG for DB2                  | - Backup and Recovery Products for DB2 Installation Guide  
                                | - Backup and Recovery Products for DB2 Messages Manual  
                                | - PACLOG for DB2 Reference Manual |
| Pool Advisor for DB2            | - Pool Advisor for DB2 User Guide  
                                | - BMC Common Components Messages Manual  
                                | - BMC Runtime Component System Configuration and Administration Guide  
                                | - System and SQL Performance for DB2 Installation Guide  
                                | - System and SQL Performance for DB2 Administrator Guide |
| R+/CHANGE ACCUM for DB2         | - Backup and Recovery Products for DB2 Installation Guide  
                                | - Backup and Recovery Products for DB2 Messages Manual  
                                | - R+/CHANGE ACCUM for DB2 User Guide |
Table 62  Documentation for BMC solutions, products, and technologies (part 4 of 5)

<table>
<thead>
<tr>
<th>Solution, product, or technology</th>
<th>Documents</th>
</tr>
</thead>
</table>
| Recovery Management for DB2      | - Backup and Recovery Products for DB2 Messages Manual  
- COPY PLUS for DB2 Reference Manual  
- EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE User Guide  
- Log Master for DB2 User Guide  
- Log Master for DB2 Reference Manual  
- RECOVER PLUS for DB2 Reference Manual  
- Recovery Management for DB2 Installation Guide  
- Recovery Management for DB2 User Guide  
- RECOVERY MANAGER for DB2 User Guide |
| RECOVER PLUS for DB2              | - Backup and Recovery Products for DB2 Installation Guide  
- Backup and Recovery Products for DB2 Messages Manual  
- RECOVER PLUS for DB2 Reference Manual |
| RECOVERY MANAGER for DB2          | - Backup and Recovery Products for DB2 Installation Guide  
- Backup and Recovery Products for DB2 Messages Manual  
- RECOVERY MANAGER for DB2 User Guide |
| REORG PLUS for DB2                | - REORG PLUS for DB2 Reference Manual  
- Utility Products for DB2 Installation Guide  
- Utility Products for DB2 Messages Manual |
| SNAPSHOT UPGRADE FEATURE for DB2  | - EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE Installation Guide  
- EXTENDED BUFFER MANAGER and SNAPSHOT UPGRADE FEATURE User Guide |
| SQL Performance for DB2           | - APPTUNE for DB2 User Guide  
- BMC Common Components Messages Manual  
- BMC Runtime Component System Configuration and Administration Guide  
- SQL Explorer for DB2 User Guide  
- SQL Performance for DB2 User Guide  
- System and SQL Performance for DB2 Administrator Guide  
- System and SQL Performance for DB2 Installation Guide |
| SQL Explorer for DB2              | - BMC Common Components Messages Manual  
- SQL Explorer for DB2 User Guide  
- System and SQL Performance for DB2 Administrator Guide  
- System and SQL Performance for DB2 Installation Guide |
Table 62  Documentation for BMC solutions, products, and technologies (part 5 of 5)

<table>
<thead>
<tr>
<th>Solution, product, or technology</th>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Performance for DB2</td>
<td>• Administrative Products for DB2 Installation Guide</td>
</tr>
<tr>
<td></td>
<td>• Administrative Products for DB2 Messages Manual</td>
</tr>
<tr>
<td></td>
<td>• BMC Common Components Messages Manual</td>
</tr>
<tr>
<td></td>
<td>• BMC Runtime Component System Configuration and Administration Guide</td>
</tr>
<tr>
<td></td>
<td>• CATALOG MANAGER for DB2 User Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Administration Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Alarm Management Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Alternate Access Implementation and User Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Best Practices: Installation, Implementation, and Maintenance</td>
</tr>
<tr>
<td></td>
<td>• MainView Common Customization Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Installation Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Security Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView Security Reference Manual</td>
</tr>
<tr>
<td></td>
<td>• MainView User Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView for DB2 Getting Started</td>
</tr>
<tr>
<td></td>
<td>• MainView for DB2 User Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView for DB2 Performance Reporter User Guide</td>
</tr>
<tr>
<td></td>
<td>• MainView for DB2 Customization Guide</td>
</tr>
<tr>
<td></td>
<td>• OPERTUNE for DB2 Reference Manual</td>
</tr>
<tr>
<td></td>
<td>• OPERTUNE for DB2 Reference Summary</td>
</tr>
<tr>
<td></td>
<td>• Pool Advisor for DB2 User Guide</td>
</tr>
<tr>
<td></td>
<td>• System Performance for DB2 User Guide</td>
</tr>
<tr>
<td></td>
<td>• System and SQL Performance for DB2 Administrator Guide</td>
</tr>
<tr>
<td></td>
<td>• System and SQL Performance for DB2 Installation Guide</td>
</tr>
<tr>
<td>UNLOAD PLUS for DB2</td>
<td>• UNLOAD PLUS for DB2 Reference Manual</td>
</tr>
<tr>
<td></td>
<td>• Utility Products for DB2 Installation Guide</td>
</tr>
<tr>
<td></td>
<td>• Utility Products for DB2 Messages Manual</td>
</tr>
</tbody>
</table>
Index

A

ACS. See Common SQL
Administrative Assistant for DB2
components 28
description 28
full documentation listing 151
installation documentation map 31
maintenance 28
relationship of components 30
AIN. See Install Execution Code
ALTER for DB2
as a component of Administrative Assistant for DB2 28
components 61
description 61
full documentation listing 151
installation documentation map 63
maintenance 61
relationship with components 62
APPTUNE for DB2
as a component of SQL Performance for DB2 46
components 64
description 64
full documentation listing 151
installation documentation map 66
maintenance 64
relationship with components 65
ASARxxx
as a component of Administrative Assistant for DB2 29
as a component of ALTER for DB2 61
as a component of APPTUNE for DB2 64
as a component of BMCDSN 68
as a component of CATALOG MANAGER for DB2 71
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of COPY PLUS for DB2 80
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Administration for DB2 33, 51
as a component of Database Performance for DB2 37
as a component of High-speed Apply Engine 142
as a component of LOADPLUS for DB2 88
as a component of Log Master for DB2 91
as a component of MainView for DB2 95
as a component of OPERTUNE for DB2 98
as a component of PACLOG for DB2 101
as a component of Pool Advisor for DB2 104
as a component of R+/CHANGE ACCUM for DB2 108
as a component of RECOVER PLUS for DB2 111
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER for DB2 114
as a component of REORG PLUS for DB2 117
as a component of SQL Explorer for DB2 123
as a component of SQL Performance for DB2 46
as a component of SUF for DB2 121
as a component of UNLOAD PLUS for DB2 126
as a component of XBM for DB2 86
for SAS Runtime Library Support (resident) 148
ASH. See BMC Space Estimation Common Code
ATS. See BMC Common Statistics

B

BBAAAxx
as a component of MainView for DB2 94
BBACMxx
as a component of MainView for DB2 94
BBAPWxx
as a component of Administrative Assistant for DB2 28
as a component of ALTER for DB2 61
as a component of APPTUNE for DB2 64
as a component of CATALOG MANAGER for DB2 71
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of COPY PLUS for DB2 80
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of High-speed Apply Engine 142
as a component of LOADPLUS for DB2 88
as a component of Log Master for DB2 91
as a component of MainView for DB2 95
as a component of OPERTUNE for DB2 98
as a component of PACLOG for DB2 101
BBAPWxx (continued)
  as a component of Pool Advisor for DB2 104
  as a component of R+/CHANGE ACCUM for DB2 108
  as a component of RECOVER PLUS for DB2 111
  as a component of Recovery Management for DB2 41
  as a component of RECOVERY MANAGER for DB2 114
  as a component of REORG PLUS for DB2 117
  as a component of SQL Explorer for DB2 123
  as a component of SQL Performance for DB2 46
  as a component of SUF for DB2 121
  as a component of System Performance for DB2 51
  as a component of UNLOAD PLUS for DB2 126
  as a component of XBM for DB2 86
for BMC Password Security System 133
BBASCxx
  as a component of Administrative Assistant for DB2 29
  as a component of ALTER for DB2 61
  as a component of CATALOG MANAGER for DB2 71
  as a component of CHANGE MANAGER for DB2 74
  as a component of DASD MANAGER PLUS for DB2 83
  as a component of Database Administration for DB2 33
  as a component of Database Performance for DB2 37
  as a component of LOADPLUS for DB2 88
  as a component of MainView for DB2 95
  as a component of REORG for DB2 117
  as a component of System Performance for DB2 51
for SAS Runtime Library Support (transient) 148
BBBBPxx
  as a component of PACLOG for DB2 101
for BMC Primary Subsystem 133
BBBBXxx
  as a component of MainView for DB2 94
BBBCSxx
  as a component of PACLOG for DB2 101
for BMC Subsystem 133
BBDDBxx
  as a component of MainView for DB2 95
BBDDPxx
  as a component of MainView for DB2 95
BBDDSxx
  as a component of MainView for DB2 95
BBDDZxx 95
BBGDAdxx
  as a component of MainView for DB2 95
BBFSSxx
  as a component of MainView for DB2 94
BBFSSxx
  as a component of MainView for DB2 94
BBFSSxx
  as a component of MainView for DB2 94
BBLBQxx
  as a component of MainView for DB2 94
BBOIMxx
  as a component of MainView for DB2 95
BBOIxxx
  as a component of MainView for DB2 95
BBTTCxx
  as a component of MainView for DB2 95
BBYXMxx
  as a component of Database Administration for DB2 33
  as a component of Database Performance for DB2 37
  as a component of LOADPLUS 88
  as a component of REORG PLUS 117
description 133
maintenance 133
BMC Common Statistics
  as a component of DASD MANAGER PLUS 83
  as a component of Database Administration for DB2 33
  as a component of Database Performance for DB2 37
  as a component of LOADPLUS 88
for BMC Password Security System
  as a component of Database Administration for DB2 33
for Cross-System Image Manager 137
BBYZZxx
  as a component of MainView for DB2 95
BMC Password Security System
  as a component of Administrative Assistant for DB2 28
  as a component of ALTER 61
  as a component of APPTUNE 64
  as a component of CATALOG MANAGER 71
  as a component of CHANGE MANAGER 74
  as a component of CHECK PLUS 77
  as a component of COPY PLUS 80
  as a component of DASD MANAGER PLUS 83
  as a component of Database Administration for DB2 33
  as a component of Database Performance for DB2 37
  as a component of EXTENDED BUFFER MANAGER 86
  as a component of LOADPLUS 88
  as a component of Log Master 91
  as a component of OPERTUNE 98
  as a component of PACLOG 101
  as a component of Pool Advisor 104
  as a component of R+/CHANGE ACCUM 108
  as a component of RECOVER PLUS 111
  as a component of Recovery Management for DB2 41
  as a component of RECOVERY MANAGER 114
  as a component of REORG PLUS 117
  as a component of SNAPSHOT UPGRADE FEATURE 121
  as a component of SQL Explorer 123
  as a component of SQL Performance for DB2 46
  as a component of System Performance for DB2 51
  as a component of UNLOAD PLUS 126
  description 133
  maintenance 133
BMC Primary Subsystem
- as a component of PACLOG 101
  description 133
  maintenance 133

BMC Software, contacting 2

BMC Space Estimation Common Code
- as a component of Administrative Assistant for DB2 28
- as a component of ALTER 61
- as a component of CATALOG MANAGER 71
- as a component of CHANGE MANAGER 74
- as a component of DASD MANAGER PLUS 83
- as a component of Database Administration for DB2 33
  description 134
  maintenance 134

BMC Subsystem
- as a component of PACLOG 101
  description 133
  maintenance 133

BMCDSN
- description 68
  full documentation listing 151
  installation documentation map 69
  maintenance 68
  relationship with components 69

BMCSORT
- as a component of Administrative Assistant for DB2 28
  as a component of ALTER 61
  as a component of CATALOG MANAGER 71
  as a component of CHANGE MANAGER 74
  as a component of Database Administration for DB2 33
  as a component of Database Performance for DB2 37
  as a component of System Performance for DB2 51
  description 134
  maintenance 134

C

CATALOG MANAGER for DB2
- as a component of Administrative Assistant for DB2 28
  as a component of Database Administration for DB2 33, 51

CHECK PLUS for DB2
- components 77
- description 77
- full documentation listing 152
- installation documentation map 78
- maintenance 77
- relationship with components 78

Common Explain
- as a component of APPTUNE 64
  as a component of SQL Explorer 123
- as a component of SQL Performance for DB2 46, 51
  description 136
  maintenance 136

Common Infrastructure
- as a component of APPTUNE 64
  as a component of Pool Advisor 104
- as a component of SQL Performance for DB2 46
  as a component of System Performance for DB2 51
  description 136
  maintenance 136

Common SQL
- as a component of Administrative Assistant for DB2 28
  as a component of ALTER 61
- as a component of CATALOG MANAGER 71
  as a component of CHANGE MANAGER 74
- as a component of DASD MANAGER PLUS 83
- as a component of Database Administration for DB2 33
  as a component of Database Performance for DB2 37
  as a component of System Performance for DB2 51
  description 137
  maintenance 137

COPY PLUS for DB2
- as a component of Database Administration for DB2 33
  as a component of Recovery Management for DB2 41
  components 80
  description 80
  full documentation listing 152
  installation documentation map 81
COPY PLUS for DB2 (continued)
maintenance 80
relationship with components 81
Cross-System Image Manager (XIM)
as a component of Database Administration for DB2 33
description
full documentation listing 152
maintenance 137
Custom installation method 24
customer support 3

D
D2U. See DB2 Utilities Common Code
DASD MANAGER PLUS for DB2
as a component of Database Performance for DB2 37
components 83
description 83
full documentation listing 152
installation documentation map 84
maintenance 83
relationship with components 84
DATA ACCELERATOR Compression
as a component of PACLOG 101
description 138
full documentation listing 152
maintenance 138
Database Administration for DB2
components 33
description 32
full documentation listing 152
installation documentation map 35
maintenance 33
relationship of components 34
Database Performance for DB2
components 37
description 36
full documentation listing 152
installation documentation map 39
maintenance 37
relationship of components 38
DB2 Assist Services
as a component of APPTUNE 64
as a component of Pool Advisor 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
description 138
maintenance 138
DB2 Component Services
as a component of APPTUNE 64
as a component of Pool Advisor 104
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER 114
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
description 138
maintenance 138
DB2 Product Configuration
as a component of APPTUNE 64
as a component of Pool Advisor 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
description 139
maintenance 139, 140
DB2 Solution Common Code (SCC)
as a component of Administrative Assistant for DB2 28
as a component of ALTER 61
as a component of APPTUNE 64
as a component of CATALOG MANAGER 71
as a component of CHANGE MANAGER 74
as a component of CHECK PLUS 77
as a component of COPY PLUS 80
as a component of DASD MANAGER PLUS 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of LOADPLUS 88
as a component of Log Master 91
as a component of Pool Advisor 104
as a component of R+/CHANGE ACCUM 108
as a component of RECOVER PLUS 111
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER 114
as a component of REORG PLUS 117
as a component of SQL Explorer 123
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
as a component of UNLOAD PLUS 126
description 140
maintenance 141
DB2 Utilities Common Code
as a component of Administrative Assistant for DB2 28
as a component of ALTER 61
as a component of CHANGE MANAGER 74
as a component of CHECK PLUS 77
as a component of DASD MANAGER PLUS 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of LOADPLUS 88
as a component of REORG PLUS 117
as a component of UNLOAD PLUS 126
description 141
maintenance 141
DBC. See DB2 Component Services
DHS. See Mainframe Host Services
Dignus C Runtimes and C++ Objects
as a component of Administrative Assistant for DB2 29
as a component of ALTER 61
as a component of APPTUNE 64
Dignus C Runtimes and C++ Objects (continued)
   as a component of CATALOG MANAGER 71
   as a component of CHANGE MANAGER 74
   as a component of CHECK PLUS 77
   as a component of COPY PLUS 80
   as a component of DASD MANAGER PLUS 83
   as a component of Database Administration for DB2 83
   as a component of Database Performance for DB2 37
   as a component of LOADPLUS 88
   as a component of Log Master 91
   as a component of R+/CHANGE ACCUM 108
   as a component of RECOVER PLUS 111
   as a component of Recovery Management for DB2 41
   as a component of RECOVERY MANAGER 114
   as a component of SQL Explorer 123
   as a component of SQL Performance for DB2 46
   as a component of System Performance for DB2 51
   as a component of UNLOAD PLUS 126
   description 142
   maintenance 142
documentation listing 151

E
Express installation method 23
EXTENDED BUFFER MANAGER for DB2
   components 86
   description 86
   full documentation listing 152
   installation documentation map 87
   maintenance 86
   relationship with components 87

F
FMID
   ASARxxx 29, 33, 37, 41, 46, 51, 61, 64, 68, 71, 74, 77, 80, 83, 86, 88, 91, 95, 98, 101, 104, 108, 111, 114, 117, 121, 123, 126, 142, 148
   BBAAxx 94
   BBACMxx 94
   BBAPWxx 28, 33, 37, 41, 46, 51, 61, 64, 71, 74, 77, 80, 83, 86, 88, 91, 95, 98, 101, 104, 108, 111, 114, 117, 121, 123, 126, 133, 142
   BBASCxx 29, 33, 37, 51, 61, 71, 74, 83, 88, 95, 117, 148
   BBBBPxx 101, 133
   BBBBxx 94
   BBBCSxx 101, 133
   BBDDBxx 95
   BBDDPxx 95
   BBDDSxx 95
   BBDDxxx 95
   BBDDZxx 95
   BBDGxx 94
   BBIIxx 94
   BBISxx 94
   BBBLQxx 94
   BBOMxx 95
   BBQxxx 95
   BBUXxx 95
   BBYXXXX 33, 137
   BBDZxx 95
   BYZxx 95
   LOSZxx 46, 51, 64, 95, 104, 147
   LSCRxx 95
   ZABxxx 68
   ZACKxx 77
   ZACMxx 28, 33, 61, 74
   ZACPxx 33, 41, 80
   ZACSxx 28, 33, 37, 51, 61, 71, 74, 83, 95, 137
   ZACTxx 28, 33, 51, 71, 95
   ZADUxxx 29, 33, 61, 74, 126
   ZAEUXXX 145
   ZAEUxx 29, 33, 37, 51, 61, 71, 74, 83, 95
   ZAFRxxx 29, 33, 41, 61, 74, 108, 111
   ZAINxx 29, 33, 37, 41, 46, 51, 61, 64, 68, 71, 74, 77, 80, 83, 88, 91, 95, 101, 104, 108, 111, 114, 117, 123, 126, 142, 144
   ZALMxxx 101
   ZALPxx 41, 91
   ZAMUxx 33, 88
   ZAPTxx 33, 41, 88, 91, 143
   ZARMxxx 41, 114
   ZARUxxx 37, 117
   ZASHxx 28, 33, 37, 51, 61, 71, 74, 83, 95, 134
   ZASUxxx 37, 83
   ZATSxx 33, 37, 83, 117
   ZAUPxxx 28, 33, 37, 41, 61, 74, 77, 88, 91, 111, 117, 126, 135, 142
   ZBDDxxx 51, 95
   ZD2XX 28, 33, 37, 61, 74, 83, 88, 117, 126, 141
   ZDAXXX 46, 51, 64, 95, 104, 138
   ZDBCxx 41, 46, 51, 64, 104, 114, 139
   ZDC2xxx 138
   ZDCxxx 101
   ZDDTXX 51, 98
   ZDHSxxx 37, 145
   ZDIGxxx 29, 33, 37, 41, 46, 51, 61, 64, 71, 74, 77, 80, 83, 88, 91, 95, 104, 108, 111, 114, 117, 123, 126, 142
   ZDOMxxx 46, 51, 64, 95, 104, 136
   ZIODxxx 46, 64
   ZLGxxx 46, 51, 64, 104, 140
   ZMRELxxx 147, 148
   ZMRxxx 46, 51, 64
   ZNLxxx 46, 51, 64, 104, 145
   ZOSZxxx 46, 51, 64, 95, 104, 147
   ZPMDxx 51, 104
   ZPSExxx 46, 123
   ZPSSxx 46, 51, 64, 95, 123, 136
### FMID (continued)

<table>
<thead>
<tr>
<th>FMID</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZSCCxxx</td>
<td>28, 33, 37, 41, 46, 51, 61, 64, 71, 74, 77, 80, 83, 88, 91, 95, 104, 108, 111, 114, 117, 123, 126, 141, 142</td>
</tr>
<tr>
<td>ZSMFxxx</td>
<td>37, 145</td>
</tr>
<tr>
<td>ZSPDxxx</td>
<td>51</td>
</tr>
<tr>
<td>ZUIMxxx</td>
<td>37, 149</td>
</tr>
<tr>
<td>ZUSCxxx</td>
<td>41, 46, 51, 64, 91, 104, 114, 149</td>
</tr>
<tr>
<td>ZXBMxxx</td>
<td>33, 37, 41, 86, 121</td>
</tr>
<tr>
<td>ZZIOxxx</td>
<td>29, 33, 37, 41, 51, 61, 71, 74, 77, 80, 83, 88, 91, 95, 108, 111, 114, 117, 126, 142, 146</td>
</tr>
</tbody>
</table>

### H

**High-speed Apply Engine**
- as a component of Database Administration for DB2 33
- as a component of LOADPLUS 88
- as a component of Log Master 91
- as a component of Recovery Management for DB2 41
  - description 142
  - full documentation listing 153
  - maintenance 142, 143

### I

**Install Execution Code (AIN)**
- as a component of Administrative Assistant for DB2 29
- as a component of ALTER 61
- as a component of APPTUNE 64
- as a component of BMCDSN 68
- as a component of CATALOG MANAGER 71
- as a component of CHANGE MANAGER 74
- as a component of CHECK PLUS 77
- as a component of COPY PLUS 80
- as a component of DASD MANAGER PLUS 83
- as a component of Database Administration for DB2 33
- as a component of Database Performance for DB2 37
- as a component of LOADPLUS 88
- as a component of Log Master 91
- as a component of PACLOG 101
- as a component of Pool Advisor 104
- as a component of R+/CHANGE ACCUM 108
- as a component of RECOVER PLUS 111
- as a component of Recovery Management for DB2 41
- as a component of RECOVERY MANAGER 114
- as a component of REORG PLUS 117
- as a component of SQL Explorer 123
- as a component of SQL Performance for DB2 46
- as a component of System Performance for DB2 51
- as a component of UNLOAD PLUS 126
  - description 143
  - maintenance 144

### J

**JCL Generation and Execution**
- as a component of Administrative Assistant for DB2 29
- as a component of ALTER 61
- as a component of CATALOG MANAGER 71
- as a component of CHANGE MANAGER 74
- as a component of DASD MANAGER PLUS 83
- as a component of Database Administration for DB2 33, 51
- as a component of Database Performance for DB2 37
  - description 144
  - maintenance 145

### L

**LOADPLUS for DB2**
- as a component of Database Administration for DB2 33
- components 88
- description 88
- full documentation listing 153
- installation documentation map 89
- maintenance 88
- relationship with components 89

**Log Master for DB2**
- as a component of Recovery Management for DB2 41
- components 91
- description 91
- full documentation listing 153
- installation documentation map 92
- maintenance 91
- relationship with components 92

**LOSZxxx**
- as a component of APPTUNE 64
- as a component of MainView for DB2 95
- as a component of Pool Advisor for DB2 104
- as a component of SQL Performance for DB2 46
- as a component of System Performance for DB2 51
- for Runtime Component System 147

**LSCRxxI**
- as a component of MainView for DB2 95

### M

**Mainframe Host Services (DHS)**
- as a component of Database Administration for DB2 37
  - description 145
  - maintenance 145
maintenance methods 24
PTFs 24

MainView for DB2
as a component of System Performance for DB2 51
components 94
description 94
full documentation listing 153
installation documentation map 96
maintenance 94

N
Next Generation Logger (NGL)
as a component of APPTUNE 64
as a component of Pool Advisor 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
description 145
maintenance 145

O
OPERTUNE for DB2
as a component of System Performance for DB2 51
components 98
description 98
full documentation listing 153
installation documentation map 99
maintenance 98
relationship with components 98

Option Value Migration
as a component of Administrative Assistant for DB2 29
as a component of ALTER 61
as a component of CATALOG MANAGER 71
as a component of CHANGE MANAGER 74
as a component of CHECK PLUS 77
as a component of COPY PLUS 80
as a component of DASD MANAGER PLUS 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of LOADPLUS 88
as a component of Log Master 91
as a component of R+/CHANGE ACCUM 108
as a component of RECOVER PLUS 111
as a component of Recovery Management for DB2 41, 51
as a component of RECOVERY MANAGER 114
as a component of REORG PLUS 117
as a component of UNLOAD PLUS 126
description 146
maintenance 146

P
PACLOG for DB2
components 101
description 101
full documentation listing 153
installation documentation map 102
maintenance 101
relationship with components 102

Policy Rules Engine
maintenance 147, 148

Pool Advisor for DB2
as a component of System Performance for DB2 51
components 104
description 104
full documentation listing 153
installation documentation map 105
maintenance 104
relationship with components 105
product changes 11
product component, definition 22
product support 3
product, definition 22
products
ALTER for DB2 61
APPTUNE for DB2 64
BMCDSN 68
CATALOG MANAGER for DB2 71
CHANGE MANAGER for DB2 74
COPY PLUS for DB2 80
DASD MANAGER PLUS for DB2 83
EXTENDED BUFFER MANAGER for DB2 86
Log Master for DB2 91
MainView for DB2 94
OPERTUNE for DB2 98
PACLOG for DB2 101
Pool Advisor for DB2 104
R+/CHANGE ACCUM for DB2 108
RECOVER PLUS for DB2 111
RECOVERY MANAGER for DB2 114
REORG PLUS for DB2 117
SNAPSHOT UPGRADE FEATURE for DB2 120
SQL Explorer for DB2 123
table listing technology components 59
UNLOAD PLUS for DB2 126

PTFs 24
publications, related 151

R
R+/CHANGE ACCUM for DB2
as a component of Recovery Management for DB2 41
components 108
description 108
full documentation listing 153
installation documentation map 110
S

SAS Runtime Library Support
as a component of Administrative Assistant for DB2 29
as a component of ALTER 61
as a component of APPTUNE 64
as a component of BMCDSN 68
as a component of CATALOG MANAGER 71
as a component of CHANGE MANAGER 74
as a component of CHECK PLUS 77
as a component of COPY PLUS 80
as a component of DASD MANAGER PLUS 83
as a component of Database Administration for DB2 33, 51
as a component of Database Performance for DB2 37
as a component of EXTENDED BUFFER MANAGER 86
as a component of LOADPLUS 88
as a component of Log Master 91
as a component of OPERTUNE 98
as a component of PACLOG 101
as a component of Pool Advisor 104
as a component of R+/CHANGE ACCUM 108
as a component of RECOVER PLUS 111
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER 114
as a component of RECOVERY MANAGER for DB2 41
as a component of SQL Explorer 123
as a component of SQL Performance for DB2 46
as a component of UNLOAD PLUS 126
description 148
maintenance 148

SCC. See DB2 Solution Common Code

shared component, definition 22

SNAPSHOT UPGRADE FEATURE for DB2
as a component of Database Administration for DB2 33
description 120
full documentation listing 154
installation documentation map 122
maintenance 121
relationship with components 121

SNAPSHOT UPGRADE FEATURE for DB2 (SUF)
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of Recovery Management for DB2 41

description, definition 23

solutions
Administrative Assistant for DB2 28
Database Administration for DB2 32
Database Performance for DB2 36
listing of components 27
Recovery Management for DB2 40

---

R+/CHANGE ACCUM for DB2 (continued)
maintenance 108
relationship with components 109

RECOVER PLUS for DB2
as a component of Administrative Assistant for DB2 29
as a component of ALTER 61
as a component of CHANGE MANAGER 74
as a component of Database Administration for DB2 33
as a component of Recovery Management for DB2 41
components 111
description 111
full documentation listing 154
installation documentation map 113
maintenance 111
relationship with components 112

Recovery Management for DB2
components 41
description 40
full documentation listing 154
installation documentation map 43
maintenance 41
relationship of components 42

RECOVERY MANAGER for DB2
as a component of Recovery Management for DB2 41
components 114
description 114
full documentation listing 154
installation documentation map 115
maintenance 114
relationship with components 115

related publications 151

RELFILEs (relative files) 24

REORG PLUS for DB2
as a component of Database Performance for DB2 37
components 117
description 117
full documentation listing 154
installation documentation map 118
maintenance 117
relationship with components 118

RTCS. See Runtime Component System

Rules Engine
as a component of APPTUNE 64
as a component of SQL Explorer 123
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
description 147, 148

Runtime Component System (RTCS)
as a component of APPTUNE 64
as a component of Pool Advisor 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
description 147
maintenance 147
solutions (continued)
SQL Performance for DB2 45
System Performance for DB2 50
SQL Explorer for DB2
as a component of SQL Performance for DB2 46
components 123
description 123
full documentation listing 154
installation documentation map 124
maintenance 123
relationship with components 124
SQL Performance for DB2
components 46
description 45
full documentation listing 154
installation documentation map 47
maintenance 46
relationship of components 47
SUF. See SNAPSHOT UPGRADE FEATURE for DB2
summary of changes 11
support, customer 3
System Performance component
as a component of System Performance 51
System Performance for DB2
components 50
description 50
full documentation listing 155
installation documentation map 53
maintenance 50
relationship of components 52
T
technical support 3
technology component, definition 23
technology components
BMC Common Statistics 133
BMC Password Security System 133
BMC Primary Subsystem 133
BMC Space Estimation Common Code 134
BMC Subsystem 133
BMCSORT 134
Common Explain 136
Common Infrastructure 136
Common SQL 137
Cross-System Image Manager 137
DATA ACCELERATOR Compression 138
DB2 Assist Services 138
DB2 Component Services 138
DB2 Product Configuration 139
DB2 Solution Common Code
DB2 Utilities Common Code
Dignus C Runtimes and C++ Objects 142
High-speed Apply Engine 142
Install Execution Code 143
JCL Generation and Execution 144
Mainframe Host Services 145
Next Generation Logger (NGL) 145
Option Value Migration 146
Rules Engine 147, 148
Runtime Component System (RTCS) 147
SAS Runtime Library Support 148
table listing with products and solutions 131
table listing with their products 59
User Interface Middleware Common Services (USC)
User Interface Middleware Server
technology, definition 23
U
UIM. See User Interface Middleware Server
UNLOAD PLUS for DB2
as a component of Administrative Assistant for DB2 29
as a component of ALTER 61
as a component of CHANGE MANAGER 74
as a component of Database Administration for DB2 33
components 126
description 126
full documentation listing 155
installation documentation map 128
maintenance 126
relationship with components 127
USC. See User Interface Middleware Common Services
User Interface Middleware Common Services (USC)
as a component of APPTUNE 64
as a component of Log Master 91
as a component of Pool Advisor 104
as a component of Recovery Management 41
as a component of RECOVERY MANAGER 114
as a component of SQL Performance 46
as a component of System Performance 51
description 148
maintenance 149
User Interface Middleware Server (UIM)
as a component of Database Performance for DB2 37
description 149
maintenance 149
X
XBM. See EXTENDED BUFFER MANAGER for DB2
XIM. See Cross-System Image Manager
Z
ZABUxxx
as a component of BMCDSN 68
ZACKxxx
as a component of CHECK PLUS for DB2 77
ZACMxxx
   as a component of Administrative Assistant for DB2 28
   as a component of ALTER for DB2 61
   as a component of CHANGE MANAGER for DB2 74
   as a component of Database Administration for DB2 33

ZACPxxx
   as a component of COPY PLUS for DB2 80
   as a component of Database Administration for DB2 33
   as a component of Recovery Management for DB2 41

ZACSxxx
   as a component of Administrative Assistant for DB2 28
   as a component of ALTER for DB2 61
   as a component of CATALOG MANAGER for DB2 71
   as a component of CHANGE MANAGER for DB2 74
   as a component of DASD MANAGER PLUS for DB2 83
   as a component of Database Administration for DB2 33
   as a component of Database Performance for DB2 37
   as a component of MainView for DB2 95
   for Common SQL 137

ZACTxxx
   as a component of Administrative Assistant for DB2 28
   as a component of CATALOG MANAGER for DB2 71
   as a component of Database Administration for DB2 33
   as a component of MainView for DB2 95
   as a component of System Performance for DB2 51

ZADUxxx
   as a component of Administrative Assistant for DB2 29
   as a component of ALTER for DB2 61
   as a component of CHANGE MANAGER for DB2 74
   as a component of Database Administration for DB2 33
   as a component of UNLOAD PLUS for DB2 126

ZAEWTxxx
   as a component of Database Administration for DB2 33
   as a component of LOADPLUS for DB2 88

ZAEWxxx
   as a component of Administrative Assistant for DB2 29
   as a component of ALTER for DB2 61
   as a component of CATALOG MANAGER for DB2 71
   as a component of CHANGE MANAGER for DB2 74
   as a component of DASD MANAGER PLUS for DB2 83
   as a component of Database Administration for DB2 33
   as a component of Database Performance for DB2 37
   as a component of MainView for DB2 95
   as a component of System Performance for DB2 51

ZAFRxxx
   as a component of Administrative Assistant for DB2 29
   as a component of ALTER for DB2 61
   as a component of CHANGE MANAGER for DB2 74
   as a component of Database Administration for DB2 33
   as a component of R+/CHANGE ACCUM for DB2 108
   as a component of RECOVER PLUS for DB2 111
   as a component of Recovery Management for DB2 41

ZAINxxx
   as a component of Administrative Assistant for DB2 29
   as a component of ALTER for DB2 61
   as a component of APPTUNE for DB2 64
   as a component of BMCDSN 68
   as a component of DATABASE MANAGER for DB2 70
   as a component of CHANGE MANAGER for DB2 74
   as a component of CHECK PLUS for DB2 77
   as a component of COPY PLUS for DB2 80
   as a component of DASD MANAGER PLUS for DB2 83
   as a component of Database Administration for DB2 33
   as a component of Database Performance for DB2 37
   as a component of High-speed Apply Engine 142
   as a component of LOADPLUS for DB2 88
   as a component of Log Master for DB2 91
   as a component of MainView for DB2 95
   as a component of PACLOG for DB2 101
   as a component of Pool Advisor for DB2 104
   as a component of R+/CHANGE ACCUM for DB2 108
   as a component of RECOVER PLUS for DB2 111
   as a component of Recovery Management for DB2 41
   as a component of RECOVERY MANAGER for DB2 114
   as a component of REORG PLUS for DB2 117
   as a component of SQL Explorer for DB2 123
   as a component of SQL Performance for DB2 46
   as a component of System Performance for DB2 51
   as a component of UNLOAD PLUS for DB2 126
   for Install Execution Code 144

ZALMxxx
   as a component of PACLOG for DB2 101

ZALPxxx
   as a component of Log Master for DB2 91
   as a component of Recovery Management for DB2 41

ZAMUxxx
   as a component of Database Administration for DB2 33
   as a component of LOADPLUS for DB2 88

ZAPT
   as a component of LOADPLUS for DB2 88
ZAPTxxx
as a component of Database Administration for DB2
33
as a component of Log Master for DB2 91
as a component of Recovery Management for DB2 41
for High-speed Apply Engine 143
ZARMxxx 114
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER for DB2 114
ZARUxxx 117
as a component of Database Performance for DB2 37
as a component of REORG PLUS for DB2 117
ZASHxxx
as a component of Administrative Assistant for DB2 28
as a component of ALTER for DB2 61, 71, 74, 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of MainView for DB2 95
as a component of System Performance 51
for BMC Space Estimation Common Code 134
ZASUxxx
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Performance for DB2 37
ZATSxxx
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of LOADPLUS for DB2 88
as a component of REORG PLUS for DB2 117
for BMC Common Statistics 133
ZAUPxxx
as a component of Administrative Assistant for DB2 28
as a component of ALTER for DB2 61
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of High-speed Apply Engine 142
as a component of LOADPLUS for DB2 88
as a component of Log Master for DB2 91
as a component of RECOVER PLUS for DB2 111
as a component of Recovery Management for DB2 41
as a component of REORG PLUS for DB2 117
as a component of UNLOAD PLUS for DB2 126
for BMCSORT 135
ZBD2xxx 95
as a component of MainView for DB2 95
as a component of System Performance for DB2 51
as a component for DASD MANAGER PLUS for DB2 83
as a component of Administrative Assistant for DB2 28
as a component of ALTER for DB2 61
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of LOADPLUS for DB2 88
as a component of Pool Advisor for DB2 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for DB2 Assist Services 138
ZBDCxxx
as a component of APPTUNE 64
as a component of Pool Advisor for DB2 104
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER for DB2 114
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for DB2 Component Services 139
ZDC2xxx
for DATA ACCELERATOR Compression 138
ZDCxxxx
as a component of PACLOG for DB2 101
ZDDTxxx
as a component of OPERTUNE for DB2 98
as a component of System Performance for DB2 51
ZDHSxxx
as a component of Database Performance for DB2 37
for Mainframe DNA Host Services 145
ZDIGxxx
as a component of Administrative Assistant for DB2 29
as a component of ALTER for DB2 61
as a component of APPTUNE for DB2 64
as a component of CATALOG MANAGER for DB2 71
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of COPY PLUS for DB2 80
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of High-speed Apply Engine 142
as a component of LOADPLUS for DB2 88
ZDIGxxx (continued)
as a component of Log Master for DB2 91
as a component of MainView for DB2 95
as a component of Pool Advisor for DB2 104
as a component of R+/CHANGE ACCUM for DB2 108
as a component of RECOVER PLUS for DB2 111
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER for DB2 114
as a component of REORG PLUS for DB2 117
as a component of SQL Explorer for DB2 123
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for Dignus C Runtimes and C++ Objects 142
ZDOMxxx
as a component of APPTUNE for DB2 64
as a component of MainView for DB2 95
as a component of Pool Advisor for DB2 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for Common Infrastructure 136
ZIODxxx
as a component of APPTUNE for DB2 64
as a component of SQL Performance for DB2 46
ZLGCxxx
as a component of APPTUNE 64
as a component of Pool Advisor for DB2 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for DB2 Product Configuration 140
ZMRELxxx
for Rules Engine 147, 148
ZMRExxx
as a component of APPTUNE 64
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
ZNLxxx
as a component of APPTUNE 64
as a component of Pool Advisor for DB2 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for Next Generation Logger 145
ZOSZxxx
as a component of APPTUNE 64
as a component of MainView for DB2 95
as a component of Pool Advisor for DB2 104
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for Runtime Component System 147
ZPMxxx
as a component of Pool Advisor for DB2 104
as a component of System Performance for DB2 51
ZPSExxx
as a component of SQL Explorer for DB2 123
as a component of SQL Performance for DB2 46
ZPSSxxx
as a component of APPTUNE for DB2 64
as a component of MainView for DB2 95
as a component of SQL Explorer for DB2 123
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
for Common Explain 136
ZSCCxxx
as a component of Administrative Assistant for DB2 28
as a component of ALTER for DB2 61
as a component of APPTUNE for DB2 64
as a component of CATALOG MANAGER for DB2 71
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of COPY PLUS for DB2 80
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Administration for DB2 33
as a component of Database Performance for DB2 37
as a component of High-speed Apply Engine 142
as a component of LOADPLUS for DB2 88
as a component of Log Master for DB2 91
as a component of MainView for DB2 95
as a component of Pool Advisor for DB2 104
as a component of R+/CHANGE ACCUM for DB2 108
as a component of RECOVER PLUS for DB2 111
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER for DB2 114
as a component of REORG PLUS for DB2 117
as a component of SQL Explorer for DB2 123
as a component of SQL Performance for DB2 46
as a component of System Performance for DB2 51
as a component of UNLOAD PLUS for DB2 126
for DB2 Solution Common Code 141
ZSMFxxx
as a component of Database Performance for DB2 37
for Mainframe DNA and console 145
ZSPDxxx
as a component of System Performance for DB2 51
ZUIMxxx
as a component of Database Performance for DB2 37
for User Interface Middleware Server 149
ZUSCxxx
as a component of APPTUNE 64
as a component of Log Master for DB2 91, 114
as a component of Pool Advisor for DB2 104
as a component of Recovery Management 41
as a component of SQL Performance 46
as a component of System Performance 51
for User Interface Middleware Common Services (USC) 149
ZXBMxxx
as a component of Database Administration for DB2
  33
as a component of Database Performance for DB2 37
as a component of Recovery Management for DB2 41
as a component of SUF for DB2 121
as a component of XBM for DB2 86

ZZIOxxx
as a component of Administrative Assistant for DB2
  29
as a component of ALTER for DB2 61
as a component of CATALOG MANAGER for DB2 71
as a component of CHANGE MANAGER for DB2 74
as a component of CHECK PLUS for DB2 77
as a component of COPY PLUS for DB2 80
as a component of DASD MANAGER PLUS for DB2 83
as a component of Database Administration for DB2
  33
as a component of Database Performance for DB2 37
as a component of High-speed Apply Engine 142
as a component of LOADPLUS for DB2 88
as a component of Log Master for DB2 91
as a component of MainView for DB2 95
as a component of R+/CHANGE ACCUM for DB2 108
as a component of RECOVER PLUS for DB2 111
as a component of Recovery Management for DB2 41
as a component of RECOVERY MANAGER for DB2 114
as a component of REORG PLUS for DB2 117
as a component of System Performance for DB2 51
as a component of UNLOAD PLUS for DB2 126
for Option Value Migration 146