Database Administration for DB2
Version 11.2.00
October 7, 2015

BMC originally issued these release notes on May 6, 2015. They are being reissued to include documentation of support for the PLANMGMT rebind option in the CHANGE MANAGER for DB2 product. Revision bars in these release notes denote differences from previous editions.

Database Administration for DB2 includes the following products:

- CATALOG MANAGER for DB2
- CHANGE MANAGER for DB2
- COPY PLUS for DB2
- LOADPLUS for DB2
- SNAPSHOT UPGRADE FEATURE of EXTENDED BUFFER MANAGER for DB2
- UNLOAD PLUS for DB2

Note
Before you begin installation, BMC recommends that you check the Support Central website at http://www.bmc.com/support for:

- Updated product documentation (for example, flashes and technical bulletins)
- Product downloads, patches, and fixes (PTFs)
- Product availability and compatibility data

These release notes supplement and supersede the product documentation and discuss product enhancements.

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**What's new in Database Administration for DB2 version 11.2.00**

These topics describe the changes or new features in this release.

**Solution components**

This version of the Database Administration solution includes new releases of the following components and technologies:
- CATALOG MANAGER for DB2
- CHANGE MANAGER for DB2
- COPY PLUS for DB2
- High-speed Apply Engine
- LOADPLUS for DB2
- SNAPSHOT UPGRADE FEATURE of EXTENDED BUFFER MANAGER (XBM) for DB2
- UNLOAD PLUS for DB2

The JCL Generation and Execution component has not changed since version 11.1 of the Database Administration solution. For a list of features and functions that were new in 10.1 of the JCL Generation and Execution component, see the release notes for 11.1 of Database Administration.

The Cross-system Image Manager (XIM) component, version 1.3.02, has not changed since version 3.2.00 of the Database Administration solution.

End of support for DB2 Version 9

Starting with this release, Database Administration for DB2 does not support IBM DB2 Version 9.

Starting with this release, Database Administration for DB2 supports the following versions of DB2:

- DB2 Version 11
- DB2 Version 10 new-function mode (NFM) only

BMC Documentation Center changes

The primary BMC Documentation Center is now available without a support login. This center offers:

- Documentation and Quick Courses for all products except Cost Optimization products
- Messages for all products, including Cost Optimization products
A new, secured Cost Optimization Documentation Center offers documentation and Quick Courses for the following products:

- BMC Application Accelerator for IMS
- BMC Cost Analyzer for zEnterprise (CAzE)
- BMC Intelligent Capping for zEnterprise (iCap)
- BMC Subsystem Optimizer for zEnterprise (Subzero)

*Note*

You must log in using your BMC Support ID to access the Cost Optimization Documentation Center.

To access the Documentation Centers, go to:

- BMC Documentation Center
- BMC Cost Optimization Documentation Center

**Documentation changes**

This release includes the following documentation changes:

- The name of the *BMC Global Infrastructure Administration Guide* has changed to *BMC Infrastructure Components Administration Guide*.

- The name of the *BMC Products and Solutions for DB2 Configuration Guide* has changed to *BMC Products and Solutions for DB2 Customization Guide*.

- In addition to the *Installation System Reference Manual*, BMC now provides the *Installation System Quick Start*, which enables you to quickly install the product with the Installation System.

**What's new in CATALOG MANAGER version 11.2.00**

Version 11.2.00 of the CATALOG MANAGER component includes the following changes.
DB2 Version 11 support

CATALOG MANAGER supports or tolerates various features of the IBM DB2 for z/OS subsystem.

CATALOG MANAGER now supports the following features of the IBM DB2 Version 11 system:

- Indexes that exclude NULL keys
- Autonomous procedure attribute for native stored procedures
- Ability to drop columns
- Support for archive-enabled tables
- Support for additional bind/rebind options
- Support for user-defined global variables
- Support for using the automatic mapping table with IBM REORG
- Support for the PCTFREE $nn$ FOR UPDATE $yy$ table space parameter

DB2 Version 10 support

CATALOG MANAGER now supports the scalar and table Stored Procedure Language (SPL) functions of DB2 Version 10.

DB2 Analytics Accelerator for z/OS support

This release adds support for the IBM DB2 Analytics Accelerator for z/OS product.

From CATALOG MANAGER, you can now list accelerated tables, accelerator tables, and accelerated packages. From a list of tables, you can add a table to an accelerator.

From a list of accelerator tables, you can directly access commands that enable you to:

- Modify an existing accelerator table
- Move data from selected DB2 partitions to an accelerator
- Copy data to an accelerator table
- View the statistics of an accelerator table
- Remove the data and table definition from an accelerator table
- Restore data from an accelerator table to DB2
- Enable or disable use of a table on the accelerator after it has been added and loaded
- Enable or disable incremental updates for a table on the accelerator after it has been added and loaded

For more information, view the Quick Course "CATALOG MANAGER for DB2 - Support for DB2 Analytics Accelerator for z/OS."

Repeated SQL error

This release limits the number of SQL error messages that are displayed for a specific command to three. Previously an unlimited number of messages were displayed.

SQL error messages will still be displayed for any erroneous commands that follow.

Batch BIND execution

This release lets you execute BIND, REBIND, or FREE commands in a batch job stream to generate the commands in batch. The command lets you specify wildcards in the name patterns for the objects to bind, rebind, or free.

You enter the commands into the batch job stream in the same way that you would type list commands into the batch job. For example, `BIND PG ACT112_D_MAIN.*` generates BIND PACKAGE commands for all packages in collection ACT112_D_MAIN.

The product writes the generated commands to the output data set, where you can save or execute them in a separate job step.

DML activity recorded in the Session Log

This release now records the execution of DML statements (DELETE, INSERT, SELECT, and DELETE) in the Session Log.
Special registers

This release supports the following additional special registers:

- CURRENT APPLICATION COMPATIBILITY
- CURRENT EXPLAIN MODE
- CURRENT GET_ACCEL_ARCHIVE
- CURRENT QUERY ACCELERATION
- CURRENT TIMESTAMP
- SESSION TIME ZONE
- CURRENT TEMPORAL SYSTEM TIME
- CURRENT TEMPORAL BUSINESS TIME

On the **COMMAND** line, enter **SEE** to display the special registers.

Improved search capabilities

This release supports search using object names that are longer than 18 bytes, and you can now execute a WHERE clause of up to 2 MB.

For more information, view the Quick Course "CATALOG MANAGER for DB2 - New and improved Search support."

New CATALOG MANAGER commands

CATALOG MANAGER now includes the following new commands:

<table>
<thead>
<tr>
<th>New command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IXC</td>
<td>Lists the time windows that specify index cleanup processing from the SYSIBM.SYSINDEXCLEANUP table</td>
</tr>
<tr>
<td>VAR</td>
<td>Lists global system variables</td>
</tr>
<tr>
<td>ACC</td>
<td>Lists all accelerators defined on the system</td>
</tr>
<tr>
<td>ACCPG</td>
<td>Lists all accelerated packages</td>
</tr>
</tbody>
</table>
### New command

<table>
<thead>
<tr>
<th>New command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTB</td>
<td>Lists all accelerated tables defined on an accelerator</td>
</tr>
<tr>
<td>ACCEL</td>
<td>Adds a table to an accelerator, displays and controls accelerator settings, and displays and controls tables defined on an accelerator</td>
</tr>
</tbody>
</table>

### Deprecated commands

As documented in the 11.1 release notes dated April 3, 2014, BMC has deprecated the HDESC and HPRINT commands for CATALOG MANAGER.

### New CATALOG MANAGER installation options

This release includes new CATALOG MANAGER installation options, which are also known as default options, or DOPTs.

<table>
<thead>
<tr>
<th>Installation option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAR= DYNAMIC</td>
<td>Defines whether CATALOG MANAGER uses dynamic SQL to access the SYSIBM.SYSVARIABLES catalog table. A user ID must have SELECT authority on the table to execute SQL on the table. DYNAMIC is the only valid value for this option.</td>
</tr>
<tr>
<td>VARAUTH= DYNAMIC</td>
<td>Defines whether CATALOG MANAGER uses dynamic SQL to access the SYSIBM.SYSVARIABLEAUTH catalog table. A user ID must have SELECT authority on the table to execute SQL on the table. DYNAMIC is the only valid value for this option.</td>
</tr>
</tbody>
</table>

### Dropped support for indirect catalogs using views

Starting with this release, you can create an indirect catalog only by using a copy of a table. You can no longer use views to create indirect catalogs.

### What's new in CHANGE MANAGER version 11.2.00

Version 11.2.00 of the CHANGE MANAGER component includes the following changes.
DB2 Version 11 support

The following IBM DB2 Version 11 features are now supported by ALTER and CHANGE MANAGER:

Support for ALTER TABLE DROP COLUMN

ALTER and CHANGE MANAGER now support the ALTER TABLE DROP COLUMN syntax, which enables the product to drop columns without dropping and rebuilding the table.

Archive and archive-enabled tables

ALTER and CHANGE MANAGER now support archive tables and archive-enabled tables.

ALTER lets you create, edit, drop, and import DDL for archive and archive-enabled tables. In addition to the features that ALTER provides, CHANGE MANAGER lets you compare, baseline, and import CDL and DML for archive and archive-enabled tables.

ALTER and CHANGE MANAGER now support the following options:

- ARCHIVE SENSITIVE bind option for stored procedures
- ARCHIVESENSITIVE bind option for REBIND PACKAGE, REBIND TRIGGER PACKAGE, and BIND PACKAGE statements

The following object types are now supported:

- TBR – Archive tables
- TBBR – Archive table for a table containing a large object (LOB) or an XML column (base table)

Also, you can now display archive table and history table information from the Command line (commands AI and HI, respectively).

Online alter of limit keys

You can now perform an online alter of the limit key value on a partition-by-range table space (PBR) or on a table space with table-controlled partitioning (TCP). All of the table space remains available throughout the alter process.
Suppression of null indexes

You can create indexes that exclude default NULL values. By default, an index includes index entries in which all key columns are NULL. Optionally, you can add the EXCLUDE NULL KEYS OPTION to the ALTER INDEX or CREATE INDEX CDL statement; in that case, the product will create index entries only for those rows in which one or more key columns contain non-null values.

Support for automatic mapping tables

You can now use the new IBM REORG options for automatic mapping tables.

In addition to defining the mapping table, you also have these options for the mapping database:

- You can define an existing database as the default mapping database where IBM REORG creates the mapping table.
- You can let IBM REORG define the mapping table in an implicit database.

You can specify the default database in either of the following locations:

- REORG MAPPING DATABASE field on the Online Reorg Utility Options panel
- REORG_MAPDB keyword in the product options file (POF)

BIND and REBIND parameters

This release supports the following bind options for the REBIND PACKAGE, REBIND TRIGGER PACKAGE, and BIND PACKAGE statements:

- APREUSE
- ARCHIVESENSITIVE
- BUSTIMESENSITIVE
- SYSTIMESENSITIVE

Additional options for stored procedures

This release supports additional options for stored procedures:
- **APPLCOMPAT**
  Indicates the package compatibility level for SQL

- **ARCHIVE SENSITIVE**
  Specifies whether references to archive-enabled tables in SQL statements are affected by the value of the SYSIBMADM.GET_ARCHIVE global variable

- **BUSINESS_TIME SENSITIVE**
  Specifies whether references to application-period temporal tables in both static and dynamic SQL statements are affected by the value of the CURRENT TEMPORAL BUSINESS_TIME special register

- **SYSTEM_TIME SENSITIVE**
  Specifies whether references to system-period temporal tables in both static and dynamic SQL statements are affected by the value of the CURRENT TEMPORAL SYSTEM_TIME special register

The release also supports the AUTONOMOUS value for the COMMIT_ON_RETURN option.

### Increased PIECESIZE and DSSIZE maximums

You can now specify a value of 128 GB or 256 GB for the PIECESIZE of non-partitioned indexes and the DSSIZE (partition size) for table spaces.

### Expanded Copy Migration functionality

You can now migrate indexes, tables with XML columns, and clone tables using an image copy in the Copy Migration feature of the Recovery Management, Database Administration, and BMC Object Administration for DB2 solutions.

This feature significantly improves performance as indexes, especially large indexes, are now recovered rather than rebuilt.

### Trusted context and roles

This release enables ALTER or CHANGE MANAGER to create worklists with objects that were created by using a trusted context, and that are owned by a role.
To work with these objects, you can specify ROLEOWN = Y in the installation options module, ROLEOWN in the ALUIN input stream, or Y for the ROLEOWN field on the Analysis Worklist Options panel. You can manually execute the worklist under the trusted context.

**Automatic rebinds when indexes are added to a table**

This release allows automatic rebinds on all packages that reference a table on which an index is added or altered.

You can use either of the following locations to specify this option:

- **All Packages on Index Create or Alter** field on the Analysis Worklist Command Options panel
- **BINDONIX** option in the installation options module

You can insert the NOBINDONIX (does not rebind packages) or BINDONIX (rebinds packages) keywords in the ALUIN input stream to override the installation options module.

**Default SYSOUT class**

Some installations do not support X as the default output class (SYSOUT). ALTER and CHANGE MANAGER now support customizing the default output class. You can set the SYSOUT to a value other than X.

You can use either of the following locations to specify this option:

- **Sysout Class** field on the ALTER and CHANGE MANAGER Analysis Options panel
- **ACM_ANALYSIS_SYSOUT** keyword in the product options file (POF)

**OVERRIDE( NOTBAUDIT )**

In a CHANGE MANAGER comparison, you can now ignore the AUDIT attribute of a table by including the OVERRIDE( NOTBAUDIT ) keyword in the ALUIN input stream.
Support for SECURED trigger attribute

ALTER and CHANGE MANAGER now support the SECURED attribute for triggers.

Support for PLANMGMT

This release adds support for the PLANMGMT rebind option. You can now specify the PLANMGMT value that ALTER and CHANGE MANAGER uses during an rebind operation.

You can make either of the following changes to specify this option:

- Specify PLANMGMT = N (no default), B (basic) or E (extended) in the installation options module. The default value is N.
- Add NOPLANMGMT, PLANMGMTBASIC, or PLANMGMTEXTENDED in the ALUIN input stream.

Dropped support for indirect catalogs using views

Starting with this release, you can create an indirect catalog only by using a copy of a table. You can no longer use views to create indirect catalogs.

Product tables

This section lists any new or changed product tables for this release.

Table 1: Changed ALTER and CHANGE MANAGER tables

<table>
<thead>
<tr>
<th>Product table name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD_ALIAS</td>
</tr>
<tr>
<td>CD_CHECK</td>
</tr>
<tr>
<td>CD_DATABASE</td>
</tr>
<tr>
<td>CD_INDEX</td>
</tr>
<tr>
<td>CD_PACKAGE</td>
</tr>
<tr>
<td>CD_ROUTINES2</td>
</tr>
</tbody>
</table>
What's new in COPY PLUS version 11.2.00

Version 11.2.00 of the COPY PLUS component includes the following changes.

<table>
<thead>
<tr>
<th>Product table name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD_SEQUENCES</td>
</tr>
<tr>
<td>CD_STOGROUP</td>
</tr>
<tr>
<td>CD_TABLE</td>
</tr>
<tr>
<td>CD_TABLESPACE</td>
</tr>
<tr>
<td>CD_TRIGGER</td>
</tr>
<tr>
<td>CD_UNQCNST</td>
</tr>
<tr>
<td>CD_UNQCNST_COL</td>
</tr>
<tr>
<td>CD_VIEW</td>
</tr>
</tbody>
</table>

Table 2: Changed CHANGE MANAGER tables

<table>
<thead>
<tr>
<th>Product table name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL_ALIAS</td>
</tr>
<tr>
<td>BL_CHECK</td>
</tr>
<tr>
<td>BL_DATABASE</td>
</tr>
<tr>
<td>BL_INDEX</td>
</tr>
<tr>
<td>BL_PACKAGE</td>
</tr>
<tr>
<td>BL_ROUTINES</td>
</tr>
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<tr>
<td>BL_TABLE</td>
</tr>
<tr>
<td>BL_TABLESPACE</td>
</tr>
<tr>
<td>BL_TRIGGER</td>
</tr>
<tr>
<td>BL_UNQCNST</td>
</tr>
<tr>
<td>BL_UNQCNST_COL</td>
</tr>
<tr>
<td>BL_VIEW</td>
</tr>
</tbody>
</table>
Native support for SHRLEVEL CHANGE RESETMOD YES copies

Previous releases of COPY PLUS called DSNUTILB to make SHRLEVEL CHANGE RESETMOD YES copies. COPY PLUS can now make these copies natively with the new SLCHRESET option.

Online consistent copies for LOBs

Starting with this release, COPY PLUS can make online consistent copies of large object (LOB) spaces.

Tagged copies for migration

In the previous release, running EXPORT to identify copies for migration did not always clearly identify which copies were exported, especially if the copies were made in multiple jobs. With the new TAG and TAGSET options, this release allows you to "tag" copies for migration to simplify selecting copies for migration.

Support for migrating XML spaces

This release adds support for migrating XML spaces by using image copies.

Support for migrating statistics

This release adds support for migrating statistics with the new EXPORT STATS option.

EXPORT file for MIGRATE without copies on the target

In the previous release, when creating an EXPORT file for MIGRATE, COPY PLUS required that copies exist on the target system for the spaces to be migrated, even though those copies would not be used. This release allows EXPORT for MIGRATE without requiring copies on the target.
Incremental copies with Instant Snapshots

This release adds support for making incremental copies based on full Instant Snapshot copies.

Ability to register LP Instant Snapshots like DB2 FlashCopies

In previous releases, COPY PLUS registered Instant Snapshot copies in BMCXCOPY. Starting with this release, COPY PLUS registers LP Instant Snapshots in SYSCOPY to enable use by either RECOVER PLUS or the DB2 RECOVER utility.

COPY IMAGE COPY of LOBs from system backups

This release adds support for making standard copies of LOB spaces from system backups.

Use of real-time statistics to size objects and estimate changed pages

This release uses DB2 real-time statistics to size objects to be copied and to estimate the number of changed pages.

Instant Snapshots of DB2 catalog

This release adds support for making Instant Snapshot copies of the DB2 catalog.

Replacement of NSCMAIN by the CONSISTENT YES option

In previous releases, you had to execute the NSCMAIN program to make online consistent copies. Now, you can make online consistent copies by executing ACPMAIN with the CONSISTENT YES option. This release continues to support NSCMAIN, but BMC plans to deprecate NSCMAIN in the next release.
New AUX ALL option

In previous releases, AUX YES copied history tables and auxiliary spaces. This release uses the HISTORY option to copy history tables and adds AUX ALL to copy all of the auxiliary spaces.

Support for persistent read only (PRO) and read-or-replication-only (RREPL) statuses

This release adds support for PRO and RREPL statuses.

What's new in High-speed Apply Engine version 11.2.00

Version 11.2.00 of the High-speed Apply Engine component includes the following changes.

Dropped support for HP-UX (Hewlett-Packard UniX)

Starting with this release, the product no longer supports HP-UX.

Additional data types supported for DB2 LUW

The product now supports the DECFLOAT and BIGINT data types for the IBM DB2 LUW database management system for Microsoft Windows and UNIX (Oracle Solaris and IBM AIX).

Additional data types supported for Oracle

The product now supports the BINARY_FLOAT and BINARY_DOUBLE data types for Windows and UNIX (Solaris and AIX) versions of Oracle.
Simplified installation process on UNIX systems

This release now provides a unified and simplified installation wizard to install High-speed Apply Engine on either a UNIX or Windows system.

Tracking of DBMS elapsed time by table and partition

The product now tracks the elapsed time in the database management system (DBMS). This information is included in the statistics displayed for each table and partition.

What's new in LOADPLUS version 11.2.00

Version 11.2.00 of the LOADPLUS component includes the following changes.

Spanned data

You can now load LOB and XML data, including inline LOB data, to a standard VBS data set.

To enable this feature, you specify the FORMAT SPANNED YES option. For more information, see the LOADPLUS for DB2 Reference Manual.

Note

PTFs BPU6680 and BPU6692 provided this functionality for version 11.1.00. For more information, see the technical bulletin dated October 31, 2014.

Inline LOB data

LOADPLUS now loads inline LOB data natively. (Earlier versions invoked DSNUTILB.)

This feature requires the new FORMAT SPANNED YES option.
Installation options for DSNUTILB load jobs

LOADPLUS no longer requires or supports the individual installation options for each feature that requires invoking DSNUTILB. However, you must still specify DSNUTILB=YES when the feature requires it.

This enhancement makes the following installation options obsolete:

- FILEVAR
- HASHAX
- IXONEX
- IXRANDOM
- LOB
- TEMPRALDATA
- UNICODE
- UTILB_COLCCSID
- UTILB_NULLIX
- XML

If your installation options module contains any of these options, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.

Updated indexes

LOADPLUS now supports indexes in which updated entries remain in their original position on the page.

CENTURY installation option

LOADPLUS now supplies a default value of (1950,2049) for the CENTURY installation option. (Earlier versions were not shipped with a value for this option, requiring that you supply it during installation.)
If you currently use a default value other than (1950,2049), either change the value in your installation options module after installation, or use the Installation System to migrate your current option values.

**System and software requirements**

This version of LOADPLUS has the following changes to minimum requirements from version 11.1.00:
- DB2 Solution Common Code (SCC) version 11.1.00 with current maintenance
- DB2 Utilities Common Code (D2U) version 11.2.00
- BMC Common Statistics component version 11.2.00

**What's new in SNAPSHOT UPGRADE FEATURE of XBM version 6.2.00**

Version 6.2.00 of the EXTENDED BUFFER MANAGER (XBM) for DB2 product and its SNAPSHOT UPGRADE FEATURE technology includes the following changes.

**Space map updates**

XBM now provides space map update monitoring by utilizing snapshot technology.

This functionality enables certain features in the utilities that call XBM or SUF. For this release, space map update monitoring enables native support of the SHRLEVEL CHANGE RESETMOD YES option in the BMC COPY PLUS for DB2 product.

**Statistics interval**

The default statistics interval has been increased to 3600 seconds.

**Device support**

XBM no longer supports IBM RAMAC Virtual Array (RVA) and Oracle StorageTek Shared Virtual Array (SVA) devices.
ESO hiperspace

Use of ESO hiperspace is now obsolete.

Information about ESO hiperspace in the documentation will be removed in a future release.

What's new in UNLOAD PLUS version 11.2.00

Version 11.2.00 of the UNLOAD PLUS component includes the following changes.

Inline LOB data

UNLOAD PLUS now allows you to unload inline LOB data when specifying DIRECT YES or DIRECT NO. (Earlier versions required DIRECT NO.)

Note

PTF BPU6778 provided this functionality for version 11.1.00. For more information, see the technical bulletin dated October 31, 2014.

Spanned data

When DIRECT YES is in effect, you can now unload LOB and XML data, including inline LOB data, to a standard VBS data set.

Note

This data set is a standard VBS data set whose format is similar to the IBM proprietary spanned record format. The FORMAT SPANNED YES option of the IBM DB2 LOAD utility requires that the input be in the IBM proprietary spanned record format. Therefore, you cannot use the IBM DB2 LOAD utility to load the VBS data set that UNLOAD PLUS produces.

To enable this feature, you specify the SPANNED YES option. For more information about this option, see the UNLOAD PLUS for DB2 Reference Manual.

Note

PTF BPU6778 provided this functionality for version 11.1.00. For more information, see the technical bulletin dated October 31, 2014.
DB2 Analytics Accelerator

When DIRECT NO is in effect, UNLOAD PLUS now optionally offloads eligible queries to the IBM DB2 Analytics Accelerator for z/OS.

You can enable this support with either the QUERY_ACCELERATION DSNZPARM, as documented in the IBM documentation, or by using the new UNLOAD PLUS option SET CURRENT QUERY ACCELERATION ALL. For more information about this option, see the UNLOAD PLUS for DB2 Reference Manual.

CENTURY installation option

UNLOAD PLUS now supplies a default value of (1950,2049) for the CENTURY installation option. (Earlier versions were not shipped with a value for this option, requiring that you supply it during installation.)

If you currently use a default value other than (1950,2049), either change the value in your installation options module after installation, or use the Installation System to migrate your current option values.

RREPL status

UNLOAD PLUS now supports read-or-replication-only (RREPL) status.

System and software requirements

This version of UNLOAD PLUS has the following changes to minimum requirements from version 11.1.00:
- DB2 Solution Common Code (SCC) version 11.1.00 with current maintenance
- DB2 Utilities Common Code (D2U) version 11.2.00

Installation

To download the Installation System for the first time, complete these steps:

1. Go to http://www.bmc.com/support/reg/installation-system.html, or navigate to the “BMC data management for DB2 and IMS, MainView, and cost
optimization products installation and maintenance” section of the BMC Support Central website.

A BMC support user ID and password are required.

2 Click **Installation**.

3 Click the method you want to use to obtain the Installation System.

4 Follow the procedures.

**Note**
To request physical shipments, contact your BMC sales representative. Contact information is available on the BMC website.

Database Administration for DB2 installed by using the Installation System. This section contains installation information that supplements or supersedes the information in the Installation System documentation.

**Requirements**

For software, hardware, and other requirements, see the Installation System documentation.

**Installation changes**

For information about installation changes, see the Installation System release notes.

**Migration considerations for CATALOG MANAGER and CHANGE MANAGER**

When you migrate the software, consider the following items:

- When you migrate to DB2 Version 10 or 11, and either of the following sets of conditions exists, DB2 cannot run DDL that CATALOG MANAGER generates:
  
  — After migrating a DB2 Version 8 or 9 NFM subsystem to DB2 Version 10 NFM, you create an object that is associated with a Version 10 feature (for example, a temporal table). Then, you fall back to Version 10 CM8*, ENFM8*, CM9*, or ENFM9*.  

After migrating a DB2 Version 8 NFM subsystem to DB2 Version 10 NFM, you create an object that is associated with a Version 9 feature. Then, you fall back to Version 10 CM8* or ENFM8.

Because a DB2 Version 10 NFM catalog now exists on the subsystem to which you fell back, that subsystem considers the newly created object to be valid. CATALOG MANAGER generates valid DDL for the object as it exists in the Version 10 NFM catalog; however, CATALOG MANAGER will not be able to recover the object or to include it in the Drop Recovery Log if dropped. ALTER or CHANGE MANAGER issues an error message upon encountering the new object.

■ When you migrate a DB2 Version 9 NFM subsystem to a DB2 Version 10 NFM subsystem, BMC recommends issuing the REBIND command and specifying EXPLAIN YES on all packages.

Migration considerations for XBM

XBM tolerates interoperation between two consecutive releases (for example, 6.1 and 6.2) for migration purposes.

The following considerations apply to this toleration:

■ When operating in a mixed environment, do not attempt to use features that have been added in the latest release. If XBM sends these requests to a subsystem that is using the previous release of XBM, XBM might abend.

■ Do not operate long term in a mixed environment. BMC recommends that you migrate your entire environment as soon as you can.

■ BMC provides limited support for interoperability problems.

For migration from XBM 6.1 to 6.2, complete the following steps:

1 Install PTF BPE0440 into the XBM 6.1 load library and restart the XBM 6.1 systems as soon as possible.
   After installing this PTF, if XBM 6.1 encounters a request for an XBM 6.2 feature, XBM fails gracefully instead of abending.

2 Ensure that all maintenance has been applied for both releases of XBM.

3 For each XBM in a sysplex group, complete the following steps:
   a If active snapshots exist, bring XBM 6.2 into the XBM sysplex group on each system before you stop the XBM on that system.
b Start the updated XBM 6.2 system.
   Active snapshots will be synchronized with the new XBM version.

   c Stop XBM 6.1 on that system.

**FMID and version information**

This release of Database Administration *for DB2* uses version 2.4.10 of the Installation System.

*Note*

If you have a later version of the Installation System, use that version to install the solution, product, or component.

During installation, the following versions and SMP/E FMIDs are installed:

<table>
<thead>
<tr>
<th>FMID</th>
<th>Component</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASAR71C</td>
<td>SAS_C and SAS_C++ V71</td>
<td>7.1</td>
</tr>
<tr>
<td>BBASC70</td>
<td>SAS_C V70B</td>
<td>7.0</td>
</tr>
<tr>
<td>BBYXM13</td>
<td>BASE TECHNOLOGY</td>
<td>1.3</td>
</tr>
<tr>
<td>ZACMB20</td>
<td>CHANGE MANAGER <em>for DB2</em></td>
<td>11.2</td>
</tr>
<tr>
<td>ZACPB20</td>
<td>COPY PLUS <em>for DB2</em></td>
<td>11.2</td>
</tr>
<tr>
<td>ZACSB20</td>
<td>Common SQL (ACS)</td>
<td>11.2</td>
</tr>
<tr>
<td>ZACTB20</td>
<td>CATALOG MANAGER <em>for DB2</em></td>
<td>11.2</td>
</tr>
<tr>
<td>ZADUB20</td>
<td>UNLOAD PLUS <em>for DB2</em></td>
<td>11.2</td>
</tr>
<tr>
<td>ZAEXB20</td>
<td>Execution for DB2</td>
<td>11.2</td>
</tr>
<tr>
<td>ZAFRB20</td>
<td>RECOVER PLUS <em>for DB2</em></td>
<td>11.2</td>
</tr>
<tr>
<td>ZAIN031</td>
<td>Install Execution Code</td>
<td>11.2</td>
</tr>
<tr>
<td>ZAMUB20</td>
<td>LOADPLUS <em>for DB2</em></td>
<td>11.2</td>
</tr>
<tr>
<td>ZAPTB20</td>
<td>High-Speed Apply Engine</td>
<td>11.2</td>
</tr>
<tr>
<td>ZASHB20</td>
<td>Common Admin Code</td>
<td>11.2</td>
</tr>
<tr>
<td>ZATSB20</td>
<td>BMCSTATS API</td>
<td>11.2</td>
</tr>
<tr>
<td>ZAUP241</td>
<td>BMCSORT</td>
<td>2.4</td>
</tr>
<tr>
<td>ZBMR15E</td>
<td>ISR External Routines</td>
<td>1.5</td>
</tr>
<tr>
<td>ZBST100</td>
<td>BMC Support Tool</td>
<td>1.0</td>
</tr>
<tr>
<td>ZDIG1A0</td>
<td>DIGNUS C runtimes and C++ objects</td>
<td>1.11</td>
</tr>
<tr>
<td>FMID</td>
<td>Component</td>
<td>Version</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>ZD2UB20</td>
<td>Utilities Common Component</td>
<td>11.2</td>
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<td>ZMRE110</td>
<td>Rules Engine &quot;c&quot; code</td>
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<td>ZPSSB20</td>
<td>SQL Explorer</td>
<td>11.2</td>
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<td>ZPWD330</td>
<td>BMC Password Security System</td>
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<tr>
<td>ZSCCB10</td>
<td>DB2 COMMON CODE</td>
<td>11.1</td>
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<tr>
<td>ZXBW620</td>
<td>Extended Buffer Manager</td>
<td>6.2</td>
</tr>
<tr>
<td>ZZIO180</td>
<td>DB2 OPTION CARRYOVER</td>
<td>1.8</td>
</tr>
</tbody>
</table>

The preceding table contains the FMIDs for Database Administration for DB2 only. You can also obtain product, solution, and component information (FMIDs, codes, and versions) in the following ways:

- View the generated installation JCL member $176APLF.
  To search the file, search on the word FORFMID.

- View one of the following reports:
  - `bxx_ozi_tape_product_list.txt` lists FMIDs for cost optimization products, products shared across product lines, and infrastructure products.
  - `cxx_ozi_tape_product_list.txt` lists FMIDs for BMC products for IBM DB2.
  - `ixx_ozi_tape_product_list.txt` lists FMIDs for BMC products for IBM IMS.
  - `mxx_ozi_tape_product_list.txt` lists FMIDs for MainView products.

To access the reports on the BMC electronic software distribution (ESD) site, take the following steps:

1. Go to [http://www.bmc.com/support/reg/installation-system.html](http://www.bmc.com/support/reg/installation-system.html), or navigate to the “BMC data management for DB2 and IMS, MainView, and cost optimization products installation and maintenance” section of the BMC Support Central website.

2. Click **Product codes and FMIDs**.

3. Click one of the listed reports.
**Maintenance**

After you install your software, you can download any additional SMP/E product maintenance by using either BMC ISR or eFix PTF Distribution Services (http://efix.bmc.com).

BMC ISR is available for all products that you install by using the Installation System. For more information, see the Installation System documentation.

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**Note**

Before applying maintenance, ensure that you have successfully run the $176APLF job to ensure that all required FMIDs are applied.

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BMC provides fixes for Database Administration *for DB2* at the component level. To apply fixes for this solution, you must apply fixes for each component of the solution.

**Support status**

You can find the support status for specific product versions on the Support Central website. Selecting a product from the “A – Z Supported Product List” shows:

- All versions of the product and their current support levels (full or limited)
- Dates on which support ends

For more information about the latest support policies, see the Support Central website at http://www.bmc.com/support.

**Product documentation**

From the Support Central website (http://www.bmc.com/support), you can:

- Link to the BMC Documentation Center to browse documentation sets (http://www.bmc.com/available/documentation-center.html or, for secured documentation sets, http://www.bmc.com/available/documentation-center-secure.html)

- View Quick Course videos (short overviews of selected product concepts, tasks, or features), which are available from the following locations:
  - Documentation Center (primary center and secured center)
—Support Central (at http://www.bmc.com/support/mainframe-demonstrations)

—BMC Mainframe YouTube channel (https://www.youtube.com/user/BMCSoftwareMainframe)

- View individual product documents (books and notices) within the “A – Z Supported Product List” (https://webapps.bmc.com/support/faces/az/supportlisting.jsp)

You can order hardcopy documentation from your BMC sales representative or from the support site. You can also subscribe to proactive alerts to receive e-mail messages when notices are issued.

Customer support

If you have problems with or questions about a BMC product, see the support website at http://www.bmc.com/support. You can view or download product documents, find answers to frequently asked questions, and download products and maintenance. If you do not have access to the web and you are in the United States or Canada, contact Customer Support at 1 800 537 1813. Outside the United States or Canada, contact your local BMC office or agent.

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