BMC originally issued these release notes on January 30, 2014. They are being reissued to reflect new support for the IBM ®DB2® Version 11 system. Revision bars in these release notes denote differences from the previous edition.

BMC is releasing version 11.1.00 of the Database Administration for DB2® solution. This solution includes the following components:

- CATALOG MANAGER for DB2
- CHANGE MANAGER for DB2
- COPY PLUS for DB2
- LOADPLUS for DB2
- SNAPSHOT UPGRADE FEATURE of EXTENDED BUFFER MANAGER (XBM) 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 (PAC) data

These release notes supplement and supersede the product documentation and discuss product enhancements:
What's new

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

Database Administration for DB2 version 11.1.00

Version 11.1.00 of the Database Administration solution includes the following changes.

Solution components

This version of the Database Administration solution includes new releases of the LOADPLUS and UNLOAD PLUS components. No other components have changed:

- The following components (at version 11.1 unless otherwise noted) have not changed since version 10.2.00 of the Database Administration solution:
  - CATALOG MANAGER
  - CHANGE MANAGER
  - COPY PLUS
  - SNAPSHOT UPGRADE FEATURE, version 6.1
  - High-speed Apply Engine
  - JCL Generation and Execution
  - RECOVER PLUS for DB2

For a list of features and functions that were new for these components at that time, see the release notes for version 10.2.00 of the Database Administration solution.

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

This release of LOADPLUS has the following changes to minimum requirements. For full requirement information, see the LOADPLUS for DB2 Reference Manual.

- IBM® System z10® processor
- DB2 Solution Common Code (SCC) version 11.1.00 with PTF BPJ0689
- DB2 Utilities Common Code (D2U) version 11.1.00
- XBM or SNAPSHOT UPGRADE FEATURE (SUF) version 6.1.00

CATALOG MANAGER

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
- Ability to define a public alias for a sequence object
- Support for archive-enabled tables
- New bind/rebind options
- Support for user-defined global variables

CHANGE MANAGER

On an IBM DB2 Version 11 system, CHANGE MANAGER now supports using the automatic mapping table with IBM Reorg.
LOADPLUS version 11.1.00

Version 11.1.00 of the LOADPLUS component includes the following changes.

DB2 Version 11 support

LOADPLUS supports the following features of IBM DB2 Version 11 either natively or by invoking DSNUTILB.

Native support

LOADPLUS supports the following features of DB2 Version 11 natively:

- Catalog and directory changes and restructuring
- Extended relative byte addresses (RBAs) and log record sequence numbers (LRSNs)
  
  LOADPLUS supports the extended values but does not convert values that are in basic format to extended format.
- Persistent read only (PRO) status

  LOADPLUS terminates when any object that is participating in the load is in PRO status.

DSNUTILB support

LOADPLUS supports the following DB2 Version 11 features by invoking DSNUTILB.
For more information about requirements and restrictions when using features that invoke DSNUTILB, see the LOADPLUS for DB2 Reference Manual.

- Indexes that are defined with EXCLUDE NULL KEYS (supported by a new installation option, UTILB_NULLIX)
- Columns that contain a CCSID specification (supported by a new installation option, UTILB_COLCCSID)

LOB data

The following requirements have changed for loading LOB data:

- LOADPLUS no longer requires that you have a unique index defined on the row ID column of the base table when loading LOB data.
You no longer need to specify INLOB=YES to enable LOADPLUS to invoke DSNUTILB to load inline LOB data. This change renders the INLOB installation option obsolete. If your installation options module contains the INLOB option, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.

Temporal tables

In most cases, LOADPLUS now natively supports loading temporal tables when you specify INDEX UPDATE. However, LOADPLUS invokes DSNUTILB when all of the following conditions exist:

- You specify INDEX UPDATE.
- A participating index is defined with BUSINESS_TIME WITHOUT OVERLAPS.
- SHRLEVEL CHANGE SQLAPPLY is not in effect.

XBM subsystem identification

LOADPLUS no longer requires that you specify an EXTENDED BUFFER MANAGER (XBM) subsystem for load jobs that use snapshot technology. When the following conditions exist, LOADPLUS searches for an XBM subsystem that is at the correct maintenance and enablement level:

- You are performing a function that requires snapshot technology.
- A value is not in effect for the XBMID option.

RREPL status

LOADPLUS terminates when encountering an object that is in read-or-replication-only (RREPL) status.

User 3900 abends

This release enhanced the locking technique for sequential file access to reduce the possibility of user 3900 abends.

Documentation changes

The LOADPLUS documentation has been updated to correct the usage of XBM or SUF for the LOAD RESUME YES SHRLEVEL REFERENCE feature. This feature uses the Instant Snapshot technology of XBM or SUF, not the hardware snapshot capability of XBM or SUF. The type of snapshot that LOADPLUS uses affects how you set up your XBM options to take advantage of this LOADPLUS feature.
SNAPSHOT UPGRADE FEATURE of XBM

DB2 Version 11 support

XBM now supports the IBM DB2 Version 11 system.

UNLOAD PLUS version 11.1.00

Version 11.1.00 of the UNLOAD PLUS component includes the following changes.

DB2 Version 11 support

UNLOAD PLUS supports the following features of IBM DB2 Version 11:

■ Catalog and directory changes and restructuring
■ Extended relative byte addresses (RBAs) and log record sequence numbers (LRSNs)

XBM subsystem identification

UNLOAD PLUS no longer requires that you specify an EXTENDED BUFFER MANAGER (XBM) subsystem for unload jobs that use snapshot technology. When the following conditions exist, UNLOAD PLUS searches for an XBM subsystem that is at the correct maintenance and enablement level:

■ You are unloading using SHRLEVEL CHANGE CONSISTENT YES.
■ A value is not in effect for the XBMID option.

RREPL status

UNLOAD PLUS terminates when encountering an object that is in read-or-replication-only (RREPL) status.

User 3900 abends

This release enhanced the locking technique for sequential file access to reduce the possibility of user 3900 abends.
## Known issues

This section describes high-priority issues that remain open at the release date. This section also describes high-priority known issues in this release for which correcting PTFs are available as of the release date.

### NOTE

Regardless of the PTFs listed in this table, BMC recommends that you download all available maintenance for a product after installing a new release.

<table>
<thead>
<tr>
<th>Tracking ID</th>
<th>Issue</th>
<th>Correcting PTF</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>LOADPLUS encounters problems when you specify INDEX UPDATE.</td>
<td>BPJ0300</td>
</tr>
<tr>
<td>QM001812153</td>
<td>When running on DB2 Version 10, LOADPLUS ignores persistent read only (PRO) status for any participating object. (When running on DB2 Version 11 or later, LOADPLUS terminates when the object that you are loading is in PRO status.) IBM APAR PM95731 enables the new PRO restrictive status for DB2 Version 10; however, for the status to take effect on an object, you must specifically set this status by using the IBM REPAIR utility. Until a fix is available for this issue, BMC recommends that you do not set PRO status on an object against which you plan to run LOADPLUS on DB2 Version 10.</td>
<td>None</td>
</tr>
</tbody>
</table>
| QM001806229 | When the following conditions exist, LOADPLUS might create an invalid index but complete without an indication of the problem:  
  - The index contains a key derived from an expression.  
  - The key contains a DECIMAL column.  
Subsequent access to the table space might not report all rows. | BPU6319 |
| QM001809001 | When the load job terminates while loading an XML table space or LOB auxiliary table space, LOADPLUS fails to delete data during discard processing. | BPU6410 |
Installation


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

Database Administration is installed by using the BMC Installation System. This section contains installation information that supplements or supersedes the information in the *Installation System User Guide*.

**Requirements**

For software, hardware, and other requirements, see the *Installation System User Guide*.
Installation changes

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

Migration considerations

Consider the following items when you migrate from an earlier version of DB2 to DB2 Version 10:

■ When 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.

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.

Known installation issue

If both of the following conditions exist at your site, contact BMC Customer Support before attempting to use the Installation System to customize your BMC products:

■ Your subsystem is using DB2 Version 10.
■ The DSNZPARM SEPARATE_SECURITY subsystem parameter is set to YES.
FMID and version information

This release of Database Administration uses version 2.3.70 or later of the Installation System and installation media.

**NOTE**

If you have a later version of the Installation System or the installation media, 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 Resident Library</td>
<td>7.1.00</td>
</tr>
<tr>
<td>BBAPW32</td>
<td>BMC Password Security System</td>
<td>3.2.00</td>
</tr>
<tr>
<td>BBASC70</td>
<td>SAS/C Transient Library</td>
<td>7.0.00</td>
</tr>
<tr>
<td>BBYXM13</td>
<td>Base Technology</td>
<td>1.3.00</td>
</tr>
<tr>
<td>ZACMB10</td>
<td>CHANGE MANAGER</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZACPB10</td>
<td>COPY PLUS</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZACSB10</td>
<td>CATALOG MANAGER Common SQL</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZACTB10</td>
<td>CATALOG MANAGER</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZADUB10</td>
<td>UNLOAD PLUS</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZAEXB10</td>
<td>JCL Generation and Execution</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZAFRB10</td>
<td>RECOVER PLUS</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZAIN031</td>
<td>Install Execution Code</td>
<td>3.1.00</td>
</tr>
<tr>
<td>ZAMUB10</td>
<td>LOADPLUS</td>
<td>11.1.00</td>
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<tr>
<td>ZAPTB10</td>
<td>High-speed Apply Engine</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZASHB10</td>
<td>BMC Space Estimation Common Code</td>
<td>11.1.00</td>
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<td>ZATS810</td>
<td>BMCSTATS API</td>
<td>11.1.00</td>
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<td>ZAUP241</td>
<td>BMCSORT</td>
<td>2.4.01</td>
</tr>
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<td>ZBMRI5E</td>
<td>ISR External Routines</td>
<td></td>
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<tr>
<td>ZBST100</td>
<td>BMC Support Tool</td>
<td>1.5.00</td>
</tr>
<tr>
<td>ZDIG190</td>
<td>Dignus C runtimes and C++ objects</td>
<td>1.9.01</td>
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<tr>
<td>ZD2UB10</td>
<td>DB2 Utilities Common Code (D2U)</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZMREI10</td>
<td>Rules Engine “C” code</td>
<td>1.1.00</td>
</tr>
<tr>
<td>ZPSSB10</td>
<td>SQL Explorer for DB2</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZSCCB10</td>
<td>DB2 Solution Common Code (SCC)</td>
<td>11.1.00</td>
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<tr>
<td>ZXBM610</td>
<td>EXTENDED BUFFER MANAGER</td>
<td>6.1.00</td>
</tr>
<tr>
<td>ZZIO170</td>
<td>Option value migration</td>
<td>1.7.00</td>
</tr>
</tbody>
</table>
The preceding table contains the FMIDs for Database Administration only. You can also obtain product, solution, and component information (FMIDs, codes, and versions) in the following ways:

- View the $B76APLF JCL member.

To search the file, search on the word FORFMID.

- View one of the following reports:
  - `bxx_ozi_tape_product_list.txt` lists products and components for the B-series installation (shared and infrastructure products).
  - `cxx_ozi_tape_product_list.txt` lists products and components for the C-series installation (DB2 products).
  - `ixx_ozi_tape_product_list.txt` lists products and components for the I-series installation (IBM IMS™ products).
  - `mxx_ozi_tape_product_list.txt` lists products and components for the M-series installation (MainView products).

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

2. Click **Electronic Downloads**.
3. Click **readme**.
4. In the “Before you begin” section, click a product media listing.

### Maintenance

After you install Database Administration, you can download any additional SMP/E maintenance by using either BMC Internet Service Retrieval (ISR) or eFix PTF Distribution Services (http://apps.bmc.com/support/efix.cgi). BMC ISR is available for all products that you install via the Installation System. For more information, see the *Installation System User Guide*.

**NOTE**

Before applying maintenance, ensure that you have completed the $B76APLF job to set up your maintenance environment.
BMC provides fixes for Database Administration 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 (https://webapps.bmc.com/infocenter/index.jsp) to browse documentation sets
- View BMC Quick Course Demos (short overviews of selected product concepts, tasks, or features), which are included in the BMC Documentation Center
- View individual product documents (books and notices) within the “A – Z Supported Product List”

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.