BMC is releasing version 11.1.00 of the REORG PLUS for DB2® product.

REORG PLUS is available as a stand-alone product and as a component of the following solutions:

- BMC High Speed Utilities for DB2
- BMC Performance for DB2 Databases
- BMC Database Performance 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
- DB2 Version 11 support
- Inline LOB data
- LOB table spaces
- DSNUTILB reorganizations
- XBM subsystem identification
- User 3900 abends
- System and software requirements

Known issues

Installation
- Requirements
- Installation changes
- Known installation issue
- FMID and version information
- Maintenance

Support status
What’s new

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

DB2 Version 11 support

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

Native support

REORG PLUS 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)

As part of this support, the new RBALRSN_CONVERSION command option enables you to tell REORG PLUS which format you want the reorganized object to be in after the reorganization. This conversion is supported natively except in certain cases when you specify SHRLEVEL CHANGE. For more information, see the description of this new option in the REORG PLUS for DB2 Reference Manual.

- Tables that are defined with ENABLE ARCHIVE

The exception to this support is that REORG PLUS terminates when you specify any of the following options for a reorganization of a table space that contains an archive-enabled table:

- SELECT
- UPDATE
- DELETE

- Persistent read only (PRO) status

REORG PLUS terminates when the object that you are reorganizing is in PRO status.
DSNUTILB support

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

- Reorganizations of table spaces that contain indexes that are defined with EXCLUDE NULL KEYS (supported by a new installation option, UTILB_NULLIX)
  REORG PLUS natively reorganizes these types of indexes.
- Reorganizations of table spaces or indexes that contain columns with a CCSID specification (supported by a new installation option, UTILB_COLCCSID)
- Table space reorganizations on DB2 Version 11 when you specify REBALANCE and the table space is defined with table-controlled partitioning

Inline LOB data

In most cases, REORG PLUS natively supports inline LOB data. REORG PLUS invokes DSNUTILB when either of the following conditions exists:

- The inline length definition was altered before the reorganization.
- An index exists on an inline LOB column.

These conditions are covered by the LOB and IXONEX installation options, respectively. Therefore, the INLOB installation option is now 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.

LOB table spaces

To reorganize LOB table spaces when reorganizing the base table space, you must use the following specifications:

- AUX YES on the REORG command
- LOB=YES and DSNUTILB=YES in the installation options module

**NOTE**

The LOB=YES requirement is a change from earlier versions and might affect existing jobs. Review your installation options module to ensure that the LOB option is set appropriately for your needs.
DSNUTILB reorganizations

REORG PLUS has enhanced DSNUTILB reorganization functionality with the following updates:

- New message BMC50182I reports the reason for invoking DSNUTILB.

- When running on DB2 Version 11 or later, REORG PLUS now provides the MAPPINGDATABASE syntax option for DSNUTILB reorganizations, enabling you to override the DB2 subsystem parameter REORG_MAPPING_DATABASE. When invoking DSNUTILB for a SHRLEVEL CHANGE table space reorganization, REORG PLUS passes the value of this option to the IBM DB2 REORG utility. For more information, see the description of the MAPPINGDATABASE syntax option in the "REORG PLUS for DB2 Reference Manual".

- When running on versions earlier than DB2 Version 11, REORG PLUS now provides an automated method for supplying a mapping table when invoking DSNUTILB. This method uses a REXX exit that you specify in the new MAPTEXIT installation or command option. For more information, see the following references in the "REORG PLUS for DB2 Reference Manual":
  - MAPTEXIT option descriptions in Chapter 3 and Appendix A
  - Description and usage of the REXX exit in Appendix C

XBM subsystem identification

REORG PLUS no longer requires that you specify an EXTENDED BUFFER MANAGER (XBM) subsystem for reorganization jobs that use snapshot technology. When the following conditions exist, REORG PLUS 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.
User 3900 abends

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

RREPL status

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

System and software requirements

This release of REORG PLUS has the following changes to minimum requirements. For full requirement information, see the REORG PLUS 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

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>REORG PLUS encounters problems when you specify INDEX UPDATE.</td>
<td>BPJ0300</td>
</tr>
<tr>
<td>QM001812154</td>
<td>When running on DB2 Version 10, REORG PLUS ignores persistent read only (PRO) status for any participating object. (When running on DB2 Version 11 or later, REORG PLUS terminates when the object that you are reorganizing is in PRO status.)</td>
<td>None</td>
</tr>
<tr>
<td>QM001808113</td>
<td>REORG PLUS does not recognize read-or-replication-only (RREPL) status.</td>
<td>BPU6394</td>
</tr>
<tr>
<td>QM001807174</td>
<td>REORG PLUS creates an invalid incremental image copy when the following conditions exist:</td>
<td>BPU6380</td>
</tr>
</tbody>
</table>
|            | ■ You are reorganizing a table space that uses extended RBAs.  
|            | ■ The following options are in effect:  
|            |    — SHRLEVEL CHANGE  
|            |    — ICTYPE INCREMENTAL                                                                                                                         | BPU6452        |
| QM001809138| REORG PLUS creates an invalid user-defined XML index but completes without an indication of the problem when the following conditions exist:                                                                 | BPU6421        |
|            | ■ You are running a REORG TABLESPACE on an XML table space.                                                                                                                                            |                |
|            | ■ The table space uses extended RBAs.                                                                                                                                                                  |                |
| QM001809015| When the following conditions exist, REORG PLUS does not convert nonpartitioned indexes, but updates the DB2 catalog and DBD to indicate conversion:                                                                 | BPU6421        |
|            | ■ You are running a partial table space reorganization.  
|            | ■ You specify the RBALRSN_CONVERSION option to convert the RBA/LRSN format.                                                                         |                |
| QM001806064| REORG PLUS creates an invalid index but completes without an indication of the problem when the following conditions exist:                                                                             | BPU6399        |
|            | ■ You are running a single-phase SHRLEVEL REFERENCE reorganization.                                                                                                                                     |                |
|            | ■ You specify the RBALRSN_CONVERSION option to convert the RBA/LRSN format.                                                                          |                |

**NOTE**

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

REORG PLUS 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.
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 REORG PLUS 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>Product or component</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASAR71C</td>
<td>SAS_C and SAS_C++</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</td>
<td>7.0.00</td>
</tr>
<tr>
<td>ZAIN031</td>
<td>Install Execution Code</td>
<td>3.1.00</td>
</tr>
<tr>
<td>ZARUB10</td>
<td>REORG PLUS for DB2</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZATSB10</td>
<td>BMCSTATS API</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZAUP241</td>
<td>BMCSORT</td>
<td>2.4.01</td>
</tr>
<tr>
<td>ZBMRI5E</td>
<td>ISR External Routines</td>
<td>1.5.00</td>
</tr>
<tr>
<td>ZBST100</td>
<td>BMC Support Tool</td>
<td>1.0.00</td>
</tr>
<tr>
<td>ZDIG190</td>
<td>Dignus C Runtime and C++ objects</td>
<td>1.9.01</td>
</tr>
<tr>
<td>ZD2UB10</td>
<td>DB2 Utilities Common Component</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZSCCB10</td>
<td>DB2 Solution Common Code</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZZIO170</td>
<td>DB2 Option Carryover</td>
<td>1.7.00</td>
</tr>
</tbody>
</table>
The preceding table contains the FMIDs for REORG PLUS 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 (BMC products for IBM DB2).
  
  — **ixx_ozi_tape_product_list.txt** lists products and components for the I-series installation (BMC products for IBM IMS™).
  
  — **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 REORG PLUS, BMC strongly recommends that you apply all available maintenance for the product and for the components and associated products that you installed with it. 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 by using the Installation System. For more information, see the *Installation System User Guide*. 
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](http://www.bmc.com/support).

Product documentation

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

- Link to the BMC Documentation Center ([https://webapps.bmc.com/infocenter/index.jsp](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](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.