BMC Software is releasing version 10.2.00 of the LOADPLUS for DB2® product.

LOADPLUS is a component of the BMC Database Administration for DB2 solution.

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:

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What’s new

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

Temporal tables

In most cases, LOADPLUS now natively loads temporal tables.

**NOTE**
LOADPLUS continues to invoke DSNUTILB when you specify INDEX UPDATE while loading temporal tables.

This support changes the following options:

- The PERIODOVERRIDE option is now valid for both native LOADPLUS jobs and DSNUTILB load jobs. This option tells LOADPLUS to load column values from an input file into a system period start or end column that is defined as GENERATED ALWAYS.

- The TRANSIDOVERRIDE option is now valid for both native LOADPLUS jobs and DSNUTILB load jobs. This option tells LOADPLUS to load column values from an input file into a transaction start column that is defined as GENERATED ALWAYS.

XML binary data

LOADPLUS now natively supports XML binary data. This support includes the ability to natively load XML data from a BLOB referenced file (by using the BLOBF keyword on the CHAR or VARCHAR data type).
The AVGSIZE keyword on the CHAR or VARCHAR data type and the XMLAVGSIZE global option now apply when you are loading XML data from a BLOB referenced file.

**XML indexes**

LOADPLUS now natively supports user-defined XML indexes for which the indexed values are stored as SQL DATE or TIMESTAMP values.

**Timestamp columns defined with a precision other than 6**

LOADPLUS now natively supports timestamp columns that are defined with a precision (number of microseconds) other than 6.

This change makes the TSPREC installation option obsolete. If your installation options module contains the TSPREC option, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.

**TIMESTAMP WITH TIME ZONE data**

LOADPLUS now natively supports TIMESTAMP WITH TIME ZONE data. This enhancement includes support for both of the following capabilities:

- Loading TIMESTAMP WITH TIME ZONE input data
- Loading columns that are defined as TIMESTAMP WITH TIME ZONE

As part of this enhancement, the definition for the IMPLICIT_TZ option has changed. LOADPLUS now uses IMPLICIT_TZ natively. Use IMPLICIT_TZ to specify the implicit time zone to use when loading a TIMESTAMP WITH TIME ZONE column with timestamp values that do not contain a time zone. For more information, see the description of this option in the *LOADPLUS for DB2 Reference Manual*.

This change makes the TSTZ installation option obsolete. If your installation options module contains the TSTZ option, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.
Clone tables

LOADPLUS now natively loads clone tables and base tables that participate (or have participated) in a clone relationship. Base table spaces are now supported regardless of instance number.

As part of this support, LOADPLUS has added the EXCHANGE syntax option to enable you to exchange the base and clone objects after the load process completes. For more information, see the description of this option in the LOADPLUS for DB2 Reference Manual.

This change makes the CLONE installation option obsolete. If your installation options module contains the CLONE option, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.

Indexes that contain non-key columns

LOADPLUS now natively supports indexes that contain non-key columns.

This change makes the IXINCLCOL installation option obsolete. If your installation options module contains the IXINCLCOL option, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.

Universal tables spaces defined with MEMBER CLUSTER

LOADPLUS now natively loads universal table spaces that are defined with MEMBER CLUSTER.

This change makes the UTSMEM installation option obsolete. If your installation options module contains the UTSMEM option, the module compiles successfully but completes with return code 4 and a message indicating that the option is obsolete.

Indexes on an expression

LOADPLUS now natively supports indexes that contain a key that is derived from certain expressions. For more information, see the LOADPLUS for DB2 Reference Manual.
LOADPLUS currently supports expressions that use the following functions:

- UPPER
- LOWER
- SUBSTR
- DATE
- DAY
- MONTH
- YEAR

**NOTE**
PTFs BPU3684, BPJ0470, and BPJ0507 provided this functionality for version 10.1.00. For more information, see the technical bulletin dated April 6, 2012.

## LOAD RESUME YES SHRLEVEL REFERENCE

LOADPLUS now supports LOAD RESUME YES SHRLEVEL REFERENCE. This option uses the hardware snapshot capability of the BMC EXTENDED BUFFER MANAGER (XBM) product or its SNAPSHOT UPGRADE FEATURE (SUF) technology. For more information, see the description of SHRLEVEL REFERENCE in Chapters 2 and 3 of the *LOADPLUS for DB2 Reference Manual*.

As part of the changes for this feature, the SHRLEVEL installation option has changed. You can now specify a value of REFERENCE for either parameter of this option.

## LOAD RESUME YES SHRLEVEL CHANGE

LOADPLUS now supports LOAD RESUME YES SHRLEVEL CHANGE (without the SQLAPPLY keyword) for PART $n$ REPLACE. For more information, see the description of SHRLEVEL CHANGE in Chapters 2 and 3 of the *LOADPLUS for DB2 Reference Manual*.

**NOTE**
When you specify LOAD RESUME YES SHRLEVEL CHANGE without PART $n$ REPLACE, LOADPLUS runs an SQLAPPLY load as it did in earlier versions.

As part of the changes for this feature, the SHRLEVEL installation option has changed. You can now specify a value of CHANGE for either parameter of this option.
Statistics

LOADPLUS has enhanced statistics collection:

- For UPDATEDB2STATS YES, BMCSTATS YES, and BMCSTATS REPORT, LOADPLUS now collects statistics for the following objects:
  - LOB table spaces
  - Partition-by-growth partitions that were added during the load job
- For UPDATEDB2STATS YES, LOADPLUS now updates additional DB2 catalog statistics by passing the following options to the Common Statistics component:
  - UPDATEDB2 ALL (instead of UPDATEDB2 ACCESSPATH)
  - HISTORY ALL (instead of HISTORY ACCESSPATH)
  - KEYCARD Y (instead of KEYCARD N)

For information about how these options affect which statistics are updated in the DB2 catalog, see the DASD MANAGER PLUS documentation.

**NOTE**
You cannot change these statistics options.

Ability to cancel threads

You can now tell LOADPLUS to cancel threads in DB2 that might prevent a successful drain. You must have the following authorizations to use this functionality. (These additional authorizations might be implicit in the authority that you have.)

- DISPLAY privileges
- One of the following authorities:
  - SYSADM
  - SYSOPR
  - SYSCtrl

A new command option, FORCE, enables this functionality; corresponding installation options FORCE, FORCE_AT, and FORCE_RPT provide default values for this option.

You can also specify a new DD statement, BMCFORCE DD, to contain the thread cancelation report.
For more information, see the descriptions of the FORCE options and the BMCFORCE DD statement in the LOADPLUS for DB2 Reference Manual.

Additional output messages data set

You can now send LOADPLUS output messages to a second output data set by specifying a SYSPRIN2 DD statement in your JCL. The content of this optional data set is identical to the content of the SYSPRINT data set.

SYSPRIN2 is not a substitute for SYSPRINT. If you include a SYSPRIN2 DD statement in your JCL, you must still include a SYSPRINT DD statement.

In a worklist environment, you can specify SYSPRIN2 DD SYSOUT=* to view output in real time from any of the BMC Utility products that run in that worklist.

**NOTE**

PTF BPU3886 provided this functionality for version 10.1.00.

Compressed versioned indexes

LOADPLUS fully supports compressed indexes that have been versioned.

**NOTE**

PTFs BPU4280 and BPJ0506 provided this functionality for version 10.1.00. For more information, see the technical bulletin dated April 6, 2012.

Data set type specification

You can use the new DSNTYPE installation or command option to specify the type of data set that you want LOADPLUS to create during dynamic allocation. For more information, see the description of this option in the LOADPLUS for DB2 Reference Manual.
&JDATE variable

When you specify the &JDATE variable with the DSNPAT option and you are running a DSNUTILB load, LOADPLUS now translates this variable to the IBM® &JDATE(3,5) variable.

ACFORTSS removal

This release removes the ACFORTSS option. Now, if the following conditions exist, you must ensure that the DB2 external security exit (DSNX@XAC) from Computer Technologies is implemented:

- You use the Computer Technologies CA-ACF2 or CA-Top Secret security product for DB2.
- You previously used ACFORTSS=Y.

System and software requirements

This version of LOADPLUS has the following changes to minimum requirements from version 10.1 of LOADPLUS:

- BMCSORT version 2.4.01
- DB2 Solution Common Code (SCC) version 11.1.00
- DB2 Utilities Common Code (D2U) version 10.2.00
- High-speed Apply Engine version 11.1.00 (for SQLAPPLY load)
- BMC Common Statistics component version 11.1.00 (to update DB2 catalog statistics or the DASD MANAGER PLUS database statistics)

End of support for DB2 8, DB2 9 CM, and DB2 10 CM8

Starting with this release, LOADPLUS does not support DB2 Version 8. Earlier releases will continue to support Version 8.

Future releases of LOADPLUS will not support the following modes:

- DB2 Version 9 CM
- DB2 Version 10 CM8
Documentation changes

This release includes the following documentation changes:

- All messages are now available in the BMC Documentation Center, which is accessible from the BMC Support Central site (http://www.bmc.com/support). A separate messages manual is no longer available.

- Installation and configuration information is located in the following books:
  - *Installation System User Guide*
  - *BMC Products and Solutions for DB2 Configuration Guide*

Known issue

When loading LOB data, LOADPLUS might write invalid LOB pages, but complete without an indication of the problem.

Known symptoms of this problem include the following results from subsequent IBM utility operations:

- Broken-page messages
- Failure with reason code 00C200FD

PTF BPU5692 resolves this issue.

Installation

Download the latest version of the LOADPLUS for DB2 product by using the Electronic Product Distribution (EPD) facility. You can navigate to the EPD page from the Support Central website at http://www.bmc.com/support.

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

LOADPLUS 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* and *BMC Products and Solutions for DB2 Configuration 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.

FMID and version information

This release of LOADPLUS uses version 2.3.60 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>ZAMUA20</td>
<td>LOADPLUS for DB2</td>
<td>10.2.00</td>
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<tr>
<td>ZAPTB10</td>
<td>High-Speed Apply Engine</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>
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<tr>
<td>ZBMR15E</td>
<td>ISR External Routines</td>
<td>1.5.00</td>
</tr>
<tr>
<td>ZDIG190</td>
<td>Dignus C Runtime and C++ objects</td>
<td>1.9.01</td>
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<td>DB2 Utilities Common Component</td>
<td>10.2.00</td>
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<td>ZSCCB10</td>
<td>DB2 Solution Common Code</td>
<td>11.1.00</td>
</tr>
<tr>
<td>ZZIO160</td>
<td>DB2 Option Carryover</td>
<td>1.6.00</td>
</tr>
</tbody>
</table>
The preceding table contains the FMIDs for LOADPLUS 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 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 LOADPLUS, 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.

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.