BMC is releasing version 12.1.00 of the Log Master for DB2 product.

Log Master is available as a stand-alone product and as a component of the BMC Recovery Management for DB2 solution.

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

The following topics are discussed:

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What's new

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

Support for IBM DB2 Version 12

Log Master version 12.1.00 supports IBM DB2 Version 12, including the following new features.

Relative page numbers

You can now create or alter range-partitioned table spaces to support relative page numbers (RPNs) for increased size and flexibility. Without this feature, partition information is still embedded in the page number, resulting in an absolute page number. With this feature, the partition information is separate from the page number, so the resulting page number reflects the relative page number for the partition. For reporting purposes, the partition number of an RPN space appears separately.

In logical log output, both the table space information record (DTSI) in the control file and the data change record (LLDF) in the data file include a new PAGENUMFMT field. This field indicates whether the space utilizes absolute (A) or relative (R) page numbers.

This release removes the following fields, which were unused, from the DTSI:

- UNTRANVCATNAMEFLAG
- UNIVCATNAMELEN
- UNIVCATNAME

Continuous delivery

DB2 Version 12 supports a continuous delivery model at the code, catalog, and function levels. Each level specification includes version, release, and modification components in vvrmmm format. The level information of the host subsystem appears in the BMC097078I message.
For earlier versions, BMC097078I continues to appear as it did before this release.

In logical log output, the type record (XTYP) in the control file includes new FUNCTIONLEVEL, CODELEVEL, and CATALOGLEVEL fields. For DB2 Version 12, you should use these fields instead of the legacy FUNCTIONLEVEL, DB2VERSION, and DB2CATALOGMODE fields. The DB2VERSION field is set to a constant Z99 value to indicate that you should use the new fields.

**LOB compression**

This release supports decompression of LOB data that has been compressed with IBM zEnterprise Data Compression (zEDC) hardware. If zEDC hardware decompression fails, Log Master attempts decompression via software emulation.

**DDL syntax**

This release supports new DB2 Version 12 data definition language (DDL) syntax.

This release also adds the following changes to support the new catalog activity type TRANSFER:

- TRANSFER keyword in the catalog activity definition syntax used in the WHERE clause of the LOGSCAN statement

- TRANSFERCOUNT column in the repository history table (ALPDDLF), indicating the number of TRANSFER OWNERSHIP DDL statements in the file

- TRANSFEROWNERSHIP column in the Filter Line table

- Transfer to the list of catalog activity values in the user interface for filter generation
Key store data moved above the bar

Starting with this release, key store data spills to above-the-bar (ATB) storage (that is, above the 2-gigabyte address) instead of to DASD, improving Log Master performance.

This release deprecates the following installation options:

- KSALLOCU
- KSSPACE
- KSSTOR
- KSDACL
- KSMGMT
- KSCLUST
- KSDATA
- KSVOLS
- QBLRBUF

This release also deprecates the following options in the STOREOPTS statement syntax:

- TRACKS
- CYLINDERS
- SPACE
- STORCLAS
- DATAACL
- MGMTCLAS
- VOLUME
- CLUSTER
- DATA

Compression dictionaries moved above the bar

In earlier releases, Log Master loaded compression dictionaries below the bar (that is, below the 2-gigabyte address), where the amount of available memory was limited. The default amount of memory was 50 MB. You could override this amount by using the DICTSPC installation option.

In this release, Log Master loads compression dictionaries above the bar (that is, above the 2-gigabyte address) and deprecates DICTSPC. By default, an unlimited amount of memory is available for storing compression dictionaries. However, you
can use the DICTIONARYSPACE option in the OPTION statement if you want to specify a limit.

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**Note**

If you already have jobs that use OPTION DICTIONARYSPACE to limit the space for compression dictionaries, BMC recommends removing that option. Doing so allows Log Master to allocate the maximum amount of memory needed for log processing.

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**QUIESCEAGING installation option**

This release adds the QUIESCEAGING installation option. This option enables you to exclude members of a data sharing subsystem from processing if they have been quiesced.

**USEUTILITYDELETES installation option**

This release adds the USEUTILITYDELETES installation option. This option specifies whether Log Master should use the delete record logged by the DSNUTILB utility when invoked by any of these:

- DB2 LOAD
- REPAIR utilities
- EXEC SQL statement

**Access to the SYSLGRNX table**

Starting with this release, Log Master no longer has indirect access to the SYSIBM.SYSLGRNX table. If you are using IBM DB2 Version 11 or later, Log Master can access the SYSLGRNX table directly because SYSLGRNX is defined in the DB2 catalog.

In DB2 Version 10, however, the SYSLGRNX table was delivered by IBM APAR PM35190 and subsequently updated by IBM APAR PM55333. Therefore, if you are using a DB2 Version 10 subsystem, you must ensure that CATMAINT has been executed for both PM35190 and PM55333 to define the SYSLGRNX table in the DB2 catalog.
Drop recovery of table spaces and tables dropped in separate units of recovery (URs)

Log Master now supports drop recovery of tables, table spaces, and databases dropped in separate URs.

Dynamic allocation of outcopy output data sets for drop recovery

Instead of specifying a ddname for outcopy, you use dynamic allocation of outcopy output data sets to perform drop recovery of databases and table spaces.

This release updates the following panels accordingly:

- Dropped Object Names Maintenance
- NGT Recover Outcopy Specification
- Generate Automated Drop Recovery

DB2 spanned LOAD format

Log Master LOAD now supports large object (LOB) or XML data in spanned record output for UNLOAD PLUS for DB2 and Log Master formats. Log Master can generate LOAD spanned output files for LOADPLUS for DB2 and IBM DB2 LOAD.

New panel for selecting report ordering options

For defining standard default reports, this release moves the report ordering options from the Report Output panel (ALPP054) to a new panel, the Report Order By Options panel (ALPW249). You access the new panel by entering E in the new Edit Order By field on the Report Output panel.

New SYSTEM ID column in load-related log records

For load data files and control file output, this release adds a SYSTEM ID informational column in the log record information.
This column is useful if you need to process data in character format (as opposed to the Log Master internal binary format. For example, you might need this information when migrating data to another platform or to a data warehouse as part of an extract, transform, and load (ETL) process.

LARGE data set type

This release adds data set type LARGE to the DSNTYPE allocation parameter for the LOGSCAN statement.

Object set management in BMC Workbench

The BMC Workbench for DB2 product now enables you to manage object sets, which are used by the RECOVERY MANAGER and DASD MANAGER PLUS products, and by certain NGT utilities.

**Note**

In BMC Workbench, you can edit only object sets that were created by using BMC Workbench. However, you can resolve, copy, and view object sets from all sources.

For more information, view the Quick Course "Workbench for DB2 - Managing object sets," the BMC Workbench for DB2 User Guide, and the BMC Workbench online Help.

Users who have a license for any of the following simplified solutions can access and use BMC Workbench to manage object sets:

- BMC High Speed Utilities for DB2
- BMC Object Administration for DB2
- BMC Recovery for DB2
- BMC Performance for DB2SQL
- BMC Performance for DB2 Databases
- BMC Utility Management for DB2
- BMC Large Object Management for DB2

Installation System changes

Beginning with version 3.1.00 of the Installation System, new product releases necessitate a new Installation System FMID. Before installing any products, always ensure that you have the most recent version of the Installation System installed and that you have refreshed its runtime environment.
This change enables PTF maintenance for individual levels of the Installation System. The change also eliminates the requirement to provide the Installation Maintenance Value, which simplifies the installation process.

For more information, see the release notes for the most current version of the Installation System.

Installation and maintenance

You install Log Master by using the Installation System.

Installing the Installation System or a product

The Installation System is installed and maintained by using SMP/E. Installing the Installation System creates the required SMP/E environment. Use the following procedures to install the Installation System or products.

Before you begin

If you need more information, see these sources:

- For software, hardware, and other requirements, see the Installation System documentation.
- For information about installation changes, see the Installation System release notes.

If you prefer physical installation media instead of downloaded images, request physical media from your BMC sales representative. Contact information is available on the BMC website.

To install the Installation System

1. Review the most recent Installation System release notes from any product page on the Support Central website.
3. Click Installation System.
4 Click the method you want to use to obtain the Installation System, and follow the
provided procedures.

--- WARNING ---

The Installation System must be installed into its own SMP/E zone.

--- To install a product ---

1 Ensure that you have the most recent version of the Installation System installed
and that it has any required PTFs applied.

To determine the most recent version number, see the most recent Installation
System release notes on any product page on Support Central. To determine the
version number of your current Installation System, see the title line on the
Installation System Main Menu. Required PTFs are announced in technical
bulletins.

2 Start the Installation System.

3 Follow the on-screen prompts.
   For more information, see the Installation System documentation.

--- Maintaining the Installation System or a product ---

Use the following procedures to maintain the Installation System or products.

--- Note ---

BMC provides fixes for Log Master at the component level. To apply fixes for this
solution, you must apply fixes for each component of the solution.

--- To maintain the Installation System ---

1 Perform one of the following actions:

- If you have the most recent version of the Installation System installed, apply
  any required PTFs.

- Install the most recent version of the Installation System, and apply any
  required PTFs.

To determine the most recent version number, see the most recent Installation
System release notes on any product page on Support Central. To determine the
version number of your current Installation System, see the title line on the
Installation System Main Menu. Required PTFs are announced in technical
bulletins.
2 Refresh the Installation System runtime data sets by running the $205RTEC and $206RTEC jobs (in order).

3 Restart the Installation System.

**To maintain a product**

1 Check [Support Central](https://supportcentral.com) for product notices, such as technical bulletins about fixes and Recommended Service Level (RSL) availability.

2 Use [BMC ISR](https://bmc.com) (recommended) to obtain product PTFs and RSLs.

3 Run the $176APLF installation job to ensure that all required FMIDs are applied.

4 Apply the product maintenance to the product's SMP/E environment. For more information, see the Installation System documentation.

**FMID and version information**

Log Master uses version 3.1.00 (or more recent) of the Installation System.

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**Note**

Always use the most recent version of the Installation System and ensure that it has any required PTFs applied.

To determine the most recent version number, see the most recent Installation System release notes on any product page on [Support Central](https://supportcentral.com). To determine the version number of your current Installation System, see the title line on the Installation System Main Menu. Required PTFs are announced in technical bulletins.

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Installation installs the following versions and SMP/E FMIDs:

<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++ V71</td>
<td>71</td>
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<tr>
<td>BBASC70</td>
<td>SAS_C V70B</td>
<td>70</td>
</tr>
<tr>
<td>ZAIN031</td>
<td>Install Execution Code</td>
<td>31</td>
</tr>
<tr>
<td>ZALPC10</td>
<td>Log Master for DB2</td>
<td>C1</td>
</tr>
<tr>
<td>ZAPTC10</td>
<td>High Speed Apply Engine</td>
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<tr>
<td>ZAUP241</td>
<td>BMCSORT</td>
<td>24</td>
</tr>
<tr>
<td>ZBMR15E</td>
<td>ISR External Routines</td>
<td>15</td>
</tr>
<tr>
<td>ZBST100</td>
<td>BMC Support Tool</td>
<td>10</td>
</tr>
<tr>
<td>FMID</td>
<td>Product or component</td>
<td>Version</td>
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<td>ZUSC550 UIM Common Services</td>
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<tr>
<td>ZZIOC10</td>
<td>ZZIOC10 DB2 Options Carryover</td>
<td>C1</td>
</tr>
</tbody>
</table>

The preceding table contains the FMIDs for Log Master 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:
  - Optimization products, common products, and common components
  - BMC products for IBM DB2
  - BMC products for IBM IMS
  - MainView products
To access the reports on Support Central, take the following steps:

2. Click Product codes and FMIDs.
3. Click one of the listed reports.

**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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