BMC is releasing version 12.1.00 of the BMC Next Generation Technology Copy for DB2 for z/OS product.

NGT Copy is available as a stand-alone product and as a component of the following solutions:

- BMC Recovery for DB2
- BMC High Speed Utilities for DB2
- BMC Object Administration for DB2
- BMC Recovery Management for DB2
- BMC Database Administration for DB2

**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 and resolved problems.

The following topics are discussed:

- What's new
  - COPY PLUS for DB2 name change
  - Support for IBM DB2 Version 12
  - Copying compressed LOBs
  - Additional zIIP offload
  - NSCMAIN deprecated
  - MAXSNAPS option
  - Reduced time for running the MODIFY command
  - Support for ARCHIVE tables
  - Use of the WHERE option on the DELETE subcommand
  - New symbolic variable &PART4
What's new

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

COPY PLUS for DB2 name change

Starting with this release, the name of the COPY PLUS for DB2 product has changed to the BMC Next Generation Technology Copy for DB2 for z/OS (or NGT Copy) product.

Support for IBM DB2 Version 12

This release adds support for DB2 Version 12.

This release supports:

- DB2 Version 12
- DB2 Version 11
- DB2 Version 10 in new-function mode (NFM) only

Copying compressed LOBs

In this release, you can copy compressed LOBs.
Additional zIIP offload

Starting with this release, NGT Copy offloads substantially more copy processing to the IBM z Integrated Information Processor (zIIP). This can reduce central processing (CP) time by 50% or more.

NSCMAIN deprecated

In this release, the NSCMAIN program has been deprecated. You can now make consistent copies by adding CONSISTENT YES to a COPY command that runs through the ACPMAIN program.

MAXSNAPS option

This release adds the MAXSNAPS option to the DELETE subcommand of the MODIFY command.

This option provides an alternative method of SYSCOPY or BMCXCOPY cleanup. You can specify the number of Instant Snapshot Copies and FlashCopies to retain. When the specified limit is reached, any older Instant Snapshot Copies or FlashCopies are deleted. If ICFDELETE YES is specified, the image copy datasets will also be deleted.

Reduced time for running the MODIFY command

You can specify the ICFDELETE option on the MODIFY command to write the names of data sets that need to be deleted to a file. This reduces the time it takes to run the MODIFY command. You can then delete the data sets from the file at a time convenient for you.

Support for ARCHIVE tables

This release adds the AUX ARCHIVE option to support the copying of ARCHIVE tables.
Use of the WHERE option on the DELETE subcommand

With this release, you must comply with the following guidelines when using the WHERE option on the DELETE subcommand:

- Do not use WHERE within another WHERE clause instead of the OR connector option.
- Do not use the following options with a WHERE option:
  - MAXCOPIES
  - MAXFULLCOPIES
  - MAXRECDAYS
  - MAXSNAPS

New symbolic variable &PART4

This release adds the &PART4 symbolic variable that you can use for any data set. &PART4 generates 4-character partition numbers.

Substrings of symbolic variables

With this release, you can use substrings of symbolic variables in data set names.

Access to the SYSLGRNX table if you are using IBM DB2 Version 10

NGT Copy no longer supports indirect access to the SYSLGRNX table but supports direct access as follows:

- **If you are using DB2 Version 10**, ensure that CATMAINT has been executed for IBM APARs PM35190 and PM55333. These APARs define the SYSLGRNX table in the DB2 catalog. With the APARs applied, NGT Copy can access SYSLGRNX directly via the DB2 catalog.

- **If you are using DB2 Version 11 or later**, you have direct access to SYSLGRNX; starting with Version 11, DB2 automatically defines SYSLGRNX in the DB2 catalog.
New SCOPE STATUS option

The SCOPE STATUS option has been added to the COPY object options. It allows you to copy only objects that are in a specified status, for example, copy pending.

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.
Installation and maintenance

You install NGT Copy 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 on any product page from the A-Z Supported Product List on Support Central.
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 from the A-Z Supported Product List 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 NGT Copy 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 from the A-Z Supported Product List 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 for product notices, such as technical bulletins about fixes and Recommended Service Level (RSL) availability.

2 Use BMC ISR (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 *Installation System Reference Manual*.

**FMID and version information**

NGT Copy uses version 3.1.00 (or more recent) of the Installation System.

--- 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 from the A-Z Supported Product List 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.

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>
</tr>
<tr>
<td>BBASC70</td>
<td>SAS_C V70B</td>
<td>70</td>
</tr>
<tr>
<td>ZACPC10</td>
<td>BMC NGT COPY for DB2</td>
<td>C1</td>
</tr>
<tr>
<td>ZAIN031</td>
<td>Install Execution Code</td>
<td>31</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>ZDIG1A0</td>
<td>DIGNUS C runtimes and C++ objects</td>
<td>1A</td>
</tr>
</tbody>
</table>
The preceding table contains the FMIDs for NGT Copy 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.
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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