SNAPSHOT UPGRADE FEATURE for DB2®

Version 6.1.00
July 24, 2014
Tracking ID QM001851467: SNAPSHOT UPGRADE FEATURE can cause an IBM DB2 Version 11 castout engine to hang

A serious problem in the SNAPSHOT UPGRADE FEATURE for DB2 technology requires immediate attention.

**NOTE**
BMC previously announced this problem in a flash dated July 3, 2014. A PTF to correct the problem is now available.

**Issue**

The product can cause an IBM® DB2 castout engine write-to-disk to hang and never complete when the following conditions exist:

- You are running DB2 Version 11 in Conversion Mode (CM) or New Function Mode (NFM) in data sharing environments.
- The data sharing environments experience heavy SQL update activity to the global buffer pools.
- You are running at least one of the following BMC utilities for DB2, with the parameter shown here:
  
  — REORG SHRLEVEL CHANGE
  — UNLOAD SHRLEVEL CHANGE CONSISTENT YES
  — CHECK SHRLEVEL CHANGE
  — LOAD ENFORCE RI or LOAD ENFORCE CONSTRAINTS (of a child table in an RI relationship)
  — COPY SHRLEVEL CONCURRENT YES
The castout engine hang might be accompanied by page corruption. The corruption appears as a page from one data set of a simple or segmented tablespace or a non-partitioned index (NPI) being written over a page from a different data set of the same object.

The castout engine hang can be identified by a DSNB355I message like the following:

DSNB355I csect-name GROUP BUFFER POOL gbpname RECOVERY LRSN VALUES MIGHT CAUSE A DELAY IN GRECP RECOVERY. PAGE LEVEL = minimum-page-lrsn MEMBER LEVEL = minimum-member-lrsn.

The page corruption can be detected as an error in a BMC reorganization, resulting in the following message:

BMC50247S 2: PAGE #### IN dsName HAS PGLOGRBA #### WHICH IS GREATER THAN THE CONSISTENCY RBA, FAILURE IN SNAPSHOT

Overwritten pages are detected when they are read by DB2 or one of the BMC utilities.

Resolution

PTF BPE0430 resolves this issue.

NOTE
If you have questions, contact Customer Support at 1 800 537 1813 (United States or Canada) or call your local support center.

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To view the latest BMC documents, see the Support Central website at http://www.bmc.com/support. Notices such as flashes, technical bulletins, and release notes are available on the website. You can subscribe to proactive alerts to receive e-mail messages when notices are issued or updated. For more information about proactive alerts, see the Support Central website.
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