CPExpert Product Update 2000-2

This product update forwards updates to both software and documentation. The software update is Release 10.2 of CPExpert. The release number indicates that it is the second release of 2000.

This release (1) provides support for OS/390 Version 2 Release 10 (V2R10), (2) enhances the DB2 Component to provide analysis of DB2 Data Sharing problems and potential problems, (3) updates the DB2 Component to support DB2 Release 6, (4) updates the DB2 Component to support DB2 interval statistics in a MICS performance data base, (5) provides updated documentation on CD-ROM, and (6) corrects errors that have been reported.

- **OS/390 Version 2 Release 10**. OS/390 V2R10 was made Generally Available (GA) by IBM in September 2000. Since Computer Management Sciences is a Business Partner with IBM, I normally can provide support for new releases of MVS within 30 days of GA of the new IBM release.

    - All CPExpert components have been updated to provide support for OS/390 Version 2 Release 10.

    - All CPExpert documentation has been updated with references to applicable OS/390 Version 2 Release 10 documents from IBM.

    Recall that all references in CPExpert documentation refer to IBM documents contained in IBM BookManager format. I will be happy to provide a cross-reference to hard-copy of IBM documents if any user does not have access to IBM documents in BookManager format.

- **Provide analysis of DB2 Data Sharing.** The primary development emphasis during the past six months has been to research DB2 Data Sharing problems and potential problems. As a result of this research, the DB2 Component has been updated to analyze DB2 Data Sharing. The following analysis of performance problems and suggested alternative solutions, are now performed by the DB2 Component in areas related to DB2 Data Sharing:

    - Provide analysis to determine when coupling facility read requests for data in a DB2 group buffer pool could not complete because of coupling facility storage constraints.

    - Provide analysis to determine when coupling facility write requests to a DB2 group buffer pool failed because of coupling facility storage constraints.

    - Provide analysis to determine when a low read-hit percentage was experienced for cross invalidated pages in a DB2 group buffer pool.

    - Provide analysis to determine when a castout engine was not available for castout processing of pages from a DB2 group buffer pool.

    - Provide analysis to determine when a coupling facility write engine was not available for virtual buffer page writing to a DB2 group buffer pool.

    - Provide analysis to determine when lock contention was high for a DB2 group buffer pool.

    - Provide analysis to determine when false lock contention was high for a DB2 group buffer pool.

    - Provide analysis to determine when service time was high for synchronous requests to a DB2 group buffer pool.

    - Provide analysis to determine when service time was high for asynchronous requests to a DB2 group buffer pool.

    - Provide analysis to determine when too many synchronous requests were changed to asynchronous for a DB2 group buffer pool.

    - Provide analysis to determine when excessive cross-invalidations due to directory reclaims occurred for a DB2 group buffer pool.

    Some of the above analysis can be performed only if SMF Type 74 (structure) information is available in the performance data base. You must specify %LET SMF74ST; in USOURCE(DB2GUIDE) if SMF Type 74(structure) information is available and you wish the DB2 Component to analyze DB2 Data Sharing problems from the perspective of the coupling facility.

- **Provide support for DB2 Release 6.** The DB2 Component has been enhanced to support DB2 Version 6.

- **Support DB2 interval statistics in a MICS performance data base.** The DB2 Component has been enhanced to provide support for DB2 interval statistics in a MICS performance data base. I would like to say "Thanks" to Darrell Faulkner (Computer Associates) for providing detailed MICS file structure information related to DB2 Data Sharing variables.

- **Correct errors that have been reported**. I've added a new member titled SOURCE(GENER101) which contains a listing of the errors that were discovered in CPExpert code for Release 10.1, and an acknowledgment of the user who found the error.

    I **really** appreciate calls from users reporting problems or simply asking questions. As I said in the original delivery letter for CPExpert, if errors occur with your installation, please don't waste your time trying to solve the error. Just give me a call and I will quickly fix the problem!

Installation

I suggest that you use the following steps to install Release 10.2:

- Create a new PDS titled "prefix.CPEXPERT.V102.SOURCE".

- Create a new PDS titled "prefix.CPEXPERT.V102.USOURCE".

- Install CPExpert into the "prefix.CPEXPERT.V102.SOURCE" using the normal installation procedures described in the *CPExpert Installation Guide*.

- Copy your **old** USOURCE members into "prefix.CPEXPERT.V102.USOURCE". This step should be done so you do not have to recreate all of your unique parameters. There are no changes to the variables in USOURCE members, unless you are exercising new options provided with this code.

    Please note that you should specify %LET SMF74ST=Y; in USOURCE(DB2GUIDE) if (1) you license the DB2 Component of CPExpert, (2) you are running DB2 Data Sharing, and (3) you wish CPExpert to analyze information contained in SMF Type 74(structure) records to identify DB2 Data Sharing problems. The SAS data set containing SMF Type 74(structure) information does not have to reside in the same SAS library as the DB2 information; you can specify that it resides in a different SAS library if necessary. Please refer to the DB2 Component User Manual for details.

Thanks

I would like to say **"Thank you"** to the following individuals. These folks have discovered errors, proposed new features, or suggested documentation changes since the last Update Bulletin:

James Baron (Department of Veterans Affairs, TX)

Glen Bowman (Wakefern Food Corporation, NJ)

Dave Cogor (US Department of Transportation)

David Ehresman (University of Louisville, KY)

Brian Farley (ReliaStar, MN)

Darrell Faulkner (Computer Associates, VA)

Paul Gordon (Bank of America,VA)

Gerd Krohm (Westdeutsche Landesbank, Germany)

Barry Merrill (Merrill Consultants, TX)

Alex Torben Nielsen (TELE-DANMARK, Denmark)

Bryant Osborn (Bank of America, VA)

Harald Seifert (HUK-Coburg, Germany)

MP Welch (Sprint, TX)

WEB site

Please visit my web site **(www.cpexpert.com)** for information about CPExpert. I post answers to frequently asked questions, errors reported by users for the current release of CPExpert, and information about CPExpert components that you might not license.

Additionally, I've posted several papers on the web site that I've presented at professional conferences.

Please call, fax, or send me a note on the Internet if you have suggestions, you want new features, or you would like to see more or different reporting done by CPExpert.

Best regards,

Don Deese

Last updated by Don Deese on 11/16/00.