



Product Update Bulletin 2014-2

This product update forwards changes to both software and documentation. The software update is Release 24.2 of CPEXPERT. The release number indicates that it is the second release of 2014. With Release 24.2, CPEXPERT has been updated to: (1) provide changes to the CICS Component, (2) provide changes to the DB2 Component, (3) provide updated documentation; and (4) correct errors that have been reported.

The main changes to the CICS Component with CPEXPERT Release 24.2 were to:

- **Support CICS Release 5.2**

- All relevant CPEXPERT CICS Component code has been updated to provide support for CICS/TS Release 5.2.
- All relevant CPEXPERT CICS Component documentation has been updated with references to applicable CICS/TS Release 5.2 documents from IBM.
- The following rules have been modified in support of CICS/TS Release 5.2:
 - **Rule CIC101** (*The CICS region reached MAX tasks too often*) was modified to support the Default and Minimum values for the MXT system initialization parameter. Note that the Default value was lowered from 500 with CICS/TS 5.1, to 250 with CICS/TS 5.2. CPEXPERT had earlier flagged the 500 Default value with CICS/TS 5.1 as being significantly too high for most CICS regions. CPEXPERT believes that for many installations, the default value of 250 with CICS/TS 5.2 is higher than should be used.
 - **Rule CIC104** (*Maximum Task specification may be too large*) was modified to support the Default and Minimum values for the MXT system initialization parameter. Note that the Default value was lowered from 500 with CICS/TS 5.1 to 250 with CICS/TS 5.2. CPEXPERT had earlier flagged the 500 Default value with CICS/TS 5.1 as being significantly too high for most CICS regions. CPEXPERT believes that for many installations, the default value of 250 with CICS/TS 5.2 is higher than should be used.
- **WARNING:** A significant amount of CPU time is required to process the files required to determine whether Rule CIC145 (*Programs were defined with DATALOCATION(BELOW)*) should be produced. At some sites using CPEXPERT, more than 95% of the CPU time used by CPEXPERT is involved in analyzing the data necessary to determine whether Rule CIC145 should be produced. This CPU usage should not be incurred unless Rule CIC145 is produced!

You should “turn off” Rule CIC145 by specifying **%LET CIC145=OFF;** in USOURCE(CICGUIDE) if Rule CIC145 is not produced. This specification will suppress the CPEXpert code involved with Rule CIC145.

If you have turned Rule CIC145 OFF, you should consider turning Rule CIC145 ON periodically (perhaps once per month) to ensure that your environment has not changed and Rule CIC145 might be applicable in your changed environment.

- **Other Changes.** Other changes to the CICS Component were to correct errors reported by users.

The main changes to the DB2 Component with CPEXpert Release 24.2 were to:

- **Support DB2 Release 11**

- All relevant CPEXpert DB2 Component code has been updated to provide support for DB2 Release 11.
- All relevant CPEXpert DB2 Component documentation has been updated with references to applicable DB2 Release 11 documents from IBM.

- **Support summarization of DB2 interval statistics with DB2 Release 10 and DB2 Release 11¹.**

The default DB2 statistics recording interval is 30 minutes until DB2 UDB for z/OS Version 9. With DB2 UDB for z/OS Version 9, the default statistics recording interval was changed to 5 minutes.

Beginning with DB2 Version 10, the STATIME subsystem parameter applies only to IFCIDs 0105, 0106, 0199, and 0365. IFCIDs 0001, 0002, 0202, 0217, 0225, and 0230 are not controlled by STATIME, and the corresponding statistics records are written at **fixed**, one-minute intervals.

Recording the DB2 statistics at fixed one-minute intervals can be ideal for some analysis of DB2 statistics. However, one-minute intervals can be too short lapsed time to allow easy performance analysis, and makes difficult a comparison between DB2 statistics and RMF statistics (when RMF statistics are written at 15-minute intervals, for example). Additionally, such frequent writing and processing of statistics can result in very large reports!

With CPEXpert Release 24.2, CPEXpert provides an option to summarize DB2 interval statistics into a longer duration, but provides the ability to use standard CPEXpert data selection to "drill down" to selected intervals if appropriate for performance analysis. With the CPEXpert DB2 statistics summarization option, a user specifies how many DB2 one-minute statistics intervals should be summarized. The resulting summary data is

¹Thanks to **Glenn Bowman** (Wakefern Food Corporation, NJ) for suggesting this new feature.

analyzed using normal CPEXpert DB2 Component analysis modules, and normal CPEXpert DB2 Component reports are produced based on the analysis of the summary data. A “drill down” feature can be implemented simply by reprocessing the data and using the normal date/time selection specifications to select data to analyze.

- **Other Changes.** Other changes to the DB2 Component were to correct errors reported by users.
- **Updated documentation.** This release provides updated documentation to reflect new or revised rules.

The CPEXpert documentation is accessible via Adobe Acrobat Reader. A free version of Adobe Acrobat Reader is available at <http://get.adobe.com/reader/>.

- **Add a log of changes to code.** A log of changes to the CPEXpert code for Release 24.1 has been included, and additions or changes to USOURCE members are included in the changes log. This log is titled CHANGES and shows each module changed (except when the change is minor). Interested users can review the CHANGES log to see what code changes have been made, and can easily identify new guidance variables. CPEXpert follows the MXG model for releases (that is, the CHANGES log shows changes in the new release, while the CHANGESS log is an accumulation of changes).

FTP download

CPEXpert Release 24.2 (both code and documentation) is available via ftp download from the CPEXpert ftp server. If you prefer this method of obtaining the update, please send an email to Don_Deese@cpexpert.com to obtain instructions for ftp download, obtain your user id, and obtain your password. **If you have requested ftp download in past, the ftp download instructions will automatically be sent to you.**

Installation

I suggest that you use the following steps to install Release 24.2:

- Create a new PDS titled "prefix.CPEXPERT.V242.SOURCE".
- Create a new PDS titled "prefix.CPEXPERT.V242.USOURCE".
- Install CPEXpert into the "prefix.CPEXPERT.V242.SOURCE" using the normal installation procedures described in the *CPEXpert Installation Guide*.
- Install CPEXpert into the "prefix.CPEXPERT.V242.USOURCE" using the normal installation procedures described in the *CPEXpert Installation Guide*. This step will cause the email macros to be loaded into USOURCE.

- Copy your **old** USOURCE members into "prefix.CPEXPERT.V242.USOURCE". This step should be done so you do not have to recreate all of your unique parameters².
- If you elected to receive updates to CPEXpert on CD, the software is distributed on the CD that contains the CPEXpert user documentation.
 - **Installing CPEXpert from CD to MVS.** Copy the *source.242.ebc* file from cd:\software\ as binary, to CPEXPERT.TAPE.RELV242, allocated as DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=0,AVGREC=K,SPACE(80,(150,50)), DSN=CPEXPERT.RELV242.IEBUPDTE. The *source.242.ebc* file is in standard IEBUPDTE format.

Use the JCL described in Exhibit 2-1 of the *CPEXpert Installation Guide* to install the CPEXpert software. Copy your old USOURCE members as described above.

- **Installing CPEXpert from CD to PC:** Copy the cd:\software\source\ on the CD to prefix\cpexpert\rel242\source. Copy the cd:\software\usource\ on the CD to prefix.cpexpert\rel242\usource using the normal installation procedures as described in the *CPEXpert Installation Guide*. This step will cause the email macros to be loaded into usource. Copy your old usource members as described above. Make sure that you update your usource(genguide) member to specify **%LET SOURCE =user_directory;** statement to point to the new SOURCE directory.
- **Downloading via ftp:** If you elected to download updates from my ftp server, you can copy the *source.242.ebc* file to CPEXPERT.TAPE.RELV242, allocated as DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=0,AVGREC=K,SPACE(80,(150,50)), DSN=CPEXPERT.RELV242.IEBUPDTE. The *source.242.ebc* file is in standard IEBUPDTE format.

The updated CPEXpert user documentation also will be available on the ftp site. It is your option whether you wish to download only the manuals, or also download the individual rule documents. If you wish to download the individual rule documents, they will be available as pdf files in the *Individual_Rule_Documentation.zip* on the ftp site.

- If you have implemented the CPEXpert option to produce output to the SAS Output Delivery System (ODS) and if you have exercised the LINKPDF option so you can “click” on a rule in the html output to see the documentation, **please remember to load the new individual rule documentation onto your system.**
- If you chose to implement the xxxHTML option (e.g., WLMHTML) to provide your own SAS ODS HTML statement parameters, please place your own macros into USOURCE and concatenate the USOURCE PDS ahead of the SOURCE PDS.

²The exception to this statement is if you chose to use the “yesterday” option in selecting data. The “yesterday” calculation is done by a PREVIOUS macro contained in USOURCE(GENGUIDE). The PREVIOUS macro is placed in USOURCE so you can select “yesterday” as the immediate previous day, or can define “yesterday” as any other previous day you chose. Placing the PREVIOUS macro in USOURCE(GENGUIDE) allows you to make such a modification, without altering a SOURCE member. Consequently, if you copy your old USOURCE(GENGUIDE) member to CPEXPERT.V242.USOURCE, you may wish to append the PREVIOUS macro from your old USOURCE(GENGUIDE) into your new USOURCE(GENGUIDE).

- If you chose to implement the CPEXpert email option, please update the xxxEMAIL modules in USOURCE to reflect your unique email requirements.

Thanks

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

Scott Barry (SBBWorks, Inc, FL)
Jim Barton (Department of Veterans Affairs, TX)
Glenn Bowman (Wakefern Food Corp., NJ)
Craig Collins (State of Wisconsin)
David Cogar (Wells Fargo, NC)
Tom Crutcher (Humana, KY)
Wayne Hammond (Bank of America, GA)
Barry Merrill (Merrill Consultants, TX)
Harald Seifert (HUK-Coburg, Germany)

Please send me an email 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

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