Error Report 1530

Error Report 1530 addresses a problem in program PPP130 where the normal total execution time of PPP130 appeared excessive.

The problem is caused by a missing selection criterion in the set of selection criteria coded in the DECLARE statement for the PER_EMP_STATUS cursor. The table view PPPVPER1_PER coded in the FROM clause in Release 1144 did not require that the EMPLOYEE_ID from the table view PPPVPER1_PER equal the EMPLOYEE_ID on the table view PPPVYEAR1_EAR. This resulted in excessive run-time during the opening of the PER_EMP_STATUS cursor.

During the testing of PPP130 for Release 1144, a small test database was used. Unfortunately, testing on a test database containing a small volume of data did not detect the problem described above.

DB2 Programs

PPP130

This program has been modified to add the selection criterion 'WHERE PPPVPER1_PER.EMPLOYEE_ID = PPPVYEAR1_EAR.EMPLOYEE' in the SELECT statement associated with cursor PER_EMP_STATUS.
Test Plan

At UCOP, the following steps were used to verify (via SPUFI) that the changes made to PPP130 corrected the problem as stated in the error report. Your campus may choose to test the changes made to PPP130 by executing PPP130 in the Special Daily Process. If this is the case, a test database should contain a large amount of data to simulate production.

1) To test the unmodified SELECT statement defined in the DECLARE cursor statement in program PPP130 from Release 1144 using SPUFI, the SELECT statement coded in program PPP130 was modified for the test via SPUFI (See SELECT statement coded below).

Instead of executing the SELECT statement via SPUFI against a test database containing a small amount of data, it was executed against a test database (Davis) containing a large amount of data.

The total run-time of the execution of the SELECT statement appeared to be excessive; after running for more than 10 minutes, the execution of the SELECT statement was manually cancelled.

SELECT PPPVPER1_PER.EMPLOYEE_ID
    FROM PPPVPER1_PER, PPPVEAR1_EAR
    WHERE
        ((HIRE_DATE >= '1997-07-21'
        AND HIRE_DATE <= '1997-09-11')
        OR
        (SEPARATE_DATE >= '1997-07-21'
        AND SEPARATE_DATE <= '1997-09-11')
        OR
        (SEPARATE_DATE >= '1997-07-05'
        AND SEPARATE_DATE <= '1997-08-26'
        AND SICK_LV_HRS_BAL > 80)
        OR
        (SEPARATE_DATE >= '1997-07-21'
        AND SEPARATE_DATE <= '1997-03-14'
        AND SICK_LV_HRS_BAL ^= 0)
        OR
        (LOA_BEGIN_DATE >= '1997-07-21'
        AND LOA_BEGIN_DATE <= '1997-09-11')
        OR
        (LOA_RETURN_DATE >= '1997-07-21'
        AND LOA_RETURN_DATE <= '1997-09-11')
    UNION
    SELECT PPPVAPP1_APP.EMPLOYEE_ID
        FROM PPPVAPP1_APP
        WHERE
            ((APPT_BEGIN_DATE >= '1997-07-21'
            AND APPT_BEGIN_DATE <= '1997-09-11')
            OR
            (APPT_END_DATE >= '1997-07-21'
            AND APPT_END_DATE <= '1997-09-11')) ;

2) The shaded line containing the WHERE clause in the SELECT statement above was replaced with the following two lines. The selection criterion coded below is the same as the selection criterion coded in the DECLARE cursor statement in program PPP130 for this release.

    WHERE PPPVPER1_PER.EMPLOYEE_ID = PPPVEAR1_EAR.EMPLOYEE_ID
    AND
The modified SELECT statement was executed against the same test database. After running less than 5 minutes, the execution of the SELECT statement ended successfully. The total run-time may be different at your location; the execution of the SELECT statement, however, should end successfully.

Campuses can replicate the above steps, and if desired make additional local tests.

**Installation Instructions**

1. Install changes to Batch DB2 program PPP130.
2. DB2 Pre-compile, compile, and link Batch DB2 program PPP130 into the Batch LOADLIB.
4. Install PPP130 into production.

**Timing of Installation**

This release is urgent.

This release must be installed to correct the problem stated in the error report above.

If your campus has already installed Release 1144, program PPP130 from this release must be installed to correct the problem addressed in Error Report 1530.

If your campus has not yet installed Release 1144, the changes to PPP130 from this release must be installed together with Release 1144.

If there are any questions, please send electronic mail to Jackson.Quan@ucop.edu, or call at (510) 987-0464.

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