Release 1934

Error Reports 2236
2241
2259
2260
2261
2267
2219

Technical Release 2\textsuperscript{nd} Quarter 2010

Detail Design

July 20, 2010
Prepared by Maxine Gerber

Revised – August 13, 2010
Revised by Baskar Chitravel
Rajeev Gupta

Information Resources & Communications
Office of the President
University of California
# Table of Contents

## Introduction ................................................................................................................. 1
- Error Report 2236 ................................................................................................. 1
- Error Report 2241 ................................................................................................. 1
- Error Report 2259 ................................................................................................. 1
- Error Report 2260 ................................................................................................. 1
- Error Report 2261 ................................................................................................. 1
- Error Report 2267 ................................................................................................. 1
- Error Report 2219 ................................................................................................. 1

## Overview of PPS Modifications .................................................................................. 1
- EDB File Maintenance Process ............................................................................... 1
- CICS EDB Inquiry (WHO Screen) .......................................................................... 2
- History Control Table Database ........................................................................... 2
- Web PAN ................................................................................................................ 2
- CICS PAN Review .................................................................................................. 2
- ARSM ...................................................................................................................... 2
- W2 .......................................................................................................................... 2
- 1042S ..................................................................................................................... 2
- Layoff Seniority Credit ............................................................................................ 2

## Programs ..................................................................................................................... 2
- New and Modified Programs .................................................................................. 2
  - PPDETUTL - ER 2241 ......................................................................................... 2
  - PPWWHO - ER 2260 .......................................................................................... 3
  - UCPPPEDB - ER 2259 ......................................................................................... 3
  - UCSWP01 - ER 2236, 2261 ............................................................................... 3
  - UCSWP07 - ER 2236 and 2261 ......................................................................... 3
  - UCWINRB - ER 2261 ........................................................................................ 3

## DDL Members ............................................................................................................. 4
- IXACC02C (new) - ER2259 ................................................................................... 4

## Java Changes ............................................................................................................. 4
- Java Programs ......................................................................................................... 4
  - DetailDAO.java .................................................................................................... 4
  - DirectoryDAO.java .............................................................................................. 4

##Obsolete Objects ...................................................................................................... 4
- Programs .................................................................................................................. 4
Introduction

The following error reports will be addressed in this release.

Error Report 2236
Two web PAN stored procedures use non-standard SQL in the “SELECT CURRENT PACKAGESET” statements. They should be corrected to select the data from the system table SYSIBM.SYSDUMMY1 instead of an application table.

Error Report 2241
Program PPDETUTL uses inefficient SQL for obtaining data from the data element table (PPPDET). The program should be modified to use “>=” instead of “NOT <” in the cursor definitions.

Error Report 2259
Program UCPPPEDB uses inefficient SQL when accessing ARSM tables. A new index should be added and the cursor modified to make use of the index.

Error Report 2260
Program PPWWHO which controls the CICS WHO screen uses inefficient SQL to access the EDB. It contains cursors used for counting rows for the purposes of accurate paging. “FETCH FIRST n ROWS ONLY” should be added for efficiency.

Error Report 2261
Three programs for web and CICS PAN review contain code which could cause an abend, now that package versioning is in use at UCOP. The programs should be modified to use “FETCH FIRST ROW ONLY WITH UR” to avoid a -811 SQL error.

Error Report 2267
Subroutines PP***HFT were developed as part of the history project in release 704. However, these programs are not called from any mainline programs and should be made obsolete.

Error Report 2219
Web PAN should be changed to be able to use current DB2 drivers instead of an old type of driver which is no longer supported.

Overview of PPS Modifications

This is a strictly technical release, which means there is no functional impact to any of the changes. So while the following processes are affected by the changes, there will be no observable difference in their functionality.

EDB File Maintenance Process
Several programs in both batch and online EDB maintenance use subroutine PPDETUTL which is being changed to resolve error report 2241.
CICS EDB Inquiry (WHO Screen)
The screen program which displays the WHO screen (PPWWHO) will be modified to resolve error report 2260.

History Control Table Database
Programs which were written to fetch CDB data are being made obsolete to resolve error report 2267. Since these programs were never used, there will be no functional impact.

Web PAN
Stored procedures used by web PAN are being modified to resolve error reports 2236 and 2261. The calls to stored procedures from web PAN have been changed to resolve error report 2219.

CICS PAN Reivew
Program UCWINRB which displays the PAN list in CICS PAN review is being modified to resolve error report 2261.

ARSM
ARSM driver program UCPPPEDB is being modified to resolve error report 2261.

W2
W2 program PPP610 invokes subroutine PPDETUTL which is being changed to resolve error report 2241.

1042S
1042S program PPP722 invokes subroutine PPDETUTL which is being changed to resolve error report 2241.

Layoff Seniority Credit
PPP863 edits Layoff Seniority Credit Transactions and reports errors. This program is not currently in use at any location, but because it uses one of the subroutines being modified (PPDETUTL), it’s included here.

Programs

New and Modified Programs

PPDETUTL - ER 2241
PPDETUTL is a subroutine which retrieves PPPDET data in the CPWSXDET format. It will be modified to resolve error report 2241 as follows:

Currently, in the DET_ROW cursor, the where clause is as follows:

WHERE (NOT DET_CARD_TYPE < :WS-CARD-TYPE) AND (NOT DET_ELEM_NO < :WS-DET-ELEM-NO)

To improve performance, it will be changed to the following:

WHERE DET_CARD_TYPE >= :WS-CARD-TYPE AND DET_ELEM_NO >= :WS-DET-ELEM-NO
PPWWHO - ER 2260

PPWWHO is the screen processor for the WHO function (Employee Browse). It will be modified to resolve error report 2260 as follows:

The following cursors are used to count rows for paging: COUNT_CURSOR_1A, COUNT_CURSOR_1B, COUNT_CURSOR_3A and COUNT_CURSOR_3B. These will be modified to include “FETCH FIRST 1 ROW ONLY”.

UCPPPEDB - ER 2259

UCPPPEDB is the ARSM security driver for the EDB and THF resource types. It validates the user's access to the selected employee data. It will be modified to resolve error report 2259 as follows:

Cursor ACC-CURS on the UC0VZACC_ACC table is written with a sub-select which causes a lengthy scan which will be eliminated by using a UNION query instead. A new index will be added for the table which will be used by the rewritten SQL.

UCSWP01 - ER 2236, 2261

UCSWP01 is the Web PAN stored procedure to return all primary PAN keys based on selection criteria and sort sequence. It will be modified as follows:

- (Error report 2236) Currently, there is SQL to do a ‘SELECT CURRENT PACKAGESET” from the UC0VZPNX_PNX table. This will be changed to reference the system table SYSIBM.SYSDUMMY1 instead.

- (Error report 2261) Currently, there is SQL which selects data from the UC0VINRB_SYSPACKAG table. Since package versioning has been introduced, this could result in an abend from a -811 SQLCODE. FETCH FIRST ROW ONLY WITH UR will be added to prevent the -811.

UCSWP07 - ER 2236 and 2261

UCSWP07 is the Web PAN stored procedure to return PAN Directory data. It will be modified as follows:

- (Error report 2236) Currently, there is SQL to do a ‘SELECT CURRENT PACKAGESET” from the UC0VZPNX_PNX table. This will be changed to reference the system table SYSIBM.SYSDUMMY1 instead.

- (Error report 2261) Currently, there is SQL which selects data from the UC0VINRB_SYSPACKAG table. Since package versioning has been introduced, this could result in an abend from a -811 SQLCODE. FETCH FIRST ROW ONLY WITH UR will be added to prevent the -811.

- In addition, the UPPER function will be eliminated in favor of the recently added _UP columns in the WHERE clause.

UCWINRB - ER 2261

UCWINRB is the screen processor for the INRB CICS function (PAN Notification Review Browse). It will be modified to resolve error report 2261 as follows:

Currently, there is SQL which selects data from the UC0VINRB_SYSPACKAG table. Since package versioning has been introduced, this could result in an abend from a -811 SQLCODE. FETCH FIRST ROW ONLY WITH UR will be added to prevent the -811.
DDL Members

IXACC02C (new) - ER2259
IXACC02C will be a new member to create index UC0XACC2 on table UC0ACC in support of error report 2259 changes being made to program UCPPPEDB.

Java Changes

Java Programs

edu\ucop\pan\data\dao

DetailDAO.java
This program processes input and output for the following stored procedure calls.

<table>
<thead>
<tr>
<th>Stored Procedure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCSWP03</td>
<td>Return detail data for a single specified PAN</td>
</tr>
<tr>
<td>UCSWP04</td>
<td>Mark PANs as deleted or read</td>
</tr>
<tr>
<td>UCSWP05</td>
<td>Forward a PAN</td>
</tr>
<tr>
<td>UCSWP06</td>
<td>Add reviewer comments to a PAN</td>
</tr>
</tbody>
</table>

The program DetailDAO.java will be modified to incorporate type 4 DB2 driver issues.

DirectoryDAO.java
This program processes input and output for the stored procedure UCSWP07 that returns PAN Directory data.

The program DirectoryDAO.java will be modified to incorporate type 4 DB2 driver issues.

Obsolete Objects

The following objects will be made obsolete in PPS.

Programs

These programs are all fetch programs for the History Control Table Database (CDB) tables. The programs have never been used (Error Report 2267).

- PPBRAHFT
- PPBREHFT
- PPBRGHT
- PPBRJHFT
- PPBRLHFT
- PPBUBHFT
- PPBUDHFT
- PPBUGHFT
- PPBULHFT
- PPBUSHFT
- PPBUTHFT
- PPDOSHFT
- PPGTNHFT
- PPHMEHFT
- PPLAFHFT
- PPLATHFT
- PPLRRHFT
- PPLRTHFT
- PPLUCHFT
- PPPRMHFT