

Release 1899

Error Reports 2223

2113

2108

PAN Error Report Fixes (MVS)

Detail Design

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Introduction

This release addresses several error reports related to PAN. This round of error fixes is entirely in the MVS part of the PAN applications. There are no changes to the java web components.

Error Report 2223

Performance issues have been reported resulting from the use of the DB2 function UCASE.

Error Report 2113

If two entries in the PAN directory have the same email address, and both have their routing preference set to Email routing, an abend occurs when a PAN is forwarded to that email address.

Error Report 2108

When forwarding a PAN to a user ID which already exists in the reviewer list, if that user ID has its routing preference set to Email routing, there is no message displayed. The message is "The User ID entered is already a recipient of the notification".

Overview of PPS Modifications

Error Report 2223 – Use of UCASE DB2 Function

Several PAN programs and stored procedures use the UCASE DB2 function in select statements to allow sorting of upper and lower case data consistently. While this method is effective, the UCASE function can cause performance problems. The approach to eliminating the use of UCASE is as follows:

- For each table column which has columns currently used in UCASE functions, a new column will be added which will always contain the upper-case version of that data. For example, in the UC0DIR table, a new column DIR_LAST_NAME_UP will be added to contain the upper-case version of the data in DIR_LAST_NAME.
- For each table with new upper-case columns, a trigger will be added to populate the upper-case columns every time the related data is updated. The new columns may not be updated directly, but solely by the execution of the triggers.
- A one-time SQL statement will be executed to populate the data for existing rows.
- Each SQL query which currently uses the UCASE function will be modified to use the new upper-case column instead.

Error Report 2113

Stored procedure UCSWP05 will be modified to prevent the abend.

Error Report 2108

Stored procedure UCSWP05 will be modified to correctly handle forwarding to a duplicate recipient when the routing preference is Email.

Programs

UCDIRTR

UCDIRTR is the stored procedure invoked by the trigger on the UCODIR table. It was modified to use the new upper-case columns in the UCODIR table instead of the UCASE function.

UCSWP01

UCSWP01 is a stored procedure invoked by web PAN to get the keys for PANs which meet the selection criteria. It was modified to use the new upper-case columns in the UCOPNX table instead of the UCASE function.

UCSWP03

UCSWP03 is a stored procedure invoked by web PAN to obtain detail data for a selected PAN. It was modified to use the new upper-case columns in the UCOPNA table instead of the UCASE function.

UCSWP04

UCSWP04 is a stored procedure invoked by web PAN to mark a PAN as deleted or read. It was modified to use the new upper-case columns in the UCOPNA table instead of the UCASE function.

UCSWP05

UCSWP05 is a stored procedure invoked by web PAN to forward a PAN to a new recipient. It was modified as follows:

- Use the new upper-case columns in the UCOPNA table instead of the UCASE function.
- Added code to count existing recipients based on selection criteria to determine whether a duplicate recipient is being added.
- Added code to allow SQLCODE = -811 (multiple matches) when forwarding to an email address.

UCWIDIR

- UCWIDIR is the CICS screen program for displaying the PAN directory. It was modified use the new upper-case columns in the UCODIR table instead of the UCASE function.

Include Members

UC0VZDIR

UC0VZDIR is the layout for the full-table view UC0VZDIR_DIR. The new columns added to this table will be added to the layout.

UC0VZPNA

UC0VZPNA is the layout for the full-table view UC0VZPNA_PNA. The new columns added to this table will be added to the layout.

UC0VZPNX

UC0VZPNX is the layout for the full-table view UC0VZPNX_PNX. The new columns added to this table will be added to the layout.

DDL Members

UCODIR Table

UCODIR is the PAN directory table. The following new columns are being added to contain upper case translations of existing columns that contain mixed case data. This will allow queries on upper-case data without having to use the inefficient UCASE SQL function. These columns will be automatically populated by triggers on the table. New indexes are being created to take advantage of the new columns.

DIR_ADDRESS_UP will contain the upper-case version of the DIR_ADDRESS column.

DIR_EMAIL_UP will contain the upper-case version of the DIR_EMAIL column.

DIR_FIRST_NAME_UP will contain the upper-case version of the DIR_FIRST_NAME column.

DIR_LAST_NAME_UP will contain the upper-case version of the DIR_LAST_NAME column.

DDL members being released for this table are:

- TBDIR01A (new) – alter statements to add the new columns.
- TBDIR00C – table create DDL, modified to reflect the new columns.
- UC0VZDIR – full table view, modified to reflect the new columns.
- IXDIR01C – new index on upper-case name.
- IXDIR02C – new index on upper-case name (descending).
- TRDIR00C – new triggers on the UCODIR table to populate the new upper-case columns. This replaces members TRDII00C and TRDIU00C, which will become obsolete.

UCOPNA Table

UCOPNA is the PAN recipient table. The following new columns are being added to contain upper case translations of existing columns that contain mixed case data. This will allow queries on upper-case data without having to use the inefficient UCASE SQL function. These columns will be automatically populated by triggers on the table.

PNA_ADDRESS_UP will contain the upper-case version of the PNA_ADDRESS column.

PNA_DIR_USERID_UP will contain the upper-case version of the PNA_DIR_USERID column.

DDL members being released for this table are:

- TBPNA02A (new) – alter statements to add the new columns.
- TBPNA00C – table create DDL, modified to reflect the new columns.
- UC0VZPNA – full table view, modified to reflect the new columns.
- TRPNA00C – new triggers on the UCODIR table to populate the new upper-case columns.

UCOPNX Table

UCOPNX is the PAN master table. The following new columns are being added to contain upper case translations of existing columns that contain mixed case data. This will allow queries on upper-case data without having to use the inefficient UCASE SQL function. These columns will be automatically populated by triggers on the table.

PNX_EMP_LAST_UP will contain the upper-case version of the PNX_EMP_LAST_NAME column.

PNX_EMP_FIRST_UP will contain the upper-case version of the PNX_EMP_FIRST_NAME column.

PNX_EMP_MID_UP will contain the upper-case version of the PNX_EMP_MID_NAME column.

DDL members being released for this table are:

- TBPNX02A (new) – alter statements to add the new columns.
- TBPNX00C – table create DDL, modified to reflect the new columns.
- UC0VZPNX – full table view, modified to reflect the new columns.
- TRPNX00C – new triggers on the UCODIR table to populate the new upper-case columns.

PPOT1899

This is a one-time DDL member which updates a column of each modified table to itself for all rows. This will force the triggers to be invoked for every row, thus setting the new upper-case columns to their appropriate values.

Obsolete Objects

The following objects will be made obsolete in PPS:

DDL Members

- TRDII00C
- TRDIU00C