Release 1415

Service Request 15213
PAN Enhancements

DETAIL DESIGN

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Introduction

Service Request 15213 asks that the CICS Post Authorization Notification (PAN) features be enhanced and that a web-based PAN review application be developed. This document contains the detail design for the requested enhancements.

Service Request 15213 PAN ENHANCEMENTS REQUIREMENTS, dated 02/27/02 describes the requirements for each feature of the enhancements.
Summary of Modifications

Modifications were made to both the Post Authorization Notification system and to the Payroll/Personnel System. The following list provides an overview of the changes made.

MVS Modifications

Numerous modifications have been made to the MVS PAN process, both to enhance CICS functionality and to support the new Web PAN processing. The formatted html for Web display is generated at PAN preparation time and saved in the new table UC0PNH. The modifications are summarized below:

1. Modifications to the PPS Pan Event Generation and Format Process
   - A standard format for PAN general information was created with a new general information section generator PPNTGINF.
   - Several of the event format generating programs have been eliminated.
   - All remaining event format generating programs were modified per requirements. In addition, these programs were modified to generate the formatted HTML which is used for the web review process.

2. Modifications to the PAN Preparation Process
   - Provided the ability to assign a priority (ie. URGENT) to a PAN
   - Provided the ability for the preparer to indicate a primary reviewer of a PAN
     A new system parameter, 265, has been added which, when turned on, will require
     benefits information to be included in the PAN.
   - The "blind cc" feature of PAN forwarding has been eliminated.

3. Modifications to the Directory so that additional information about preparers and reviewers can be displayed on notifications, including e-mail address and phone directory can be entered for PAN routing.

4.  


5. Provided an e-mail summary of PAN notifications that have been generated for the reviewer on a periodic basis. This is a new batch program, UC0MLR which can be run on a schedule to generate the email summary notifications.

6. Modified the PAN archive and purge process (UC0PNP) to include new tables and data elements.

**Web-Based PAN Review**

A new web-based PAN review application has been developed using the net.data environment introduced for the Web EDB Inquiry system (release 1408). The application uses the same main menu as the EDB inquiry system. Web PAN shares net.data utility code and DB2 stored procedures with EDB inquiry for session control, ARSM and RACF functions. All other programs are new for Web PAN, including the main navigation net.data macro ucwpanrouter.d2w.

The PAN detail review screen has a link to the EDB inquiry system which allows the user to view EDB data for the employee associated with the PAN being reviewed in a separate window.

The html for the PAN detail is generated in CICS when the PAN is first generated and stored in the new table UC0PNH, where it is retrieved by the net.data programs.

The Web PAN system has the following features:

1. A web-inbox with the ability to sort the incoming notifications and to delete notifications from the inbox.

2. A screen for entering search criteria which will cause the inbox screen to be filtered.

3. Display of PAN detail including
   - Highlighting of changed data
   - Ability for the reviewer to add comments to the PAN
   - Ability for the reviewer to forward the PAN to another reviewer
   - Ability to link to EDB inquiry for the employee associated with the PAN

4. A screen for viewing the PAN directory which can be used to select a specific reviewer for forwarding or search criteria.
An audit review of mandatory reviewer activity, with the ability to monitor whether or not this has been requested.

6. A screen for users to specify an option to receive email notifications in addition to viewing notifications in the CICS or web inbox.

1. Information be displayed for a PAN, including detailed employee and reviewer information.
   - UC0PNX
   - UC0PNA
   - UC0DIR

New tables:
   - UC0PNH contains formatted HTML for the web review process
   - UC0PNP contains user preference information, currently only the email routing

- forwarding.
  - UC0PNR contains all of the departments associated with the employee for which the PAN was generated.

DB2 Triggers for the directory table:

directory (UC0DIR table), no base process to load the directory was requested. Therefore, locations will develop their own procedures for loading local data into this regardless of the method of loading the data. The trigger will invoke a DB2 stored procedure to perform the edits.

DB2 Stored procedures - two new stored procedures have been added.
   - UCDIRTR is the directory trigger processor
   - UCPANMLSL is called by the web application to format e-mail PANs.
DDL Members

**UC0PNX**

*Description:* The UC0PNX table is the PAN header and the "parent" of all PAN notification data tables. The key is the notification identifier (PNX_NOTICE_ID) which relates it to the other notification data tables.

**DDL Members**

- TBPNX01A - alter statements to add new fields to table
- TBPNX00C - modified create table DDL with new fields.
- UC0VZPNX - full table view modified with new fields

*The following fields were added to the UC0PNX table*

- PNX_EMPLOYEE_ID: ID of the employee for whom the PAN was generated
- PNX_EMPLOYEE_NAME: name of the employee for whom the PAN was generated
- PNX_TITLE_CODE: primary title code of the employee for whom the PAN was generated
- PNX_TITLE_DESC: description of the primary title code of the employee for whom the PAN was generated
- PNX_ACTION_1: first action code associated with the generation of the PAN
- PNX_ACTION_1_DESC: description of the first action code associated with the generation of the PAN
- PNX_ACTION_2: second action code associated with the generation of the PAN
- PNX_ACTION_2_DESC: description of the second action code associated with the generation of the PAN
- PNX_ACTION_3: third action code associated with the generation of the PAN
- PNX_ACTION_3_DESC: description of the third action code associated with the generation of the PAN
- PNX_ACTION_4: fourth action code associated with the generation of the PAN
- PNX_ACTION_4_DESC: description of the fourth action code associated with the generation of the PAN
- PNX_ACTION_5: fifth action code associated with the generation of the PAN
- PNX_ACTION_5_DESC: description of the fifth action code associated with the generation of the PAN
- PNX_SUBSYSTEM_ID: online subsystem for which the PAN was
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- **PNX_PRIORITY**
  preparer-assigned priority of the PAN (urgent or not)

- **PNX_EMP_LAST_NAME**
  last name of the employee for whom the PAN was generated

- **PNX_EMP_FIRST_NAME**
  first name of the employee for whom the PAN was generated

- **PNX_EMP_MID_NAME**
  middle name of the employee for whom the PAN was generated

- **PNX_OLD_PAN_FLAG**
  a flag to indicate that the PAN was generated prior to the installation of this release.

**UC0PNA**

Description: UC0PNA is the Notification Address table. It contains one record for each reviewer of a PAN, including mandatory, non-mandatory, user entered and forwarded reviewers.

**DDL Members**

- TBPNA01A - alter statements to add new fields to table
- TBPNA00C - modified create table DDL with new fields.
- UC0VZPNA - full table view modified with new fields
- IXPN200C - modified index to include new field PNA_DIRECTORY_ADDR

The following fields were added to the UC0PNA table

- **PNA_PRIMARY_FLAG**
  Used to indicate that the addressee is the primary reviewer

- **PNA_DIRECTORY_ADDR**
  The reviewer's CICS ID in the PAN directory

- **PNA_LAST_NAME**
  The reviewer's last name from the directory

- **PNA_FIRST_NAME**
  The reviewer's first name from the directory

- **PNA_MIDDLE_NAME**
  The reviewer's middle name from the directory

- **PNA_SUMMARY_TIMEST**
  The timestamp indicating when the PAN was included in an email summary notification.

**UC0DIR**

Description: UC0DIR is the PAN directory table.

**DDL Members**

- TBDIR00C - modified create table DDL with new fields. Field DIR_ADDRESS was changed from 50 to 8 characters.
- UC0VZDIR - full table view modified with new fields
The following fields were added to the UC0DIR table

- DIR_EMAIL  PAN user's email address
- DIR_FIRST_NAME  PAN user's first name
- DIR_MIDDLE_NAME  PAN user's middle name
- DIR_LAST_NAME  PAN user's last name
- DIR_EMPLOYEE_ID  PAN user's employee ID
- DIR_PHONE_AREA  PAN user's phone number area code
- DIR_PHONE_NUMBER  PAN user's phone number
- DIR_PHONE_EXT  PAN user's phone extension
- DIR_DEPT  PAN user's home department

UC0PNC - New table

The UC0PNC table contains reviewer-entered comments for a PAN

DDL Members
- TSPNC00C - Create tablespace
- TBPNC00C - Create table
- IXPNC00C - Create primary index
- UC0VZPNC - full table view

The UC0PNC table contains the following fields:

- PNC_NOTICE_ID  Notification ID
- PNC_USER_ID  CICS ID of the reviewer entering the comment
- PNC_TIMESTAMP  Timestamp the comment was entered
- PNC_ITEM_NUMBER  Line number within the comment
- PNC_COMMENT_TEXT  Comment text line

UC0PNF - New table

UC0PNF is a work table which will temporarily store the formatted text of a PAN. This data was previously stored in a temp storage queue, but is now in DB2 so it can be used by both CICS and the web application.

DDL Members
- TSPNF00C - Create tablespace
- TBPNF00C - Create table
- IXPNF00C - Create primary index
- UC0VZPNF - full table view
The UC0PNF table contains the following fields:

- **PNF_NOTICE_ID**: Notification ID
- **PNF_TIMESTAMP**: Timestamp that the notification was formatted
- **PNF_ITEM_NUMBER**: Line number within the notification text
- **PNF_NOTIF_TEXT**: Notification text line

**UC0PNH - New table**

The UC0PNH table contains the formatted HTML for a PAN to be displayed by the web application.

**DDL Members**

- **TSPNH00C**: Create tablespace
- **TBPNH00C**: Create table
- **IXPNH00C**: Create primary index
- **UC0VZPNH**: full table view

The UC0PNH table contains the following fields:

- **PNH_NOTICE_ID**: Notification ID
- **PNH_HTML_TYPE**: Type of html segment - currently all "N" for notification text.
- **PNH_HTML_SUBTYPE**: The type of data in the html segment.
  - 1 - General Information
  - 2 - Period of Initial Eligibility Change data
  - 3 - Indefinite Layoff data
  - 4 - Work study data
  - 5 - Sabbatical data
  - 6 - Layoff data
  - 7 - Benefits data
  - 8 - Appointment/Distribution data
- **PNH_ITEM_NUMBER**: Segment number within the notification html
- **PNH_HTML_TEXT**: HTML text

**UC0PNP - New table**

The UC0PNP table contains PAN user preference data for a user in the PAN directory. This data is kept in a separate table so that the directory can be reloaded without losing the preference information. There is no referential integrity between UC0PNP and UC0DIR. Currently this includes only the PAN email routing preference.

**DDL Members**
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- TSPNP00C - Create tablespace
- TBPNP00C - Create table
- IXPNP00C - Create primary index
- UC0VZPNP - full table view

The UC0PNP table contains the following fields:
- PNP_ADDRESS User's directory address
- PNP_ROUTING_CODE Email routing code:
  E - Email routing
  N - Not email routing

UC0PNR - New table

The UC0PNR table contains data for each department (home department, appointment departments and distribution departments) associated with the employee for whom a PAN was generated.

DDL Members
- TSPNR00C - Create tablespace
- TBPNR00C - Create table
- IXPNR00C - Create primary index
- UC0VZPNR - full table view

The UC0PNR table contains the following fields:
- PNR_NOTICE_ID Notification ID
- PNR_DEPT_CODE Department code
- PNR_DEPT_DESCRIPT Department description

DB2 Triggers

Two DB2 triggers are being used to validate the data entered or loaded into the UC0DIR table:

DDL Members
- TRDII00C Creates the insert trigger
- TRDIU00C Creates the update trigger

Stored Procedures

Two new stored procedures have been created to support PAN

DDL Members
- SPDIR00C Creates the definition for stored procedure UCDIRTR which performs the trigger
processing for the two UC0DIR table triggers.

- **SPMLS00C**
  Creates the definition for stored procedure UCPANMLS which calls UCPANNOT to format a text PAN. This is currently called from the web only.

**One-time update**

DDL member PPO1415B contains SQL to update the description field for the EENT function.

**Grants**

DDL member PPO1415A contains grant statements to grant permissions on views and stored procedures to the Web surrogate ID.
Program Changes

PPAPEUPN

PPAPEUPN is the EDB Entry/Update subsystem PAN formatting processor. It was modified to obtain the new data needed for the new UC0PNX fields as well as all of the employee's department codes, and stores them in the UCWSPANC external. Note that this program previously did not have any procedure-division SQL statements, but now it does.

PPAPTDPN

PPAPTDPN is the Time Reporting subsystem PAN formatting processor. It was modified to obtain the new data needed for the new UC0PNX fields as well as all of the employee's department codes and stores them in the UCWSPANC external. Note that this program previously did not have any procedure-division SQL statements, but now it does.

PPNTAPPT, PPNTBENE, PPNTINDL, PPNTLAYO, PPNTPIEC, PPNTSABB, PPNTWSPC

These are the notification formatting programs for the event types APPT, BENE, INDL, LAYO, PIEC, SABB and WSPC respectively. The text notifications were modified per requirements. The programs were modified to generate the formatted html for each event type.

PPNTCITZ, PPNTFICA, PPNTHIRE, PPNTKEYC, PPNTLABR, PPNTLEAV, PPNTLVRT, PPNTSEPR

These were the notification formatting programs for the event types CITZ, FICA, HIRE, KEYC, LABR, LEAV, LVRT and SEPR events respectively. These programs are now obsolete because the PAN information for them is now included in the new general information section.

PPNTTRG
PPNTTRG sets the PPS event triggers for PAN. It was modified to skip setting the BENE trigger if the (new) parameter which controls display of benefits PAN data is set to suppress display. Note that this program did not previously contain any SQL statements and did not require a package bind, but now it does.

PPNTUTA

PPNTUTA is a utility program which writes PAN data to temp storage from the external areas. It was modified to write data from the new CPWSPHTM external to temp storage.

UC0PNP

UC0PNP is a batch program which archives and purges PAN data. It was modified to include the new tables and the new fields in existing tables.

UCAPPNLF

UCAPPNLF is the "logical function" application processor for PAN. It was modified to require that comments be entered during PAN preparation, but only if new parameter 265 is set to 1. Note that this program did not previously contain any SQL statements and did not require a package bind, but now it does.

UCAPPNUP

UCAPPNUP is the update application processor for PAN. It was modified to include processing the new fields in the UC0PNA table. In addition, the "blind copy" feature was eliminated.

UCPANDIR

UCPANDIR obtains and formats a record from UC0DIR for the address passed. It was modified to obtain and format the new fields. The program was previously CICS-use only, but now it is "tri-use" which means it can be called by CICS, batch or from a DB2 stored procedure. The web application calls stored procedure UCPANMLS which calls UCPANNOT which in turn calls UCPANDIR.
UCPANMGC

UCPANMGC is the CICS I/O driver program for PAN. It obtains data from temp storage and loads it into the UCWSPANI external. It was modified to process HTML data as well.

UCPANMGR

UCPANMGR is the PAN notification generation driver module. It was modified as follows:

- Code was added to process the new UC0PNX and UC0PNA fields from data saved in temp storage.
- Code was added to insert department data into the new UC0PNR table with data saved in temp storage.
- Code was added to insert html data into the new UC0PNH table with data saved in temp storage.

UCPANMLR

UCPANMLR is the PAN email notification distribution module. It calls UCPPANNOT to format a PAN and then generates one or more email messages using the formatted text. It was modified to obtain the text from the new UC0PNF table instead of temp storage. The email subject line was modified per requirements.

UCPANNOT

UCPANNOT formats a PAN notification. Previously the notifications were written to temp storage, but now they're written to the new table UC0PNF. New UC0PNX and UC0PNA fields are obtained for use in the formatted header. It formats the reviewer-entered comments from the new UC0PNC table. This program was previously CICS-use only, but now it is "tri-use" which means it can be called by CICS, batch or from a DB2 stored procedure. It is called by the stored procedure UCPANMLS which is in turn called from the web PAN application to format an email PAN.

UCROUTER
UCROUTER is the router program for the online applications system. It was modified to delete the new temp storage queue containing the formatted html data for a PAN.

**UCWECOM**

UCWECOM is the comments entry screen program which is part of the PAN preparation process. It was changed as follows:
- Comments entry is now required if new system parameter 265 is set on (value = 1).
- The screen heading was modified to include new UC0PNX fields.
- The new field PNX_PRIORITY can be entered on this screen and the program updates the table with the entered value.

**UCWEENT**

UCWEENT is the EDB notification distribution entry screen program. It was changed as follows:
- Formatting was changed to include the email address and name of the user being processed.
- The user entered must now be in the UC0DIR table to be valid.

**UCWENPR**

UCWENPR is the PAN notification preparation and forwarding screen program. It was changed as follows:
- There is no longer a user-entered description field.
- There is a new entry field for mandatory reviewers only which allows the user to indicate that a reviewer is the primary reviewer of the PAN.
- For additional reviewers, or forwarding, the user may enter a CICS user ID in the user ID field, or an email address in the email field. CICS user IDs must be present in the UC0DIR table.
- The blind copy feature has been eliminated.
- The screen heading was modified to include new UC0PNX fields.
- The screen detail was modified to include new UC0PNA and UC0DIR fields for each recipient.
- The new UC0PNA fields are included in the insert and update for this table.
UCWIARV

UCWIARV is the PAN notification detail screen program. It was changed to obtain the formatted PAN data from the new table UC0PNF instead of from temp storage. Note that this program previously did not contain any procedure division SQL statements and did not require a package bind, but now it does.

UCWIDIR

UCWIDIR is the PAN directory display and selection screen program. The formatting of this screen was changed to include new UC0DIR and UC0PNP fields. In addition, the search feature now supports only last name searches.

UCWINBX

UCWINBX is the PAN inbox display and selection screen program. This screen was changed to match the current user's CICS ID with the new UC0PNA field PNA_DIRECTORY_ADDR instead of PNA_ADDRESS, since PNA_ADDRESS can contain an email address.
New Programs

**PPNTGENE**

PPNTGENE is a new program derived from the program PPNTGEN which was the notification text preparation driver module for both EDB Entry-Update and Time Reporting. PPNTGEN is now used only for Time Reporting, and PPNTGENE is used exclusively for EDB Entry-Update. PPNTGENE calls PPNTGINF to format the new "general information" section of the PAN, and then it calls the relevant PPNT* formatting programs depending on the events triggered as well as certain data conditions. It is no longer the case that every event requires a call to a text generator because the PAN data for most events is formatted in the general information section.

**PPNTGINF**

PPNTGINF is a new program which generates the new general information section notification text and html.

**PPPANDIR**

PPPANDIR is a new batch program to edit and load a sequential file into the UC0DIR table. A spec card is used to indicate that it should be run in either REPORT or UPDATE mode. The input file is a sequential file in the format of a utility unload file for UC0DIR. The program produces a file of rejected input records. Since the error messages are generated by the database triggers for the UC0DIR table, they are also reported in the MESSAGES output file of the job with SQLCODE of -723. These can be ignored, since they are duplicated in the program's error report. The program generates a report of error messages for rejected input records, plus counts of records processed. It also reports on any "orphaned" PPPNPND records, i.e. those which no longer have a matching UC0DIR record. These items must be resolved manually. Note that PPPANDIR deletes all existing records from UC0DIR prior to reloading from the sequential input file.

**UCDIRTR**

UCDIRTR is a new DB2 stored procedure. It is invoked by the insert and update triggers for the table UC0DIR to validate data entered. It returns errors for invalid data which prevents the updates from taking place. In addition, it creates a new UC0PNP record for each inserted or updated UC0DIR record if one doesn't already exist.
UCOMLR

UCOMLR is a new batch program which sends an email summary of recently generated PANs to each PAN recipient. It can be run on any schedule and will generate summaries only for recipients who have received PANs since the last time the program was run.

UCPANMLS

UCPANMLS is a new DB2 stored procedure which calls UCPPANNOT to build the email formatted notification and store it in the new UC0PNF table. This program is currently called only from the web PAN application.

PPO14151

- **PPO14151** is a new one-time batch program to convert PPPPND data and report errors. This program is intended to be rerun until all errors are resolved. Failure to resolve these errors will cause serious problems in PAN. If no errors are found, any email addresses in PND_ADDRESS are replaced with the corresponding CICS ID from UC0DIR. Any lower-case PND_ADDRESS's are replaced with upper case. If multiple entries for the same key are found in PPPPND (this can occur if the same address exists in both upper and lower case values in PPPPND, or if a PPPPND record exists for both the CICS ID and email address of the same user), the data will be "merged" so that there's a single record for each unique ID and event. If one record indicates a mandatory reviewer and the other does not, the single remaining record will indicate mandatory.

PPO14151 can be run in either "edit only" or "update" mode by coding REPORT or UPDATE on the spec card respectively, but must be run in update mode to complete data conversion.

The following errors are reported:

- Address not found in Directory - the address in the PPPPND record is not present in the UC0DIR table, either as an email address or a CICS address. This is no longer permissable and must be corrected prior to continuing with the installation.
- Multiple matches on email in directory - the address in the PPPPND record matches more than one email address in the UC0DIR table. PPO14151 cannot determine which directory entry to obtain the CICS ID from. This is a warning-level error. The first matching directory record is used to update the PPPPND record. EENT may be used to correct any issues.
PPO14152

PPO14152 is a new one-time batch program to convert UC0PNA data and report errors. This program is intended to be rerun until all errors are resolved. However, failure to resolve the errors will not cause serious problems in PAN. If no errors are found, the new fields are updated with data from the matching UC0DIR and UC0PNP records. The following errors are reported:

- Multiple matches on email in directory - the address in the UC0PNA record matches more than one email address in the UC0DIR table. In this case the program cannot determine which UC0DIR record to use to update the UC0PNA data. If this issue is not resolved, the associated directory fields (eg. name, email address, phone number) will not be available for display on the CICS and web screens.

- Automatic reviewer not found in directory - The address in the UC0PNA is not present in UC0DIR and the reviewer type = 'M' or 'R' (automatic reviewer). If this issue is not resolved, the associated directory fields (eg. name, email address, phone number) will not be available for display on the CICS and web screens.

PPO14152 can be run in either "edit only" or "update" mode by coding REPORT or UPDATE on the spec card respectively, but must be run in update mode to complete data conversion.

PPO14153

PPO14153 is a new one-time batch program to convert UC0PNX data and report errors. This program is intended to be rerun until all errors are resolved. However, failure to resolve the errors will not cause serious problems in PAN. If no errors are found, the new fields for employee name are obtained from the EDB and the new action code fields are updated using pre-defined values. The following errors are reported:

- Notifications which have employee IDs which are not present on the EDB. This means that those notifications will not display the employee name. No action is needed.

- The preparer user ID in a PNX records was not found in the directory. If this exception is not resolved, the preparer's directory information (eg. name email, phone number) will not be available for display on the web or CICS review screens.

PPO14153 can be run in either "edit only" or "update" mode by coding REPORT or UPDATE on the spec card respectively, but must be run in update mode to complete data conversion.
CICS Map Changes

UCECOM0

UCECOM0 is the comments entry screen associated with the UCWECOM screen processor. It was changed as follows:
- The screen heading format was modified to include new fields.
- A new entry field for PNX_PRIORITY was added.

UCEENT0

UCEENT0 is the notification distribution screen associated with the UCWEENT screen processor. It was changed as follows:
- The screen heading format was modified to include new fields.

UCENPR0

UCENPR0 is the PAN preparation and forwarding screen associated with the UCWENPR screen processor. It was changed as follows:
- The screen heading format was modified to include new fields.
- Each reviewer now takes two screen lines to display
- New fields were added for each reviewer.
- A new entry field for mandatory reviewers was added to allow the user to indicate that the reviewer is the primary reviewer.

UCIDIR0

UCIDIR0 is the PAN directory display and selection screen associated with the UCWIDIR screen processor. It was changed as follows:
- Each directory entry now takes two lines to display
- Display fields for new UC0DIR fields were added.

UCSAF20
UCSAF20 is the footer map for the EENT function. It was changed to limit the entry of the address to 8 characters. Previously an email address could be entered in this field, but now only CICS IDs may be entered.
Copylib Member Changes

*CPWSNGWB*

CPWSNGWB is a PAN interface area. It was modified with a new error code (108) for HTML overflow. This error will occur if there are more than 5300 HTML segments.

*CPWSPTXT*

CPWSPTXT contains the formatted PAN text. It was expanded to allow for more text lines. The new maximum is 1040 (previously 520).

*CPWSXIDC*

CPWSXIDC contains installation constants. The campus URL for web PAN access was added.

*UCPNARC*

UCPNARC is the PAN archive record layout. It was modified with new record types for the new tables.

*UCWSEENT*

UCWSEENT is the work area for the notification distribution function EENT. It was modified with fields for name and email address.

*UCWSENPR*

UCWSENPR is the work area for the notification distribution function ENPR. It was modified with fields which are used for display in the screen header, eg. preparer name and email address as well as new fields for display of each reviewer. Obsolete fields were removed.
UCWSPANC

UCWSPANC is the UCPANMGR interface/control area. New fields were added to store data for the new UC0PNX and UC0PNR tables.

UCWSPAND

UCWSPAND is the UCPANDIR interface/control area. New fields were added for the new directory fields, eg. phone and email.

UCWSPANI

UCWSPANI is the UCPANMGR interface to the I/O module. Fields were added for HTML processing.

UCWSPANW

UCWSPANW is the PAN common work area. Fields were added to store new data elements, eg. preparer name and email.
New Copylib Members

CPPDHTMW

CPPDHTMW is a new procedure division copylib member which contains procedures for formatting notification HTML.

CPWSHTMW

CPWSHTMW is a new copylib member used as a work area for formatting notification HTML.

CPWSPHTM

CPWSPHTM is a new copylib member used as an interface to the notification generation processors to store notification HTML.

UCWSPANH

UCWSPANH is a new copylib member with the record layout for the new HTML temp storage queue.
JCL

**PPPANDIR**

Sample JCL will be created for new program PPPANDIR.

It will have DD input for:
CARDLIB for the Run Specification Record read by PPPANDIR.
DIRLOAD for the sequential input file.

It will have DD output for:
REJECT for a file of rejected update records which can be used for a rerun
PRNTFIL for the report file.
Forms

UPAY909

Layout for PPPANDIR spec card. Specify REPORT or UPDATE run mode.
Net.data Macro Changes

ppsmenu.d2w

ppsmenu.d2w is the main menu for the PPS web applications. It was changed to include the new PAN features.
New Net.data Macros

ucwactionslist.d2w

ucwactionslist.d2w displays a screen with a list of actions. This screen is used as a help screen for the notification selection screen.

ucwiary.d2w

ucwiary.d2w formats and displays the PAN detail review screen. It is accessed when the user clicks on a PAN from either the inbox, notification selection results or audit review screens. When the PAN is first displayed, the UC0PNA table is updated to indicate that the reviewer has viewed the PAN.

Reviewers can enter comments on this screen which get saved in the UC0PNC table.

Reviewers can forward the PAN to a CICS ID or email address which causes records to be saved in the UC0PNA table. When the PAN is being forwarded to an email address, DB2 stored procedure UCPANMLS is called to format the PAN and save it in UC0PNF. ucwiary.d2w then reads the UC0PNF records and uses the net.data command @DTW_SENDMAIL to send the formatted PAN.

The header frame is formatted with data from the UC0PNX and UC0DIR tables. There is a link to EDB Inquiry, which passes the employee ID associated with the PAN to the EDB Inquiry web application. Also in the header frames are buttons which allow the user to "jump to" a specified section in the detail frame. The preparer's email address is a "mailto" href allowing the user to send mail to that address.

The detail frame is formatted as follows:
The comments section of the detail frame is formatted with data from the UC0PNC and UC0PNT tables.
If the subsystem is "EU" and PNX_OLD_PAN_FLAG is not set to "Y", then the PAN detail sections of the detail frame are formatted with data from the UC0PNH table. Otherwise, it's either an old PAN or from a different subsystem (eg. Time Reporting), and therefore there's no formatted html available. In those cases, the detail section is formatted from data in the UC0PNT table.
The reviewer list section of the detail frame is formatted with data from the UC0PNA and UC0DIR tables. The email address for each reviewer entry is a "mailto" href allowing the user to send mail to that address.
ucwiaud.d2w

ucwiaud.d2w formats and displays the Audit selection and review screen. Only mandatory notifications are displayed. Users can enter selection criteria to filter the list. Each notification contains a link to ucwiarv.d2w to display the PAN detail.

The header frame is formatted with any selection criteria previously entered. The column headings are also displayed in the header frame. Each column heading is an href which re-submits the form with a sort order based on that column. The status and type column headings have a "?" next to them which is an href link to the inbox help screen program ucwinbxhelp.d2w.

The detail frame is formatted with a list of notifications which match any selection criteria entered, sorted in the order requested. The data is obtained from the UC0PNX, UC0PNA and UC0DIR tables. The displayed employee name is an href which causes ucwiarv.d2w to be executed and display the detail for the selected item.

ucwidir.d2w

ucwidir.d2w formats and displays the PAN directory screen. Users can enter selection criteria to filter the list. When the program is invoked from an href on another screen, ucwidir.d2w functions as a selection process, ie. the user can select a directory entry and pass that information back to the originating screen. If the directory is invoked from the main menu it functions simply as an inquiry screen.

The header frame is formatted with any selection criteria previously entered. The column headings are also displayed in the header frame. Each column heading is an href which re-submits the form with a sort order based on that column. In selection mode, a button is present to transfer back to the originating screen with the selected directory entry.

The detail frame is formatted with a list of notifications which match any selection criteria entered, sorted in the order requested. The data is obtained from the UC0DIR and UC0PNP tables. In selection mode, there is a radio button beside each directory entry to allow one to be selected for transfer back to the originating screen. The email address for each directory entry is a "mailto" href allowing the user to send mail to that address.

ucwinbx.d2w
ucwinbx.d2w formats and displays the Inbox and selection results screen. When no notification selection criteria exists, the program displays the current user's inbox. If there is selection criteria, then the list is filtered by the selection criteria.

If the user accessed the notification selection screen, then the variable "Mode" is set to "A" and ucwinbx.d2w will show notifications for all users (filtered by selection criteria). This is known as "notification selection mode". Otherwise, only the user's own notifications will be shown. This is known as "inbox mode".

When in "inbox mode", the user may delete notifications from the inbox. This does not cause any data to actually be deleted, but rather causes PNA_DELETE_STATUS to be set to "Y".

The header frame displays the current selection criteria, if any. In the header frame there's an href in the statement "click here to specify selection criteria" which causes ucwinsrs.d2w to be executed to display the selection screen.

In "inbox mode" there's a button in the header frame for deleting any notifications selected for deletion in the detail frame. The column headings are also displayed in the header frame. Most column headings are hrefs which re-submit the form with a sort order based on that column. The status and type column headings have a "?" next to them which is an href link to the inbox help screen program ucwinbxhelp.d2w.

The detail frame is formatted with a list of notifications which match any selection criteria entered, sorted in the order requested. The data is obtained from the UC0PNX, UC0PNT and UC0DIR tables. The displayed employee name is an href which causes ucwiarv.d2w to be executed and display the detail for the selected item. In "inbox mode" a checkbox is displayed to the left of each PAN entry which is used to indicate that the item should be deleted from the user's inbox when the delete button is pressed.

**ucwinbxhelp.d2w**

ucwinbxhelp.d2w formats and displays the help screen for ucwinbx.d2w and ucwiaud.d2w. It shows the translations of the status and type fields.

**ucwinrs.d2w**

ucwinrs.d2w formats and displays the notification selection screen. When invoked from the main menu, the "Mode" variable is set to "A". This is known as "notification selection mode". Otherwise, control came from the inbox screen. The user enters selection criteria and presses the submit button which transfers control to ucwinbx.d2w.
The detail frame contains the selection criteria entry fields. In "notification selection mode", this includes the field "Reviewer ID". In inbox mode, only notifications for the current reviewer can be viewed, so the Reviewer ID option is not shown. In inbox mode only, the option of viewing only unopened notifications is present.

The submit button invokes ucwinbx.d2w with the selection criteria entered.

ucwpref.d2w

ucwpref.d2w formats and displays the Routing Option Selection screen. The program obtains and displays data from the UC0PNP and UC0DIR tables for the current user. The user can change the e-mail routing preference which causes the UC0PNP record to be updated.

ucwpans_router.d2w

ucwpans_router.d2w is the main navigation driver for PAN. It performs the following functions:

- For the ucwiav.d2w screen, it calls DB2 stored procedure UCPPPEDB to check the ARSM authorization for the employee ID associated with the selected PAN.
- Using the stored cookie, it confirms that the user is legitimately logged on and that the session hasn't timed out.
- Calls ppsfunc which determines whether the user has the RACF permissions to view the screen requested.
- Sets up the frame set and invokes the appropriate macros for each frame based on the screen requested.

ucwtop_frame.d2w

ucwtop_frame.d2w formats and displays the common top frame for all PAN screens. It displays the system logo, user ID, current date and time, the screen title and a contextual navigation menu based on the screen being displayed.
New Net.data Include Members

*ucwcommon.hti*

Common routines for the PAN application

*ucwcommon_defs.hti*

Common variable definitions for the PAN application

*ucwstyles.hti*

The html style sheet for the PAN application. This defines the font attributes for each class of data.

*ucw_js_header.hti*

Common javascript routines for the PAN application.
Modified Net.data Include Members

ppsparms.d2w

This contains installation parameters. A new parameter was added to contain the installation's return email address for PANs forwarded by email.
New Web Image Files

These are image files displayed on the PAN screens

*apptdist.gif*

Button image used in the ucwiarv.d2w header frame to "jump to" the appointment/distribution section.

*apptdis2.gif*

Section header image used in the ucwiarv.d2w detail frame as the heading for the appointment/distribution section.

*comments.gif*

Button image used in the ucwiarv.d2w header frame to "jump to" the comments section.

*comments2.gif*

Section header image used in the ucwiarv.d2w detail frame as the heading for the comments section.

*diron.jpg*

Button image used on several screens to link to the directory screen.

*flag.gif*

Image used to indicate that a notification is Urgent.

*geninf.gif*
Button image used in the ucwiarv.d2w header frame to "jump to" the general information section.

`geninf2.gif`

Section header image used in the ucwiarv.d2w detail frame as the heading for the general information section.

`goto.gif`

Image used in ucwiarv.d2w to highlight the "jump to" buttons.

`revwrs.gif`

Button image used in the ucwiarv.d2w header frame to "jump to" the reviewer list section.

`revwrs2.gif`

Section header image used in the ucwiarv.d2w detail frame as the heading for the reviewer list section.

`pay.gif`

Button image used in the ucwiarv.d2w header frame to "jump to" the pay transaction section.

`pay2.gif`

Section header image used in the ucwiarv.d2w detail frame as the heading for the pay transaction section.