

**Release 1571**

**Service Request 16916  
YTD Balances in the PAR**

**Detail Design**

Caroline Rider  
May 3, 2004

Enterprise IT Services  
Office of the President  
University of California

## **Introduction**

Service Request 16916 asks for the addition of year-to-date grosses balances, selected hours balances, and year-to-date gross-to-net balances to the PAR file. These balances will be used to provide more information to employees in the UC For Yourself Pay Advice web application.

In order to provide the greatest flexibility for including or removing balances in the future, the balances will be carried in a new, variably-occurring segment of the PAR file record. The maximum number of entries for this new segment is currently set to 150. The service request identifies several specific hours and grosses balances, so there could be a minimum of 23 entries; the deductions/reductions/contribution segment of the PAR file record has a maximum of 40 entries, so there could be 40 year-to-date balances associated with them. There may be additional year-to-date gross-to-net balances on the EDB for discontinued deductions that no longer appear in the PAR file.

Each occurrence of the balances segment will include the four-digit data element number (51xx, 55xx, and 6xxx), a balance type code (which will be Y for the year-to-date 6xxx entries and blank for the rest), and a single amount field sized to hold the 6-decimal leave hours balances as well as earnings up to \$9,999,999.99 (nnnnnnn.nnnnnn).

The 51xx hours and 55xx grosses balances will be included only if their amounts are not zero. Year-to-date GTN balances will be included only if they are not zero. The balances will be included only on the last PAR file record created for the employee during a compute. If the last PAR file record for the employee is an expense transfer, the balances are not included (expense transfers do not affect employee balances).

The new balances segment will be included as a new table (PPPBAL) in the DB2 PAR.

These modifications will be combined with the PAR file expansion modifications (SR 14841). There is a separate design document for Service Request 14841, which introduces significant changes to the physical structure of the PAR file.

## **Overview of PPS Modifications**

### **PAR File Changes**

The new, sixth OCCURS DEPENDING ON portion of the PAR file record will be added at the end of the existing logical record (see CPWSXPAR). The occurrence counter, XPAR-NO-BALS, will be inserted after XPAR-NO-WORK-FIL.

### **One-Time Conversion Programs**

The one-time program developed for the PAR file expansion (SR 14841) for converting the current sequential PAR file structure (as of release 1138) will be modified to initialize the new PAR balances counter (XPAR-NO-BALS) to zero.

## **Programs**

### **PPDB2PAR**

PPDB2PAR is called by PPP465 to prepare a sequential PAR file record for insertion into the DB2 PAR tables.

It will be modified to process the new balances segment of the PAR file record.

### **PPEUDEXT**

PPEUDEXT selects the full PPPEUD row for use by the PAR Inquiry programs.

It will be modified to include the new ENTRY\_BALANCES column.

### **PPGRSAUP**

PPGRSAUP is called by PPP390.

It will be modified to initialize the PAR balances counter to zero.

### **PPO1571A (new with SR 14841)**

PPO1571A converts the sequential PAR file from its current format (as of release 1503) to the new, multiple record format.

It will be modified to initialize the balances counter XPAR-NO-BALS to zero.

### **PPP380**

PPP380 creates the Consolidated Payroll Activity (CPA) file from the Transaction Holding File.

It will be modified to initialize the CPA balances counter to zero.

### **PPP400**

PPP400 creates a PAR file from the EDB and the preliminary PAR file with gross-to-net activity.

It will be modified to initialize the PAR balances counter to zero, and to move it into copies of the PAR file records as necessary.

### **PPP410**

PPP410 updates the EDB with the new balances generated by the compute process.

It will be modified to add the balances to the PAR file record after the balances have been updated on the EDB. The balances will be added to a new, output version of the PAR file. The hours and grosses balances will be selected from the PPPEAR and PPPCM tables. The year-to-date ('Y') balances will be selected from the PPPDBL table with a cursor. The balances will be added to the PAR file by closing the input PAR file after the computed balances have been committed to the EDB, then opening it again as input. The input PAR will be copied to a new output PAR file.

The balances will be added to only the last PAR file logical record created for the employee in that compute, and only if the last record is not an expense transfer (expense transfers do not affect balances). For example, if the employee has only expense transfer activity (transaction type 65) in that compute, none of those records will have the balances; if the employee has a cancellation (transaction type 70), a rush check (transaction type 82), and current pay (transaction type 85), the current pay record will be the only one with the balances; if the employee has several overpayments (transaction type 75) and handdrawns (transaction type 80), only the last handdrawn will have the balances.

The specified hours and grosses balances that are not zero will be added to the balances segment; they are listed in the table below with their data element number, DB2 table name, and DB2 table column name. The year-to-date balances from the PPPDBL cursor will then be added to the balances segment.

Data Element	DB2 Table	Column Name
5101	PPPEAR	YTD_TOTAL_HOURS
5102	PPPEAR	YTD_REG_HRS_WORK
5110	PPPEAR	COMP_TIME_BAL
5139	PPPEAR	LAST_STUB_VAC_BAL
5140	PPPEAR	LAST_STUB_SICK_BAL
5141	PPPEAR	LAST_STUB_PTO_BAL
5185	PPPEAR	VAC_HRS_BALANCE
5186	PPPEAR	SICK_LV_HRS_BAL
5187	PPPEAR	PTO_HRS_BAL
5501	PPPPCM	YTD_TOTAL_GROSS
5502	PPPPCM	YTD_FWT_GROSS
5503	PPPPCM	YTD_FICA_GROSS
5505	PPPPCM	YTD_RET_GROSS
5506	PPPPCM	YTD_SWT_GROSS
5507	PPPPCM	YTD_NONTAX_GROSS
5510	PPPPCM	YTD_MED_GROSS
5512	PPPPCM	YTD_OSTWT_GROSS_1
5537	PPPPCM	YTD_TT_GROSS
5538	PPPPCM	YTD_ALT_TT_GROSS
5539	PPPPCM	ETD_TT_GROSS
5540	PPPPCM	YTD_OSWT_GROSS_2
5541	PPPPCM	YTD_OSWT_GROSS_3
5544	PPPPCM	YTD_SFHBR_GROSS

**PPP460**

PPP460 merges two PAR files together and creates a duplicate of one of the files.

It will be modified include the new balances record type and occurrence counter in the processing of all files.

**PPP465**

PPP465 maintains the DB2 PAR tables.

It will be modified to include the new balances segment and occurrence counter. The record counts will be included as a separate line on the PPP4651 control report and labeled 'BALANCES TABLE'.

**PPP876**

PPP876 maintains the data for Financial Aid reporting.

It will be modified to include the new balances segment and occurrence counter in the FYTD record.

**PPSEQPAR (new with SR 14841)**

PPSEQPAR is a new subprogram that will handle all the I/O for all the PAR files (including the CPA file).

It will be modified to handle the new balances segment/record type the same way the other variably-occurring segments/record types are handled. Its RECORD-TYPE will be 26.

## **Copymembers**

### **CPWPATBL**

CPWPATBL defines the DB2 PAR tables for PPP465/PPDB2PAR. It will be modified to include an array (BALAMT) for the balances segment; the balances occurrences counter will be added to the EUD record.

### **CPWSSPAR (new with SR 14841)**

CPWSSPAR defines the new format of the sequential PAR file. It will be modified to include the balances segment as a new record type.

### **CPWSVPAR**

CPWSVPAR defines portions of the PAR file record for use by PPP390 and the PPGRSxxx subprograms. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (WPAR-NO-BALS).

### **CPWSWPAR**

CPWSWPAR defines a skeleton version of CPWSXPAR for use by PPP520. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (WPAR-NO-BALS).

### **CPWSXCPA**

CPWSXCPA defines the CPA file record format. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (XCPA-NO-BALS).

### **CPWSXIC2**

CPWSXIC2 defines many installation constants. It will be modified to include IDC-MAX-CPA-PAR-BALS with a value of 150.

### **CPWSXPAR**

CPWSXPAR defines the PAR file record format. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (WPAR-NO-BALS).

### **CPWSXPAW**

CPWSXPAW defines a skeleton version of CPWSXPAR for use by PPGRSPAR and PPP400. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (WPAR-NO-BALS).

### **CPWSPA1**

CPWSPA1 defines a skeleton version of CPWSXPAR for use by PPP400 and PPP460. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (WPAR-NO-BALS).

### **CPWSZPAR**

CPWSZPAR defines a skeleton version of CPWSXPAR for use by PPP520. It will be modified to include the new OCCURS DEPENDING ON balances segment and the occurrence counter (WPAR-NO-BALS).

## DB2 Changes

### PPPBAL (new):

PPPBAL is a new table in the PPPPAR database that will contain the balances from the new balances segment of the PAR file record. It includes the standard primary key and foreign key that the other DB2 PAR tables include.

```
( PAY_CYCLE_END_DATE    DATE NOT NULL ,
  PAY_CYCLE_CODE        CHAR(2) NOT NULL ,
  EMPLOYEE_ID           CHAR(9) NOT NULL ,
  RECORD_TYPE           CHAR(2) NOT NULL ,
  PRI_GROSS_CTL         CHAR(3) NOT NULL ,
  ENTRY_SEQ_NO          SMALLINT NOT NULL ,
  BAL_NUMBER            CHAR(4) NOT NULL ,
  BAL_IND               CHAR(1) NOT NULL ,
  BAL_AMT               DECIMAL(13,6) NOT NULL ,
PRIMARY KEY (PAY_CYCLE_END_DATE ,
             PAY_CYCLE_CODE ,
             EMPLOYEE_ID ,
             RECORD_TYPE ,
             PRI_GROSS_CTL ,
             ENTRY_SEQ_NO) ,
FOREIGN KEY (PAY_CYCLE_END_DATE ,
             PAY_CYCLE_CODE ,
             EMPLOYEE_ID ,
             RECORD_TYPE ,
             PRI_GROSS_CTL)
REFERENCES PPPEUD ON DELETE CASCADE)
```

The standard DDL members defining the table and views for the PPPBAL table will be created:

- TSBAL00C
- TBBAL00C
- IXBAL00C
- PPPVZBAL

### PPPEUD

PPPEUD contains the fixed employee data from the PAR file record. It will be modified to include the occurrence counter for the new balances segment.

```
ENTRY_BALANCES    SMALLINT
```

The standard DDL members defining the table and views for the PPPEUD table will be modified to include the new column:

- TBEUD00C
- PPPVZEUD
- PPPVEUD1

A DDL member will be supplied which can be used to alter the PPPEUD table to add the balances occurrence counter:

- TBEUD08A

In addition, the program-specific views for PPP465 have been replaced by the generic PAR table views, and are now obsolete:

- PPPV465A (PPPVZDAT)
- PPPV465B (PPPVZDRC)
- PPPV465E (PPPVZHAT)
- PPPV465F (PPPVZPIR)

## **Include Member Changes**

The following INCLUDE members will be created or updated to match the changes to their corresponding views:

- PPPVZBAL (new)
- PPPVEUD1
- PPPVZEUD

The following INCLUDE members are now obsolete:

- PPPV465A
- PPPV465B
- PPPV465E
- PPPV465F