**MCCF EDI TAS US30**

System Design Document

PRCA\*4.5\*XXX



Department of Veterans Affairs

**December 2016**

Version 1

**User Story Number:** US30 (USPY-07)

**User Story Name:** ERAs and EFTs must balance, in order to auto-post  (Backlog ID#113, Row 92)

# Background

As a user, I need the sum of all payments to equal the total of the ERA and for the ERA/EFT totals to balance before the system completes the auto posting process. When the transactions do not balance due to missing line items or unbalanced ERAs, an out of balance occurs within VistA/FMS requiring manual steps to correct or in some cases entering a ticket with VistA Product Support for assistance. If an ERA/EFT does not balance, it should not be considered an auto post candidate and the software should not complete auto posting. The ERA should appear on the worklist with an indicator that the ERA does not balance so as a user, I’m alerted to the out of balance issue and it can be resolved and posted manually. In case of transmission error, the missing line items may be retransmitted to VistA, in which case, I want VistA to reevaluate during the nightly job for potential auto posting.

ERAs and EFTs must balance, in order to auto-post -- EEOB lines must balance to ERA total - ERA must balance to EFT.  If an ERA is truncated or the line item payments do not balance to the attached EFT, ERA/EFT are not eligible to auto-post and manual posting will resume.  VistA auto-posting routine needs to reject any ERA/EFT out of balance, to ensure the integrity of VistA's accounts receivable files.

# Conversation

Nightly process needs to reject the ERA from the auto-post queue if the ERA line items do not balance and ERA and EFT totals do not match.

**ERA Worklist**

**New behavior when selecting ERA WORKLIST** [[1]](#footnote-1) **option.**

When displaying the ERA Worklist and selecting an ERA-EFT match status filter of either ‘NOT MATCHED’ or ‘BOTH’, any unmatched ERAs that are also unbalanced will have the text ‘- UNBALANCED’ appended to EFT MATCH Status value displayed in the worklist for the ERA.

Select EDI Lockbox Option: WL ERA Worklist

DO YOU WANT A (L)IST OF ERAs OR A (S)PECIFIC ONE?: LIST//

LIMIT THE SELECTION TO A DATE RANGE WHEN THE ERA WAS RECEIVED?: NO//

Select parameters for displaying the list of ERAs

ERA POSTING STATUS: (U)NPOSTED, (P)OSTED, OR (B)OTH: U// NPOSTED

DISPLAY (A)UTO-POSTING, (N)ON AUTO-POSTING, OR (B)OTH: B// OTH

ERA-EFT MATCH STATUS: (N)OT MATCHED, (M)ATCHED, OR (B)OTH: B// NOT MATCHED

(M)EDICAL, (P)HARMACY, OR (B)OTH: B// OTH

(A)LL PAYERS, (R)ANGE OF PAYER NAMES: A// LL

DO YOU WANT TO SAVE THIS AS YOUR PREFERRED VIEW (Y/N)? NO//

**The user is presented with the ERA Worklist**

When the ERA Worklist is displayed, the header will contain all of the selected Sorting/filtering option values as before. This is current functionality.

**ERA List - Worklist** Oct 05, 2016@11:38:29 Page: 1 of 1

SELECTED MATCH STATUS: NOT MATCHED POST STATUS : UNPOSTED

DATE RANGE: NONE SELECTED AUTO-POSTING : BOTH

ALL PAYERS PHARMACY/MEDICAL: BOTH

# ERA # Trace#

PAYER NAME/MATCH STATUS ERA PAID DT TOT AMT PAID DT REC'D

1 1 12345

10/29/02 20.00 10/29/02

AN INSURANCE COMPANY NAME APPROX # EEOBs: 1

UNMATCHED - UNBALANCED EFT RECEIPT STATUS: NOT ENTERED

2 90 ABCDE

10/26/04 10.00 10/26/04

NM APPROX # EEOBs: 1

UNMATCHED N/A

|'-' No scratch pad|'x' EXC |'A' autopost complete

Select ERA View/Print ERA EXIT

Sort List Change View

Select Action: Quit//

**Data fields needed:**

EFT total [TOTAL DEPOSIT AMOUNT (#344.3, .08)]

ERA total [TOTAL AMOUNT PAID field (#344.4, .05)]

How to find the EFT total starting at the ELECTRONIC REMITTANCE ADVICE file (#344.4):  
The ELECTRONIC REMITTANCE ADVICE file (#344.4) uses the RECEIPT field (#344,.4,.08) to point to the AR BATCH PAYMENT file (#344). The AR BATCH PAYMENT file (#344) uses EFT RECORD field (#344,.17) to point to EDI THIRD PARTY EFT DETAIL (#344.31). The EDI THIRD PARTY EFT DETAIL file (#344.31) uses EFT TRANSACTION field (#344.31,.01) to point to EDI LOCKBOX DEPOSIT file (#344.3).

**Resolution – Added Changed Objects**

| Routines | Activities | | | |
| --- | --- | --- | --- | --- |
| **Routine Name** | RCDPEWL7 | | | |
| **Enhancement Category** | New | Modify | Delete | No Change |
| **RTM** |  | | | |
| **Related Options** |  | | | |

| Related Routines | Routines “Called By” | Routines “Called” |
| --- | --- | --- |
|  | RCDPEWL  RCDPEWL8  RCDPEWLP | RCDPEWL@DISP  RCDPEWL0@FILTER  RCDPEWL0@PRERA  RCDPEWL8@HASADJ  RCDPEWL8@SELBAT  RCDPEWL8@CTEEOB  RCDPEWLP@AGEDEFTS  RCDPEWLP@PHARM  RCDPEWLP@XCEPT  RCDPEWLP@EXCDENY  RCDPUREC@FMSSTAT |

| **Current Logic** |
| --- |
| .  .  .  EXTRACT(RCSRT1,RCSRT2,RCT) ; Extract the data  ; RCSRT1 = data value at 1st sort level  ; RCSRT2 = data value at 2nd sort level  ; RCT = running entry counter - returned if passed by ref  N AUTOCOMP,FIRST,RC0,RCEFT,RCEXCEP,RCPOST,RCSTAT,RCZ,X,Z,Z0  S RCZ=0 F S RCZ=$O(^TMP($J,"RCERA\_LIST",RCSRT1,RCSRT2,RCZ)) Q:'RCZ D  . S RCT=RCT+1,RC0=$G(^RCY(344.4,RCZ,0))  . S RCEFT=+$O(^RCY(344.31,"AERA",RCZ,0))  . S RCEXCEP=$$XCEPT^RCDPEWLP(RCZ) ; prca\*4.5\*298 assignment of ERA exception flag  . S AUTOCOMP=$S($P($G(^RCY(344.4,RCZ,4)),U,2)=2:"A",1:"") ;prca\*4.5\*298 AUTO-POSTED COMPLETE indicator ("A")  . S RCSTAT=$S('RCEFT:U\_$S($P(RC0,U,15)="CHK":"(CHECK PAYMENT EXPECTED)",$P(RC0,U,15)="NON":"(NO PAYMENT EXPECTED)",$P(RC0,U,9)=2:"(CHECK PAYMENT CHOSEN)",1:"N/A"),1:$$FMSSTAT^RCDPUREC(+$P($G(^RCY(344.31,RCEFT,0)),U,9)))  . S RCPOST=$S(RCEFT:"EFT RECEIPT STATUS: ",1:"")\_$P(RCSTAT,U,2)  . ;prca\*4.5\*298 include Auto-Post Complete indicator and ERA exception flag in $SELECT statement  . S X=$E(RCT\_$J("",5),1,5)\_" "\_$S(RCEXCEP]"":RCEXCEP,AUTOCOMP]"":AUTOCOMP,$D(^RCY(344.49,RCZ)):" ",1:"-")\_$E($P(RC0,U)\_$J("",10),1,10)\_" "\_$E($P(RC0,U,2)\_$J("",50),1,50)  . D SET(X,RCT,RCZ)  . S X=$J("",40)\_$J($$FMTE^XLFDT($P(RC0,U,7),"2D"),8)\_$J("",5)\_$J(+$P(RC0,U,5),12,2)  . S $E(X,73,80)=$$FMTE^XLFDT($P(RC0,U,7),"2D")  . D SET(X,RCT,RCZ)  . S X=$J("",12)\_$E($P(RC0,U,6)\_$J("",30),1,30)\_" APPROX # EEOBs: "\_+$$CTEEOB^RCDPEWLB(RCZ)  . D SET(X,RCT,RCZ)  . S X=$J("",12)\_$E($$EXTERNAL^DILFD(344.4,.09,"",$P(RC0,U,9))\_$J("",30),1,30)\_" "\_RCPOST  . D SET(X,RCT)  . D SET(" ",RCT)  ;.; prca\*4.5\*298 per patch requirements, keep code related to  ;. ; creating/maintaining batches but just remove from execution.  ;. ;I $G(^TMP("RCERA\_PARAMS",$J,"BATCHON")) D  ;.. ;S Z=0 F S Z=$O(^RCY(344.49,RCZ,3,Z)) Q:'Z S Z0=$G(^(Z,0)) I Z0'="" D  ;...; S X=$J("",12)\_$E("- BATCH #"\_$P(Z0,U)\_$J("",4),1,13)\_" "\_$E($P(Z0,U,2)\_$J("",30),1,30)\_" "\_$S('$P(Z0,U,3):"NOT ",1:"")\_"READY TO POST"  ;... ;D SET(X,RCT)  ;  S VALMSG="|'-' No scratchpad|'x' EXC |'A' autopost complete"  ;  Q  ;  .  .  . |

| **Modified Logic (Changes are in bold)** |
| --- |
| .  .  .  EXTRACT(RCSRT1,RCSRT2,RCT) ; Extract the data  ; RCSRT1 = data value at 1st sort level  ; RCSRT2 = data value at 2nd sort level  ; RCT = running entry counter - returned if passed by ref  N AUTOCOMP,FIRST,RC0,RCEFT,RCEXCEP,RCPOST,RCSTAT,RCZ,X,**XX**,Z,Z0 **;PRCA\*4.5\*318 Variable XX added**  S RCZ=0 F S RCZ=$O(^TMP($J,"RCERA\_LIST",RCSRT1,RCSRT2,RCZ)) Q:'RCZ D  . S RCT=RCT+1,RC0=$G(^RCY(344.4,RCZ,0))  . S RCEFT=+$O(^RCY(344.31,"AERA",RCZ,0))  . S RCEXCEP=$$XCEPT^RCDPEWLP(RCZ) ; prca\*4.5\*298 assignment of ERA exception flag  . S AUTOCOMP=$S($P($G(^RCY(344.4,RCZ,4)),U,2)=2:"A",1:"") ;prca\*4.5\*298 AUTO-POSTED COMPLETE indicator ("A")  . S RCSTAT=$S('RCEFT:U\_$S($P(RC0,U,15)="CHK":"(CHECK PAYMENT EXPECTED)",$P(RC0,U,15)="NON":"(NO PAYMENT EXPECTED)",$P(RC0,U,9)=2:"(CHECK PAYMENT CHOSEN)",1:"N/A"),1:$$FMSSTAT^RCDPUREC(+$P($G(^RCY(344.31,RCEFT,0)),U,9)))  . S RCPOST=$S(RCEFT:"EFT RECEIPT STATUS: ",1:"")\_$P(RCSTAT,U,2)  . ;prca\*4.5\*298 include Auto-Post Complete indicator and ERA exception flag in $SELECT statement  . S X=$E(RCT\_$J("",5),1,5)\_" "\_$S(RCEXCEP]"":RCEXCEP,AUTOCOMP]"":AUTOCOMP,$D(^RCY(344.49,RCZ)):" ",1:"-")\_$E($P(RC0,U)\_$J("",10),1,10)\_" "\_$E($P(RC0,U,2)\_$J("",50),1,50)  . D SET(X,RCT,RCZ)  . S X=$J("",40)\_$J($$FMTE^XLFDT($P(RC0,U,7),"2D"),8)\_$J("",5)\_$J(+$P(RC0,U,5),12,2)  . S $E(X,73,80)=$$FMTE^XLFDT($P(RC0,U,7),"2D")  . D SET(X,RCT,RCZ)  . S X=$J("",12)\_$E($P(RC0,U,6)\_$J("",30),1,30)\_" APPROX # EEOBs: "\_+$$CTEEOB^RCDPEWLB(RCZ)  . D SET(X,RCT,RCZ)  **. S XX=$E($$EXTERNAL^DILFD(344.4,.09,"",$P(RC0,U,9))**  **. S:$$UNBAL^RCDPEAP1(RCZ) XX=XX\_” – UNBALANCED” ;PRCA\*4.5\*318 added line**  . S X=$J("",12)\_$E(**XX**\_$J("",30),1,30)\_" "\_RCPOST **;PRCA\*4.5\*318 modified line**  . D SET(X,RCT)  . D SET(" ",RCT)  ;.; prca\*4.5\*298 per patch requirements, keep code related to  ;. ; creating/maintaining batches but just remove from execution.  ;. ;I $G(^TMP("RCERA\_PARAMS",$J,"BATCHON")) D  ;.. ;S Z=0 F S Z=$O(^RCY(344.49,RCZ,3,Z)) Q:'Z S Z0=$G(^(Z,0)) I Z0'="" D  ;...; S X=$J("",12)\_$E("- BATCH #"\_$P(Z0,U)\_$J("",4),1,13)\_" "\_$E($P(Z0,U,2)\_$J("",30),1,30)\_" "\_$S('$P(Z0,U,3):"NOT ",1:"")\_"READY TO POST"  ;... ;D SET(X,RCT)  ;  S VALMSG="|'-' No scratchpad|'x' EXC |'A' autopost complete"  ;  Q  ;  .  .  . |

| Routines | Activities | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Routine Name | RCDPEAP | | | | | | | |
| **Enhancement Category** | New | | Modify | Delete | | No Change | | |
| **RTM** |  | | | | | | | |
| **Related Options** |  | | | | | | | |
| Routines | Activities | | | | | | | |
| **Data Dictionary (DD) References** |  | | | | | | | |
| **Related Protocols** |  | | | | | | | |
| **Related Integration Control Registrations (ICRs)** |  | | | | | | | |
| **Data Passing** | Input | Output Reference | | | Both | | Global Reference | Local |
| **Input Attribute Name and Definition** | Name:  Definition: | | | | | | | |
| **Output Attribute Name and Definition** | Name:  Definition: | | | | | | | |

| Related Routines | Routines “Called By” | Routines “Called” |
| --- | --- | --- |
|  | RCDPEAA2  RCDPEAD  RCDPEAP1  RCDPEEM0 | RCDPDPLU@LOCKDEP  RCDPEAP1@RCDET  RCDPEAP1@REJDT  RCDPEM@RCPTDET  RCDPEMA@BLDRCPT  RCDPEMA@RCPTDET  RCDPEWL@ADDREC  RCDPEWLA@ADDLINES  RCDPRPLU@LOCKREC  RCDPURE1@PROCESS  RCDPUREC@BLDRCPT  RCDPUREC@FMSTAT  RCDPUREC@PENDPAY |

| **Current Logic** |
| --- |
| .  .  .   ;  ; Process ERA AUTOPOST(RCEFTDA,RCERA) ;   ; RCEFTDA = ien of file #344.31  ; RCERA = ien of file #344.4  ;  ;Lock ERA  L +^RCY(344.4,RCERA):5 Q:'$T  ;  ;Build Scratchpad and Verify Lines  N ALLOK,RCRCPTDA,RCSCR,RCTRDA,RCERR,RCLINES,ZEROBAL  K ^TMP($J,"RCDPEWLA")  S RCSCR=$$SCRPAD(RCERA)  ; Re-set AUTO-POST STATUS if unable to create scratchpad  I 'RCSCR D SETSTA(RCERA,"@","Auto Posting: Removed from Auto Posting-Unable to create scratchpad") G AUTOQ  ;  ; ERA cannot be autoposted; remove any pre-existing value to the AUTO-POST STATUS so ERA can be processed manually in the Worklist  I $D(^TMP($J,"RCDPEWLA","ERA LEVEL ADJUSTMENT EXISTS")) D SETSTA(RCERA,"@","Auto Posting: Removed from Auto Posting-ERA level Adjustment(s)") G AUTOQ  ;  ;Check if all lines can be posted  S ALLOK=$$ALLOK(RCERA,RCSCR,.ZEROBAL,.RCLINES)  ;  ;If $$ALLOK post entire ERA and reset AUTO-POST STATUS = COMPLETE  I ALLOK D POSTALL(RCERA)  ;  ; If 'ALLOK and 'ZEROBAL(matching postive/negative pairs to not balance out to zero), then ERA needs to go to the standard worklist for manual receipt processing  I 'ALLOK,'ZEROBAL D SETSTA(RCERA,"@","Auto Posting: Removed from Auto Posting-+/- pairs do not balance") G AUTOQ  ;  ;If 'ALLOK and some of the lines passed validation then post receipt to summary ERA and set AUTO-POST STATUS = PARTIAL  ;Un-posted lines fall to APAR list for processing.  I 'ALLOK D POSTERA(RCERA,.RCLINES)  ;Unlock ERA AUTOQ D UNLOCKE  Q  ;  .  .  . |

| **Modified Logic (Changes are in bold)** |
| --- |
| ;  ; Process ERA AUTOPOST(RCEFTDA,RCERA) ;   ; RCEFTDA = ien of file #344.31  ; RCERA = ien of file #344.4  ;  ;Lock ERA  L +^RCY(344.4,RCERA):5 Q:'$T  ;  ;Build Scratchpad and Verify Lines  **N ALLOK,RCERR,RCLINES,RCRCPTDA,RCSCR,RCTRDA,ZEROBAL ; PRCA\*4.5\*318 Variables placed in alpha order**   K ^TMP($J,"RCDPEWLA")  S RCSCR=$$SCRPAD(RCERA)  ; Re-set AUTO-POST STATUS if unable to create scratchpad  I 'RCSCR D SETSTA(RCERA,"@","Auto Posting: Removed from Auto Posting-Unable to create scratchpad") G AUTOQ  ;  ; ERA cannot be autoposted; remove any pre-existing value to the AUTO-POST STATUS so ERA can be processed manually in the Worklist  I $D(^TMP($J,"RCDPEWLA","ERA LEVEL ADJUSTMENT EXISTS")) D SETSTA(RCERA,"@","Auto Posting: Removed from Auto Posting-ERA level Adjustment(s)") G AUTOQ  **;**  **; ERA total ‘= EFT total – ERA is unbalanced, do not auto-post**  **I $$UNBAL^RCDPEAP1(ERA) D UNLOCKE Q ; PRCA\*4.5\*318 Added line**   ;  **; confirm all lines equal ERA total**  ;Check if all lines can be posted   S ALLOK=$$ALLOK(RCERA,RCSCR,.ZEROBAL,.RCLINES)  ;  ;If $$ALLOK post entire ERA and reset AUTO-POST STATUS = COMPLETE  I ALLOK D POSTALL(RCERA)  ;  ; If 'ALLOK and 'ZEROBAL(matching postive/negative pairs to not balance out to zero), then ERA needs to go to the standard worklist for manual receipt processing  I 'ALLOK,'ZEROBAL D SETSTA(RCERA,"@","Auto Posting: Removed from Auto Posting-+/- pairs do not balance") G AUTOQ  ;  ;If 'ALLOK and some of the lines passed validation then post receipt to summary ERA and set AUTO-POST STATUS = PARTIAL  ;Un-posted lines fall to APAR list for processing.  I 'ALLOK D POSTERA(RCERA,.RCLINES)  ;Unlock ERA AUTOQ D UNLOCKE  Q  ;  .  .  . |

| Routines | Activities | | | |
| --- | --- | --- | --- | --- |
| **Routine Name** | RCDPEAP1 | | | |
| **Enhancement Category** | New | Modify | Delete | No Change |
| **RTM** |  | | | |
| **Related Options** | PRCA NIGHTLY PROCESS | | | |

| Related Routines | Routines “Called By” | Routines “Called” |
| --- | --- | --- |
|  | RCDPEAD  RCDPEAP  RCDPEAPP  RCDPEM0  RCDPEM2  RCDPEWL8  RCDPEWL7 | $$CHECKPAY^RCDPEAP  $$SCRPAD^RCDPEAP  CLEAR^RCDPEAP |

| **Current Logic** |
| --- |
| N/A |

| **Modified Logic (Changes are in bold)** |
| --- |
| **UNBAL(RCERA) ; PRCA\*4.5\*318 added method**  **; Determine if the ERA total matches the EFT total for the selected ERA**  **; Input: RCERA - Internal IEN of the selected ERA**  **; Returns: 1 - ERA is unbalanced, 0 otherwise**  **N RCLTOT,RCSUB,RCTOT**  **;ERA total balance - on matched ERAs the ERA total balance is the same as the EFT total**  **S RCTOT=+$$GET1^DIQ(344.4,RCERA\_",",.05)**  **;Sum of ERA claim line payments**  **S RCSUB=0,RCLTOT=0**  **F S RCSUB=$O(^RCY(344.4,RCERA,1,RCSUB)) Q:'RCSUB D**  **. S RCLTOT=RCLTOT+$$GET1^DIQ(344.41,RCSUB\_","\_RCERA\_",",.03)**  **;Plus sum of ERA adjustment lines**  **S RCSUB=0**  **F S RCSUB=$O(^RCY(344.4,RCERA,2,RCSUB)) Q:'RCSUB D**  **. S RCLTOT=RCLTOT+$$GET1^DIQ(344.42,RCSUB\_","\_RCERA\_",",.03)**  **;Return 1 if total of ERA lines does not match EFT**  **Q $S(RCTOT=RCLTOT:0,1:1)** |

1. Technical note for programmer: routine ^RCDPEWL [↑](#footnote-ref-1)