

Export

Peak Incident Management System

Call Reference	PC0146170	Call Logger	_Customer Call_ -- EDSC
Release	Targeted At -- T70	Top Ref	FSTK_2_0_WP25065
Call Type	Live Incidents	Priority	B -- Business restricted
Contact	EDSC	Call Status	Closed -- S/W Fix Available to Call Logger
Target Date	21/05/2007	Effort (Man Days)	4.00
Summary	FAD080940 discrepancies when declaring Euros/cash-Code		
All References	Type	Value	
	Fast Track Fix	FSTK_2_0_WP24992	
	Powerhelp	E-0705180512	
	Release PinICL	PC0150797	
	Clone Call	PC0148615	
	Fast Track Fix	FSTK_2_0_WP25065	
	Work Package	PWY_WP_24992	
	Clone Call	PC0150233	
	SSCKEL	KEL MScardifield2219S	
	Release PinICL	PC0148739	
	Work Package	PWY_WP_25065	
	Clone Call	PC0150568	
	Release PinICL	PC0148766	

Progress Narrative

Date:18-May-2007 13:29:29 User:_Customer Call_
CALL PC0146170 opened
Details entered are:-
Summary:opening call as advised by pse suki
Call Type:L
Call Priority:B
Target Release:T50
Routed to:EDSC - _Unassigned_

Date/Time Raised: May 18 2007 1:08PM
Priority: B
Contact Name: TRACY SCOTT
Contact Phone: [GRO]
Originator: Phelp
Originator's reference: E-0705180512
Product Serial No:
Product Site: 080940
Product Site: 080940

18/05/07 13:08 opening call as advised by pse suki

18/05/07 13:09 uk959335
Information: This office had a problem when declaring Euros on Wednesday
16/05/07. She did a currency holding report and this showed
the Euros she had but when she declared that figure the
system showed a discrepancy of 2000 Euros.
She contacted HSH but was advised to contact us. She says
this problem has occurred previously over the last 12 months
and she is always told to reboot which corrects it, but
she wants HSH to investigate why it keeps happening.
On Wednesday she was working on the gateway and her user
id was CD[GRO], the reboot again rectified the problem.
18/05/07 13:09 uk959335
Information: user: CD[GRO]

18/05/07 13:11 uk959335
Information: Key Strokes:

F1 transactions
F3 remmitences
F9 pouch delivery

scan bar codes on pouches

t then prints
18/05/07 13:13 uk959335
Information: vents are fine

18/05/07 13:14 uk959335
Information: events are fine
18/05/07 13:14 uk959335
Information: full error message is:

there is no error message it is when you do the cash
declaration they are getting a 2000 euro discrepancy on wednesday
18/05/07 13:16 uk959335
Information: the error occurred when they done the cash discrepancy
18/05/07 13:17 uk959335
Information: node affected: all nodes mgr thinks but is not 100% sure
18/05/07 13:17 uk959335
Information: user: CD[GRO] & NG[GRO]
18/05/07 13:18 uk959335
Information: TIME OF ERROR: about 1500 wednesday 16th MAY 2007
18/05/07 13:19 uk959335
Information: TRADING PERIOD: 1

BALANCE PERIOD: 8

STOCK UNIT: MAIN SAFE STOCK UNIT (MS)
18/05/07 13:20 uk959335
Access Times: MON FRI 0900 1730
NO LUNCH
18/05/07 13:28 uk959335
KEL Ref No.: JBallantyne5245K
18/05/07 13:28 SYSADM
Open OTI: Automatic Open OTI
***Updated by Tracy Scott at 18/05/2007 13:28:40
18/05/07 13:28 uk959335
REASSIGN: Call # E-0705180512 was Reassigned from Tracy Scott, Group
HSH6 to Group EDSC1

Date:18-May-2007 13:31:08 User:Lorraine Guiblin

The call summary has been changed from:-
opening call as advised by pse suki
The call summary is now:-
FAD080940 problem when declaring Euros

Date:18-May-2007 13:31:21 User:Lorraine Guiblin

Reference Added: SSCKEL JBallantyne5245K

Date:18-May-2007 13:31:33 User:Lorraine Guiblin

Product EPOSS & DeskTop -- Counter Common (version unspecified) added.

Date:18-May-2007 13:31:39 User:Lorraine Guiblin

The Call record has been assigned to the Team Member: Anne Chambers
Progress was delivered to Provider

Date:18-May-2007 16:41:11 User:Anne Chambers

[Start of Response]

This looks very similar to the problem described in PC0145558. However the code found to have caused that problem is not yet live
(and won't be live; fixed in COUNTER_EPOSS 36_3 which is about to go out everywhere.)

So far I haven't reproduced the problem on our test counter.

Phoned the branch but PM not available - I'll ring her Monday pm. They should not have to reboot if the problem happens, logging
off and on should cause the data tree to be rebuilt correctly.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation
Response was delivered to Consumer

Date:21-May-2007 18:00:22 User:Anne Chambers

Spoke to PM, not happy, it happened again this morning (and they now have COUNTER_EPOSS 36_3). Says it has been happening since
last March, not fixed by log off/ on but needs a reboot. She's concerned that it could have security implications if someone sees
that the figures are apparently adrift by several thousand pounds and decides to make off with the difference.

Will investigate some more and contact her Thursday.

Date:24-May-2007 10:40:39 User:Customer Call

EMPTY 24/05/07 10:34 uk952601 HSH1 Repeat Call: pm states that this issue has happened again today. about
15 mins ago . they were inputting cash in to system and pm
states it doesnt add this to holdings so now looks like pm is
£ 5000 pounds up in cash when she isnt . pm is rebooting gw
node as pm states this sorts the issue out and figures are
fine after reboot. pm states this had been happening for a
year or more. not every month but alot. and pm has had
previous checks done with nbac and is doing all procedures

correctly. 24/05/07 10:36 uk952601 HSH1 Information: advised pm this issue is still under investigation as was resent on 18th may. awaiting updates. pm is happy. but states if the reboot doesnt rectify issue pm is going to through the horizon kit out the window.

Date:24-May-2007 10:45:06 User:Anne Chambers

[Start of Response]

This branch reports that they have been having problems since March 2006 where they do declarations, do further transactions (usually transfers or rems), redeclare then get a discrepancy equal to the value of the recent transactions.

Two recent examples (all times UTC)

Wed 16th May: 2000 Euros transferred out at 14:23 then reported as a discrepancy during trial balance at 15:54.

Mon 21st May: 8 cash transactions totalling £2465 between 9:35 and 10:16, ignored when cash declared subsequently at 10:20.

The problems are always in stock unit MS, which is an individual stock unit (hence a variance check is run automatically after a cash declaration). Almost always using the gateway for this stock unit.

These type of errors are not that unusual these days (I would say much less rare than a couple of years ago?). We usually quote KEL MScardifield2219S - I think the outcome of those investigations was that the Riposte message port was possibly sometimes failing.

However given that this problem is not uncommon at this branch, and also that PC0145558 found a problem within Horizon that gave very similar consequences, I think this might be worth a recheck. I appreciate that with HNG-X coming up, it may not be worth pursuing this, but this problem is causing a number of Postmasters to have serious doubts about the reliability of their systems, since they are very obviously displaying incorrect figures.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Response was delivered to Consumer

Date:24-May-2007 11:35:50 User:Anne Chambers

Evidence Added - Full messagestore and 111111111 group

Date:24-May-2007 11:36:14 User:Anne Chambers

Evidence Added - Counter 1 audit logs

Date:24-May-2007 11:36:42 User:Anne Chambers

Evidence Added - Summary of 3 recent problems (on separate worksheets)

Date:24-May-2007 11:37:07 User:Anne Chambers

The call summary has been changed from:-

FAD080940 problem when declaring Euros

The call summary is now:-

FAD080940 discrepancies when declaring Euros/cash

Date:24-May-2007 11:40:06 User:Anne Chambers

[Start of Response]

Another problem with cash reported this morning. PM threatening to throw kit out of window. I will inform her of the workaround from KEL MScardifield2219S which should avoid reboot.

Please pass call to EPOSS Dev.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Response was delivered to Consumer

Date:24-May-2007 11:40:28 User:Anne Chambers

The Call record has been transferred to the team: QFP

Progress was delivered to Provider

Date:24-May-2007 11:45:16 User:Lionel Higman

The Call record has been assigned to the Team Member: Mark Scardifield

Progress was delivered to Provider

Date:25-May-2007 14:06:32 User:Steve Evans

The Call record has been transferred to the team: EPOSS-Dev

The Call record has been assigned to the Team Member: Mark Scardifield

Progress was delivered to Provider

Date:25-May-2007 14:27:59 User:Mark Scardifield

This is Steve Evans area. He is on Leave now until 6th June.

Date:29-May-2007 14:15:56 User:Anne Chambers

Reference Deleted: SSCKEL JBallantyne5245K

TOP Reference automatically set to:Powerhelp E-0705180512

Date:29-May-2007 14:19:30 User:Anne Chambers

Reference Added: SSCKEL MScardifield2219S

Date:07-Jun-2007 13:54:39 User:Mark Scardifield

The Call record has been assigned to the Team Member: Steve Evans
Progress was delivered to Provider

Date:11-Jun-2007 10:47:10 User: Customer Call

EMPTY 11/06/07 10:44 UK955761 HSH8 Repeat Call: pm calling to say that she is having to reboot again

Date:25-Jun-2007 11:29:41 User: Customer Call

EMPTY EMPTY EMPTY OTI Astea OTI Success: An add has been sent to PINICL 25/06/07 10:26 UK959245 HSH5 Repeat Call: PM states this current problem has also now occurred on node 3, PM states node 3 is not adjusting the holdings

Date:27-Jun-2007 08:37:31 User: Customer Call

EMPTY EMPTY EMPTY OTI Astea OTI Success: An add has been sent to PINICL 27/06/07 08:35 UK959656 HSH2 Repeat Call: PO called in to inform that node 3 did not adjust its holdings yesterday, PO did not reboot but has cleared itself over night.

Date:18-Jul-2007 11:16:12 User:Anne Chambers

[Start of Response]

This problem is continuing to affect a number of branches, especially larger ones where they have individual stock units and commonly where they have transferred out cash (which then appears as if it is still in the stock unit - hence they think there is something wrong with the transfer mechanism). The PMs are not at all happy that the system is giving them incorrect figures, causing much confusion and potentially creating opportunities for fraud.

See PC0147959 for a recent example. I am putting this call up to A priority.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Response was delivered to Consumer

Date:18-Jul-2007 11:16:16 User:Anne Chambers

The call Priority has been changed from B

The call Priority is now A

Date:18-Jul-2007 11:24:38 User:Steve Evans

The Call record has been assigned to the Team Member: Gerald Barnes

Progress was delivered to Provider

Date:25-Jul-2007 15:09:48 User:Gerald Barnes

[Start of Response]

Anne documents two instances of the problem. In addition she has added evidence of a third problem

This is a T30i1 office.

There was a change at T30i1 in which a cash data tree is maintained which is very similar to the full data tree which already existed but is only for cash. I suspect the increases of incidence of this problem occurred when the cash tree was added.

I could see no logic flaws with the cash tree.

The cash tree logic is in fact straighter forward than the full tree logic and so is easier to validate.

Anne says these problems usually occur with transfers.

In all three cases reported here the first transaction for which a message port notification did not occur was a transfer.

Transfers also use a message port notification mechanism similar to the notification mechanism used in the stock and cash trees. In all cases I could see from the audit log that the notification of the transfer mechanism, which occurs first, had worked but that the tree notification had not. I can see that the notify from the transfer mechanism itself did occur

My present thought is that this intermittent problem occurs because of the use of multiple notifies at the same time. The number of instances of the problem has gone up because one extra message notification part has been added.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:26-Jul-2007 09:39:45 User:Gerald Barnes

[Start of Response]

I have a correction from my previous response. Infact the Cash Only tree was introduced at T20i3. Other bugs of a similar nature have been investigated before e.g. PC0141483.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:03-Aug-2007 09:17:57 User:Gerald Barnes

[Start of Response]

I noticed that the software had been upgraded to T40i1 for the last two cases.

I tried to duplicate the third instance. I installed T40i1 on a dual counter system. I imported the supplied message store to a date of 24 May 07:12:17 and, on counter 1 and where necessary counter 2 (to do a transfer out required by counter 1 for a transfer in) duplicated all transactions done for the day. This time where the discrepancy of £6972 occurred before there was no problem.

Cheryl Card produced a table of incidences of the problem and one thing to note was that the minimum number of counters the problem has occurred is 4.

My present thought is that it will only be possible to duplicate the bug if you have at least 4 counters and that it is why it has never been replicated before. Cheryl noticed also that transfers had been going on in all failing cases. I will investigate this aspect as well.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:03-Aug-2007 14:56:10 User:Gerald Barnes

[Start of Response]

At a recent meeting between Chris Bailey, Mark Scardifield and I it was decided that I would investigate the feasibility of eliminating the use of TALOP_CREATE_MESSAGE_PORT (which is the call which causes the rebuilding of the trees on the fly by a notify mechanism) and instead incrementally rebuild the tree when necessary. This will neatly side step the missing notify issue.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:08-Aug-2007 11:18:21 User:Gerald Barnes

[Start of Response]

I attach my design proposal for the speculative fix for data server in evidence labelled "Data Server Design Modification" and a zip of the source that I have been running and appears to be working fine as evidence labelled "Source modification to Data Server for Tree rescans". All modification to DataServer from the currently released one are marked up with the line containing "'~GJB PC0146170 03/08/2007".

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:08-Aug-2007 11:19:06 User:Gerald Barnes

Evidence **Added** - Data Server Design Modification

Date:08-Aug-2007 11:19:33 User:Gerald Barnes

Evidence **Added** - Source modification to Data Server for Tree rescans

Date:08-Aug-2007 11:50:34 User:Chris Bailey

Gerald, I have reviewed your proposed changes and this seems to capture the proposed change as discussed between ourselves and Mark last Friday.

Date:08-Aug-2007 12:39:56 User:Gerald Barnes

Target Date/Time updated: new value is 15/08/2007 13:29

Development Cost updated: new cost is 2 (Man Days)

[Start of Response]

This problem has not yet been reproduced and so it is impossible to be certain that what I propose will fix anything.

However the problem, which has been around for a very long time, appears to be that the software gets in a state that the notify mechanism for stock trees (and now as a result of a recent change cash trees as well) stops getting though.

The speculative fix, which has already been coded and had initial module testing done on it, is to replace the Notify mechanism by a method whereby the trees are incrementally rebuilt as required. The mechanism will be switched on by a piece or reference data. The order of delivery of code and reference data does not matter but only when both are in place will the change take effect.

The new reference data is shown below

```
<Collection:EPOSSDataServer>
<ObjectName:Parameters>
<Data:
  <NotifyReplacement:
    <Enabled:True>
    <MinimumRebuildGapSeconds:4>
  >
>
```

In addition the existing trace has been subtly enhanced to include the instance number of the tree used in data server which may help track down the problem if the speculative fix to DataServer does not fix the problem. Care has been taken so that the additional trace will have small volume and therefore negligible impact on performance. In addition some trace which was spuriously appearing by accident before has been taken out which should normally more than compensate for the trace added.

FIX IMPACT

Complete Forecast Date and Development (man days) fields below this text box.

Include a brief statement for each of the headings below these instructions.

On return to Details window Set Target Release Type to "Proposed for" and Target Release to that proposed.

To the Developer:

(1) Put yourself in the shoes of people downstream and provide information that they are likely to need to process this fix. eg the testing and rollout costs may add significantly to the COST of the fix

(2) Check that the statements are still accurate post-implementation

IMPACT ON DEVELOPMENT:

Effort in mandays.

Coding is complete. However checking the source into VSS ready to build and running further module tests will take me another 2 man days. In addition the code and test plan will need to be inspected which will take another half a man day.

There will be an expectation at RMF that this approximates to the timescale for delivery so if there are reasons why this might not be the case please note them here.

IMPACT ON TEST:

What independent test coverage does development recommend?

This will often be about the level of regression testing required.

This fix affects balancing. I recommend it is given at least two man days of regression testing in the following areas.

Doing transactions particularly of stamps and redeclaring cash and stamps often; mainly for individual stock units but also of shared stock units. Rolling over stock units and the office with some of the rollovers including discrepancies. Doing that described before on at least a two counter office and doing thing on both counters simultaneously.

The fix potentially could affect reports; whilst doing the above check a few reports.

IMPACT ON USER:

Benefit of making the fix.

If the fix works (and it is a speculative fix so we can not be absolutely certain) bigger office will no longer get into a state where there cash declarations and rollovers incorrectly report discrepancies.

What does the user have to do to get this problem?

We have never duplicated the problem so we are not sure. However the problem occurs both in cash declaration and rolling over. Transfers between stock units appears to be a prerequisite for the problem to occur and the problem only appears to occur in offices with at least 4 counters.

How does it affect them when it occurs?

It is a very irritating problem. Spurious discrepancies are reported and the work around is now quite tedious. At least one post master has threatened to throw the kit out of the window!

IMPACT ON OPERATIONS:

Benefit of fix that may not visible to end user.

We will have less support calls because there will no longer be calls about spurious discrepancies.

RISKS (of releasing and of not releasing proposed fix):

What live problems will there be if we do not issue this fix?

Spurious discrepancies will most certainly continue to occur.

What are the risks of this fix having unexpected interactions with other areas?

The fix does affect balancing and so it is conceivable that a problem will crop up in this area.

Is this a high-risk area in which changes have caused problems in the past?

Definitely yes!

Should we consider a pilot rollout and of what sort?

I think this is a very sensible idea. Just put the fix out to a small sub set of offices and if they report no problems after at least a month including an office rollover send it out everywhere. Although the problem we are trying to fix only occurs in big offices; the successful running of the software on offices with only two counters is quite sufficient to prove it.

LIST OF LIKELY DELIVERABLES:

EPOSSDataServer

LIST OF THE ABOVE ALREADY DELIVERED FOR THE PROPOSED RELEASE:

None

LIST OF THE ABOVE ALREADY DELIVERED TO A RELEASE LATER THAN THAT PROPOSED:

None

LIST OF THE ABOVE LIKELY TO BE REDELIVERED INTO THE PROPOSED OR A LATER RELEASE:

EPOSSDataServer

ANYTHING ELSE THAT SHOULD BE KNOWN ABOUT THIS CHANGE:

[End of Response]

Response code to call type L as Category 55 -- Pending -- Live Fix Impact Supplied

Date:08-Aug-2007 12:41:08 User:Gerald Barnes

The call Target Release has been moved to Proposed For -- T50

<p>Date:08-Aug-2007 12:43:44 User:<u>Gerald Barnes</u> The Call record has been transferred to the team: RelMngmntForum Progress was delivered to Provider</p>
<p>Date:09-Aug-2007 17:06:46 User:<u>John Budworth</u> The call Target Release has been moved to Targeted At -- T60</p>
<p>Date:09-Aug-2007 17:16:03 User:<u>John Budworth</u> [Start of Response] Targeted at T60. EPOSS-Dev to deliver by close of play on Tuesday August 14th if possible as Release Management would like to raise release paperwork for LST on the morning of Wednesday August 15th latest. Routing to RDT in the first instance to create a clone for the associated Ref Data. RDT to route to EPOSS-Dev. [End of Response] Response code to call type L as Category 56 -- Pending -- Live Fix Authorised</p>
<p>Date:09-Aug-2007 17:17:57 User:<u>John Budworth</u> The Call record has been transferred to the team: Ref-DataCS-Liv Progress was delivered to Provider</p>
<p>Date:09-Aug-2007 17:18:23 User:<u>John Budworth</u> Product DevIntRel-Director -- Live Supp.Test (version unspecified) added.</p>
<p>Date:09-Aug-2007 17:20:01 User:<u>Rob Gelder</u> Taking Clone for provision of Ref Data</p>
<p>Date:09-Aug-2007 17:20:11 User:<u>Rob Gelder</u> The call summary has been changed from:- FAD080940 discrepancies when declaring Euros/cash The call summary is now:- FAD080940 discrepancies when declaring Euros/cash-Code</p>
<p>Date:09-Aug-2007 17:20:15 User:<u>Rob Gelder</u> Call has been cloned to Call:PC0148615 by User:Rob Gelder</p>
<p>Date:09-Aug-2007 17:20:39 User:<u>Rob Gelder</u> Defect cause updated to 40: General - User</p>
<p>Date:09-Aug-2007 17:20:46 User:<u>Rob Gelder</u> The Call record has been transferred to the team: EPOSS-Dev Progress was delivered to Provider</p>
<p>Date:10-Aug-2007 14:11:57 User:<u>Kath Greenwood</u> The Call record has been assigned to the Team Member: Gerald Barnes Progress was delivered to Provider</p>
<p>Date:13-Aug-2007 15:21:15 User:<u>Gerald Barnes</u> [Start of Response] Unit Testing has been performed as specified in the attached Unit Test Plan (UTP146170.doc). The test plan is contained within a zip file which also contains two spreadsheets to which it refers. The zip file is attached as evidence labelled "Unit Testing Done". [End of Response] Response code to call type L as Category 44 -- Pending -- Fix in Progress</p>
<p>Date:13-Aug-2007 15:22:46 User:<u>Gerald Barnes</u> Evidence Added - <u>Unit Testing Done</u></p>
<p>Date:14-Aug-2007 12:26:04 User:<u>Steve Evans</u> EPOSS-DEV Solution Review ----- Prior to internal handover and final unit testing, a review of the solution is required. In addition the proposed local Unit Test Plan should be attached, to aid the review. (To be completed by the reviewer) A viable and comprehensive local Unit Test Plan which is sufficient to test the solution, has been attached (UTP146170.doc) I am satisfied that the proposed solution has been;</p>

-Agreed with and underwritten by Design (Y)
-Implemented according to this agreement in the proposed fix for this fault.

Notes:

Proviso: This PEAK has not been reproduced and so the UTP does not directly test the 'fix' against the live problem; only that the new mechanism works.

This design and code change clearly achieves this.

Date:14-Aug-2007 13:08:03 User:Gerald Barnes

[Start of Response]

Fixed (hopefully - it is a speculative fix) by a new release of DataServer.

[End of Response]

Response code to call type L as Category 46 -- Pending -- Product Error Fixed

Date:14-Aug-2007 13:08:14 User:Gerald Barnes

The Call record has been transferred to the team: EPOSS-Rel
Progress was delivered to Provider

Date:14-Aug-2007 16:53:44 User:Tyrone Cozens

Reference Added: Release PinICL PC0148739

Date:14-Aug-2007 16:55:22 User:Phil Budd

EPOSS-REL HANDOVER QUALITY AUDIT CHECKLIST

Prior to formal Handover to the Testing function, an audit of required processes should be completed.

(To be completed by the release-builder)

1. Design/Solution Documentation attached or In-Line (Y)

2. EPOSS-DEV Solution Review complete (Y)

3. EPOSS-DEV Unit Test Notification complete (Y)

4. EPOSS-DEV Reference Data Notification complete (N)

5. Reference Data change attached (N, see PC0148615)

I am satisfied that the proposed solution has been processed correctly (Y)

Notes:

Fix released in WP24992 for T60i1

Date:14-Aug-2007 16:59:51 User:Phil Budd

Reference Added: Work Package PWY_WP_24992

Date:14-Aug-2007 16:59:54 User:Phil Budd

TOP Reference set to: Work Package PWY_WP_24992

Date:14-Aug-2007 17:00:32 User:Phil Budd

The Call record has been transferred to the team: Dev-Int-Rel
Progress was delivered to Provider

Date:14-Aug-2007 17:53:55 User:PIT Automated User

Reference Added: Fast Track Fix FSTK_2_0_WP24992 (TOP Reference)

Date:14-Aug-2007 17:53:56 User:PIT Automated User

[Start of Response]

"Fasttrack fix released, now ready for test."

[End of Response]

Response code to call type L as Category 46 (Product Error Fixed)

The incident has been transferred to the team: Live Supp.Test

Progress was delivered to Powerhelp

Date:15-Aug-2007 09:27:33 User:Edward Willis

Reference Added: Release PinICL PC0148766

Date:17-Sep-2007 09:54:34 User:John Budworth

[Start of Response]

Routing by to EPOSS-Dev for attention of Gerald Barnes.
The fix for this PEAK was reversed in live (549 Branches) via Ref-Data
14/9/07. See associated PEAKS 159506 and 149540.
[End of Response]
Response code to call type L as Category 50 -- Pending -- Fix Failed

Date:17-Sep-2007 09:54:52 User:John Budworth
The Call record has been transferred to the team: EPOSS-Dev
Progress was delivered to Provider

Date:17-Sep-2007 10:30:34 User:Mark Scardifield
The Call record has been assigned to the Team Member: Gerald Barnes
Progress was delivered to Provider

Date:18-Sep-2007 12:10:48 User:Gerald Barnes
[Start of Response]
I have found an intermittent problem with the fix in PWY_WP_24992. It occurs for me about 1 in 5 stock unit rollovers into a new trading period when there is a discrepancy. It was not spotted in module testing prior to release because I did not perform a sufficient number of rollovers into a new trading period with a discrepancy.

The problem occurred because of my change from a notify mechanism to an incremental build mechanism.

The basic change worked fine. No problems were reported with cash declarations (the key area effected) prior to the rollover day. However on rolling over into a new trading period problems were detected with discrepancies on some counters.

The problem was tracked down to my implementation of the bIgnoreMsgPort private variable of DataServer.

Using the Notify mechanism this variable when set caused transactions not to go into the tree.

My implentation checked the bIgnoreMsgPort when incremntally building the tree. This is however flawed logic. The correct mapping of the bIgnoreMsgPort behaviour to the new incremental build mechanism is to build up a list of message ranges for when it is switched off and switched on and then when doing the incremental build checking each transaction against these ranges before putting the transaction in the tree.

The bIgnoreMsgPort functionality is only used when rolling over with discrepancies and hence that is why the intermittent problem occurred on that day.

[End of Response]
Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:18-Sep-2007 15:56:12 User:Gerald Barnes
Target Date/Time updated: new value is 28/09/2007 13:29
Development Cost updated: new cost is 4.0 (Man Days)
[Start of Response]

I have module tested a new release of dataserver which (with incremental building enabled) handles bIgnoreMsgPort in the manner described in my response "Date:2007-09-18 12:10:48 User:Gerald Barnes". No problems were observed in 12 trading period rollovers with discrepancy.

At a meeting between Chris Bailey, Mark Scardifield and myself in Airmail today between 1pm and 2pm it was decided this was the forward path on this problem. However it was noted that there may well be other yet unforeseen problems lurking with the proposed fix and so a thorough testing is essential.

FIX IMPACT

Complete Forecast Date and Development (man days) fields below this text box.
Include a brief statement for each of the headings below these instructions.
On return to Details window Set Target Release Type to "Proposed for" and Target Release to that proposed.

To the Developer:

- (1) Put yourself in the shoes of people downstream and provide information that they are likely to need to process this fix. eg the testing and rollout costs may add significantly to the COST of the fix
- (2) Check that the statements are still accurate post-implementation

IMPACT ON DEVELOPMENT:

Effort in mandays.

There will be an expectation at RMF that this approximates to the timescale for delivery so if there are reasons why this might not be the case please note them here.

4 man days mostly of further module testing. The coding has already been done.

The further testing is to be broken down as follows

.5 day reviewing each line changed whilst running EPOSSDataServer in the IDE whilst doing cash declarations and rollovers and checking each such line behaves as expected.

.5 day doing rollovers on two counters side by side (mimicking all transactions done) from a scratch build one with the enabling reference data and one without and checking that all printed results come out the same.

2 days doing rollovers with discrepancies (and a broad range of transactions between) on two counters side by side with and without the enabling reference data starting with a messagstore imported from live mimicking the key strokes done on each counter and checking all printed reports are the same.

1 day for administration (checking the code into VSS, link testing, preparing handover forms etc.)

IMPACT ON TEST:

What independent test coverage does development recommend?

This will often be about the level of regression testing required.

Two days of further testing mainly of cash declarations and rollovers with discrepancies preferably using as a start point an imported live message store. As a variation from the module testing done this should be done on at least a dual counter office.

The testing should be done mainly with the enabling reference data. However a small amount of testing should be done with the enabling reference data switched off such that in the event the fix needs to be reversed again by reference data there is confidence in advance for the mechanism.

IMPACT ON USER:

Benefit of making the fix.

If the fix works (and it is a speculative fix so we can not be absolutely certain) bigger office will no longer get into a state where there cash declarations and rollovers incorrectly report discrepancies.

What does the user have to do to get this problem?

We have never duplicated the problem so we are not sure. However the problem occurs both in cash declaration and rolling over. Transfers between stock units appears to be a prerequisite for the problem to occur and the problem only appears to occur in offices with at least 4 counters.

How does it affect them when it occurs?

It is a very irritating problem. Spurious discrepancies are reported and the work around is now quite tedious. At least one post master has threatened to throw the kit out of the window!

IMPACT ON OPERATIONS:

Benefit of fix that may not visible to end user.

We will have less support calls because there will no longer be calls about spurious discrepancies.

RISKS (of releasing and of not releasing proposed fix):

What live problems will there be if we do not issue this fix?

Spurious discrepancies will most certainly continue to occur.

What are the risks of this fix having unexpected interactions with other areas?

The fix does affect balancing and so it is conceivable that a problem will crop up in this area.

Is this a high-risk area in which changes have caused problems in the past?

Definitely yes!

Should we consider a pilot rollout and of what sort?

There must be a pilot. Put the fix out to a small number of Office and see whether there are any problems on trading period rollover. If there are none then release the fix to more offices and see whether there are any problems with trading period rollover etc. Although the problem we are trying to fix only occurs in big offices; the successful running of the software on offices with only two counters is quite sufficient to prove it.

LIST OF LIKELY DELIVERABLES:

EPOSSDataServer

LIST OF THE ABOVE ALREADY DELIVERED FOR THE PROPOSED RELEASE:

EPOSSDataServer

LIST OF THE ABOVE ALREADY DELIVERED TO A RELEASE LATER THAN THAT PROPOSED:

None

LIST OF THE ABOVE LIKELY TO BE REDELIVERED INTO THE PROPOSED OR A LATER RELEASE:

EPOSSDataServer

ANYTHING ELSE THAT SHOULD BE KNOWN ABOUT THIS CHANGE:

The change will be able to be disabled by reference data if necessary. The disabling will only take effect after reboot though.
[End of Response]

Response code to call type L as Category 42 -- Pending -- Product Error Diagnosed

Date:18-Sep-2007 16:00:40 User:Gerald Barnes

The Call record has been transferred to the team: RelMngmntForum
Progress was delivered to Provider

Date:21-Sep-2007 09:15:14 User:Mark Scardifield

I notice that Gerald hasn't set a proposed target release. Logically this is a fix on top of the earlier T60 "attempt" however we are nearly out of T60 so I suspect T70 is more realistic.

Date:04-Oct-2007 16:00:33 User:Tyrone Cozens

The call Target Release has been moved to Targeted At -- T70

Date:04-Oct-2007 16:01:07 User:Tyrone Cozens

[Start of Response]

RMF authorise a fix for T70.

[End of Response]

Response code to call type L as Category 56 -- Pending -- Live Fix Authorised

Date:04-Oct-2007 16:01:26 User:Tyrone Cozens

The Call record has been transferred to the team: EPOSS-Dev

Date:04-Oct-2007 16:03:34 User:Gerald Barnes

The Call record has been assigned to the Team Member: Gerald Barnes

Date:05-Oct-2007 17:27:04 User:Gerald Barnes

The Call record has been transferred to the team: Ref-DataCS-Liv

The Call record has been assigned to the Team Member: Rob Gelder

Date:08-Oct-2007 09:36:45 User:Rob Gelder

Taking Clone for Revised Ref Data

Date:08-Oct-2007 09:36:50 User:Rob Gelder

Call has been cloned to Call:PC0150233 by User:Rob Gelder

Date:08-Oct-2007 09:37:42 User:Rob Gelder

The Call record has been transferred to the team: EPOSS-Dev

The Call record has been assigned to the Team Member: Gerald Barnes

Date:10-Oct-2007 14:56:39 User:Gerald Barnes

[Start of Response]

Module testing has now been completed on the T70i1 DataServer source with the label "Module Tested PC0146170".

The module testing material is attached in a zip labelled "Test Material for initial failure".

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:10-Oct-2007 14:57:30 User:Gerald Barnes

Evidence **Added** - Test Material for initial failure

Date:10-Oct-2007 16:42:37 User:Steve Evans

[Start of Response]

EPOSS-DEV Solution Review

Prior to internal handover and final unit testing, a review of the solution is required.

In addition the proposed local Unit Test Plan should be attached, to aid the review.

(To be completed by the reviewer)

A viable and comprehensive local Unit Test Plan which is sufficient to test the solution, has been attached (UTP146170.doc [within PC0146170_175256[1].zip] - attached as 'Test Material for initial failure')

I am satisfied that the proposed solution has been;

-Agreed with and underwritten by Design (NA)

-Implemented according to this agreement in the proposed fix for this fault.

Notes:

The tests look thorough, and the code has no obvious flaws.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:10-Oct-2007 17:00:49 User:Steve Evans

[Start of Response]

**AMENDED

EPOSS-DEV Solution Review

Prior to internal handover and final unit testing, a review of the solution is required.

In addition the proposed local Unit Test Plan should be attached, to aid the review.

(To be completed by the reviewer)

A viable and comprehensive local Unit Test Plan which is sufficient to test the solution, has been attached (UTP146170.doc [within PC0146170_175256[1].zip] - attached as 'Test Material for initial failure')

I am satisfied that the proposed solution has been;

-Agreed with and underwritten by Design (Y)

See entry above: Date:18-Sep-2007 15:56:12 User:Gerald Barnes

Gareth Jenkins was also consulted on, and sanctioned this further change.

-Implemented according to this agreement in the proposed fix for this fault.

Notes:

The tests look thorough, and the code has no obvious flaws.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:10-Oct-2007 17:20:50 User:Gerald Barnes

[Start of Response]

Fixed by a new release of EPOSSDataServer.dll.

[End of Response]

Response code to call type L as Category 46 -- Pending -- Product Error Fixed

Date:10-Oct-2007 17:21:01 User:Gerald Barnes

The Call record has been transferred to the team: EPOSS-Rel

Date:17-Oct-2007 10:05:40 User:Gerald Barnes

[Start of Response]

I proceeded with my Link Test Phase. I imported the message store attached to PC0149476 and did parallel runs on two counters - one with the fix enabled and one with the fix disabled. When I rolled over stock unit ATM a difference was observed. The fix needs to be studied again.

[End of Response]

Response code to call type L as Category 38 -- Pending -- Potential Problem Identified

Date:18-Oct-2007 09:40:58 User:Gerald Barnes

The Call record has been transferred to the team: EPOSS-Dev

The Call record has been assigned to the Team Member: Gerald Barnes

Date:18-Oct-2007 10:17:35 User:Gerald Barnes

[Start of Response]

I attach my analysis of the link test failure as evidence labelled "Proposed Design Modification for Link Test Failure".

[End of Response]

Response code to call type L as Category 38 -- Pending -- Potential Problem Identified

Date:18-Oct-2007 10:20:17 User:Gerald Barnes

Evidence Added - Proposed Design Modification for Link Test Failure

Date:22-Oct-2007 09:38:15 User:Gerald Barnes

[Start of Response]

As a result of testing and as anticipated in the previously attached design it was discovered that EPOSSDeclaration needs to be reissued as well. It is a one line change to tell Dataserver to rescan incrementally just before calculating discrepancies.

[End of Response]

Response code to call type L as Category 40 -- Pending -- Incident Under Investigation

Date:22-Oct-2007 16:36:21 User:Gerald Barnes

[Start of Response]

Further testing has revealed a one line modification is required to EPOSSStockUnit as well of the same nature as the change to EPOSSDeclare.

EPOSSStockUnit is in the HNGX stream as well. I shall clone the PEAK for this reason.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:22-Oct-2007 16:36:26 User:Gerald Barnes

Call has been cloned to Call:PC0150568 by User:Gerald Barnes

Date:23-Oct-2007 16:38:49 User:Gerald Barnes

[Start of Response]

Module testing is complete and the change is ready for a solution review.

The changed modules are now EPOSSDataServer.dll, EPOSSDeclare.dll and EPOSSStockUnit.dll. All source modules module tested have been labelled in VSS "PC0146170 Solution Review Two".

Module tests material is attached in the zip file labelled "Module Test Material 2".

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:23-Oct-2007 16:39:44 User:Gerald Barnes

Evidence Added - Module Test Material 2

Date:25-Oct-2007 18:06:15 User:Miriam Bell

[Start of Response]

EPOSS-DEV Solution Review

Prior to internal handover and final unit testing, a review of the solution is required.

In addition the proposed local Unit Test Plan should be attached, to aid the review.

(To be completed by the reviewer)

A viable and comprehensive local Unit Test Plan which is sufficient to test the solution, has been attached (UTP146170_2.doc)

I am satisfied that the proposed solution has been;

-Agreed with and underwritten by Design (Y)

Gerald tells me that he discussed the solution to part 2 of this Peak fix with Gareth.

-Implemented according to this agreement in the proposed fix for this fault.

Notes:

As Gerald has pointed out, this is a high risk fix in that it is possible that an incremental scan has not been invoked from somewhere which needs to do it. Gerald has addressed this by coding in such a way that the fix can be reversed by changing reference data. The tests look thorough. A very minor comment is that I happened to notice a misleading comment in EPOSSDataServer/cIsInternalSession.cls - ResetAllNodes, which says before the call to fForceRescan 'It would be better to have made a direct call from EPOSSStockUnit but then EPOSSStockUnit would have had to be released as well.' EPOSSStockUnit IS now being released as part of the latest fix.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:25-Oct-2007 18:11:33 User:Miriam Bell

[Start of Response]

Obviously I cannot check that this fix is correct. I have diff'ed the code changed and it doesn't look wrong so far as I can see.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:25-Oct-2007 18:44:07 User:Gerald Barnes

[Start of Response]

Fixed by new releases of EPOSSDataServer, EPOSSDeclare and EPOSSStockUnit.

The fix is labelled "Handover Number 2 for PC0146170" in VSS.

Note that although I have tested this fix to the best of my ability and am about to conduct a further thorough link test involving parallel runs rolling over stock units on machines side by side with and without the fix enabled from an imported message store it is still a relatively high risk one.

For this reason the fix has also been thoroughly tested without the enabling reference data. Should there be a problem the fix can be disabled by end dating or deleting the enabling reference data EPOSSDataServer Parameters.

This approach is recommended because it will avoid creating a log jam of other fixes on top of these dlls. In addition even with the fix disabled there is useful extra diagnostics within the fix.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:25-Oct-2007 18:44:35 User:Gerald Barnes

The Call record has been transferred to the team: EPOSS-Rel

Date:30-Oct-2007 08:30:12 User:Phil Budd

[Start of Response]

Gerald is still finishing off his thorough testing on the link test rig but I expect him to have an answer today, I will then progress the Peak.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:30-Oct-2007 09:27:06 User:Gerald Barnes

[Start of Response]

I have conducted a link test consisting of importing the message store attached to PC0149476 to a date and time of <Date:12-Sep-2007><Time:12:18:59> on two counters one with the fix enabled and one with it disabled and then rolling over stock units 01, 02 and 04 and checking all figures displayed on the screen and printed. They were all the same.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:30-Oct-2007 09:44:28 User:Phil Budd
[Start of Response]
EPOSS-REL HANDOVER QUALITY AUDIT CHECKLIST

Prior to formal Handover to the Testing function, an audit of required processes should be completed.

(To be completed by the release-builder)

1. Design/Solution Documentation attached or In-Line (Y)
2. EPOSS-DEV Solution Review complete (Y)
3. EPOSS-DEV Unit Test Notification complete (Y)
4. EPOSS-DEV Reference Data Notification complete (N)
5. Reference Data change attached (Not here, see PC0150233)

I am satisfied that the proposed solution has been processed correctly (Y)

Notes:

Fix released in WP25065 for T70i1. <Collection:EPOSSDataServer><ObjectName:Parameters> is required to enable the fix. The order of delivery of code and reference data does not matter but only when both are in place will the new functionality take effect. PC0150233 is the clone of the PEAK for the provision of this reference data.

[End of Response]

Response code to call type L as Category 44 -- Pending -- Fix in Progress

Date:30-Oct-2007 09:44:56 User:Phil Budd
Reference Added: Work Package PWY_WP_25065

Date:30-Oct-2007 09:45:01 User:Phil Budd
TOP Reference set to: Work Package PWY_WP_25065

Date:30-Oct-2007 09:45:15 User:Phil Budd
The Call record has been transferred to the team: Dev-Int-Rel

Date:30-Oct-2007 15:24:32 User:PIT Automated User
Reference Added: Fast Track Fix FSTK_2_0_WP25065 (TOP Reference)

Date:30-Oct-2007 15:24:34 User:PIT Automated User
[Start of Response]
"Fasttrack fix released, now ready for test."
[End of Response]
Response code to call type L as Category 46 (Product Error Fixed)
The incident has been transferred to the team: Live Supp.Test

Date:30-Oct-2007 15:32:29 User:Tyrone Cozens
Reference Added: Release PinICL PC0150797

Date:12-Nov-2007 10:27:29 User:Tyrone Cozens
[Start of Response]
WP24908, 25061, 25065 and 25087 passed test on 09/11/07 via RNT7018. Routing for closure.
[End of Response]
Response code to call type L as Category 60 -- Final -- S/W Fix Released to Call Logger
Routing to Call Logger following Final Progress update.

Date:12-Nov-2007 10:27:59 User:Lorraine Guiblin
The Call record has been assigned to the Team Member: Anne Chambers

Date:19-Dec-2007 11:09:29 User:Anne Chambers
[Start of Response]
This fix has been on pilot at 50 branches for some weeks now, with no problems reported. It will be fully rolled out in the new year. I'm reducing the priority as requested.
[End of Response]
Response code to call type L as Category 46 -- Pending -- Product Error Fixed

Date:19-Dec-2007 11:09:39 User:Anne Chambers
The call Priority has been changed from A
The call Priority is now B

<p>Date:17-Jan-2008 10:15:13 User:Anne Chambers</p> <p>[Start of Response]</p> <p>Fix now out everywhere (COUNTER_EPOSS 39_3). Closing call.</p> <p>[End of Response]</p> <p>Response code to call type L as Category 60 -- Final -- S/W Fix Released to Call Logger</p> <p>Routing to Call Logger following Final Progress update.</p>
<p>Date:17-Jan-2008 10:15:22 User:Anne Chambers</p> <p>CALL PC0146170 closed: Category 60 Type L</p>

Root Cause	General - User
Logger	_Customer Call_ -- EDSC
Subject Product	EPOSS & DeskTop -- Counter Common (version unspecified)
Assignee	_Customer Call_ -- EDSC
Last Progress	17-Jan-2008 10:15 -- Anne Chambers