Export

Peak Incident Management System

Call Reference	**PC0053384**	Call Logger	Deleted User -- Analysts
Release	Targeted At -- CSR-CI4R	Top Ref	FSTK_2_0_WP10691
Call Type	Product Incidents/Defects	Priority	C -- Progress restricted
Contact	Deleted Contact	Call Status	Closed -- No fault in product
Target Date	08/09/2000	Effort (Man Days)	0
Summary	Time Service errors at counter		
All References	Type	Value	
	Fast track fix	FSTK_2_0_WP10691	
	Other	Futures?	
	Other	C	
	Work Package	PWY_WP_10691	

Progress Narrative

```
Date:01-Sep-2000 15:07:00 User:John Pope
CALL PC0053384 opened
References entered are:-
Product Infrastructure Unknown Infra'sture added
Target Release entered: Unknown
Time Service errors at counter
Two and three nights ago 1000+ transactions failed to go to TIP for reasons
accociated with apparent negative transaction times on OBCS
transactions/events at counters. IT was found that the time service to the
correspondence servers was not working, and that there was a difference in
time of a couple of minutes. This caused the counters to be re-set to and
fro according to which server the gateway connected to on successive OBCS
Foreign transactions.
Last night 5,000 + transactions were dropped despite the fact that time
service was apparently working. Jim Stinchcombe confirmed to me in the 1st
hour that the servers were apparently synched to within a fraction of a
second. The "negative" times last night were smaller, and suggest that the
counter clocks were jumping by something of the order of 20 seconds despite
the correspondence servers being in line. This should not be happening and
needs investigation, as there is a Requirement to maintain accurate counter
times. This is not high priority, because changes being made to the
harvester tonight will stop rejects even if the time service defect remains.
Secondly, it seems to me that the correspondence servers should not have
drifted appart by 2 minutes + just because time service was off for a couple
of days. Does this imply that the hardware clock is defective on one of the
servers?
CALL PC0053384:Priority C:CallType P - Target 08/09/00 16:07:51
The Call record has been transferred to the Team: QFP
Defect cause updated to 99:General - Unknown
Hours spent since call received: .5 hours
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```
Date:01-Sep-2000 15:33:00 User:Lionel Higman
FAO James Stinchcome
The Call record has been transferred to the Team: TDA
Hours spent since call received: 0 hours
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Date:01-Sep-2000 15:40:00 User:Roger Donato
There were about 5000 instancess on 31/08/2000 which calculated a negative
value for foreign enquiry time. I've attached one example for FAD 105002
showing start time taking place after end time. There a many others!!!
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```
Date:01-Sep-2000 15:42:00 User:Roger Donato
New evidence added - Example transaction for FAD 105002
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```
Date:04-Sep-2000 09:36:00 User:Deleted user (Carolyn Payne Jun01)
The Call record has been assigned to the Team Member: James Stinchcombe
Hours spent since call received: .1 hours
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Date:04-Sep-2000 11:30:00 User:James Stinchcombe
I've talked this through with Mark Jarosz. We believe that the problem is
that Riposte doesn't take account of the ISDN delay caused by the dialling
process. This would typically be around 2 seconds but could be much longer in
the case of first choice dial problems. This will cause the clocks to move by
this much, probably every day at most counters.
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John, Could you please find what we are contractually obliged to do in this
area. We can then try and sort out the problem. What we need to know is the
level of accuracy required, and what we have committed to. Many thanks James
The Call record has been transferred to the Team: Requirements
Hours spent since call received: 0.5 hours

Date:**04-Sep-2000 16:03:00** User:**John Pope**
F} Response :
We have not committed ourselves to any specific time, but have made a number
of comments which give a flavour. We talk about 0.5 seconds in the context
of the accuracy at the NT servers. We talk about haveing robust operational
systems to maitain accuracy. We explicitly comment that our methodology will
be good at sychronising times on the transactions themselves.
I think a couple of seconds would be acceptable, but that 20 seconds is not.
Seems to me that Riposte is logically at fault if it uses the time stamp on
the first syncronisation message in a conversation (i.e. the message that
initiated the ISDN call) for synch purposes, and we should ask Esher to fix
this asap, whatever else we do choose to do.
[END OF REFERENCE 21509129]
Responded to call type P as Category 40 -Incident Under Investigation
The response was delivered on the system
The Call record has been transferred to the Team: TDA
Hours spent since call received: .5 hours

Date:**05-Sep-2000 08:02:00** User:**Gareth Jenkins**
The Call record has been assigned to the Team Member: Gareth Jenkins
Hours spent since call received: 0 hours

Date:**27-Sep-2000 07:03:00** User:**Gareth Jenkins**
Passing on to Glenn to raise a CP as discussed 26/9/00.
The Riposte configuration parameter to change at the counter to only synch if
greater than 5 secs out is TimeSynchDriftLimit. This is defined in
milliseconds. The Riposte default is 60000 (ie one minute). The rollout
script currently sets this to 1000 (ie 1 second). As discussed it should be
changed to 5000 (5 seconds).
The Call record has been assigned to the Team Member: Glenn Stephens
Hours spent since call received: .5 hours

Date:**07-Nov-2000 10:22:00** User:**del(05/01 John McLean)**
Target Release updated to M1Clone

Date:**01-Dec-2000 17:04:00** User:**Lionel Higman**
Updates agreed at tdaqfp (JD/JMcL/LMH)
Target Release updated to DTL - unknown
The call references have been updated. They are now:-
T Other : Futures?

Date:**06-Dec-2000 09:12:00** User:**Gareth Jenkins**
Having discussed this with Glenn, it would appear we need a change to
AutoConfig and to the Standard Riposte Build for counters at M1. There are
actually 2 PinICLs on this problem (58817 and 53384).
58817 will be used to handle the Autoconfig change
53384 (this PinICL) will handle the Riposte Build change
Gareth
The change for the Riposte Config parameters is to change the value of
TimeSynchDriftLimit from the current value of 1000 to a new value of 5000.
TD/SPE/010 version 0.5 contains this change.
Passing PinICL to PIT to be implemented as part of the standard M1 build /
migration.
Gareth

Date:**06-Dec-2000 09:14:00** User:**Gareth Jenkins**
The Call record has been transferred to the Team: PIT
Hours spent since call received: 0 hours

Date:**06-Dec-2000 10:15:00** User:**Del(01/03 Ajay Nehra)**
The Call record has been assigned to the Team Member: Ajay Nehra
Hours spent since call received: 0 hours

Date:**07-Dec-2000 13:11:00** User:**Del(01/03 Ajay Nehra)**
The call references have been updated. They are now:-
Other : Futures?
T Work Package : PWY_WP_10691
F} Response :
Fix issued in PWY_WP_10691 (CI4R_WP10691)
[END OF REFERENCE 23617414]

Responded to call type P as Category 46 -Product Error Fixed
The response was delivered on the system
The Call record has been transferred to the Team: Dev-Int-Rel
Hours spent since call received: 1 hours

Date:**07-Dec-2000 15:55:00** User:**Miho Fujii**
The call references have been updated. They are now:-
Other : Futures?
Work Package : PWY_WP_10691
T Fast track fix : FSTK_2_0_WP10691
F} Response :
Fast track available, please test.
[END OF REFERENCE 23626649]
Responded to call type P as Category 60 -S/W Fix Released to Call Logger
Hours spent since call received: 0 hours
The response was delivered on the system

Date:**08-Dec-2000 09:15:00** User:**del(01/01 Denise Jackson)**
M1 Clone confirmed by QFP
Target Release updated to M1Clone
The call references have been updated. They are now:-
Other : Futures?
Work Package : PWY_WP_10691
T Fast track fix : FSTK_2_0_WP10691
Other : C

Date:**20-Dec-2000 15:06:00** User:**John Pope**
F} Response :
The original complaint was that there was evidence to show that time synch at
the counters was out by up to 20 seconds. The "solution" suggested is to
degrade accuracy from 1 second to 5 seconds !?
Is it suggested that the original evidence (provided by Roger Donato) was
wrong?
[END OF REFERENCE 23865613]
Responded to call type P as Category 52 -Response Rejected
The response was delivered on the system
The Call record has been transferred to the Team: TDA
Hours spent since call received: 1 hours

Date:**20-Dec-2000 20:47:00** User:**Allan Hodgkinson**
The Call record has been assigned to the Team Member: Gareth Jenkins
Hours spent since call received: 0 hours

Date:**22-Dec-2000 13:14:00** User:**Gareth Jenkins**
The original problem had the 2 Data Centres out of sych by a significant
amount (I believe it was 2 mins rather than 20 secs). This was due to time
service software not running correctly. That was an operational problem. I
believe that this PinICL has successfully sorted out the consequences of
that. NB there will still be "oscillations" of the clock if the data Centre
time is not maintained correctly. If you wish to persue that, then please
raise a separate PinICL. I believe that this PinICL can be closed.
Gareth
F} Response :
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[END OF REFERENCE 23917567]
Responded to call type P as Category 94 -Advice and guidance given
Hours spent since call received: 0 hours
The response was delivered on the system

Date:**07-Jan-2001 12:43:00** User:**Lionel Higman**
Target Release updated to DTL - unknown

Date:**08-Jan-2001 14:02:00** User:**John Pope**
F} Response :
Gareth.
The original problem was indeed 2 minutes, and was due to Time Service not
running. Hoewever, evne after thsi was rectified there was still clear
evidence from observing OBCS transaction time start and finish times in the
last week of August that the clocks were still jumping by up to 20 seconds,
which is why I raised this PinICL. It has not been explained (at least not
in the responses to this PinICL) what caused the 20 second jumps, and why the
action taken is an appropriate response.
[END OF REFERENCE 24031122]
Responded to call type P as Category 40 -Incident Under Investigation
The response was delivered on the system
The Call record has been transferred to the Team: TDA
Hours spent since call received: .2 hours

Date:**15-Jan-2001 15:12:00** User:**Allan Hodgkinson**
The Call record has been assigned to the Team Member: Gareth Jenkins
Hours spent since call received: 0 hours

Date:**30-Jan-2001 11:36:00** User:**Lionel Higman**
Target Release updated to CSR-CI4R

Date:**16-Feb-2001 14:10:00** User:**Gareth Jenkins**
I have heard allegations of the 20 second jumps but I've not seen any
evidence of it nor details of when it happened. I don't believe it is worth
spending any further time investigating alledged problems that occurred
during a period of instability after CI4 migration.
I am aware of the following related issues to do with Time Management that
have been addressed :-
1) TPS Harvester treated negetive OBCS response times as exceptions (This
is the issue which originally caused this PinICL to be raised). This was
fixed in early Septemeber 2000.
2) OBCS measured response time from clock readings. At M1 (or possibly
earlier), it has been changed to use "ticks" which avoids time drift issues
(provided it handles the 49.7 day "tick wrap issue)
3) Clock drift at the counter has been configured (from M1) to be 5 seconds
rather than 1 second to avoid hysteresis
4) Configuration / build problems with Time Services at the Data Centre
have been addressed. This was addressed in February 2001.
The only known outstanding issue is the fact that Riposte uses the packet
send time in its time synch protocol and does not allow form ISDN call set up
time. This is item 4.36 on the Riposte Enhancement Register. With the other
measures taken this is unlikely to give negetive transaction times.
I suggest that this PinICL is closed and the situation reviewed again once M1
is fully operational. If problems are still found, then further PinICLs
should be raised to investigate the specific problems idnetified with
appropriate evidence.
Gareth
F} Response :
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[END OF REFERENCE 24843510]
Responded to call type P as Category 94 -Advice and guidance given
Hours spent since call received: .1 hours
The response was delivered on the system

Date:**15-May-2001 13:02:00** User:**John Pope**
F} Response :
examination of a sample of OBCS foreigns (courtesy of SRC) show no evidence
of strange clock re-setting.
[END OF REFERENCE 26076962]
Responded to call type P as Category 62 -No fault in product
Hours spent since call received: 1 hours
The response was delivered on the system

Date:**15-May-2001 13:03:00** User:**John Pope**
CALL PC0053384 closed: Category 62, Type P
Hours spent since call received: 1 hours
Defect cause updated to 39:General - User Knowledge

Root Cause	General - User Knowledge
Logger	Deleted User -- Analysts
Subject Product	Infrastructure -- Unknown Infra'sture (version unspecified)
Assignee	Deleted User -- Analysts
Last Progress	15-May-2001 13:03 -- John Pope