Export

Peak Incident Management System

Call Reference	**PC0070702**	Call Logger	POA Deleted User -- Deleted Team
Release	Targeted At -- Horizon Future Unspecified	Top Ref	900
Call Type	System Testing Incidents/Defects	Priority	D -- Non-urgent
Contact	Deleted Contact	Call Status	Closed -- Administrative Response
Target Date	10/10/2002	Effort (Man Days)	0
Summary	Time drift during Slave counter recovery		
All References	Type	Value	
	Supplier reference	900	
	Test reference	TCMSG10	

Progress Narrative

```
Date:15-Oct-2001 08:22:00 User:Madhu Karia
CALL PC0070702 opened
References entered are:-
T Test reference : TCMSG10
Product Infrastructure RIPOSTE messaging sw added
Target Release entered: Unknown
Time drift during Slave counter recovery
On test rig INF2, both the Gateway and Slave at FAD 505038 were built to S10
level with riposte ver 6.0.3.22. A large messagestore (from Trafalgar Square)
was replicated from the Gateway to the Slave. It was observed that during
index inserts following message inserts (as indicated on the performance
monitor) the clock on the Slave started drifting behind the Gateway and
catching up at the end of replication. Inspection of the NT Eventlog showed
lots of time synchronisation messages.
Evidence has been forwarded to Mark Jarosz.
Please route this call to Mark Jarosz.
CALL PC0070702:Priority D:CallType S - Target 29/10/01 09:22:02
The Call record has been assigned to the Team Member: Chris Rayner
Defect cause updated to 42:Gen - Outside Pathway Control
Hours spent since call received: 3 hours
```

```
Date:15-Oct-2001 09:15:00 User:Chris Rayner
F} Response :
Please route this call to Mark Jarosz (TDA) for investigation/resolution,
Mark is already aware of the problem and evidence.
[END OF REFERENCE 27867466]
Responded to call type S as Category 30 -TL confirmed
The response was delivered on the system
The Call record has been transferred to the Team: QFP
Hours spent since call received: 0 hours
```

```
Date:15-Oct-2001 10:07:00 User:Tariq Arain
The Call record has been transferred to the Team: Escher-Dev
Hours spent since call received: 0 hours
```

```
Date:26-Oct-2001 06:53:00 User:Gareth Jenkins
Mark has talked to Madhu about this.
Basically, Mark has asked him to come up with a recipe for reproducing this
problem based on a synthetic message store that Escher can generate
themselves. Once he has done this then we can forward direct to Escher.
Therefore we need to route this PinICL back to Madhu.
Gareth (from MJ email)
The Call record has been transferred to the Team: IP System Test
Hours spent since call received: 0 hours
```

```
Date:20-Nov-2001 12:40:00 User:Tariq Arain
Target Release updated to BI_2
```

```
Date:21-Nov-2001 14:50:00 User:Madhu Karia
The Call record has been assigned to the Team Member: Madhu Karia
Hours spent since call received: 0.1 hours
```

```
Date:04-Dec-2001 08:48:00 User:Madhu Karia
Install riposte on two systems on the same LAN giving them the same group id
but different node id, say 123456,1 and 123456,2.
Start riposte on both systems and apply the appropriate license and build
```

objects.
Use ripesteputmessage to create a large number of messages, say 200000, on
each system.
Create about 30 indexes, including Date, Time, CRC, on each system.
Use ripostenode to configure the two systems to be neighbors and let the
messagestores synchronise.
Configure 123456,2 to synchronise time with 123456,1 with a drift value of 5
seconds.
Stop riposte on 123456,2 and delete the messagestore.
Start riposte on 123456,2 and let it recover from 123456,1.
Display clocks on both systems.
Run perfmon on 123456,2 and display riposte counters MessageInserts/sec,
IndexInserts/sec.
After about 20 minutes, when MessageInserts have been completed and
IndexInserts is taking place, the clock on 123456,2 starts to lag the one on
123456,1. The lag continues to increase until all the indexing activity is
complete. Then the two clocks synchronise. NT event log shows a large number
of time synch messages (ID 198, 199)
The Call record has been transferred to the Team: Escher-Dev
Hours spent since call received: 3 hours

Date:**04-Dec-2001 10:37:00** User:**Del(04/03 Brian Orzel)**
Email to Gareth

Date:**04-Dec-2001 12:11:00** User:**Madhu Karia**
Apologies for being a bit too hasty with the 'send' key.
Attached herewith is a zip file containing the full event log from node 2 and
a snapshot of the network trace while node 2 was falling behind node 1. At
the time the cpu usage on node 2 was between 20 and 30 percent. The time
drift observed at one stage was nearly an hour and still drifting behind.
New evidence added - Event log and network trace

Date:**04-Dec-2001 12:36:00** User:**Madhu Karia**
New evidence added - Text of event log

Date:**05-Dec-2001 11:36:00** User:**Madhu Karia**
Brian Orzell suggested we repeat the above test on riposte 6.0.3. The 'time
drift' problem was first observed on riposte 6.0.3.22 using the large
Trafalgar Square messagestore. Then the problem was reproduced on riposte
6.2.5 using the test messagestore created by riposteputmessage (so Escher can
reproduce the problem). I have, today, used the test messagestore procedure
on riposte 6.0.3.22 using the same two counters and following the same
procedure as before.
Observations:
At 22:00 started node2 in recovery.
Clocks displayed on both node1 and node2
Perfmon showing MessageInserts and IndexInserts going on.
Approx 22:45 MessageInserts end, IndexInserts carries on and the clock on
node2 starts drifting straight away.
Netmon trace shows node2 responding with <Offline:1>
After about an hour ....
node1 clock= 23:43:59 - node2 clock= 23:02:09
node2: ripostenode status for node1 shows Marker Delta: 0 messages
ripostestatus 2 shows Status: Recovering ..License Object not
validated
node1: ripostenode status for node2 shows Offline Disconnected and Marker
Delta: 0 messages
Hope this gives some clues in locating the problem.

Date:**13-Dec-2001 11:00:00** User:**Del(04/03 Brian Orzel)**
I am sending this to Escher.
The Call record has been assigned to the Team Member: At-Escher
Hours spent since call received: 0 hours

Date:**15-Jan-2002 09:39:00** User:**Del(04/03 Brian Orzel)**
Feedback from Escher:
900   PC0070702   Reproduced scheduled for WR 2.1.2
The Call record has been assigned to the Team Member: Escher recreated
Hours spent since call received: 0 hours

Date:**17-Jan-2002 08:02:00** User:**Del(04/03 Brian Orzel)**
The following item needs additional investigation to determine how
destabilizing the fix might be:
PC0070702 900 D Recreated Time drift during Slave counter recovery

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Date:**22-Jan-2002 10:15:00** User:**Del(04/03 Brian Orzel)**
PC0070702 900 D rec.Discus? Time drift during Slave counter recovery
Km - An improvement is being planned in this area. The pure fix remains

under investigation.

Date:**05-Feb-2002 13:06:00** User:**Del(04/03 Brian Orzel)**
dispite the above, I can find no mention of this bug in the release note wor
WR211. Retest?
The Call record has been transferred to the Team: IP System Test
Hours spent since call received: 0 hours

Date:**05-Feb-2002 13:08:00** User:**Del(04/03 Brian Orzel)**
It is also still marked as open on the Escher database. I will ask them for
an update.

Date:**06-Feb-2002 09:13:00** User:**Madhu Karia**
Please return this call for testing when a fix / improvement is confirmed by
Escher. If an improvement is claimed, please get a definition of the
improvement so we know what we are looking for in the absence of a fix.
The Call record has been transferred to the Team: Escher-Dev
Hours spent since call received: 0.5 hours

Date:**07-Feb-2002 09:45:00** User:**Gareth Jenkins**
Madhu,
We're getting confusing stories from Escher. Please can you repeat the test
on 6.2.10 to see if anything has changed. We are not expecting any further
versions of the message server for BI2, so we need to know exactly what is
the case on this one.
Thanks
Gareth
The Call record has been transferred to the Team: IP System Test
Hours spent since call received: 0 hours

Date:**08-Feb-2002 16:42:00** User:**Chris Rayner**
The Call record has been assigned to the Team Member: Madhu Karia
Hours spent since call received: 0 hours

Date:**14-Feb-2002 08:44:00** User:**Madhu Karia**
With the Counters upgraded to Riposte 6.2.10 used the Trafalgar Square
messagestore and a smaller 'synthetic' one to test the recovery. No time
drift was evident on the clocks displayed on the Counters or the event logs.
So, whatever it is that Escher did seems to have fixed the problem. There are
a lot of events, EID 201: "Connected to neighbor (nnnn,m) while in recovery
mode. <Marker:........> " in the event log which occurred previously but were
not mentioned as I thought they were part of the same problem. Seems to me to
be a minor problem. Therefore, closing the call.
CALL PC0070702 closed: Category 60, Type S
Hours spent since call received: 4.0 hours

Date:**19-Jun-2002 08:46:00** User:**Del(04/03 Brian Orzel)**
Fix claimed in todays WR2.1.2 release

Date:**26-Sep-2002 09:07:00** User:**Madhu Karia**
CALL PC0070702 Reopened: Riposte 6.2.15 failed the test.
CALL PC0070702:Priority D:CallType S - Target 10/10/02 10:07:20

Date:**26-Sep-2002 09:10:00** User:**Madhu Karia**
Riposte 6.2.15 was used for testing Gateway to Slave replication. Time drift
was evident as before.
The Call record has been transferred to the Team: Escher-Dev
Hours spent since call received: 2 hours

Date:**30-Sep-2002 13:07:00** User:**Madhu Karia**
A summary of the time synch and time drift problems ---
In Riposte 6.0.3 and 6.2.5, the time drift during replication problem
described in this call was noticed.
A fix for this problem was provided in Riposte 6.2.10. However, time synch
between time server and client was affected (see PinICL 74043). In Riposte
6.2.12, the time synchronisation appeared to revert to the 6.2.5 behaviour.
But, because this version of riposte was not taken on the counters, the time
drift problem was not tested.
Riposte 6.2.15 is due to go on all platforms and was therefore tested on
counters and correspondence servers. The time synch problem (PinICL 74043)
has been fixed but the time drift during replication problem has reappeared.

```
Date:02-Oct-2002 10:07:00 User:Del(04/03 Brian Orzel)
The Call record has been assigned to the Team Member: At-Escher
Hours spent since call received: 0 hours
```

```
Date:02-Oct-2002 10:35:00 User:Del(04/03 Brian Orzel)
The call references have been updated. They are now:-
Test reference : TCMSG10
T Supplier reference : 900
```

```
Date:10-Oct-2002 10:41:00 User:Lionel Higman
Target Release updated to BI_3S30
```

```
Date:10-Dec-2002 11:10:00 User:Lionel Higman
Retarget at request of Gareth Jenkins.
Target Release updated to Future Unspecified
```

```
Date:09-Jan-2004 14:11:36 User:_Customer Call_
Please route this call to Mark Jarosz (TDA) for investigation/resolution, Mark is already aware of the problem and evidence.
```

```
Date:10-Mar-2004 08:06:32 User:Iain Janssens
Updated to Escher recreated after meeting with Alan Smalley 09-Mar-2004
The Call record has been assigned to the Team Member: Escher recreated
```

```
Date:21-Jun-2004 11:51:21 User:Lionel Higman
The call TargetRelease has been changed from:-
Future Unspecified
The call TargetRelease is now:-
Future Unspecified
```

```
Date:13-Sep-2004 14:05:29 User:Iain Janssens
[Start of Response]
This call is being returned for closure as a result of the Escher S80 review
(held 10-Sep-2004). This has been agreed between Development and ITU (Simon
Vaughan)
[END OF REFERENCE 38535697]
Response code to call type S as Category 68
```

```
Date:14-Sep-2004 07:29:08 User:Madhu Karia
[Start of Response]
Closing as per instructions above - no fix to the problem.
[END OF REFERENCE 38538960]
Response code to call type S as Category 68
Routing to Call Logger following Final Progress update.
Hours spent since call received: 0 hours
```

```
Date:14-Sep-2004 07:29:19 User:Madhu Karia
CALL PC0070702 closed: Category 68 Type S
```

Root Cause	Gen - Outside Program Control
Logger	POA Deleted User -- Deleted Team
Subject Product	Infrastructure -- RIPOSTE messaging sw (version unspecified)
Assignee	Deleted User -- Deleted Team
Last Progress	14-Sep-2004 07:29 -- Madhu Karia