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HNG → EBT risks and issues

Meeting: **20/06/2013**

Invitees: Peter R Laycock
Willie Hughes
Antonio Jamasb
Ian Trundell

Apologies Ghulam Hussain

Agenda and Outcomes:

1. **JP Morgan, via HP has reported for some time now(well over one year) the issues of POca transaction drops followed by peaks of up to 350TPS.**

This is happening every day, but is more noticeable on heavy POca days (Monday and Tuesday). The contracted number taken from the TIS is 180TPS with the system tested to 240TPS, but this is being regularly burst

Risk: (Commercial; Operational; Customer Experience)

Could impact JP Morgan's ability to satisfy the SLA requirement and worst case impact POca counter transactions and lead to transaction queuing and possible timeouts

Embedded doc provides original stats from HP/JPM and dialogue


latest stats from HP
at 170613 showing P(

Embedded doc provides stats from Fujitsu but averaged over 5-minutes


capo5min.xlsx

Note: HP/JPM has monitored at their side of the fence and have stated that the problem is not with EBT. Moreover we have discounted the cable and wireless link that was experiencing issues, but monitoring after the fix identified that the peaks and troughs still exist

The missing piece is that traffic monitoring from HNG has not been performed by Fujitsu and they delivered only stats averaged over 5-minutes so not possible to compare like for like

It must be borne in mind that there is a mismatch between the HP/JPM service targets and those of Fujitsu, but equally the Transaction Interface Specification, which details the appropriate numbers should have been agreed by all during the POca 2 project which went live in 2010. This document is stored in the POca Infosec SharePoint site under "Peter Laycock batons". Dave and Ian have access

POSSIBLE CAUSES

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Although nothing definite, due to the obvious nature of the problem and a noticeable a frequency of 4-minutes, or multiples thereof, discussions considered possible causes in the HNG space. These are:

a) **The Oracle database**

b) **Network Persistent Store**

ACTIONS:

a) **Tony to raise a problem record with Fujitsu**

b) **Tony to ask Capacity teams to check if other products may be experiencing similar issues – especially with a cycle of 4-minutes, or multiples thereof**

c) **Tony to allocate this to the Problem Management Team**

d) **Peter to ask HP to document what they believe the actual risk to both service levels and customer could be**

e) **Fujitsu to investigate. Note: it is true that if this just happens to be a mismatch of service targets, albeit in the agreed TIS that a cost would be incurred for any change, but if this is a defect in the NPS, Oracle database or elsewhere in the HNG space and requires a fix, cost should be zero**

2. **HNG → EBT "rehomes"**

This is expected at 02:00hrs each day but EBT has identified this happening at random times

Risk: (Commercial; Operational; Customer Experience)

If this happens during trading hours EBT will be managing these reconnections which could impact on POca counter transactions and lead to transaction queuing and possible timeouts

ACTIONS:

a) **Tony to raise a problem record with Fujitsu**

b) **Peter was to ask HP for details going back 6-months, but HP has made numerous incident reports for some considerable time to the Duty Manager on this. Mark Geldart (HP) will provide problem record numbers for analysis by POL Service Management**

c) **Tony to allocate this to the Problem Management Team**

d) **Results to be provided to Fujitsu**

e) **Fujitsu to provide a rationale, and hopefully a proposed fix**

3. **Horizon terminal time offsets:**

"Summary: JP Morgan are reporting that out of a sample of 865,731 transactions from 10,643 FAD codes, 1,640 FAD codes had at least one terminal with "its time out by more than 1 minute (±1.0

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second). And of those, 36 FAD codes had at least one terminal with its time out by more than 5 minutes, with the worst one being out by nearly 21 minutes.

This indicates that clock synchronisation at the counter is not always what it should be. Of course for banking transactions, the time stamp on the receipt is important in relation to disputes, but if this differs considerably to the time of the transaction recorded by the bank could complicate any dispute"

Embedded doc provides original stats and dialogue

POca - transaction time offsets.pdf

Discussion took place on this and there was debate on the actual time stamping of transactions, but it should be borne in mind that the time on the receipt is provided by the terminal clock

See above embedded document but important to note that HP/JPM are receiving the ISO8583 message at EBT, generated by HNG NBX, which is where they are measuring the discrepancy

Risk: (Regulatory; Customer Experience; Fraud; Transaction Disputes)

It should be noted that for POca and other banking transactions disputes do occur on a regular basis and must follow the Financial Ombudsman Service criteria for resolution, so discrepancies in the time on the receipt to the actual time of the transaction could have an impact. Moreover, where fraud is concerned, data is required for evidential purposes so accuracy is paramount

ACTIONS:

a) **Tony to raise a problem record with Fujitsu**

b) **Peter has asked HP for details more detail; see below**

c) **Tony to allocate this to the Problem Management Team**

d) **Results to be provided to Fujitsu**

e) **Fujitsu to provide a rationale, and hopefully a proposed fix**

Email from Mark Geldart in response to Peter laycock's questions (21/06/13)

Q1 – how does the counter time get sent to EBT – is this part of the ISO8583 message?

It is part of the ISO 8583 message.

Q2 – is the counter time "used" for transaction processing or is that only between HNG and EBT (i.e. The EBT transaction processing SLA is to return success of failure to HNG and what happens beyond IRE11 is not "our" concern)

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We store the counter time and the switch time from the ISO 8583 message and add our own timestamp. The counter time is what is displayed when transactions are displayed on a screen or returned to CRM. This is done as these enquires would usually be done in response to dealing with a customer, and it's the terminal time that is printed on the customer receipt. However we do display/return the transactions in our internal timestamp order.

Q3 – if the times all stayed offset by 20 minutes or more, would it actually matter (other than a customer having a receipt with potentially the incorrect transaction processing time on it?

It doesn't matter to EBT. However, if a customer rapidly visited two branches and performed transactions it could lead to a customer attempting a fraud. I.e. A customer performs a balance enquiry in a +30 minute branch showing £200. They dash to a nearby -30 minutes branch and withdraw the £200. They are left with two receipts that show a withdrawal of £200 (and a balance of zero) and an "hour" later a receipt showing a balance of £200. This should be caught if they tried to claim the £200 as having gone missing, but there's always a possibility that it wouldn't. There are probably other fraudulent / criminal activities that could use an incorrectly timed receipt to their advantage. But I'll leave those to your own imagination.

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GRO Mobex n/a

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