FUJ00176533

From: Gauntlett, Paul[/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=20fad69c1be541619bbf58bbefdae198-Gauntlett,]
Sent: Tue 30/11/2021 5:17:46 PM (UTC)
To: Barnes, Gerald[GRO]
Subject: RE: Summary of Riposte and HNGx

Hi Gerald - this looks really good and concise thanks.

GRO tho atm so will reread in the morning GRO and let you know if I have any comments

From: Barnes, Gerald < GRO >
Sent: Tuesday, November 30, 2021 5:10 PM
To: Gauntlett, Paul < GRO >
Subject: Summary of Riposte and HNGx

Hi Paul,

1. Originally a system called Riposte was used to gather audit transactions from all the Post Office counters. It was a big distributed database.
2. There were two data centres. Each evening all transactions were harvested and put in files. Different files were produced in each data centre but they each contained the same transactions all be it in a different order and for different FADs.
3. One audit server gathered one file and the other the other. Although there was an option to robocopy files from one to other it was switched off for these files because there was already two copies of each transaction.
4. Around 2010 the contract for looking after Post Office transactions came up for renewal. Fujitsu's proposal was a rewrite called HNGx which eliminated Riposte (for which there was a big annual licence fee). As a part of this rewrite all transactions were stored in one file only.
5. The auditing of these files was done by one audit server only and what it stored each evening was robocopied and stored on the other audit server.
6. Once all Post Office counters were converted to HNGx as a tidying up exercise the audit configuration files were changed such that only IRE11 actively gathered and all files that were stored were robocopied to IRE19 each evening.
7. When ARQ requests for a FAD code are made all relevant files are got back from the audit server being used (they may have been robocopied, they may be gathered directly). Then they are processed by the Query Manager service on the audit server. Now whether Horizon or HNGx each transaction has a unique number associated with it. The Query Manager checks that the transactions have not been tampered with and also checks whether or not there are any duplicates or gaps in the sequence of transactions.
8. It is very rarely the case that there are gaps in the Horizon transactions on one audit server but not the other.
9. These gaps are caused by the rare malfunction of the Harvester process on one data centre.
10. I went through PEAKs yesterday using a free text search and found one such instance reported. I looked in detail at that. Now Horizon nodes have two sorts – counter transactions which are nodes 1-32(or maybe 31) and some sort of administrative correspondence server nodes which have a bigger number. The gaps were in the correspondence server nodes only. There is good reason for that. In Riposte all transactions have a build in retain time and it is more for real transactions than correspondence server transactions. So if the harvester is down for a period it is more likely that the correspondence server transactions disappear than the real ones. So maybe the harvester was down for some reason or other and by the time it got going again the correspondence server transactions had disappeared.

Regards,
Gerald Barnes

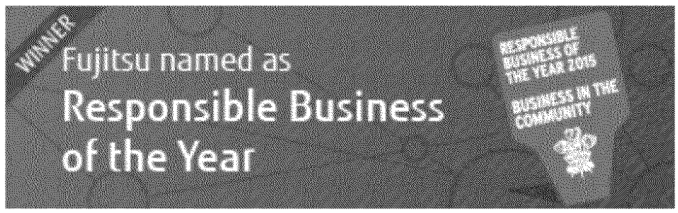
FUJ00176533

Gerald Barnes

Senior Software Engineer

Post Office Account

Fujitsu
Lovelace Road, Bracknell, Berks, RG12 8SN
Tel: GRO
Mob: GRO
Email: Gerald.Barnes GRO
Linked in: http:www.linkedin.com/in/GeraldJamesBarnes
Web: http://uk.fujitsu.com



Fujitsu is proud to partner with Action for Children

I-CIO: Global Intelligence for the CIO. Fujitsu's online resource for ICT leaders

Sponsors of the 2015 Rugby World Cup

Please consider the environment - do you really need to print this email?