From: "Bansal Steve (BRA01)" < **GRO**

To: Newsome Pete < **GRO**

Cc: Godeseth Torstein **GRO** "Defence Legal (Chris Jay)" **GRO**

Subject: RE: PRIVATE & CONFIDENTIAL - SUBJECT TO PRIVILEGE - Quick query - Bond Dickinson KELs Question

Date: Thu, 29 Jun 2017 07:10:38 +0000

Inline-Images: image001.gif; image009.gif; image011.gif; image013.gif; image015.png; image017.gif; image019.jpg; image021.jpg; image022.jpg; image023.jpg; image024.jpg; image025.jpg; image026.jpg; image027.jpg; image028.jpg; image029.jpg; image030.jpg; image031.jpg; image032.jpg; image033.jpg; image034.jpg; image035.jpg; image036.png; image037.png; image038.jpg; image039.jpg; image040.png; image041.png; image042.jpg; image043.jpg; image044.jpg; image045.jpg; image046.jpg; image047.jpg; image048.jpg; image049.jpg; image050.png; image051.png; image052.jpg; image002.png; image008.png; image003.png; image004.png; image005.png; image006.png; image007.png; image053.png; image054.png; image056.jpg

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Hi

We have circa 3500 KEL's relative to POA, the following is based on the current Master KEL workbook, posted on POA SharePoint.

During 2017 an average of 16 KEL's per week continue to be reviewed. Typical examples of KEL's reviewed, updated and approved by the forum recently are illustrated below.

In the first, although these alerts are defined as not presently being seen by SMC, appropriate action steps are now in place so as should incidents reoccur during a Blade server reboot event.

The second example details a KEL that was incomplete due to lack of assigned priorities . The update (v.2) is now approved and live ensuring that a P1 call with voicing is raised with Unix. Terminology within all KEL's is also verified as being current relative to contractual changed.

KEL Ref:	Version	Criteria for review	Comments
JonnalagaddaN5649Q	3	No Incident Priority assigned. Currently such alerts are not occurring.	SSC : Possible rewording: 1. If a **single occurrence** of this alert, SMC can Safely ignore this event. 2. If SMC observe **>3 events with in a 10-minute period**, pass a P5 call over to Unix (no need to voice Unix). 3. If the **event keeps recurring** (as in this case, when there was a constant stream of events generated), then raise a P1 call and pass to Unix - contact Unix ASAP (both in & out of hours). SMC to amend accordingly.
maxwellg3554M	1	Priority not assigned and need to discuss on SMC action	SSC: This is the loading of the replenishment files. P1 with voicing to UNIX. They will probably know already as there must be an underlying issue with the BRDB database. – SMC ISD – amend to POA

cBlade piXXpbfXXX/cX non-sensor event

cBlade pi19pbf007/c1 non-sensor event, eventDate = Sat Nov 06 03:11:46 GMT 2010, Hardware NonFatal, errortype=Correctable DRAM ECC Error, errorcode=0x01, diagdata=0x8a620000e57c1000

Symptoms

Server Name :- LPRPPAN007
Date Stamp :- 06/11/2010 3:10:46
Event Text :- cBlade pi19pbf007/c1 non-sensor event, eventDate = Sat Nov 06 03:11:46 GMT 2010, Hardware NonFatal, errortype=Correctable DRAM ECC Error, errorcode=0x01, diagdata=0x8a620000e57c1000 Configuration Item: Unable to resolve Server LPRPPAN007

Problem

Blade Rebooted

Solution

ATOS	**SMC**	SSC

SMC Action :

1. If a single occurrence of this alert, SMC can Safely **ignore** this event.

2. If SMC observe **>3** events with in a **10-minute** period, pass a **P5** call over to Unix (**no need to voice Unix**).

3. If the event keeps recurring (as in this case, when there was a constant stream of events generated), then raise a **P1** call and pass to Unix - **contact Unix ASAP (both in & out of hours)**.

      As per **TFS#4913429**

      Please follow KEL JonnalagaddaN5021K for PIM (Power In Module) events.

LFS_RDC.BRDBC008_CHECK_RDC_FROM_LFS1 Abend

LFS_RDC.BRDBC008_CHECK_RDC_FROM_LFS1 Abend - error BRDBC008 reports nnn successes from 128 Fad Hashes

Symptoms

TWS job log content:

```
============================================================
= JOB       : M_DB_SRV#LFS_RDC130150[(1301 06/27/10),(LFS_RDC130150)].BRDBC008_CHECK_RDC_FROM_LFS1
= USER      : brdbblv1           brdbblv1
= JCLFILE   : $BRDB_PROC/BRDBC008 BRDB_RDC_FROM_LFS 20100627
= Job Number: 9026
= Sun 27/06/10 14:34:52 BST
============================================================
...
Sun 27-Jun-2010 14:34:53:115 Debug Level for module BRDBC008 is set to <0>
Sun 27-Jun-2010 14:34:53:122 Fad Hash 3 not run
Sun 27-Jun-2010 14:34:53:132 Fad Hash 11 not run
Sun 27-Jun-2010 14:34:53:150 Fad Hash 27 not run
Sun 27-Jun-2010 14:34:53:158 Fad Hash 35 not run
Sun 27-Jun-2010 14:34:53:175 Fad Hash 51 not run
Sun 27-Jun-2010 14:34:53:181 Fad Hash 59 not run
Sun 27-Jun-2010 14:34:53:196 Fad Hash 75 not run
Sun 27-Jun-2010 14:34:53:203 Fad Hash 83 not run
Sun 27-Jun-2010 14:34:53:222 Fad Hash 99 not run
Sun 27-Jun-2010 14:34:53:228 Fad Hash 107 not run
Sun 27-Jun-2010 14:34:53:243 Fad Hash 123 not run
Sun 27-Jun-2010 14:34:53:247 117 successes from 128 Fad Hashes
Sun 27-Jun-2010 14:34:53:247 Process Failed
AWSBIS308I End of job
============================================================
= Exit Status         : 1
= System Time (Seconds) : 0      Elapsed Time (Minutes) : 0
= User Time (Seconds)   : 0
= Sun 27/06/10 14:34:53 BST
============================================================
```

Problem

The Fad Hash check failure indicates incomplete processing of all fad hashes for the relevant stream.

The sequence of events (TWS jobs) which led to this:

LFS_RDC.BRDBX003_RDC_FROM_LFS_1 completed successfully
LFS_RDC.BRDBX003_RDC_FROM_LFS_2 abended - BRDB node not available
LFS_RDC.BRDBX003_RDC_FROM_LFS_3 abended - BRDB node not available
LFS_RDC.BRDBX003_RDC_FROM_LFS_4 abended - BRDB node not available

2,3,4 were retried with success.

BRBD node 4 failed, which prompted an auto-rerun.

LFS_RDC.BRDBX003_RDC_FROM_LFS_1_RERUN completed successfully
LFS_RDC.BRDBX003_RDC_FROM_LFS_1_RERUN abended - BRDB node not available
LFS_RDC.BRDBX003_RDC_FROM_LFS_1_RERUN abended - BRDB node not available
LFS_RDC.BRDBX003_RDC_FROM_LFS_1_RERUN abended - BRDB node not available

2,3,4 were retried with success.

In summary, all jobs were eventually retried successfully...so the fad hash check should be successful, right ?

No.

Solution

| ATOS | SMC | SSC |

All four of the BRDBX003_RERUN jobs must be rerun (even the ones that SUCC'd) then BRDBC008 rerun.

Otherwise this may result in a fad hash balancing timing issue which will result in the BRDBC008 process failing with the error indicated.

ISD have processes in place to ensure that the appropriate steps are taken during schedule recovery, however, if the call arrives with SSC:

1) Check for earlier failures in the relevant schedule. There are multiple BRDB schedules with the same format so potentially this could affect any one of them.

2) If there are failures, check to see if the _RERUN jobs have been rerun before running the BRDBC008 job. If the correct jobs have been run & BRDBC008 still reports the error then it's a different problem.

Regards

Steve Bansal

Senior Service Delivery Manager

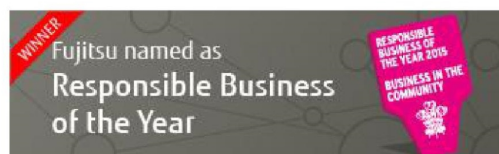Business & Application Services

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From: Newsome, Pete
Sent: 26 June 2017 10:43
To: Bansal, Steve (BRA01)
Cc: Godeseth, Torstein ; Defence Legal (Chris Jay,)
Subject: PRIVATE & CONFIDENTIAL - SUBJECT TO PRIVILEGE - Quick query - Bond Dickinson KELs Question

Steve

At the meeting we had with Post Office and their legal representatives they asked the question again on whether we currently (understanding this is a 'living' document set) have any KELs on the audit store or that are related to errors or bugs in the system that could cause imbalance in sub postmasters accounts.

Thanks

Pete

Pete Newsome

Account Manager

Post Office Account, Fujitsu UK&I
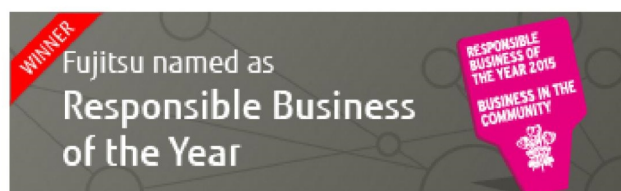
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E-Mail: GRO

Web: http://uk.fujitsu.com

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From: Bansal, Steve (BRA01)
Sent: Tuesday, November 1, 2016 11:53 AM
To: Newsome, Pete < GRO > Thompson, Peter
GRO
Cc: Harvey, Michael < GRO >
Subject: RE: Quick query - Bond Dickinson KELs Question

I can arrange this, would this forum like to review the KEL's or should I forward to Pete to distribute?

Regards

Steve Bansal

Senior Service Delivery Manager
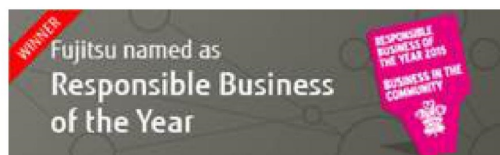
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From: Newsome, Pete
Sent: 01 November 2016 11:08
To: Thompson, Peter GRO ; Bansal, Steve (BRA01)
GRO
Cc: Harvey, Michael < GRO >
Subject: FW: Quick query - Bond Dickinson KELs Question

Pete and Steve

I assume we can pull a few KELs as examples as asked for below?
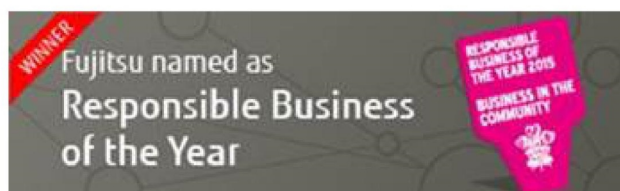
Pete

Pete Newsome

Business Change Manager

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From: Loraine, Paul [mailto: GRO]
Sent: 31 October 2016 17:38
To: Newsome, Pete [GRO]
Cc: Parsons, Andrew [GRO] Rodric Williams [GRO]
Subject: FW: Quick query

Hi Pete

By way of an introduction, I am a colleague of Andy Parsons at Bond Dickinson.

With apologies for bringing this issue up again, we need to revisit the Known Error Log point and I'm currently looking to draft a short description of what the KEL is / its scope etc. In addition to your helpful notes below, we wondered whether you might be able to provide us with a few example KELs (5 or so), just from the top of the pile? Is this feasible / easily done?

Thanks

Paul

From: Parsons, Andrew
Sent: 23/09/2016 10:30
To: pete.newsome(GRO)

Cc: Rodric Williams [_____GRO_____]); Prime, Amy; Michael.Harvey([_____GRO_____]

Subject: RE: Quick query

Thanks Pete – much appreciated.

A

Paul Loraine
Solicitor
Bond Dickinson LLP

Bond Dickinson

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From: pete.newsome[_____GRO_____]
Sent: 23 September 2016 10:26
To: Parsons, Andrew
Cc: Rodric Williams [_____GRO_____]); Prime, Amy; Michael.Harvey[_____GRO_____]
Subject: RE: Quick query [BD-4A.FID26896945]

Andrew

We have checked all the KELs (takes time as they have free text included) and have found there are no KELs that directly affect the normal operation of the Core Audit Process.

Pete

Pete Newsome

Business Change Manager

Post Office Account, Fujitsu UK&I

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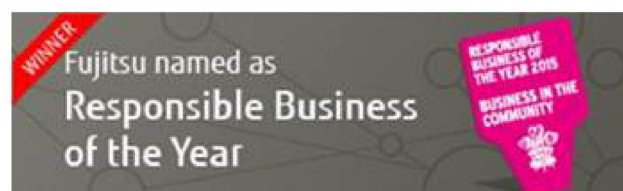
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From: Parsons, Andrew [mailto: GRO]
Sent: 21 September 2016 13:40
To: Newsome, Pete GRO
Cc: Rodric Williams GRO ; Prime, Amy GRO ; Harvey, Michael < GRO >
Subject: RE: Quick query [BD-4A.FID26896945]

Pete

Thanks. Very useful.

Noted on the theme of questions – unfortunately these are not always under are control as these are questions being put by Freeths, the postmasters' solicitors.

That said, are you 100% sure that there are no KELs in respect of the Core Audit Log? If so, we may say this to Freeths so to try to avoid having to disclose the KELs.

Thanks
Andy

Andrew Parsons
Partner
Bond Dickinson LLP

Bond Dickinson

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From: pete.newsome GRO
Sent: 21 September 2016 12:36
To: Parsons, Andrew
Cc: Rodric Williams GRO ; Prime, Amy; Michael.Harvey GRO
Subject: RE: Quick query [BD-4A.FID26896945]

Andrew

As requested, please find below our answers to the 6 questions posed.

We would, however, like to first point out our concern regarding the underlying, erroneous, theme that these questions (and the previous questions we've provided answers to you on) seem to be driving at. At the risk of sounding like a "broken record", the key premise of the HNG-X (and Horizon) system is the Core Audit Log. This comprises the only source of the "truth". And to our knowledge there has been no identified issues with the Core Audit Log and there are no KELs in respect of this log. To this end, the questions regarding the existence or otherwise of issues with other elements of the system are, in our opinion, a distraction to the key premise and could be used to create an erroneous view of HNG-X / Horizon. It is our view that a strong rebuttal is required and a shift of focus from a view that we should somehow constantly need to "prove the negative" to a focus on the fact that the Core Audit Log provides a true source of the data entered and transactions performed at the relevant terminals. Any subsequent

use of said data by the system does not impact on this "truth" and as such we often determine the existence or otherwise of errors by reference to the Core Audit Log.

The answers (highlighted in yellow) to your questions are:

What format do these logs take and where are they held? The logs (referred to as the Known Error Log or "KEL") are held on a server and contain information advising to accessor of the error condition, priority, resolver group to handle and process to follow. Access to the log is controlled by the accessor having to logon to the server. KELs created as a result of an issue arising from an enterprise management event or the result of a post incident action. KEL's are often fixed as part of a maintenance release and then closed. However, in some instances KELs are not closed and remain on the system on the basis it is easier to follow the tactical workaround procedure defined in the individual record.

What level of detail is included within the logs (i.e. are they generic logs for all Horizon errors or linked to specific branches, do the logs explain the consequences of the error and the fix which was applied, etc.)? KELs are individual articles associated to individual events. They explain the issue and any workaround for to be followed if the issue is reported. They are logged against a priority/impact and which capability the call should be passed onto in our service management tool to record and resolve at the time.

When did Fujitsu begin to maintain these logs and are they still maintained? The log was implemented from day 1 of the service and is reviewed periodically. The KEL solution is currently being reviewed as part of a service improvement activity with service managers talking with product owners on relevance and quality of all KELs in the system,

Are the logs capable of being extracted and provided to us? Yes via excel data extract

Have Post Office previously been provided with a copy of these and, if so, to whom and when? We don't believe Post Office has ever asked for this before but it is available if required.

Has there been any correspondence between Post Office and Fujitsu concerning these logs? I suspect loads– but it would be good to just understand in high level terms how they are used. To our recollection, this has not been raised in any service meetings and as such we are not aware of any correspondence regarding the KELs themselves though clearly there will be numerous correspondence regarding any issues that may have given rise to a KEL.

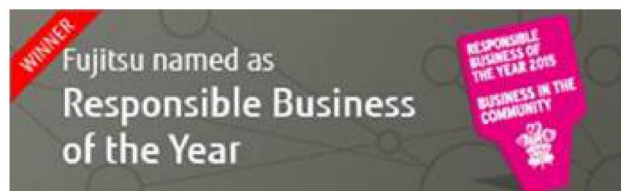Hope this helps

Pete

Pete Newsome

Business Change Manager

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From: Newsome, Pete
Sent: 19 September 2016 13:57
To: 'Parsons, Andrew' GRO
Cc: Rodric Williams GRO ; Prime, Amy
GRO
Subject: RE: Quick query [BD-4A.FID26896945]

Andrew

Will check with colleagues and get back with an update.

Regards

Pete

Pete Newsome

Business Change Manager

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From: Parsons, Andrew [mailto: GRO]
Sent: 19 September 2016 12:21
To: Newsome, Pete GRO
Cc: Rodric Williams GRO ; Prime, Amy
GRO
Subject: Quick query [BD-4A.FID26896945]

Pete

Hope you're well. Would you mind hoping with what is hopefully a quick query?

The solicitors for the postmasters have asked us to provide them with a copy of the 'known error logs' kept by Fujitsu and all correspondence between Fujitsu and Post Office relating to the same. So we can respond to this request it would be appreciated if you could confirm whether a Horizon "known error log" or a similar documents exist. We've not decided yet on whether to provide this information (and so don't need any documents from you at this stage) – we're just trying to scope out what might be covered by the request.

We would appreciate if you could help with the following:

What format do these logs take and where are they held?

What level of detail is included within the logs (i.e. are they generic logs for all Horizon errors or linked to specific branches, do the logs explain the consequences of the error and the fix which was applied, etc)?

When did Fujitsu begin to maintain these logs and are they still maintained?

Are the logs capable of being extracted and provided to us?

Have Post Office previously been provided with a copy of these and, if so, to whom and when?

Has there been any correspondence between Post Office and Fujitsu concerning these logs? I suspect loads – but it would be good to just understand in high level terms how they are used.

I'm hoping that this questions are fairly easy to address but if they do need more careful thought, please let me know and we can discuss how to tackle them.

If possible, a response by close of business on Wednesday would be useful.

Kind regards

Andy

Andrew Parsons
Partner
Bond Dickinson LLP

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