

## Export

## Peak Incident Management System

Call Reference	PC0276050	Call Logger	Jon Hulme -- Bus_Apps_Des
Release	Targeted At -- HNG-X 19.20	Top Ref	OSR_APP_V2_1920_D051
Call Type	Internal Development Incidents/Defects	Priority	C -- Progress Restricted
Contact	Jon Hulme	Call Status	Closed -- S/W Fix Available to Call Logger
Target Date	12/01/2019	Effort (Man Days)	0
Summary	Concurrent login checks are bypassed if a counter is in Recovery		
All References	Type	Value	
	DevIntRel-Director	Live Supp.Test	
	Release PEAK	<a href="#">PC0277452</a>	
	Product Baseline	OSR_APP_V2_1920_V051	
	Jira	<a href="#">CBB-3284</a>	
	Product Baseline	OSR_APP_V2_1920_D051	
Collections	Name	User	Date
	BIFApproved	Raj Bains	30-Jan-2019 10:14:42
Impact Statement	User	Date	
	Jon Hulme	07-Jan-2019 17:30:42	
In recovery scenarios, a user can bypass concurrent login checks, potentially leading to unexpected removal of balancing locks and other side effects.			

## Progress Narrative

Date:07-Jan-2019 17:25:04 User:Jon Hulme

CALL PC0276050 opened

Details entered are:-

Summary:Concurrent login checks are bypassed if a counter is in Recovery

Call Type:I

Call Priority:C

Target Release:HNG-X 68.20

Routed to:Bus\_Apps\_Des - Jon Hulme

Date:07-Jan-2019 17:25:04 User:Jon Hulme

[Start of Response]

Consider the following scenario:

- 1) User logs in to Counter A which displays MSG04024 "Recovery" "A failure occurred during the previous session. Starting recovery process".
- 2) User moves to Counter B and logs in as the same Horizon User Id.
- 3) The BAL database query that checks to see if the user is already logged in (SessionAlreadyExists) only looks for ACTIVE sessions, and so does not think the user is logged in.
- 4) The user is therefore able to login to counter B.
- 5) The user returns to counter A and completes the recovery process.

Now there are two counters logged in with the same Horizon user id at the same time, which is could cause problems with balancing etc.

The EUM query (PoidSessionAlreadyExists\_v2) works similarly, allowing the same HUID, or two different HUIDs linked to the same POID, to login concurrently even though both are unlocked.

The fix is to change these queries to also return sessions in state RECOVERING.

The following queries with return when a user is logged in for information purposes should also include the RECOVERING state, not just ACTIVE state:

- GetBranchUsersWithRoleDetails
- getSessionStatus

It is possibly that the NEW session state should also be considered as the user being logged in, but this is a very short lived transitory state and so is unlikely to have much impact.

[End of Response]

Response code to call Internal Development Incidents/Defects(I) as Potential Problem Identified(38)

Date:07-Jan-2019 17:29:18 User:Jon Hulme

Corrected typos.



Consider the following scenario:

- 1) User logs in to Counter A which displays MSG04024 "Recovery" "A failure occurred during the previous session. Starting recovery process". This puts the session into RECOVERING state.
- 2) User moves to Counter B and logs in as the same Horizon User Id.
- 3) The BAL database query that checks to see if the user is already logged in (SessionAlreadyExists) only looks for ACTIVE sessions, and so does not think the user is logged in.
- 4) The user is therefore able to login to counter B.
- 5) The user returns to counter A and completes the recovery process.

Now there are two counters logged in with the same Horizon user id at the same time, which could cause problems with balancing locks etc.

The EUM query (PoidSessionAlreadyExists v2) works similarly, allowing the same HUID, or two different HUIDs linked to the same POID, to login concurrently even though both are unlocked.

The fix is to change these queries to also return sessions in state RECOVERING.

The following queries return the status of whether a user is logged in for information purposes, and should also include the RECOVERING state, not just ACTIVE state:

- GetBranchUsersWithRoleDetails
- getSessionStatus

It is possible that the NEW session state should also be considered as the user being logged in, but this is a very short lived transitory state and so is unlikely to have much impact.

Date:07-Jan-2019 17:30:42 User:Jon Hulme

A new Business Impact has been added:

In recovery scenarios, a user can bypass concurrent login checks, potentially leading to unexpected removal of balancing locks and other side effects.

Date:07-Jan-2019 17:31:04 User:Jon Hulme

The Call record has been transferred to the team: xCtr\_GDC

Date:08-Jan-2019 06:50:03 User:Ramesh Kalavakolla

The Call record has been assigned to the Team Member: Chethan Gurumurthy

Date:28-Jan-2019 09:58:40 User:Chethan Gurumurthy

The fix includes 4 SQL changes to include the Sessions in RECOVERING state.

It requires 2.5 mandays for Dev and testing.

DEVELOPMENT IMPACT OF FIX:

SPECIFY THE HNG-X PLATFORMS IMPACTED:

Have you used the "HNG-X Platforms" Product Group available under the PRODUCTS button in PEAK to specify all HNGX platforms impacted by this fix?

Yes

Are all the platforms in the same deployment group?

Yes

TECHNICAL SUMMARY:

Summarise the impact by technical areas affected

4 SQL changes

DEPENDENCIES:

Are there any other PEAKS or CPs with interdependencies on the proposed fix?

No

Are there any clone peaks to take the delivery to a different deployment group? If yes is there any order in which they must be deployed?

No

Any other dependencies such as Infrastructure changes or technical/configuration changes that will not included in the Development fix?

No

DEPLOYMENT DETAIL:

Does the fix include procedures that are known not to be packagable by Integration in an automatically deployable baseline (DPVB)? If so, please comment on the nature and technical complexity of such procedures

No

Does the fix require a reboot?

Yes

DEV EFFORT IN MANDAYS:

If the Man Days figures will be different to the elapsed duration, please state so here. Also, if there are any constraints on work beginning, please state here.

2.5 Man days for Dev and testing



## IMPACT ON USER:

Benefit of making the fix.

Avoids two users logging in at the same time.

What does the user have to do to get this problem?

User1 logs in to counter A (which should go into recovery mode).

Same user tries to log in to Counter A and it allows to login.

How does it affect them when it occurs?

It allows two counters logged in with the same Horizon user id at the same time, which could cause problems with balancing locks etc.

## IMPACT ON OPERATIONS:

Will the absence of a fix for this issue impact the ability of the operations team to support the HNGX system?

No

## IMPACT ON TEST:

What independent test coverage/scenarios does development recommend?

1. Logging in to two different Counters using the same UserID while the Counter A is in recovery mode.

2. Balancing Stock units in Counter B while the same user is logged in to Counter A and it is in recovery mode.

What CIT test coverage does development recommend?

Same as mentioned above.

RISKS (of releasing and of not releasing proposed fix):

What live problems will there be if we do not issue this fix?

Two counters logged in with the same Horizon user id at the same time, which could cause problems with balancing locks etc.

What are the risks of this fix having unexpected interactions with other areas?

None

## LIST OF LIKELY DELIVERABLES:

4 SQL Changes

SessionAlreadyExists

PoidSessionAlreadyExists\_v2

GetBranchUsersWithRoleDetails

getSessionStatus

Date:28-Jan-2019 10:00:23 User:Chethan Gurumurthy

[Start of Response]

.

[End of Response]

Response code to call type I as Category 41 -- Pending -- Product Error Diagnosed

Date:28-Jan-2019 12:26:36 User:Maciej Frontczak

Action placed on Team:BIF

Date:30-Jan-2019 10:15:03 User:Raj Bains

BIF approved on 30/01/2019, to be presented to the customer.

Date:30-Jan-2019 10:15:09 User:Raj Bains

Action has been removed from the call

Date:31-Jan-2019 09:47:46 User:Maciej Frontczak

Problem Statement ( Underlying cause of problem): Following the EUM investigation, in recovery scenarios, a user can bypass concurrent login checks resulting in two counters logged in with the same Horizon user id at the same time, potentially leading to unexpected removal of balancing locks and other side effects.

Such scenario is unlikely but it's a loophole in an important check.

At the moment BAL database query that checks to see if the user is already logged in (SessionAlreadyExists) only looks for ACTIVE sessions, and doesn't check ones in RECOVERY state so does not think the user is logged in. The fix is to change these queries to also return sessions in state RECOVERING.

Risk of not fixing: It allows two counters logged in with the same Horizon user id at the same time, which could cause problems with balancing locks etc.

Benefit of fixing: Avoids two users with the same id logging in to two counters at the same time.

ASM Utilisation Capacity: 2.5

Date:31-Jan-2019 12:14:26 User:Maciej Frontczak

Action placed on Team:PTF

Date:04-Feb-2019 11:19:02 User:Ramesh Kalavakolla

[Start of Response]



[End of Response] Response code to call type I as Category 75 -- Pending -- Fix awaiting Target Release
Date:07-Feb-2019 10:54:09 User:Jubita Gurung To be discussed in next RP meeting on 12/02/2019 as per 07/02/2019 PTF meeting.
Date:12-Feb-2019 10:49:50 User:Jubita Gurung The call Target Release has been moved to Targeted At -- HNG-X 19.20
Date:12-Feb-2019 10:50:25 User:Jubita Gurung Targeted to R19.20 as per RP meeting on 12/02/2019
Date:12-Feb-2019 10:50:27 User:Jubita Gurung Action has been removed from the call
Date:14-Feb-2019 11:43:10 User:Gimcy johnbasco Reference Added: Jira CBB-3284
Date:14-Feb-2019 11:44:17 User:Gimcy johnbasco The call Target Release has been moved to Proposed For -- Re-target
Date:14-Feb-2019 11:45:09 User:Gimcy johnbasco Proposed for re-target, this peak should be targeted along with CP2318 EUM changes.
Date:14-Feb-2019 11:46:21 User:Gimcy johnbasco *typo CP2368 - EUM Balancing enhancements
Date:14-Feb-2019 11:46:39 User:Gimcy johnbasco Action placed on Team:PTF
Date:21-Feb-2019 10:33:59 User:Jubita Gurung The call Target Release has been moved to Targeted At -- HNG-X 19.20
Date:21-Feb-2019 10:34:09 User:Jubita Gurung Targeted to R19.20 as per 21/02/2019 PTF meeting
Date:21-Feb-2019 10:34:12 User:Jubita Gurung Action has been removed from the call
Date:25-Feb-2019 14:55:45 User:Ramesh Kalavakolla [Start of Response]  [End of Response] Response code to call type I as Category 76 -- Pending -- Fix Targeted awaiting Release
Date:08-Mar-2019 07:26:07 User:Chethan Gurumurthy [Start of Response] SQL changes committed to poa-bal-cp2368 branch. [End of Response] Response code to call type I as Category 46 -- Pending -- Product Error Fixed
Date:08-Mar-2019 07:26:35 User:Chethan Gurumurthy The Call record has been transferred to the team: xCtr REL GDC The Call record has been assigned to the Team Member: Krishna Prabhu
Date:26-Mar-2019 14:20:01 User:Dimensions Automated User Reference Added: Product Baseline OSR_APP_V2_1920_V051
Date:26-Mar-2019 15:12:16 User:Krishna Prabhu 1. Logged in to counter A, made a banking transaction and crashed the counter without settling it. 2. Verified the the BRDB table "BRDB_BRANCH_USER_SESSIONS" the user is in ACTIVE state 3. Again logged in to counter A and got Recovery MSG04024 "A failure occurred during the previous session". Started the recovery process



4. Verified the the BRDB table "BRDB\_BRANCH\_USER\_SESSIONS" the user is in RECOVERING state
5. Moved to Counter B and logged in with the same Horizon User Id successfully.
6. Returned to counter A , after completing the recovery process counter A gets logged out forcefully

Now there is only one counter (Counter B) running on the Horizon user id.

Date: **26-Mar-2019 15:13:07** User: **Krishna Prabhu**  
Defect cause updated to 14: Development - Code

Date: **26-Mar-2019 15:13:16** User: **Krishna Prabhu**  
The Call record has been transferred to the team: Dev-Int-Rel

Date: **27-Mar-2019 08:49:36** User: **Geoff Inglis**  
The Call record has been assigned to the Team Member: PIT Automated User

Date: **27-Mar-2019 10:00:01** User: **Dimensions Automated User**  
Reference Added: Product Baseline OSR\_APP\_V2\_1920\_D051

Date: **27-Mar-2019 11:43:05** User: **Raj Bains**  
Reference Added: Release PEAK\_PC0277452

Date: **27-Mar-2019 12:00:57** User: **PIT Automated User**  
[Start of Response]  
Peak 0276050 handled by integration auto handler  
  
The following baselines attached to this peak have the targeting flags set:  
OSR\_APP\_V2\_1920\_D051 FOR (LIVE:YES TEST:YES RDT:YES) Integrator: Prashant Purohit

These baselines have completed integration testing, moving to holding stack awaiting peak ejection.  
[End of Response]  
Response code to call type I as Category 47 (Fix Processed by PIT)  
The incident has been transferred to the Team: Int-Rel  
The incident has been assigned to the Team Member: Matt Swain

Date: **27-Mar-2019 14:04:29** User: **Matt Swain**  
Reference Added: DevIntRel-Director Live Supp.Test

Date: **27-Mar-2019 14:05:15** User: **Matt Swain**  
The Call record has been transferred to the team: Dev-Int-Rel  
The Call record has been assigned to the Team Member: Matt Swain

Date: **27-Mar-2019 15:00:51** User: **PIT Automated User**  
[Start of Response]  
Peak 0276050 handled by integration auto handler  
  
The following baselines attached to this peak have the targeting flags set:  
OSR\_APP\_V2\_1920\_D051 FOR (LIVE:YES TEST:YES RDT:YES) Integrator: Prashant Purohit

These baselines have completed integration testing, moving to holding stack awaiting peak ejection.  
[End of Response]  
Response code to call type I as Category 47 (Fix Processed by PIT)  
The incident has been transferred to the Team: Int-Rel  
The incident has been assigned to the Team Member: Matt Swain

Date: **27-Mar-2019 15:02:22** User: **PIT Automated User**  
[Start of Response]  
## AUTOMATED UPDATE - INTEGRATION PEAK BOT ##  
  
Fix processed by integration, routing to dev-int-rel director...  
  
PLEASE NOTE: If this fix has failed, to send this peak back to integration it MUST have the response code Fix Failed or Response Rejected on it, otherwise the peak will bounce.  
[End of Response]  
Response code to call type I as Category 49 (Fix Available for IndependentTest)  
The incident has been transferred to the Team: Live Supp.Test

Date: **03-Apr-2019 15:04:36** User: **Mark Ascott**  
The Call record has been assigned to the Team Member: Timothy Harris

Date: **25-Apr-2019 17:00:23** User: **Mark Ascott**  
The Call record has been transferred to the team: ITU SV&I



Date:25-Apr-2019 17:00:45 User:Mark Ascott  
Routing to SV&I for testing ?..

Date:26-Apr-2019 12:22:44 User:Paul Bott  
tested and fixed

Date:26-Apr-2019 12:24:02 User:Paul Bott  
Defect cause updated to 37: General - Network Change

Date:26-Apr-2019 12:28:20 User:Paul Bott  
The Call record has been transferred to the team: Bus\_Apps\_Des  
The Call record has been assigned to the Team Member: Jon Hulme

Date:30-Apr-2019 11:38:16 User:Jon Hulme  
[Start of Response]  
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[End of Response]  
Response code to call type I as Category 60 -- Final -- S/W Fix Available to Call Logger  
Routing to Call Logger following Final Progress update.

Date:30-Apr-2019 11:38:20 User:Jon Hulme  
CALL PC0276050 closed: Category 60 Type I

Root Cause	General - Network Change
Logger	Jon Hulme -- Bus_Apps_Des
Subject Product	HNG-X BAL/OSR -- Service Handler (version unspecified)
Assignee	Jon Hulme -- Bus_Apps_Des
Last Progress	30-Apr-2019 11:38 -- Jon Hulme