

**Billing Operation Knowledge**

**ICP\_Camelot\_Billing\_Exception\_SOP\_v1**

***BRM EXCEPTION KX***

***Final Hand-Over***

|  |  |
| --- | --- |
| **Prepared By :** | **Liew Bo Yuan (Accenture)** |
| **Date:** | **Ryan Wong Weng Tjun (Accenture)**  **10th December 2015** |
| **Version** | **0.3** |

**Document History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document Title | Version | State | Created by | Date |
| BRM EXCEPTION KX | 0.1 | Update | Yusuf Naim bin Mohd Adila | 28th August 2015 |
| BRM EXCEPTION KX | 0.2 | Update | Liew Bo Yuan  Ryan Wong Weng Tjun | 2nd December 2015 |
| ICP\_Camelot\_Billing\_Exception\_SOP\_v1 | 0.3 | Final | Liew Bo Yuan  Ryan Wong Weng Tjun | 10th December 2015 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Table of Contents**

Contents

[**1** **Introduction** 5](#_Toc437334015)

[**1.1** **Reference Document** 5](#_Toc437334016)

[**2** **Monitoring Exceptions** 6](#_Toc437334017)

[**2.1** **Steps in Monitoring BRM health environment** 7](#_Toc437334018)

[**3** **BRM Exception Basic Knowledge** 10](#_Toc437334019)

[**3.1** **TESTNAP** 10](#_Toc437334020)

[**3.2** **TRANS\_ABORT** 10](#_Toc437334021)

[**3.3** **FLIST** 12](#_Toc437334022)

[3.3.1 Create Account FLIST 13](#_Toc437334023)

[3.3.2 Create Service FLIST 15](#_Toc437334024)

[3.3.3 Purchase Product FLIST 17](#_Toc437334025)

[3.3.4 Purchase Discount FLIST 19](#_Toc437334026)

[3.3.5 Terminating Account FLIST 19](#_Toc437334027)

[3.3.6 Terminating Service FLIST 20](#_Toc437334028)

[3.3.7 Terminating Product FLIST 20](#_Toc437334029)

[3.3.8 Terminating Discount FLIST 20](#_Toc437334030)

[3.3.9 Update Login FLIST 21](#_Toc437334031)

[3.3.10 Transfer Owner FLIST 21](#_Toc437334032)

[3.3.11 Set Product Status to Suspended FLIST 21](#_Toc437334033)

[3.3.12 Bulk Termination and Purchasing 22](#_Toc437334034)

[3.3.13 Run in background (Nohup Testnap) 22](#_Toc437334035)

[**4** **Data Exceptions (Investigation and Debugging)** 23](#_Toc437334036)

[**4.1** **ERR\_STORAGE** 23](#_Toc437334037)

[**4.2** **ERR\_STREAM\_EOF** 23](#_Toc437334038)

[**4.3** **ERR\_NULL\_PTR** 24](#_Toc437334039)

[**4.4** **ERR\_BAD\_POID\_TYPE** 25](#_Toc437334040)

[**4.5** **ERR\_TIMEOUT** 26](#_Toc437334041)

[**4.6** **ERR\_BAD\_VALUE** 26](#_Toc437334042)

[**4.7** **ERR\_NOT\_FOUND** 27](#_Toc437334043)

[**4.8** **ERR\_BAD\_ARG** 27](#_Toc437334044)

[**4.9** **ERR\_NONEXISTANT\_ELEMENT** 28](#_Toc437334045)

[**4.10** **GST\_INFLIGHT\_ORDER** 28](#_Toc437334046)

[**4.11** **UNSYNC ASSET INTEG ID BETWEEN SBL AND EAI** 29](#_Toc437334047)

[**4.12** **ERR\_BAD\_TYPE (ALPP/CLPP ENROLLMENT)** 29](#_Toc437334048)

[**5** **Environment Exceptions (Investigation and Debugging)** 30](#_Toc437334049)

[**6** **Queries** 31](#_Toc437334050)

[**6.1** **XREF MAPPING** 31](#_Toc437334051)

[**6.2** **EAI ID EXTRACTION** 31](#_Toc437334052)

[**6.3** **Check if the customer pay the bills** 32](#_Toc437334053)

[**6.4** **Check the program name of the account or service** 32](#_Toc437334054)

[**6.5** **Check if there any adjustment** 32](#_Toc437334055)

[**6.6** **Account Info** 32](#_Toc437334056)

[**6.7** **ICP Counting Total Transactions** 33](#_Toc437334057)

[**6.8** **To check how many unbilled accounts** 33](#_Toc437334058)

[**6.9** **Finding duplication** 33](#_Toc437334059)

# **Introduction**

This document is to describe and explain step by step on how to monitor and debug exceptions in Billing and Revenue Management (BRM) for ICP.

## **Reference Document**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Document** | **File Name** | **Ref Type** | **Version No.** |
| 1 | BRM 7.3.1 Documentation |  |  |  |

# **Monitoring Exceptions**

The online transactions in ICP BRM is using TOMCAT as Server and CATALINA as a servlet container. It’s using more than one node to process the activity.

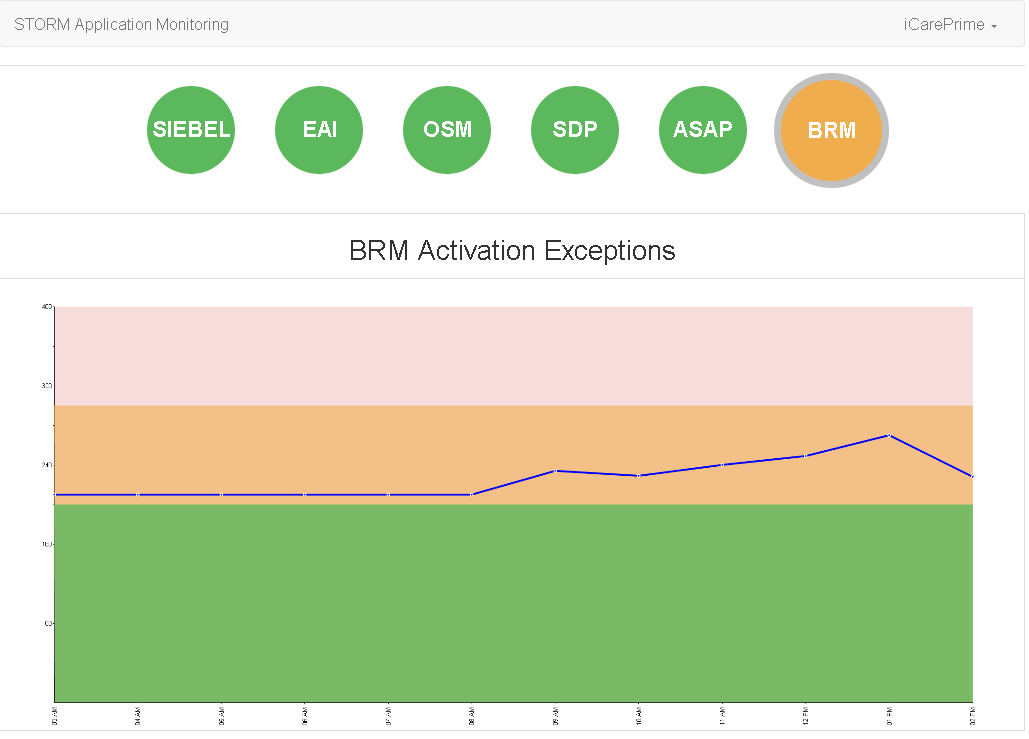
We are currently using only 3 nodes for online transactions.

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Node Name | IP Address | Remarks |
| 1 | Node 1 | 10.41.66.10 | Online Transactions |
| 2 | Node 2 | 10.41.66.11 | Online Transactions |
| 3 | Node 3 | 10.41.66.12 | Online Transactions |
| 4 | Node 4 | 10.41.66.13 | Billing |
| 5 | Node 5 | 10.41.66.14 | Billing |
| 6 | Node 6 | 10.41.66.15 | Billing |
| 7 | Node 7 | 10.41.66.16 | Billing |
| 8 | Node 8 | 10.41.66.17 | Billing |

\*\*\* TOMCAT & CATALINA Health need to be monitored every day.

## **Steps in Monitoring BRM health environment**

* Open BRM Exceptions monitoring application



* Monitor the BRM exceptions every hour during working hour or on call.
  + The graph in BRM Exception monitoring application is corresponding to total of exceptions in BRM current bucket.
  + The main objective in monitoring is to keep exceptions as low as possible, advisedly GREEN.
  + Any spike in exceptions, person in charge need to take action as soon as possible.

Steps to be taken:

1. Extract BRM exceptions in our bucket for past hour via OSM Database using below query:

|  |
| --- |
| SELECT OOF2.ORDER\_SEQ\_ID AS "OSM ID"  ,ooh.reference\_number AS "SIEBEL ID"  ,oot.order\_type\_description AS "ORDER TYPE"  ,OT2.TASK\_MNEMONIC AS "TASK"  ,to\_char(oof2.date\_pos\_started , 'dd-Mon-yyyy hh24:mi:ss') AS "TIMESTAMP"  ,TEMP.ooi\_node\_value\_text "ERROR MESSAGE"  FROM osm.om\_order\_flow oof2  INNER JOIN OSM.OM\_TASK OT2 ON (OOF2.TASK\_ID = OT2.TASK\_ID)  INNER JOIN osm.om\_state os ON (os.STATE\_ID = oof2.STATE\_ID)  INNER JOIN osm.om\_cartridge oc2 ON (oc2.cartridge\_id = oof2.cartridge\_id)  INNER JOIN osm.om\_order\_header ooh ON (oof2.order\_seq\_id = ooh.order\_seq\_id)  INNER JOIN osm.om\_ospolicy\_state oos ON (ooh.ord\_state\_id = oos.ID)  INNER JOIN osm.om\_process op ON (OP.PROCESS\_ID = oof2.PROCESS\_ID)  INNER JOIN osm.om\_order\_type oot ON (ooh.order\_type\_id = oot.order\_type\_id)  LEFT JOIN (  SELECT ooi.order\_seq\_id AS ooi\_order\_seq\_id  ,oof.order\_seq\_id AS oof\_order\_seq\_id  ,ooi.node\_value\_text AS ooi\_node\_value\_text  ,oof.state\_id AS oof\_state\_id  ,oof.hist\_seq\_id AS oof\_hist\_seq\_id  FROM osm.om\_order\_instance ooi  JOIN osm.om\_order\_flow oof ON (ooi.order\_seq\_id = oof.order\_seq\_id)  JOIN osm.om\_order\_data\_dictionary oodd ON (ooi.data\_dictionary\_id = oodd.data\_dictionary\_id)  WHERE oodd.data\_dictionary\_mnemonic = 'response\_error\_message'  AND oof.task\_type = 'M'  AND ooi.hist\_seq\_id = CASE  WHEN oof.state\_id = '1'  THEN (  SELECT a.hist\_seq\_id\_from  FROM osm.om\_hist$flow a  JOIN osm.om\_hist$flow b ON (a.hist\_seq\_id = b.hist\_seq\_id\_from)  WHERE b.hist\_seq\_id = oof.hist\_seq\_id  AND b.order\_seq\_id = ooi.order\_seq\_id  AND a.order\_seq\_id = ooi.order\_seq\_id  )  ELSE (  SELECT a1.hist\_seq\_id  FROM osm.om\_hist$flow a1  JOIN osm.om\_hist$flow b1 ON (a1.hist\_seq\_id = b1.hist\_seq\_id\_from)  JOIN osm.om\_hist$flow c1 ON (b1.hist\_seq\_id = c1.hist\_seq\_id\_from)  JOIN osm.om\_hist$flow d1 ON (c1.hist\_seq\_id = d1.hist\_seq\_id\_from)  WHERE a1.order\_seq\_id = ooi.order\_seq\_id  AND b1.order\_seq\_id = ooi.order\_seq\_id  AND c1.order\_seq\_id = ooi.order\_seq\_id  AND d1.order\_seq\_id = ooi.order\_seq\_id  AND d1.hist\_seq\_id = oof.hist\_seq\_id  )  END  ) TEMP ON (  oof2.order\_seq\_id = TEMP.oof\_order\_seq\_id  AND oof2.hist\_seq\_id = TEMP.oof\_hist\_seq\_id  )  WHERE oos.mnemonic = 'in\_progress'  AND OC2.cartridge\_id = ot2.cartridge\_id  AND oc2.cartridge\_id = ooh.cartridge\_id  AND oc2.cartridge\_id = op.cartridge\_id  --AND OOF2.DATE\_POS\_STARTED > TO\_DATE ('05-19-2015 16:00:00', 'MM-DD-YYYY HH24:MI:SS')  AND OOF2.TASK\_TYPE = 'M'  AND OT2.TASK\_MNEMONIC LIKE 'Exception%BRM%' --BRM Exceptions  ORDER BY OOF2.DATE\_POS\_STARTED asc; |

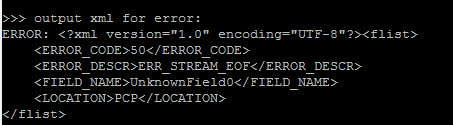
Green highlighted text can be manually change to select time period of interest

1. Try to identify the trend of the exception type for the past hour and determine either it is caused by environment or data problem.
2. If it is caused by environment, proceed with next step:
   1. Monitor the transactions in BRM online nodes and check the configuration if there is any problems.
3. \*\*\*If after checking and monitoring the environment is healthy or environment problem has been repaired. Please provide OSM ID of the orders extracted that are caused by environment error to OSM GIT team to be retriggered. If the numbers are too large, please request OSM team to retrigger by throttle order so the orders would not jammed BRM online nodes.

Steps in monitoring and checking BRM online nodes:

Monitoring:

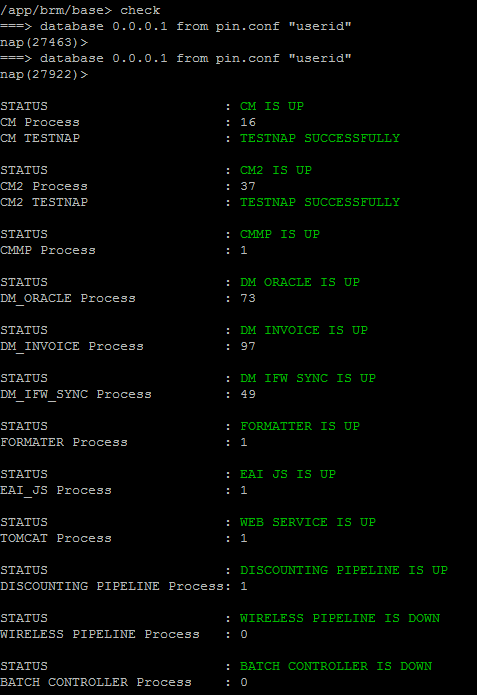
1. Open each online nodes (Nodes 1,2,3)
2. Type: cd /opt/hpws/tomcat/logs/
3. Type: tail –f catalina.out
4. If environment error keep persisting consistently without any transactions to go through like; timeout, stream\_eof, trans\_lost and etc, straight away check the health of the nodes.



1. If **STREAM\_EOF** occurs, straight away ask BRM TA team to only bounce tomcat for that node. Please request for authorization first from higher management before proceeding with this action.

Checking:

1. Open each online nodes (Nodes 1,2,3)
2. Type: check
3. The result should look like this:



1. All status should be in green colored and the value should be as default.
2. If any problem occurs, please proceed to contacting BRM TA team for further action.

# **BRM Exception Basic Knowledge**

## **TESTNAP**

Testnap is a function that is used to run flists that creates changes into BRM environment and can be run in any folder that has pin.conf in the environment.

\*\*\*It is advised to run testnap in billing node that is not busy (Eg. nodes 7 & 8). Please avoid using online nodes for any manual recovery or investigation as it might jam the nodes and cause environment errors.

Ways to run:

1. Change path to the folder containing the testnap script, type cd <pathname>
2. Make sure the flist inside a file is correct and updated by viewing the file, type: vi <filename>
3. To quit viewing the file, type ‘:q!’
4. Run the flist, type: testnap <filename>

## **TRANS\_ABORT**

Trans\_Abort is a function used in BRM Exception to test an order. It is used to simulate running the Flist in our environment and be processed but aborted to cause any changes in the database. This will enable us to verify if the Flist has problems if to be run in a real case scenario.

The way to run, type testnap Trans\_Abort

\*\*\*Please take note that opcode PCM\_OP\_CUST\_COMMIT\_CUSTOMER (Account Creation) cannot be trans\_abort. It will still go through into BRM Database. Please do not trans\_abort any opcode that has commit.

Flist for Trans\_Abort:

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account -1 1  XXX  #  xop PCM\_OP\_TRANS\_OPEN 65536 1  r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 1 1  0 PIN\_FLD\_COMPONENT STR [0] "CM"  0 PIN\_FLD\_LOGLEVEL INT [0] 3  XXX  #  xop PCM\_OP\_INFMGR\_SET\_LOGLEVEL 0 1  r << XXX 1  0 PIN\_FLD\_DISCOUNTS ARRAY [0] allocated 3, used 3  1 PIN\_FLD\_QUANTITY DECIMAL [0] 1  1 PIN\_FLD\_OFFERING\_OBJ POID [0] 0.0.0.1 /purchased\_discount 39545364146 0  1 PIN\_FLD\_DISCOUNT\_OBJ POID [0] 0.0.0.1 /discount 43049 0  0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/telephony 39545364114 0  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 39545364111 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "EAI"  0 PIN\_FLD\_END\_T TSTAMP [0] (1415174573) 05/11/2014 16:02:53:000 PM  0 PIN\_FLD\_FLAGS INT [0] 256  XXX  xop 30002 0 1  r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 1 1  0 PIN\_FLD\_COMPONENT STR [0] "CM"  0 PIN\_FLD\_LOGLEVEL INT [0] 1  XXX  #  xop PCM\_OP\_INFMGR\_SET\_LOGLEVEL 0 1  r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account -1 1  XXX  #  xop PCM\_OP\_TRANS\_ABORT 0 1 |

* Log Level:
  + Log level 1, will not generate logs for the flist ran.
  + Log level 3, will generate logs for the flist ran. Normally log level 3 is used in order to investigate an order further.
    - All logs will goes into /app/brm/var/cm in the same node that you run.
    - Way to use logs:

1. Type: var
2. Type: cd cm
3. Type: ll –lrt
4. After you listed out all the files inside cm folder, you will noticed there is a file named cm.pinlog. logs of an order will go into cm.pinlog. It is advised to make sure nobody is currently using the file as it is live before proceeding with the steps.
5. Before running the flist that contains loglevel 3, you need to remove all content inside cm.pinlog by typing : :>cm.pinlog
6. As soon as possible, run your trans\_abort flist. When it is completed straight away copy the data inside cm.pinlog into your own file so it would not be disrupted by other orders by typing,: cp cm.pinlog <filename>
7. View your pinlog by typing: vi <filename>
8. To see the errors inside the log, type: /^E
9. To go through from error to another error row, press ‘n’ key.
10. To quit viewing the file, press ‘:q!’
11. In order to extract the logs, please use WinSCP software or etc.

* Flist contents
  + This field is for the flist content for the order. If it comes from XML, please convert the xml to flist before using the converter from this link:

<http://10.23.23.55:8080/IcpBrmException/XmlToFlist.jsp>

* Opcode
  + This field is the opcode of the order.

## **FLIST**

FLIST is a fundamental data structure created by Oracle for Billing and Revenue Management (BRM).

\*\*\*Note:

* The timestamp field can be inserted to specify the time of when the flist brings changes to the database. This is useful when it comes to the need to do backdate purchasing, terminating or creating. The field can be removed if no backdate recovery is needed.

|  |
| --- |
| 0 PIN\_FLD\_END\_T TSTAMP [0] (1431446400) |

* Please change the program name other than system program name if the flist is run manually. It is advised to use testnap program name or specific issue recovery name

|  |
| --- |
| 0 PIN\_FLD\_PROGRAM\_NAME STR [0] "Testnap" |

* Any manual creation or purchasing it should follow this flow,
  + ACCOUNT>SERVICE>DISCOUNT>PRODUCT
* Any manual termination it should follow this flow,
  + PRODUCT>DISCOUNT>SERVICE>ACCOUNT
* It is highly advised to follow this flow as this is how the system carries out purchase/terminate to avoid any unexpected miscalculation within BRM system itself.

\*\*\*These flists provided below are the most common order in BRM and usually being used in manual recovery. Other order type flists can be requested from EAI team.

\*\*\* Fields that are highlighted are subject to change depending on the nature of the action.

**XREF MAPPING FOR MANUAL PURCHASE RECOVERY**

|  |
| --- |
| PLEASE TAKE NOTE.  ANY MANUAL PURCHASE DONE IN BRM NEED TO CREATE A XREF MAPPING TEMPLATE TO BE GIVEN TO EAI TEAM FOR UPDATING OUR XREF.  STEPS:   1. REFER TO FILENAME “Template BRM Product Manual Purchase”. 2. FILL IN THE FIELD FOR BRM PART 3. GIVE TO SIEBEL TEAM FOR THEM TO FILL IN THEIR PART 4. SIEBEL TEAM TO SEND TO EAI TEAM WHEN COMPLETED   FOR ANY MANUAL TERMINATION OR UPDATE, NEED TO INFORM EAI TEAM THAT WE HAVE TERMINATED OR UPDATED THE ACCOUNT/SERVICE/PRODUCT/DISCOUNT IN BRM FOR THEM TO UPDATE XREF. |

**Creating Service**

To see other service cost center configurations in the same account for reference

|  |
| --- |
| Select a.account\_no,a.poid\_id0 acc\_poid,b.login, b.poid\_id0 serv\_poid, c.poid\_id0 profile\_poid, c.poid\_type,d.name,d.value,unix\_ora\_ts\_conv(c.mod\_t) mod\_time, c.effective\_t  from pin.account\_t a, pin.service\_t b, pin.profile\_t c, pin.TM\_CUST\_SRV\_PROFILE\_T d  --where a.account\_no in ('F941324840108')  Where A.Poid\_Id0=B.Account\_Obj\_Id0  and a.account\_no in ('D947341840410')  and b.poid\_id0=c.service\_obj\_id0  And C.Poid\_Id0=D.Obj\_Id0  --and b.poid\_id0='534841357'j  --and d.name='TM\_COST\_CENTER\_6'  --and b.status=10100  --And D.Value Like '%COST%'  --and b.login='pkh9885'  And C.Poid\_Type='/profile/tm\_service'  Order By C.Mod\_T Desc; |

### Create Account FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_LOCALES ARRAY [1] allocated 1, used 1  1 PIN\_FLD\_LOCALE STR [0] "en\_US"  0 PIN\_FLD\_ACCOUNT\_OBJ POID [0] 0.0.0.1 /account -1 0  0 PIN\_FLD\_PAYINFO ARRAY [0] allocated 6, used 6  1 PIN\_FLD\_NAME STR [0] "Invoice"  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /payinfo/invoice -1 0  1 PIN\_FLD\_INHERITED\_INFO SUBSTRUCT [0] allocated 1, used 1  2 PIN\_FLD\_INV\_INFO ARRAY [0] allocated 7, used 7  3 PIN\_FLD\_INV\_TERMS ENUM [0] 0  3 PIN\_FLD\_NAME STR [0] "Ryan"  3 PIN\_FLD\_COUNTRY STR [0] "MALAYSIA"  3 PIN\_FLD\_ZIP STR [0] "34050"  3 PIN\_FLD\_STATE STR [0] "SELANGOR"  3 PIN\_FLD\_CITY STR [0] "BANGSAR"  3 PIN\_FLD\_ADDRESS STR [0] "TM"  1 PIN\_FLD\_PAYMENT\_TERM ENUM [0] 21  1 PIN\_FLD\_FLAGS INT [0] 1  1 PIN\_FLD\_PAY\_TYPE ENUM [0] 10001  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /product -1 0  0 PIN\_FLD\_DEAL\_OBJ POID [0] 0.0.0.0 / 0 0  0 PIN\_FLD\_NAME STR [0] ""  0 PIN\_FLD\_FLAGS INT [0] 0  0 PIN\_FLD\_NAMEINFO ARRAY [1] allocated 12, used 12  1 PIN\_FLD\_TITLE STR [0] ""  1 PIN\_FLD\_LAST\_NAME STR [0] "Ryan"  1 PIN\_FLD\_MIDDLE\_NAME STR [0] ""  1 PIN\_FLD\_FIRST\_NAME STR [0] ""  1 PIN\_FLD\_SALUTATION STR [0] ""  1 PIN\_FLD\_CONTACT\_TYPE STR [0] "Billing Contact"  1 PIN\_FLD\_EMAIL\_ADDR STR [0] ""  1 PIN\_FLD\_COUNTRY STR [0] "MALAYSIA"  1 PIN\_FLD\_ZIP STR [0] "34050"  1 PIN\_FLD\_STATE STR [0] "SELANGOR"  1 PIN\_FLD\_CITY STR [0] "BANGSAR"  1 PIN\_FLD\_ADDRESS STR [0] "TM"  0 PIN\_FLD\_PROFILES ARRAY [0] allocated 2, used 2  1 PIN\_FLD\_INHERITED\_INFO SUBSTRUCT [0] allocated 1, used 1  2 TM\_FLD\_CUST\_PROFILE ARRAY [1] allocated 11, used 11  3 TM\_FLD\_COST\_CENTER\_5 STR [0] "33530"  3 TM\_FLD\_REFUND\_IND STR [0] " "  3 TM\_FLD\_RELATIONSHIP\_CODE STR [0] ""  3 TM\_FLD\_TPID STR [0] "9999"  3 TM\_FLD\_DEBIT\_REQ\_DATE TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  3 TM\_FLD\_WHOLESALE\_NAME STR [0] "Ryan"  3 TM\_FLD\_REFUND\_IND\_LAST\_MOD\_DATE TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  3 TM\_FLD\_INDUSTRIAL\_CODE STR [0] ""  3 TM\_FLD\_SEGMENT\_CODE STR [0] "R10"  3 TM\_FLD\_CREDIT\_LIMIT DECIMAL [0] 180  3 TM\_FLD\_FINAL\_ACCT\_DATE TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_PROFILE\_OBJ POID [0] 0.0.0.1 /profile/tm\_account -1 0  0 PIN\_FLD\_PROFILES ARRAY [1] allocated 2, used 2  1 PIN\_FLD\_INHERITED\_INFO SUBSTRUCT [0] allocated 1, used 1  2 TM\_FLD\_INV\_PROFILE ARRAY [1] allocated 5, used 5  3 TM\_FLD\_ITEMIZED\_BILL INT [0] 1  3 TM\_FLD\_BILL\_LANGUAGE STR [0] "MAL"  3 PIN\_FLD\_DELIVERY\_PREFER ENUM [0] 1  3 PIN\_FLD\_NUMBER STR [0] "0145053030"  3 TM\_FLD\_BILL\_STREAM INT [0] 10  1 PIN\_FLD\_PROFILE\_OBJ POID [0] 0.0.0.1 /profile/tm\_invoice -1 0  0 PIN\_FLD\_PROFILES ARRAY [2] allocated 3, used 3  1 PIN\_FLD\_NAME STR [0] "AcctTaxCode"  1 PIN\_FLD\_INHERITED\_INFO SUBSTRUCT [0] allocated 1, used 1  2 PIN\_FLD\_DATA\_ARRAY ARRAY [0] allocated 4, used 4  3 PIN\_FLD\_VALUE STR [0] "SR"  3 PIN\_FLD\_NAME STR [0] "AcctTaxCode"  3 PIN\_FLD\_VALID\_TO TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_PROFILE\_OBJ POID [0] 0.0.0.1 /profile/acct\_extrating -1 0  0 PIN\_FLD\_BILLINFO\_OBJ POID [0] 0.0.0.1 /billinfo -1 0  0 PIN\_FLD\_DESCR STR [0] ""  0 PIN\_FLD\_BAL\_INFO ARRAY [0] allocated 4, used 4  1 PIN\_FLD\_NAME STR [0] "Balance Group"  1 PIN\_FLD\_LIMIT ARRAY [458] allocated 1, used 1  2 PIN\_FLD\_CREDIT\_LIMIT DECIMAL [0] NULL  1 PIN\_FLD\_LIMIT ARRAY [2000015] allocated 1, used 1  2 PIN\_FLD\_CREDIT\_LIMIT DECIMAL [0] NULL  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /balance\_group -1 0  1 PIN\_FLD\_BILLINFO ARRAY [0] NULL  0 PIN\_FLD\_ACCTINFO ARRAY [0] allocated 5, used 5  1 PIN\_FLD\_ACCOUNT\_NO STR [0] "D354291410138"  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /account -1 0  1 PIN\_FLD\_BAL\_INFO ARRAY [0] NULL  1 PIN\_FLD\_CURRENCY INT [0] 458  1 PIN\_FLD\_BUSINESS\_TYPE ENUM [0] 2  0 PIN\_FLD\_BILLINFO ARRAY [0] allocated 6, used 6  1 PIN\_FLD\_ACTG\_FUTURE\_DOM INT [0] 25  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /billinfo -1 0  1 PIN\_FLD\_BILLINFO\_ID STR [0] "Bill Unit(1)"  1 PIN\_FLD\_PAYINFO ARRAY [0] NULL  1 PIN\_FLD\_BAL\_INFO ARRAY [0] NULL  1 PIN\_FLD\_PAY\_TYPE ENUM [0] 10001  XXX  xop PCM\_OP\_CUST\_COMMIT\_CUSTOMER 0 1 |

### Create Service FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_ACCOUNT\_OBJ POID [0] 0.0.0.1 /account 2164646294 0  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /plan -1 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "Testnap"  0 PIN\_FLD\_SERVICES ARRAY [0] allocated 8, used 8  1 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/tmm\_streamyx -1 0  1 PIN\_FLD\_SERVICE\_ID STR [0] "Streamyx"  1 PIN\_FLD\_PASSWD\_CLEAR STR [0] "XXXX"  1 PIN\_FLD\_LOGIN STR [0] "Ryan001"  1 PIN\_FLD\_INHERITED\_INFO SUBSTRUCT [0] allocated 1, used 1  2 PIN\_FLD\_AAC\_ACCESS STR [0] "N"  1 PIN\_FLD\_BAL\_INFO ARRAY [0] NULL  1 PIN\_FLD\_PROFILES ARRAY [1] allocated 2, used 2  2 PIN\_FLD\_INHERITED\_INFO SUBSTRUCT [0] allocated 1, used 1  3 PIN\_FLD\_ATTRIBUTES ARRAY [0] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "21524"  4 PIN\_FLD\_NAME STR [0] "TM\_COST\_CENTER\_5"  3 PIN\_FLD\_ATTRIBUTES ARRAY [1] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "Ryan001"  4 PIN\_FLD\_NAME STR [0] "TM\_SIEBEL\_SERVICE\_ID"  3 PIN\_FLD\_ATTRIBUTES ARRAY [2] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "K"  4 PIN\_FLD\_NAME STR [0] "TM\_SERVICE\_CLASS"  3 PIN\_FLD\_ATTRIBUTES ARRAY [3] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "R"  4 PIN\_FLD\_NAME STR [0] "TM\_SEGMENT\_CODE"  3 PIN\_FLD\_ATTRIBUTES ARRAY [4] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_INDUSTRIAL\_CODE"  3 PIN\_FLD\_ATTRIBUTES ARRAY [5] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "0"  4 PIN\_FLD\_NAME STR [0] "TM\_SERVICE\_ITEMIZED\_BILL"  3 PIN\_FLD\_ATTRIBUTES ARRAY [6] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_FLD\_SRV\_CREDIT\_LIMIT"  3 PIN\_FLD\_ATTRIBUTES ARRAY [7] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "N"  4 PIN\_FLD\_NAME STR [0] "TM\_USP"  3 PIN\_FLD\_ATTRIBUTES ARRAY [8] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_FLD\_TRANSLATED\_NUM"  3 PIN\_FLD\_ATTRIBUTES ARRAY [9] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_CONTRACT\_NO"  3 PIN\_FLD\_ATTRIBUTES ARRAY [10] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "N"  4 PIN\_FLD\_NAME STR [0] "TM\_CAMS\_TOS"  3 PIN\_FLD\_ATTRIBUTES ARRAY [11] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "N"  4 PIN\_FLD\_NAME STR [0] "TM\_CAB\_TOS"  3 PIN\_FLD\_ATTRIBUTES ARRAY [12] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_CONTRACT\_END"  3 PIN\_FLD\_ATTRIBUTES ARRAY [13] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_CONTRACT\_START"  3 PIN\_FLD\_ATTRIBUTES ARRAY [14] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] ""  4 PIN\_FLD\_NAME STR [0] "TM\_WHS\_DSL\_REF"  3 PIN\_FLD\_ATTRIBUTES ARRAY [101] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "YEHBES"  4 PIN\_FLD\_NAME STR [0] "TM\_COST\_CENTER\_6"  3 PIN\_FLD\_ATTRIBUTES ARRAY [102] allocated 2, used 2  4 PIN\_FLD\_VALUE STR [0] "Consumer"  4 PIN\_FLD\_NAME STR [0] "TM\_SEGMENT\_GROUP"  2 PIN\_FLD\_PROFILE\_OBJ POID [0] 0.0.0.1 /profile/tm\_service -1 0  1 PIN\_FLD\_ALIAS\_LIST ARRAY [0] allocated 1, used 1  2 PIN\_FLD\_NAME STR [0] "Ryan001"  0 PIN\_FLD\_BAL\_INFO ARRAY [0] allocated 4, used 4  1 PIN\_FLD\_BILLINFO\_OBJ POID [0] 0.0.0.1 /billinfo 293033045106269237 0  1 PIN\_FLD\_NAME STR [0] "Service Balance Group (1)"  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /balance\_group -1 0  1 PIN\_FLD\_LIMIT ARRAY [458] allocated 3, used 3  2 PIN\_FLD\_CREDIT\_LIMIT DECIMAL [0] NULL  2 PIN\_FLD\_CREDIT\_THRESHOLDS INT [0] 0  2 PIN\_FLD\_CREDIT\_FLOOR DECIMAL [0] NULL  1 PIN\_FLD\_LIMIT ARRAY [1000115] allocated 3, used 3  2 PIN\_FLD\_CREDIT\_LIMIT DECIMAL [0] NULL  2 PIN\_FLD\_CREDIT\_THRESHOLDS INT [0] 0  2 PIN\_FLD\_CREDIT\_FLOOR DECIMAL [0] NULL  1 PIN\_FLD\_LIMIT ARRAY [1000105] allocated 3, used 3  2 PIN\_FLD\_CREDIT\_LIMIT DECIMAL [0] NULL  2 PIN\_FLD\_CREDIT\_THRESHOLDS INT [0] 0  2 PIN\_FLD\_CREDIT\_FLOOR DECIMAL [0] NULL  1 PIN\_FLD\_LIMIT ARRAY [1000106] allocated 3, used 3  2 PIN\_FLD\_CREDIT\_LIMIT DECIMAL [0] NULL  2 PIN\_FLD\_CREDIT\_THRESHOLDS INT [0] 0  2 PIN\_FLD\_CREDIT\_FLOOR DECIMAL [0] NULL  XXX  xop PCM\_OP\_CUST\_MODIFY\_CUSTOMER 0 1 |

### Purchase Product FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/tmm\_streamyx 2164487851 0  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 2164428853 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  0 PIN\_FLD\_DEAL\_INFO SUBSTRUCT [0] allocated 7, used 7  1 PIN\_FLD\_PRODUCTS ARRAY [0] allocated 23, used 23  2 PIN\_FLD\_USAGE\_END\_UNIT INT [0] 0  2 PIN\_FLD\_PURCHASE\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_CYCLE\_END\_UNIT INT [0] 0  2 PIN\_FLD\_PURCHASE\_END\_UNIT INT [0] 0  2 PIN\_FLD\_USAGE\_END\_DETAILS INT [0] 0  2 PIN\_FLD\_USAGE\_START\_UNIT INT [0] 0  2 PIN\_FLD\_QUANTITY DECIMAL [0] 1  2 PIN\_FLD\_CYCLE\_END\_DETAILS INT [0] 0  2 PIN\_FLD\_PURCHASE\_END\_DETAILS INT [0] 0  2 PIN\_FLD\_USAGE\_START\_DETAILS INT [0] 1  2 PIN\_FLD\_CYCLE\_START\_UNIT INT [0] 0  2 PIN\_FLD\_CYCLE\_START\_DETAILS INT [0] 1  2 PIN\_FLD\_PURCHASE\_START\_DETAILS INT [0] 1  2 PIN\_FLD\_PURCHASE\_START\_UNIT INT [0] 0  2 PIN\_FLD\_PRODUCT\_OBJ POID [0] 0.0.0.1 /product 145265 0  2 PIN\_FLD\_USAGE\_DISCOUNT DECIMAL [0] 0  2 PIN\_FLD\_DESCR STR [0] "BUTIR LENGKAP PANGGILAN STD-P"  2 PIN\_FLD\_CYCLE\_DISCOUNT DECIMAL [0] 0  2 PIN\_FLD\_PURCHASE\_DISCOUNT DECIMAL [0] 0  2 PIN\_FLD\_STATUS ENUM [0] 1  2 PIN\_FLD\_STATUS\_FLAGS INT [0] 0  2 PIN\_FLD\_USAGE\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_CYCLE\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_NAME STR [0] "Dummy"  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /deal -1 0  1 PIN\_FLD\_END\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_FLAGS INT [0] 0  1 PIN\_FLD\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_DESCR STR [0] ""  0 PIN\_FLD\_DESCR STR [0] ""  XXX  xop PCM\_OP\_SUBSCRIPTION\_PURCHASE\_DEAL 0 1 |

### Purchase Discount FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/tmm\_streamyx 2164487851 0  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 2164428853 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  0 PIN\_FLD\_DEAL\_INFO SUBSTRUCT [0] allocated 7, used 7  1 PIN\_FLD\_DISCOUNTS ARRAY [0] allocated 17, used 17  2 PIN\_FLD\_CYCLE\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_PURCHASE\_START\_UNIT INT [0] 0  2 PIN\_FLD\_QUANTITY DECIMAL [0] 1  2 PIN\_FLD\_PURCHASE\_END\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_STATUS ENUM [0] 1  2 PIN\_FLD\_PURCHASE\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_STATUS\_FLAGS INT [0] 0  2 PIN\_FLD\_DISCOUNT\_OBJ POID [0] 0.0.0.1 /discount 2089932234 0  2 PIN\_FLD\_USAGE\_END\_UNIT INT [0] 0  2 PIN\_FLD\_CYCLE\_END\_UNIT INT [0] 0  2 PIN\_FLD\_DESCR STR [0] "Free Unlimited STD On Net Fixed Minutes Discount"  2 PIN\_FLD\_PURCHASE\_END\_UNIT INT [0] 0  2 PIN\_FLD\_USAGE\_START\_UNIT INT [0] 0  2 PIN\_FLD\_USAGE\_END\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_USAGE\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  2 PIN\_FLD\_CYCLE\_START\_UNIT INT [0] 0  2 PIN\_FLD\_CYCLE\_END\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_NAME STR [0] "Dummy"  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /deal -1 0  1 PIN\_FLD\_END\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_FLAGS INT [0] 0  1 PIN\_FLD\_START\_T TSTAMP [0] (0) 01/01/1970 08:00:00:000 AM  1 PIN\_FLD\_DESCR STR [0] ""  0 PIN\_FLD\_DESCR STR [0] ""  XXX  xop PCM\_OP\_SUBSCRIPTION\_PURCHASE\_DEAL 0 1 |

### Terminating Account FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 161267528 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  0 PIN\_FLD\_STATUSES ARRAY [0] allocated 20, used 2  1 PIN\_FLD\_STATUS ENUM [0] 10103  1 PIN\_FLD\_STATUS\_FLAGS INT [0] 4  XXX  xop PCM\_OP\_CUST\_SET\_STATUS 0 1 |

### Terminating Service FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 161267528 0  0 PIN\_FLD\_END\_T TSTAMP [0] (1430323200)  0 PIN\_FLD\_SERVICES ARRAY [0] allocated 3, used 3  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /service/tmm\_hotspot 161267539 0  1 PIN\_FLD\_STATUS ENUM [0] 10103  1 PIN\_FLD\_STATUS\_FLAGS INT [0] 4  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  XXX  xop PCM\_OP\_CUST\_UPDATE\_SERVICES 0 1 |

### Terminating Product FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 229541300517 0  0 PIN\_FLD\_END\_T TSTAMP [0] (1432018515)  0 PIN\_FLD\_PRODUCTS ARRAY [1] allocated 20, used 3  1 PIN\_FLD\_OFFERING\_OBJ POID [0] 0.0.0.1 /purchased\_product 357476249635 1  1 PIN\_FLD\_PRODUCT\_OBJ POID [0] 0.0.0.1 /product 44401 0  1 PIN\_FLD\_QUANTITY DECIMAL [0] 1  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  XXX  xop PCM\_OP\_SUBSCRIPTION\_CANCEL\_PRODUCT 0 1 |

### Terminating Discount FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 10249033550 0  0 PIN\_FLD\_END\_T TSTAMP [0] (1432018515)  0 PIN\_FLD\_DISCOUNTS ARRAY [1] allocated 20, used 3  1 PIN\_FLD\_OFFERING\_OBJ POID [0] 0.0.0.1 /purchased\_discount 10249033602 1  1 PIN\_FLD\_DISCOUNT\_OBJ POID [0] 0.0.0.1 /discount 115307 0  1 PIN\_FLD\_QUANTITY DECIMAL [0] 1  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  XXX  xop PCM\_OP\_SUBSCRIPTION\_CANCEL\_DISCOUNT 0 1 |

### Update Login FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 7663254926 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  0 PIN\_FLD\_FLAGS INT [0] 1  0 PIN\_FLD\_SERVICES ARRAY [0] allocated 20, used 4  1 PIN\_FLD\_POID POID [0] 0.0.0.1 /service/tmm\_hotspot 12046021105 -1  1 PIN\_FLD\_LOGIN STR [0] "c\_hee"  1 PIN\_FLD\_ALIAS\_LIST ARRAY [0] allocated 20, used 1  2 PIN\_FLD\_NAME STR [0] "c\_hee"  XXX  xop PCM\_OP\_CUST\_UPDATE\_SERVICES 0 1 |

### Transfer Owner FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_BILLINFO\_OBJ POID [0] 0.0.0.1 /billinfo 274965868060457640 0  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /service/tmm\_hotspot 162368906 0  0 PIN\_FLD\_TO\_OBJ POID [0] 0.0.0.1 /account 186234024 0  0 PIN\_FLD\_FROM\_OBJ POID [0] 0.0.0.1 /account 162368903 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "Testnap"  XXX  xop 40007 0 1 |

### Set Product Status to Suspended FLIST

Steps to run FLIST:

1. Edit the highlighted fields.
2. Testnap in production nodes.

|  |
| --- |
| r << XXX 1  0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 124967372172 0  0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/telephony 124967372175 0  0 PIN\_FLD\_PROGRAM\_NAME STR [0] "testnap"  0 PIN\_FLD\_END\_T TSTAMP [0] (1443628800)  0 PIN\_FLD\_START\_T TSTAMP [0] (1443628800)  0 PIN\_FLD\_STATUSES ARRAY [0] allocated 5, used 5  1 PIN\_FLD\_STATUS\_FLAGS INT [0] 4  1 PIN\_FLD\_OFFERING\_OBJ POID [0] 0.0.0.1 /purchased\_product 515830452012 0  1 PIN\_FLD\_STATUS ENUM [0] 2  1 PIN\_FLD\_DESCR STR [0] "SSR"  XXX  xop PCM\_OP\_SUBSCRIPTION\_SET\_PRODUCT\_STATUS 0 |

### Bulk Termination and Purchasing

For bulk termination and purchasing, place as many flist as desired and execute the file in production nodes. Do note that it would be safer to perform bulk termination and purchasing at one level at a time. For example, bulk termination should be done for discounts first for all services before moving to terminating products.

### Run in background (Nohup Testnap)

In executing bulk Flists, the script can be run in background to avoid testnap failing when the node session timeouts. The testnap function always runs the flist from the first line until the end, therefore if any error occur while running the flist, record the flist that hit error remove all flists above the flist with error and retain the remaining flist to run after resolving the error.

Steps:

1. Create main testnap script.
2. To run testnap in background, open production billing nodes (Nodes 4,5,6,7,8)
3. Change path to the folder containing the script, type cd <pathname>.
4. Run the testnap script in background, type

nohup testnap <filename> > <logfilename> &

tail –f <logfilename>

1. <logfilename> is the file that captures the logs of the nohup testnap, the filename can be specified as anything when nohup testnap is executed

Note: new file will be automatically created if not found, if <logfilename> exists, > will cause the old log to be overwritten and >> will cause the new logs to append onto the old logs.

# **Data Exceptions (Investigation and Debugging)**

\*\*\*NOTE:

* Exception in BRM is inconsistent. Sometimes it will throw different error with different root cause. Any exception that is not corresponding to the error that it should, and has no workaround, please kindly do further investigation by looking in the logs of Trans\_Abort.

## **ERR\_STORAGE**

Root Cause:

1. The length of character for the last name in Account Creation exceeded 90 characters (allowable length for last\_name column in Account\_Nameinfo\_T.

**Workaround:**

**Need to request SIEBEL Team or the processor to provide a new last name for the account creation which have characters length below 90.**

1. Account Number already exists in BRM and active.

**Workaround:**

**Request SIEBEL team to provide a new account no.**

|  |
| --- |
| Select account\_no, poid\_id0,status,unix\_ora\_ts\_conv(created\_t),unix\_ora\_ts\_conv(effective\_t\_  From account\_t  Where account\_no=’ A600002783307’; |

1. Service Login already exists in BRM and active.

**Workaround:**

**Request SIEBEL team to provide a new login.**

SELECT POID\_ID0,POID\_TYPE,SERVICE\_ID,LOGIN,STATUS,account\_obj\_id0

FROM SERVICE\_T

WHERE login='classnkk';

1. Environment error due to DB locking, where data cannot be stored in DB. This can be deduced whenever there are many ERR\_STORAGEs that happen in a short duration.

**Workaround:**

**Determine and verify cases that fall under environment error by executing Trans\_Abort and send a list to OSM to retrigger.**

## **ERR\_STREAM\_EOF**

Root Cause:

1. Due to environment error.

**Workaround:**

**Prepare a list and send to OSM to retrigger.**

1. Wrong combination of cost center during service or account creation. (Fixed to return error message as ERR\_BAD\_VALUE)

**Workaround:**

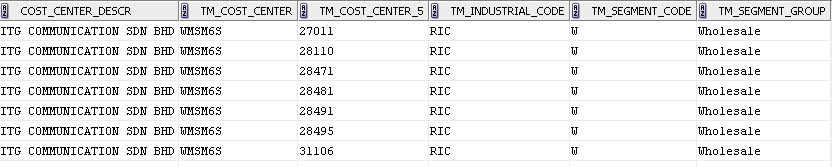
**Need to request from Siebel team to provide correct cost center combination.**

To check cost center combination in DB:

|  |
| --- |
| Select \*  From pin.tm\_config\_jnl\_cost\_t; |

Each row in the table represents 1 combination.

For example if TM\_SEGMENT\_CODE is W, it has to pair with any combination as shown in each row of the table below, any wrong value passed to BRM will return an error.



## **ERR\_NULL\_PTR**

Root Cause:

1. The poid of the account with service poid is wrong combination.
2. The poid of the service with the product/discount poid is wrong combination.
3. The poid of the account with the product/discount poid is wrong combination.
4. Poid field value is null

**Workaround:**

**To repair this error, need to request EAI team to correct the xref mapping and then retrigger.**

SQL queries to extract required information for EAI patching:

|  |
| --- |
| Select account\_obj\_id0,poid\_id0,poid\_type,service\_id,login,status,unix\_ora\_ts\_conv(created\_t)  From service\_t  Where account\_obj\_id0=’’  --and poid\_id0=’’  ; |

|  |
| --- |
| Select account\_obj\_id0,service\_obj\_id0,poid\_id0,product\_obj\_id0,desr,status,unix\_ora\_ts\_conv(created\_t),unix\_ora\_ts\_conv(effective\_t)  From purchased\_product\_t  Where account\_obj\_id0=  And service\_obj\_id0=; |

|  |
| --- |
| Select account\_obj\_id0,service\_obj\_id0,poid\_id0,discount\_obj\_id0,desr,status,unix\_ora\_ts\_conv(created\_t),unix\_ora\_ts\_conv(effective\_t)  From purchased\_discount\_t  Where account\_obj\_id0=  And service\_obj\_id0=; |

For Null\_Ptr errors that are caused by null account poid, need to provide information to EAI team for patching according to the template below:

ACCOUNT\_OBJ varchar2(100) :='0.0.0.1 /account 0';

BAL\_INFO\_BILLINFO\_OBJ varchar2(100) :='0.0.0.1 /billinfo 0';

PAYINFO\_POID varchar2(100) :='0.0.0.1 /payinfo/invoice 0';

PROFILES\_elem0\_PROFILE\_OBJ varchar2(100) :='0.0.0.1 /profile/tm\_account 0';

PROFILES\_elem1\_PROFILE\_OBJ varchar2(100) :='0.0.0.1 /profile/tm\_invoice 0';

Query to obtain the above information using account number:

select a.poid\_id0 acc\_poid, b.poid\_id0 billinfo\_poid,p.poid\_id0 payinfo\_poid,pr.poid\_id0 profile\_poid,pr.poid\_type

from account\_t a, billinfo\_t b, payinfo\_t p, profile\_t pr

where a.poid\_id0 = b.account\_obj\_id0

and a.poid\_id0 = p.account\_obj\_id0

and a.poid\_id0 = pr.account\_obj\_id0

and pr.poid\_type in ('/profile/tm\_account','/profile/tm\_invoice')

and a.account\_no = '1011241989'

;

Steps:

1. Query the required information by EAI
2. Complete the template and provide to EAI PIC

## **ERR\_BAD\_POID\_TYPE**

Root Cause:

1. The poid type of the poid is unsync.
2. For example:
   1. Service poid\_id0 12312312312 is /service/telephony in BRM DB.
   2. However in the flist it calls other poid type for the service /service/tmm\_streamyx 12312312312.

**Workaround:**

**Need to request EAI team to update xref then retrigger.**

## **ERR\_TIMEOUT**

Root Cause:

1. The account is unbilled. The last bill is not the last bp.

|  |
| --- |
| SELECT A.ACCOUNT\_NO,A.POID\_ID0 ACCOUNT\_POID, B.POID\_ID0 BILLINFO\_POID, ACTG\_CYCLE\_DOM BILL\_DAY,ACTG\_LAST\_T  ,UNIX\_ORA\_TS\_CONV(ACTG\_LAST\_T) ACCT\_LAST\_T,ACTG\_NEXT\_T, UNIX\_ORA\_TS\_CONV(ACTG\_NEXT\_T) ACCT\_NEXT\_T,  UNIX\_ORA\_TS\_CONV(ACTG\_FUTURE\_T) ACCT\_FUTURE\_T, UNIX\_ORA\_TS\_CONV(LAST\_BILL\_T) LAST\_BILL,  UNIX\_ORA\_TS\_CONV(NEXT\_BILL\_T) NEXT\_BILL, A.STATUS  FROM ACCOUNT\_T A, BILLINFO\_T B  WHERE A.POID\_ID0 = B.ACCOUNT\_OBJ\_ID0  --and b.NEXT\_BILL\_OBJ\_ID0=0  --and ACTG\_CYCLE\_DOM=22;  AND A.ACCOUNT\_NO IN ('A600223655509'); |

1. Large Account
   1. Account has more than 100 services.
   2. The time to process the order exceeded that maximum duration length for an order to be processed.
   3. Normally it happens on termination order.

**Workaround:**

* **Try to request OSM team to retrigger few times, if still failed,**
* **Proceed with manual recovery:**
  + 1. **Request OSM team to check if the order only trying to terminate the services and does not consisted any other order like modify or new install.**
    2. **If yes, proceed with this recovery, manual termination**
    3. **Create a flist for manual product, discount and service termination.**
    4. **Need to run one by one, with a file only contain 1 flist order.**
    5. **Need to run in NODE 7 as this is the only node without timeout function**
    6. **Run the testnap background by using**
       1. **nohup testnap <filename> > <log filename> &**
       2. **tail –f <logfilename>**
    7. **It should take few minutes to run.**
    8. **When completed, continue back from step vi with another flist order.**
    9. **When all recovery is completed:**
       1. **Request OSM to bypass order.**
       2. **Asked EAI team to update our xref. Change the status to closed.**

## **ERR\_BAD\_VALUE**

Root Cause:

1. Normally caused by null value in attributes like missing cost\_center or missing service\_id in the flist. Need to investigate further. BRM could not interpret data from the database. The data is not valid in the current context, and BRM cannot resolve the conflict.

**Workaround:**

* 1. **Need to find the value. Depends on the situation**
  2. **When the value is known, need to request OSM team to patch and retrigger.**

1. It also can be caused by duplication of login and is active in BRM during service creation.

**Workaround:**

**Need to request SIEBEL to provide a new login as there is already similar login available in BRM**

## **ERR\_NOT\_FOUND**

Root Cause:

1. Caused by unsync status of product and discount. Normally happen during termination order for a product or discount under a service. For example:
   1. The status of a product already 10103 (closed) in BRM, but the order is still trying to terminate a product that is already closed in BRM

**Workaround:**

**Need to request EAI team to update our xref.**

1. Caused by unsync poid. Usually happen due to migration or non-commit issue.

**Workaround:**

**Query the correct data/information and provide to EAI team to update our xref.**

## **ERR\_BAD\_ARG**

Root Cause:

1. A required field in a flist is incorrect. This is always a serious error because the system will not work until the argument is fixed. The problem is usually a programming or data entry error.
2. This type of error normally need to be investigate further by looking at the logs via trans\_abort.
3. There is no specific workaround or specific investigation for this error because it can be anything, because of that it is advised to look at the logs and find the error.

Case Study

ERR\_BAD\_ARG due to termination opcode dropping a double discount causing the error.

**Workaround:**

**Perform manual termination using an alternate termination opcode: PCM\_OP\_SUBSCRIPTION\_SET\_PRODINFO/PCM\_OP\_SUBSCRIPTION\_SET\_DISCOUNTINFO**

Steps:

1. Replace highlighted fields in the flist to relevant data.
2. Testnap the flist in production node.
3. Update product/discount status in DB.

-----------------------to terminate products--------------------------

r << XXX 1

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 229515979778

0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/telephony 407636461366

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "badarg"

0 PIN\_FLD\_PRODUCTS ARRAY [0]

1 PIN\_FLD\_PRODUCT\_OBJ POID [0] 0.0.0.1 /product 4030867273

1 PIN\_FLD\_OFFERING\_OBJ POID [0] 0.0.0.1 /purchased\_product 229515979916

1 PIN\_FLD\_PURCHASE\_END\_T TSTAMP [0] (1405014480)

1 PIN\_FLD\_USAGE\_END\_T TSTAMP [0] (1405014480)

1 PIN\_FLD\_CYCLE\_END\_T TSTAMP [0] (1405014480)

XXX

xop PCM\_OP\_SUBSCRIPTION\_SET\_PRODINFO 0 1

------------------------patch product status---------------------------------

update purchased\_product\_t set status = '3' where poid\_id0 = '';

-----------------------to terminate discounts--------------------------

r << XXX 1

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 124947729858

0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/telephony 407636461366

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "badarg"

0 PIN\_FLD\_DISCOUNTS ARRAY [0]

1 PIN\_FLD\_DISCOUNT\_OBJ POID [0] 0.0.0.1 /discount 44489

1 PIN\_FLD\_OFFERING\_OBJ POID [0] 0.0.0.1 /purchased\_discount 407636541716

1 PIN\_FLD\_PURCHASE\_END\_T TSTAMP [0] (1430963647)

1 PIN\_FLD\_USAGE\_END\_T TSTAMP [0] (1430963647)

1 PIN\_FLD\_CYCLE\_END\_T TSTAMP [0] (1430963647)

XXX

xop PCM\_OP\_SUBSCRIPTION\_SET\_DISCOUNTINFO 0 1

------------------------patch discount status---------------------------------

update purchased\_discount\_t set status = '3' where poid\_id0 = '';

## **ERR\_NONEXISTANT\_ELEMENT**

Root Cause:

1. The array in the specified storable object does not have the specified element. Need to see the logs via trans\_abort.
2. There is no workaround for this error as it is inconsistent.

## **GST\_INFLIGHT\_ORDER**

Root Cause:

1. The TaxCode value is missing while creating the service.

**Workaround:**

**Need to request the correct TaxCode from SBL and retrigger in OSM with the correct taxcode.**

## **UNSYNC ASSET INTEG ID BETWEEN SBL AND EAI**

Root Cause:

1. The Siebel asset integration ID that is tied to the order does not correspond to any poid within the EAI XREF, thus returning a blank service poid that is sent to BRM.

**Workaround:**

**Need to request advise from SBL and EAI to retrieve the correct combination of SBL > EAI > BRM in order to retrigger the order with the correct poid.**

## **ERR\_BAD\_TYPE (ALPP/CLPP ENROLLMENT)**

Root Cause:

1. The account is tied to ALPP/CLPP but the service that is going to be created is not enrolled under the same discount group.

**Workaround:**

1. **Check service type to be created.**
2. **Check if the service type is enrolled under the ALPP/CLPP.**
3. **If missing, enroll the service type using flist.**
4. **Retrigger the order from OSM.**

Case Study

Trying to purchase Audio Conferencing service under an account whereby the service is not enrolled under the ALPP.

Checking Query:

select poid\_id0 from group\_t where account\_obj\_id0 = 118105265343;

select \* from GROUP\_SHARING\_MEMBERS\_T where obj\_id0 = 118105265515 ;



From the screenshot of the row in GROUP\_SHARING\_MEMBERS\_T, the service\_obj\_type /service/tmm\_audio\_conferencing is not enrolled under the same roof.

**Steps to enroll CLPP**

1. Manually purchase the CLPP RC and discounts using the flists in 3.3.3 and 3.3.4.
2. Create profile if necessary. (Check with EAI)
3. Enroll the account in GROUP\_SHARING\_MEMBERS\_T.
4. Enroll the service in GROUP\_SHARING\_MEMBERS\_T.
5. Enroll in ORDERED\_BALGROUP\_T.
6. Update EAI on CLPP RC and discount poids.

Note: ARRAY denotes REC\_ID

To enroll account level in GROUP\_SHARING\_MEMBERS\_T:

r << XXX 1

0 PIN\_FLD\_MEMBERS ARRAY [0] allocated 2, used 2

1 PIN\_FLD\_ACCOUNT\_OBJ POID [0] 0.0.0.1 /account 118103546231 0

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 118103546004 0

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "ENROLL"

0 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 118107276126 0

XXX

xop PCM\_OP\_SUBSCRIPTION\_SHARING\_GROUP\_MODIFY 0 1

To enroll service level in GROUP\_SHARING\_MEMBERS\_T:

r << XXX 1

0 PIN\_FLD\_MEMBERS ARRAY [1] allocated 2, used 2

1 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/tmm\_audio\_conferencing -1 0

1 PIN\_FLD\_ACCOUNT\_OBJ POID [0] 0.0.0.1 /account 118103546231 0

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 118103546004 0

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "ENROLL"

0 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 118107276126 0

XXX

xop PCM\_OP\_SUBSCRIPTION\_SHARING\_GROUP\_MODIFY 0 1

LEGEND for PCM\_OP\_SUBSCRIPTION\_SHARING\_GROUP\_MODIFY:

0 PIN\_FLD\_POID = Poid of the CLPP dummy/parent account

0 PIN\_FLD\_MEMBERS = Definition of the members of the CLPP (both service & account level)

1 PIN\_FLD\_SERVICE\_OBJ = Member service of the CLPP

1 PIN\_FLD\_ACCOUNT\_OBJ = Member account of the CLPP

0 PIN\_FLD\_GROUP\_OBJ = Poid of the Discount Sharing Group (DSG)

To enroll in ORDERED\_BALGROUP\_T:

r << XXX 1

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 103616959263

0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/telephony 103616959295

0 PIN\_FLD\_ORDERED\_BALGRP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 103616959300

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "ENROLL"

0 PIN\_FLD\_ACTION STR [0] "Create"

0 PIN\_FLD\_ORDERED\_BALGROUPS ARRAY [0] allocated 2,used 2

1 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 103616959300

0 PIN\_FLD\_ORDERED\_BALGROUPS ARRAY [1] allocated 2,used 2

1 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts -1

XXX

xop PCM\_OP\_SUBSCRIPTION\_ORDERED\_BALGRP 0 1

Replace the highlighted fields in the flist above and testnap the flist into the environment to enroll the service under the ALPP/CLPP.

As a result, by running the checking query in DB again the result will be like this:



Once this is confirmed, may request OSM to retrigger the order to create the intended service.

**Steps to un-enroll CLPP**

1. Manually terminate the CLPP RC and discounts using the flists in 3.3.7 and 3.3.8.
2. Delete profile if necessary (Check with EAI)
3. Un-enroll the account in GROUP\_SHARING\_MEMBERS\_T.
4. Un-enroll the service in GROUP\_SHARING\_MEMBERS\_T.
5. Un-enroll in ORDERED\_BALGROUP\_T.
6. Update EAI on terminated CLPP RC and discounts.

To un-enroll the service in GROUP\_SHARING\_MEMBERS\_T:

r << XXX 1

0 PIN\_FLD\_MEMBERS ARRAY [1] allocated 2, used 2 🡨node location

1 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/tmm\_audio\_conferencing -1 0 🡨 service type

1 PIN\_FLD\_ACCOUNT\_OBJ POID [0] 0.0.0.1 /account 118103546231 0 🡨child

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 118103546004 0 🡨parent

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "ENROLL"

0 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 118107276126 0 🡨DSG poid

XXX

xop PCM\_OP\_SUBSCRIPTION\_SHARING\_GROUP\_DELETE 0 1

To un-enroll the account in GROUP\_SHARING\_MEMBERS\_T:

r << XXX 1

0 PIN\_FLD\_MEMBERS ARRAY [0] allocated 2, used 2

1 PIN\_FLD\_ACCOUNT\_OBJ POID [0] 0.0.0.1 /account 118103546231 0

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 118103546004 0

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "ENROLL"

0 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 118107276126 0

XXX

xop PCM\_OP\_SUBSCRIPTION\_SHARING\_GROUP\_DELETE 0 1

To un-enroll in ORDERED\_BALGROUP\_T:

r << XXX 1

0 PIN\_FLD\_POID POID [0] 0.0.0.1 /account 103616959263

0 PIN\_FLD\_SERVICE\_OBJ POID [0] 0.0.0.1 /service/telephony 103616959295

0 PIN\_FLD\_ORDERED\_BALGRP\_OBJ POID [0] 0.0.0.1 /ordered\_balgrp 103617160111

0 PIN\_FLD\_PROGRAM\_NAME STR [0] "UNENROLL"

0 PIN\_FLD\_ACTION STR [0] "Delete"

0 PIN\_FLD\_ORDERED\_BALGROUPS ARRAY [0] allocated 2,used 2

1 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts 103616959300

0 PIN\_FLD\_ORDERED\_BALGROUPS ARRAY [1] allocated 2,used 2

1 PIN\_FLD\_GROUP\_OBJ POID [0] 0.0.0.1 /group/sharing/discounts -1

XXX

xop PCM\_OP\_SUBSCRIPTION\_ORDERED\_BALGRP 0 1

Replace the highlighted fields in the flist above and testnap the flist into the environment to unnroll the service under the ALPP/CLPP.

# **Environment Exceptions (Investigation and Debugging)**

Any exceptions regarding environment can be retriggered. Normally it is caused by environment malicious errors and not because of the data inside the flist. The workarounds is to request OSM team to retrigger the orders.

Please note if the orders need to be retrigger is too large, please request OSM team to retrigger by throttle order to avoid online nodes being jammed.

* ERR\_STREAM\_EOF
* ERR\_TIMEOUT
* ERR\_TRANS\_LOST
* ERR\_DM\_CONNECT\_FAILED
* ERR\_NAP\_CONNECT\_FAILED
* ERR\_TRANS\_LOST
* ERR\_STREAM\_IO
* ERR\_DEADLOCK
* ERR\_CONNECTION\_LOST

# **Queries**

## **XREF MAPPING**

|  |
| --- |
| --product xref mapping--  Select A.Account\_No,A.Poid\_Id0,S.Poid\_Id0,S.Poid\_Type,B.Poid\_Id0,  Unix\_Ora\_Time\_Conv(B.Effective\_T),B.Poid\_Type,B.Product\_Obj\_Id0,S.Login,  S.Service\_Id,  B.Descr,b.cycle\_fee\_amt,B.Status,B.Flags,B.Quantity  From Account\_T A,Service\_T S,Purchased\_Product\_T B  Where A.Poid\_Id0='437289826048'  and s.poid\_id0='437841270756'  And S.Account\_Obj\_Id0=A.Poid\_Id0  And B.Account\_Obj\_Id0=A.Poid\_Id0  AND B.SERVICE\_OBJ\_ID0=S.POID\_ID0;  --discount xref mapping--  Select A.Account\_No,A.Poid\_Id0,S.Poid\_Id0,S.Poid\_Type,B.Poid\_Id0,  Unix\_Ora\_Time\_Conv(B.Effective\_T),B.Poid\_Type,B.discount\_Obj\_Id0,S.Login,  S.Service\_Id,  B.Descr,B.Status,B.Flags,B.Quantity  From Account\_T A,Service\_T S,Purchased\_discount\_T B  Where A.Poid\_Id0='437289826048'  and s.poid\_id0='437841270756'  And S.Account\_Obj\_Id0=A.Poid\_Id0  And B.Account\_Obj\_Id0=A.Poid\_Id0  AND B.SERVICE\_OBJ\_ID0=S.POID\_ID0;s |

## **EAI ID EXTRACTION**

|  |
| --- |
| --finding OSM Order Id for known Siebel Order Id  select audit\_param\_3 from eai\_custom.eai\_audit\_log where int\_msg\_id in (  select distinct int\_msg\_id from eai\_custom.eai\_audit\_log where  event\_name in ('evProcessOrderFrSBL','evProcessOrderFrSBL\_old') and  audit\_param\_2 ='1-4VM7XRE' and  audit\_type = 'HTTPRQ');  --finding EAI log for respective Siebel Order Id and OSM Order Id  select a.audit\_param\_2, a.int\_msg\_id , a.event\_name,a.AUDIT\_DATE\_TIME  from eai\_custom.EAI\_AUDIT\_LOG a,eai\_custom.EAI\_AUDIT\_LOG b  where  a.audit\_param\_2 in ('8287042')  and a.audit\_type = 'RQI'  and a.EVENT\_NAME like '%BRM%'  and b.audit\_type ='ERR'  and a.INT\_MSG\_ID = b.INT\_MSG\_ID  order by a.AUDIT\_DATE\_TIME desc;  --finding EAI based on SR  select \* from eai\_custom.eai\_audit\_log where audit\_param\_2 = '1-10681754704' order by audit\_date\_time desc; |

## **Check if the customer pay the bills**

|  |
| --- |
| --check if the customer pay the bills  select UNIX\_ORA\_TS\_CONV(A.END\_T) BILL\_DATE, A.POID\_ID0 bill\_poid, A.BILL\_NO, B.POID\_tYPE, B.ITEM\_TOTAL,a.total\_due, UNIX\_ORA\_TS\_CONV(B.EFFECTIVE\_T) PAYMENT\_DATE  from bill\_t a, item\_t b  where a.account\_obj\_id0 = 33344651638  AND A.ACCOUNT\_OBJ\_ID0 = B.ACCOUNT\_OBJ\_ID0  and a.bill\_no is not null  and b.effective\_t between a.start\_T and a.end\_t  and b.poid\_type = '/item/payment'  order by a.end\_t desc; |

## **Check the program name of the account or service**

|  |
| --- |
| --check the program name of the account or service  Select \* From Event\_T;  Select Account\_Obj\_Id0,Service\_Obj\_Id0,service\_obj\_type,Poid\_Type,  Unix\_Ora\_Ts\_Conv(Created\_T),Unix\_Ora\_Ts\_Conv(End\_T),  Name,Program\_Name,Sys\_Descr  From Event\_T  Where Account\_Obj\_Id0='112610097' And Service\_Obj\_Id0 In (127325726,127615481)  order by created\_t desc; |

## **Check if there any adjustment**

|  |
| --- |
| --check and verify adjustment  select (unix\_ora\_time\_conv(a.created\_t)) created, c.account\_no,a.poid\_type, b.reason\_domain\_id, b.reason\_id,a.flags,e.amount, a.descr, program\_name--, a.\*  from pin.event\_t a, pin.event\_billing\_misc\_t b, pin.account\_t c,event\_bal\_impacts\_t e  where a.poid\_id0 = b.obj\_id0  and a.account\_obj\_id0 = c.poid\_id0  and a.poid\_type like ('/event/billing/adjustment%')  and e.obj\_id0 = a.poid\_id0  and c.account\_no in ('D209210910209') --A600001737404  --and c.poid\_id0 ='229523605471'  order by a.created\_t desc; |

## **Account Info**

|  |
| --- |
| --ACCOUNT INFO  Select Account\_T.Account\_No, Account\_T.Poid\_Id0 Account\_Poid, Billinfo\_T.Poid\_Id0 Billinfo\_Poid, Payinfo\_T.Poid\_Id0 Payinfo\_Poid, Payinfo\_T.Poid\_Type As Pay\_Type, Account\_Nameinfo\_T.Last\_Name, Payinfo\_T.Name,  TM\_CUST\_PROFILE\_T.TM\_SEGMENT\_CODE, unix\_ora\_ts\_conv(account\_t.EFFECTIVE\_t) EFFECTIVE\_T,unix\_ora\_ts\_conv(account\_t.created\_t) created\_T,account\_t.effective\_t, account\_t.created\_t,account\_t.last\_status\_t,account\_t.status  FROM ACCOUNT\_T, ACCOUNT\_NAMEINFO\_T, PROFILE\_T, TM\_CUST\_PROFILE\_T, BILLINFO\_T, PAYINFO\_T  WHERE (ACCOUNT\_T.POID\_ID0=PROFILE\_T.ACCOUNT\_OBJ\_ID0  AND ACCOUNT\_T.POID\_ID0=ACCOUNT\_NAMEINFO\_T.OBJ\_ID0  AND PROFILE\_T.POID\_ID0=TM\_CUST\_PROFILE\_T.OBJ\_ID0  AND ACCOUNT\_T.POID\_ID0=BILLINFO\_T.ACCOUNT\_OBJ\_ID0  AND ACCOUNT\_T.POID\_ID0=PAYINFO\_T.ACCOUNT\_OBJ\_ID0  AND ACCOUNT\_T.ACCOUNT\_NO in ('D944370220206')); |

## **ICP Counting Total Transactions**

|  |
| --- |
| --ICP Counting Total Transactions  select count(\*) from (Select t1.\*  From Eai\_Custom.Eai\_Audit\_Log T1, Eai\_Custom.Eai\_Biz\_Event\_Config T2  Where T1.Event\_Name = T2.Event\_Name  And T2.Target\_System = 'BRM'  and t1.audit\_type = 'RQI'  And T1.Audit\_Date\_Time >= To\_Date('01-DEC-2014 12:00 A.M.','DD-MON-YYYY HH:MI A.M.') --Change the date  and t1.AUDIT\_DATE\_TIME < TO\_DATE('31-DEC-2014 12:00 A.M.','DD-MON-YYYY HH:MI A.M.')); |

## **To check how many unbilled accounts**

|  |
| --- |
| --To check how many unbilled account [Bill run; change actg\_next\_t value to current timestamp]  SELECT count(1),billing\_status FROM billinfo\_t bt WHERE bt.actg\_next\_t = 1424822400 group by billing\_status; |

## **Finding duplication**

|  |
| --- |
| --finding login duplication data  SELECT A.ACCOUNT\_NO,S.ACCOUNT\_OBJ\_ID0,S.POID\_ID0,S.POID\_TYPE,S.SERVICE\_ID,S.LOGIN,S.STATUS  ,UNIX\_ORA\_Time\_CONV(s.EFFECTIVE\_T) serv\_eff\_time,UNIX\_ORA\_Time\_CONV(s.CREATED\_T) serv\_created\_time  FROM account\_t a,SERVICE\_T s  WHERE  S.STATUS='10100' AND A.STATUS='10100'  and s.poid\_type='/service/tmm\_hotspot'  AND A.POID\_ID0=S.ACCOUNT\_OBJ\_ID0  and s.login in (  SELECT login  FROM SERVICE\_T  WHERE STATUS='10100'  AND POID\_TYPE='/service/tmm\_hotspot'  GROUP BY LOGIN  having count (\*)>1);  --finding login number  SELECT LOGIN,COUNT(\*)  FROM SERVICE\_T  WHERE STATUS='10100'  AND POID\_TYPE='/service/tmm\_hotspot'  GROUP BY LOGIN  HAVING COUNT (\*)>1;  --counting account affected  SELECT distinct ACCOUNT\_OBJ\_ID0  FROM SERVICE\_T  where login in (  SELECT LOGIN  FROM SERVICE\_T  WHERE STATUS='10100'  AND POID\_TYPE='/service/tmm\_hotspot'  GROUP BY LOGIN  having count (\*)>1); |

## **CLPP**

Customer Level Pricing Plan (CLPP) is a discount plan whereby a Discount Sharing Group (DSG) is created with a parent account (dummy BA) and member accounts (actual BA). In order for the discount to work correctly, the CLPP products/discounts have to be purchased under the parent and the member accounts and each of the members enrolled to the parent in the DSG.

In order to check whether an account/service is enrolled under CLPP, the following steps can be followed (Given a member account of the CLPP):

1. Check in group\_sharing\_members\_t to see the group poids and the accounts that are tied to the same group poid. This table specifies the parent CLPP and members that are tied to the same discount.

select gsm.obj\_id0 group\_poid, a.poid\_id0 ACC\_POID, a.account\_no BA, gsm.service\_obj\_id0 gsm\_serv\_poid, gsm.service\_obj\_type gsm\_serv\_type,gsm.rec\_id

from group\_sharing\_members\_t gsm, account\_t a

where gsm.account\_obj\_id0 = a.poid\_id0

--and gsm.obj\_id0 = 103616959300

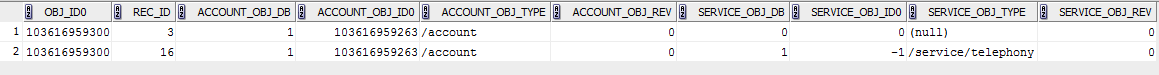
and a.poid\_id0 in ()

order by gsm\_serv\_type desc

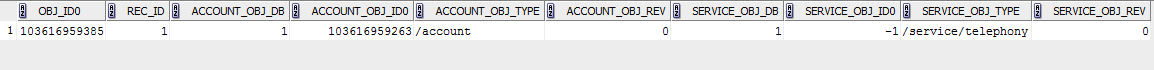
;

Note: need to make sure that the account is always enrolled for the CLPP to work. Screenshot example:

Correct:



Wrong:



1. Check in ordered\_groups\_t to see the ordered balgrp poids and the accounts that are tied to the same ordered balgrp poids. This table holds the order of the CLPP that is calculated on the accounts.

select ob.poid\_id0,ob.poid\_type,ob.account\_obj\_id0,og.group\_obj\_id0,og.group\_obj\_type,ob.service\_obj\_id0,ob.service\_obj\_type,og.rec\_id

from ordered\_balgroup\_t ob, ordered\_groups\_t og

where ob.poid\_id0 = og.obj\_id0

and ob.account\_obj\_id0 in (103616959268)

order by ob.poid\_id0

;

Note: the accounts/services will always exists in pairs with group\_obj\_id0 = -1 and a valid poid. Both will carry the same ordered\_balgrp poid.

Example:

