

【故障解决】OGG-00446 Could not find archived log for sequence

1.1 BLOG 文档结构图

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1.2 前言部分

1.2.1 导读和注意事项

各位技术爱好者，看完本文后，你可以掌握如下的技能，也可以学到一些其它你所不知道的知识，~O(∩_∩)O~：

① OGG-00446 Could not find archived log for sequence 的解决方法（重点）

② OGG 基本的维护、排错操作

Tips :

① 若文章代码格式有错乱，推荐使用 QQ 或 360 浏览器，也可以下载 pdf 格式的文档来查看，pdf 文档下载地址：<http://yunpan.cn/cdEQedhCs2kFz> （提取码：ed9b）

② 本篇 BLOG 中代码部分需要特别关注的地方我都用黄色背景和红色字体来表示，比如下边的例子中，thread 1 的最大归档日志号为 33，thread 2 的最大归档日志号为 43 是需要特别关注的地方，命令一般使用粉红颜色标注，注释一般采用蓝色字体表示。

```
List of Archived Logs in backup set 11
Thrd Seq      Low SCN      Low Time      Next SCN      Next Time
-----
1      32          1621589      2015-05-29 11:09:52 1625242      2015-05-29 11:15:48
1      33          1625242      2015-05-29 11:15:48 1625293      2015-05-29 11:15:58
2      42          1613951      2015-05-29 10:41:18 1625245      2015-05-29 11:15:49
2      43          1625245      2015-05-29 11:15:49 1625253      2015-05-29 11:15:53

[ZFXDESKDB1:root]:/>lsvg -o
T_XDESK_APP1_vg
rootvg
[ZFXDESKDB1:root]:/>
[ZFXDESKDB1:root]:/>lsvg rootvg

====》 2097152*512/1024/1024/1024=1G
```

本文如有错误或不完善的地方请大家多多指正，ITPUB 留言或 QQ 皆可，您的批评指正正是我写作的最大动力。

1. 2. 2 相关参考文章链接

1. 2. 3 本文简介

同事说有一套 OGG 的环境挂掉了，不能同步了，让处理一下，查看了进程状态和错误日志后分析得出是 source 端的归档日志不见了，也没有备份，最后只能重新初始化数据来解决了。

1.3 相关知识点扫盲

1.3.1 OGG 的告警日志路径

ogg 也有类似 oracle 的告警文件，该文件在 \$OGG_HOME/ggserr.log

```
oracle@ZT1XPADRDB1:/gg/ogg$ ll ggserr.log
-rw-rw-r-- 1 oracle dba      81355509 Jul 25 2025 ggserr.log
oracle@ZT1XPADRDB1:/gg/ogg$
```

1.4 故障分析及解决过程

1.4.1 故障环境介绍

项目	source db	target db
db 类型	rac 环境	rac 环境
db version	10.2.0.5.0	11.2.0.3.0
db 存储	RAW	ASM
ORACLE_SID	oraXPAD	oraXPAD
db_name	oraXPAD	oraXPAD
主机 IP 地址：	22.188.131.27 22.188.131.47	22.188.132.82 22.188.132.85
OS 版本及 kernel 版本	AIX 5.3	AIX 6.1
OS hostname	ZTGXPADDB1	ZT1XPADRDB1

1. 4. 2 故障发生现象及报错信息

source 端：

```
root@ZTGXPADDB1:/# ps -ef|grep gg
  root 3248278 3211312   1 09:15:45 pts/0   0:00 grep gg
 oracle 3719330 3751980   1   Dec 30     -   7:29 /gg/ogg/extract PARAMFILE /gg/ogg/dirprm/ggspump.prm REPORTFILE /gg/ogg/dirrpt/GGSPUMP.rpt PROCESSID GGSPUMP USESUBDIRS
 oracle 3723472 3706978   0   Aug 03     -   0:03 /oracle/app/oracle/product/10.2.0/crs/bin/evmlogger.bin -o /oracle/app/oracle/product/10.2.0/crs/evm/log/evmlogger.info -l
/oracle/app/oracle/product/10.2.0/crs/evm/log/evmlogger.log
 oracle 3751980         1   0   Aug 03     - 21:00 ./mgr PARAMFILE /gg/ogg/dirprm/mgr.prm REPORTFILE /gg/ogg/dirrpt/MGR.rpt PROCESSID MGR PORT 7809
 oracle 3772504 3751980   3   Dec 30     - 18:42 /gg/ogg/extract PARAMFILE /gg/ogg/dirprm/ggsext.prm REPORTFILE /gg/ogg/dirrpt/GGSEXT.rpt PROCESSID GGSEXT USESUBDIRS
root@ZTGXPADDB1:/# cd /gg/ogg/
oracle@ZTHXPADB2:/gg/ogg$ ggsci

Oracle GoldenGate Command Interpreter for Oracle
Version 11.1.1.1.2 OGGCORE_11.1.1.1.2_PLATFORMS_111004.2100
AIX 5L, ppc, 64bit (optimized), Oracle 10.2 on Oct  5 2011 02:32:51

Copyright (C) 1995, 2011, Oracle and/or its affiliates. All rights reserved.

GGSCI (ZTHXPADB2) 1> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
EXTRACT      STOPPED     GGSEXT      00:00:00      21915:44:49
EXTRACT      RUNNING     GGSPUMP     00:00:00      unknown
GGSCI (ZTHXPADB2) 5> view report GGSEXT

*****
      Oracle GoldenGate Capture for Oracle
      Version 11.1.1.1.2 OGGCORE_11.1.1.1.2_PLATFORMS_111004.2100
      AIX 5L, ppc, 64bit (optimized), Oracle 10.2 on Oct  5 2011 02:52:14

Copyright (C) 1995, 2011, Oracle and/or its affiliates. All rights reserved.

      Starting at 2020-08-03 07:47:21
*****

Operating System Version:
AIX
Version 5, Release 3
Node: ZTGXPADDB1
Machine: 00C207D44C00

Address Space Size :    soft limit    hard limit
Heap Size          :    unlimited    unlimited
File Size          :    unlimited    unlimited
CPU Time           :    unlimited    unlimited

Process id: 2113596

Description:

*****
**              Running with the following parameters              **
*****
```

```
*****
EXTRACT ggsext
SETENV (NLS_LANG='AMERICAN_AMERICA.ZHS16GBK')
Set environment variable (NLS_LANG=AMERICAN_AMERICA.ZHS16GBK)
SETENV (ORACLE_SID='oraXPAD1')
Set environment variable (ORACLE_SID=oraXPAD1)
USERID goldengate, PASSWORD *****
DISCARDFILE ./dirrpt/ggsext.dsc, APPEND, MEGABYTES 100
--DDL INCLUDE MAPPED
--DDLOPTIONS ADDTRANDATA NOCROSSRENAME REPORT
TRANLOGOPTIONS RAWDEVICEOFFSET 0
EXTTRAIL ./dirdat/st
TRANLOGOPTIONS ALTARCHIVELOGDEST PRIMARY INSTANCE oraXPAD1 /gg/sarch1, ALTARCHIVELOGDEST INSTANCE oraXPAD1 /gg/sarch2, ALTARCHIVELOGDEST INSTANCE oraXPAD2 /gg/sarch2, ALTARCHIVELOGDEST INSTANCE oraXPAD2 /gg/sarch1
--TRANLOGOPTIONS ALTARCHIVELOGDEST PRIMARY INSTANCE oraXPAD1 /gg/sarch1, ALTARCHIVELOGDEST INSTANCE oraXPAD2 /gg/sarch2
WILDCARDRESOLVE DYNAMIC
dynamicresolution
THREADOPTIONS MAXCOMMITPROPAGATIONDELAY 60000
--GETTRUNCATES
TABLE XPADB.BASE_ACTIONPOWER;
TABLE XPADB.BASE_BANK;
TABLE XPADB.BASE_BANKMERGE;
TABLE XPADB.BASE_BANKTREE;
TABLE XPADB.BASE_BRCHBANKCTRL;
TABLE XPADB.BASE_CERTIFICATE;
《《《《。。。。。。篇幅原因，有省略。。。。。。》》》》
TABLE XPADB.RICH_TRANSFERTRADE;
TABLE XPADB.RICH_LISTING;
TABLE XPADB.RICH_DELISTING;
TABLE XPADB.RICH_CUSTPROOFPROPERTY;
TABLE XPADB.BASE_FEESCALE;
TABLE XPADB.BASE_FEEDISCOUNT;

TABLE t.t2;

Bounded Recovery Parameter:
BRINTERVAL = 4HOURS
BRDIR      = /gg/ogg

CACHEMGR virtual memory values (may have been adjusted)
CACHEBUFFERSIZE:      64K
CACHESIZE:            8G
CACHEBUFFERSIZE (soft max): 4M
CACHEPAGEOUTSIZE (normal): 4M
PROCESS VM AVAIL FROM OS (min): 16G
CACHESIZEMAX (strict force to disk): 13.99G

2020-08-03 07:47:22 INFO OGG-01639 BOUNDED RECOVERY: ACTIVE: for object pool 1: p1916948_Redo Thread 1.

2020-08-03 07:47:22 INFO OGG-01640 BOUNDED RECOVERY: recovery start XID: 0.0.0.

2020-08-03 07:47:22 INFO OGG-01641 BOUNDED RECOVERY: recovery start position: SeqNo: 2598, RBA: 89822224, SCN: 2850.524344649 (12241181138249), Timestamp: 2018-07-01 04:09:42.000000.

2020-08-03 07:47:22 INFO OGG-01642 BOUNDED RECOVERY: recovery end position: SeqNo: 2598, RBA: 89823232, SCN: 2850.524344649 (12241181138249), Timestamp: 2018-07-01 04:09:42.000000.

2020-08-03 07:47:22 INFO OGG-01639 BOUNDED RECOVERY: ACTIVE: for object pool 2: p1916948_Redo Thread 2.

2020-08-03 07:47:22 INFO OGG-01640 BOUNDED RECOVERY: recovery start XID: 0.0.0.

2020-08-03 07:47:22 INFO OGG-01641 BOUNDED RECOVERY: recovery start position: SeqNo: 2382, RBA: 245488144, SCN: 2850.524344719 (12241181138319), Timestamp: 2018-07-01 04:09:41.000000.

2020-08-03 07:47:22 INFO OGG-01642 BOUNDED RECOVERY: recovery end position: SeqNo: 2382, RBA: 245489152, SCN: 2850.524344719 (12241181138319), Timestamp: 2018-07-01 04:09:41.000000.

2020-08-03 07:47:22 INFO OGG-01643 BOUNDED RECOVERY: CANCELED: for object pool 2: p1916948_Redo Thread 2.

2020-08-03 07:47:22 INFO OGG-01579 BOUNDED RECOVERY: VALID BCP: CP.GGSEXT.000000102.

2020-08-03 07:47:22 INFO OGG-01629 BOUNDED RECOVERY: PERSISTED OBJECTS RECOVERED: 1.
```

```
Database Version:
Oracle Database 10g Enterprise Edition Release 10.2.0.5.0 - 64bi
PL/SQL Release 10.2.0.5.0 - Production
CORE      10.2.0.5.0      Production
TNS for IBM/AIX RISC System/6000: Version 10.2.0.5.0 - Productio
NLSRTL Version 10.2.0.5.0 - Production

Database Language and Character Set:
NLS_LANG = "AMERICAN_AMERICA.ZHS16GBK"
NLS_LANGUAGE      = "AMERICAN"
NLS_TERRITORY      = "AMERICA"
NLS_CHARACTERSET   = "ZHS16GBK"

2020-08-03 07:47:24 INFO      OGG-00546 Default thread stack size: 196608.

2020-08-03 07:47:24 INFO      OGG-00547 Increasing thread stack size from 196608 to 1048576.

2020-08-03 07:47:24 INFO      OGG-01513 Positioning to (Thread 1) Sequence 2598, RBA 89822224, SCN 2850.524344649.

Source Context :
  SourceModule      : [er.main]
  SourceID          : [/scratch/aime2/adestore/views/aime2_staxkl1/oggcore/0penSys/src/app/er/rep.c]
  SourceFunction     : [extract_start_point(time_elt_def *, time_elt_def *)]
  SourceLine        : [13026]

2020-08-03 07:47:44 ERROR      OGG-00446 Could not find archived log for sequence 2598 thread 1 under alternative destinations. SQL <SELECT MAX(sequence#) FROM v$log WHERE thread# = :ora_thread>. Last alternative
log tried /gg/sarch2/1_2598_704996932.arc, error retrieving redo file name for sequence 2598, archived = 1, use_alterdate = 0Not able to establish initial position for sequence 2598, rba 89822224.

2020-08-03 07:47:44 ERROR      OGG-01668 PROCESS ABENDING.
```

source 端告警日志:

```
oracle@ZT1XPADADB1:/gg/ogg$ tail -f ggserr.log
2020-08-03 07:47:27 INFO      OGG-01226 Oracle GoldenGate Capture for Oracle, ggspump.prm: Socket buffer size set to 27985 (flush size 27985).
2020-08-03 07:47:27 INFO      OGG-01055 Oracle GoldenGate Capture for Oracle, ggspump.prm: Recovery initialization completed for target file ./dirdat/tt002073, at RBA 1153.
2020-08-03 07:47:27 INFO      OGG-01478 Oracle GoldenGate Capture for Oracle, ggspump.prm: Output file ./dirdat/tt is using format RELEASE 10.4/11.1.
2020-08-03 07:47:27 INFO      OGG-01026 Oracle GoldenGate Capture for Oracle, ggspump.prm: Rolling over remote file ./dirdat/tt002074.
2020-08-03 07:47:27 INFO      OGG-01053 Oracle GoldenGate Capture for Oracle, ggspump.prm: Recovery completed for target file ./dirdat/tt002074, at RBA 1119.
2020-08-03 07:47:27 INFO      OGG-01057 Oracle GoldenGate Capture for Oracle, ggspump.prm: Recovery completed for all targets.
2020-08-03 07:47:44 ERROR      OGG-00446 Oracle GoldenGate Capture for Oracle, ggsext.prm: Could not find archived log for sequence 2598 thread 1 under alternative destinations. SQL <SELECT MAX(sequence#) FROM
v$log WHERE thread# = :ora_thread>. Last alternative log tried /gg/sarch2/1_2598_704996932.arc, error retrieving redo file name for sequence 2598, archived = 1, use_alterdate = 0Not able to establish initial position
for sequence 2598, rba 89822224.
2020-08-03 07:47:44 ERROR      OGG-01668 Oracle GoldenGate Capture for Oracle, ggsext.prm: PROCESS ABENDING.
2020-12-29 15:37:48 ERROR      OGG-01117 Oracle GoldenGate Command Interpreter for Oracle: Received signal: Program interrupt (2).
2020-12-29 15:37:48 ERROR      OGG-01668 Oracle GoldenGate Command Interpreter for Oracle: PROCESS ABENDING.
```

target 端:

```
oracle@ZT1XPADADB1:/gg/ogg$ ggsci

Oracle GoldenGate Command Interpreter for Oracle
Version 11.1.1.1.2 OGGCORE_11.1.1.1.2_PLATFORMS_111004.2100
AIX 5L, ppc, 64bit (optimized), Oracle 11g on Oct  5 2011 00:37:03

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GGSCI (ZT1XPADADB1) 1> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
REPLICAT     ABENDED    GGSREP     30088:08:59   3577:00:35
GGSCI (ZT1XPADADB1) 4> info all
```

```
Program      Status      Group      Lag      Time Since Chkpt
MANAGER      RUNNING
REPLICAT     ABENDED      GGSREP      30088:08:59  3577:47:23

GGSCI (ZT1XPADADB1) 5> start  GGSREP

Sending START request to MANAGER ...
REPLICAT GGSREP starting

GGSCI (ZT1XPADADB1) 6>  info all

Program      Status      Group      Lag      Time Since Chkpt
MANAGER      RUNNING
REPLICAT     ABENDED      GGSREP      33665:56:32  00:03:08
GGSCI (ZT1XPADADB1) 8> view report GGSREP

*****
      Oracle GoldenGate Delivery for Oracle
      Version 11.1.1.1.2 OGGCORE_11.1.1.1.2_PLATFORMS_111004.2100
      AIX 5L, ppc, 64bit (optimized), Oracle 11g on Oct  5 2011 02:03:36

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      Starting at 2020-12-30 09:34:14
*****

Operating System Version:
AIX
Version 6, Release 1
Node: ZT1XPADADB1
Machine: 00C08DF04C00

Address Space Size  :    soft limit    hard limit
Heap Size          :    unlimited    unlimited
File Size          :    unlimited    unlimited
CPU Time           :    unlimited    unlimited

Process id: 35717358

Description:

*****
**      Running with the following parameters      **
*****
REPLICAT ggsrep
--SETENV (ORACLE_SID = ggstd)
SETENV (NLS_LANG="AMERICAN_AMERICA.ZHS16GBK")
Set environment variable (NLS_LANG=AMERICAN_AMERICA.ZHS16GBK)
USERID goldengate, PASSWORD *****
--DDL include MAPPED
--DDLERROR DEFAULT IGNORE RETRYOP MAXRETRIES 3 RETRYDELAY 5
--DDLOPTIONS report
REPERROR DEFAULT, ABEND
ASSUMETARGETDEFS
DBOPTIONS DEFERREFCONST
DBOPTIONS SUPPRESSTRIGGERS
--BATCHSQL
--GROUPTRANSOPS 2000
DISCARDFILE ./dirrpt/ggsrep.dsc, APPEND, MEGABYTES 1000
WILDCARDRESOLVE DYNAMIC
Dynamicresolution
ALLOWNOOPUPDATES
```

```
--GETTRUNCATES
MAP XPADB.*, TARGET XPADRPT.*;
--OGG test table
MAP t.*, TARGET tt.t*;

CACHEMGR virtual memory values (may have been adjusted)
CACHEBUFFERSIZE:          64K
CACHESIZE:                512M
CACHEBUFFERSIZE (soft max): 4M
CACHEPAGEOUTSIZE (normal): 4M
PROCESS VM AVAIL FROM OS (min): 1G
CACHEsizEMAX (strict force to disk): 881M

Database Version:
Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production
PL/SQL Release 11.2.0.3.0 - Production
CORE    11.2.0.3.0      Production
TNS for IBM/AIX RISC System/6000: Version 11.2.0.3.0 - Production
NLSRTL Version 11.2.0.3.0 - Production

Database Language and Character Set:
NLS_LANG = "AMERICAN_AMERICA.ZHS16GBK"
NLS_LANGUAGE      = "AMERICAN"
NLS_TERRITORY      = "AMERICA"
NLS_CHARACTERSET = "ZHS16GBK"

For further information on character set settings, please refer to user manual.

*****
**                               **
*****

Opened trail file ./dirdat/tt002032 at 2020-12-30 09:34:14

Wildcard MAP resolved (entry XPADB.*):
  MAP XPADB.RICH_CUSTPAYAMOUNTHIS, TARGET XPADRPT.RICH_CUSTPAYAMOUNTHIS;

2020-12-30 09:34:14  WARNING OGG-00869  No unique key is defined for table RICH_CUSTPAYAMOUNTHIS. All viable columns will be used to represent the key, but may not guarantee uniqueness.  KEYCOLS may be used to
define the key.
Using following columns in default map by name:
  SERIALNO, TRADENO, ACCOUNT, CUSTACCOUNT, ISSUEID, FLAG, BANKID,
  EXECDATE, CURRENCYID, AMOUNT, BANCSNO, CASHREMIT, STATE, MEMO,
  PAYEXRATE, RESEND, EXECMODE, TRANCODE, RESPONSECODE, DATEEXPIRATION,
  TRADECHANNEL, TSNUMBER, FREEZESRLNO, EXPDATE, AMTTYPE, RELTRANTYPE,
  PROMOCODE, RELSERIALNO

Using the following key columns for target table XPADRPT.RICH_CUSTPAYAMOUNTHIS: SERIALNO, TRADENO, ACCOUNT, CUSTACCOUNT, ISSUEID, FLAG, BANKID, EXECDATE, CURRENCYID, AMOUNT, BANCSNO, CASHREMIT, STATE, MEMO, PAYEXRATE,
RESEND, EXECMODE, TRANCODE, RESPONSECODE, DATEEXPIRATION, TRADECHANNEL, TSNUMBER, FREEZESRLNO, EXPDATE, AMTTYPE, RELTRANTYPE, PROMOCODE, RELSERIALNO.

2020-12-30 09:34:14  WARNING OGG-01004  Aborted grouped transaction on 'XPADRPT.RICH_CUSTPAYAMOUNTHIS', Database error 1403 ().

2020-12-30 09:34:14  WARNING OGG-01003  Repositioning to rba 47143866 in seqno 2032.

2020-12-30 09:34:14  WARNING OGG-01154  SQL error 1403 mapping XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS.

2020-12-30 09:34:14  WARNING OGG-01003  Repositioning to rba 47143866 in seqno 2032.

Source Context :
  SourceModule      : [er.main]
  SourceID          : [/scratch/aime2/adestore/views/aime2_staxk11/oggcore/OpenSys/src/app/er/rep.c]
  SourceFunction     : [take_rep_err_action(short, int32_t, const char *, extr_ptr_def *, std_rec_hdr_def *, char *, file_def *, bool)]
  SourceLine        : [16148]

2020-12-30 09:34:14  ERROR    OGG-01296  Error mapping from XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS.

*****
*                               *
** Run Time Statistics **
*
```

Last record for the last committed transaction is the following:

```
Trail name : ./dirdat/tt002032
Hdr-Ind    :      E   (x45)      Partition :      .   (x04)
UndoFlag   :      .   (x00)      BeforeAfter:      A   (x41)
RecLength  :    854 (x0356)      IO Time    : 2017-02-26 15:37:42.331328
IOType     :    115 (x73)      OrigNode   :    255 (xff)
TransInd   :      .   (x03)      FormatType :      R   (x52)
SyskeyLen  :      0   (x00)      Incomplete:      .   (x00)
AuditRBA   :      2301      AuditPos    : 568568848
Continued  :      N   (x00)      RecCount   :      1   (x01)
```

```
2017-02-26 15:37:42.331328 GGSKeyFieldComp    Len    854 RBA 47143866
Name: XPADB.RICH_CUSTPAYAMOUNTHIS
```

Reading ./dirdat/tt002032, current RBA 47143866, 0 records

Report at 2020-12-30 09:34:14 (activity since 2020-12-30 09:34:14)

From Table XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS:

#	inserts:	0
#	updates:	0
#	deletes:	0
#	discards:	1

Last log location read:

```
FILE:      ./dirdat/tt002032
SEQNO:     2032
RBA:       47143866
TIMESTAMP: 2017-02-26 15:37:42.331328
EOF:       NO
READERR:   0
```

2020-12-30 09:34:14 ERROR OGG-01668 PROCESS ABENDING.

CACHE OBJECT MANAGER statistics

CACHE MANAGER VM USAGE

vm current	=	0	vm anon queues =	0
vm anon in use	=	0	vm file	= 0
vm used max	=	0	==> CACHE BALANCED	

CACHE CONFIGURATION

cache size	= 512M	cache force paging =	881M
buffer min	= 64K	buffer highwater	= 4M
pageout eligible size	=	4M	

=====

RUNTIME STATS FOR SUPERPOOL

CACHE Transaction Stats

trans active	=	0	max concurrent =	0
non-zero total	=	0	trans total	= 0

CACHE File Caching

disk current	=	0	disk total	=	0
disk caching	=	0	file cached	=	0
file retrieves	=	0			

CACHE MANAGEMENT

buffer links	=	0	anon gets	=	0
forced unmaps	=	0	cnbnbl try	=	0
cached out	=	0	force out	=	0

Allocation Request Distribution

< 128B:	0				
128B:	0	0	512B:	0	0
2K:	0	0	8K:	0	0
32K:	0	0	128K:	0	0
512K:	0	0	2M:	0	0
8M:	0	0	32M:	0	0
128M:	0	0	512M:	0	0
2G:	0	0	8G:	0	

Cached Transaction Size Distribution

0:	0				
< 4K:	0				
4K:	0	0	16K:	0	0
64K:	0	0	256K:	0	0
1M:	0	0	4M:	0	0
16M:	0	0	64M:	0	0
256M:	0	0	1G:	0	0
4G:	0	0	16G:	0	0
64G:	0	0	256G:	0	0
1T:	0	0	4T:	0	0
16T:	0	0	64T:	0	0
256T:	0	0	1024T:	0	0

CUMULATIVE STATS FOR SUPERPOOL

CACHE Transaction Stats

trans active	=	0	max concurrent	=	0
non-zero total	=	0	trans total	=	0

CACHE File Caching

disk current	=	0	disk total	=	0
disk caching	=	0	file cached	=	0
file retrieves	=	0			

CACHE MANAGEMENT

buffer links	=	0	anon gets	=	0
forced unmaps	=	0	cnnbl try	=	0
cached out	=	0	force out	=	0

Allocation Request Distribution

< 128B:	0				
128B:	0	0	512B:	0	0
2K:	0	0	8K:	0	0
32K:	0	0	128K:	0	0
512K:	0	0	2M:	0	0
8M:	0	0	32M:	0	0
128M:	0	0	512M:	0	0
2G:	0	0	8G:	0	

Cached Transaction Size Distribution

0:	0				
< 4K:	0				
4K:	0	0	16K:	0	0
64K:	0	0	256K:	0	0
1M:	0	0	4M:	0	0
16M:	0	0	64M:	0	0
256M:	0	0	1G:	0	0
4G:	0	0	16G:	0	0
64G:	0	0	256G:	0	0
1T:	0	0	4T:	0	0
16T:	0	0	64T:	0	0
256T:	0	0	1024T:	0	0

QUEUE Statistics:

```
num queues      =      15      default index =      0
cur len         =      0      max len       =      0
q vm current    =      0      vm max        =      0
q hits         =      0      q misses      =      0

queue size  q hits  curlen  maxlen      cannibalized
  0   64K      0      0      0      0
  1  128K      0      0      0      0
  2  256K      0      0      0      0
  3  512K      0      0      0      0
  4   1M      0      0      0      0
  5   2M      0      0      0      0
  6   4M      0      0      0      0
  7   8M      0      0      0      0
  8  16M      0      0      0      0
  9  32M      0      0      0      0
10  64M      0      0      0      0
11 128M      0      0      0      0
12 256M      0      0      0      0
13 512M      0      0      0      0
14   1G      0      0      0      0

=====

RUNTIME STATS FOR CACHE POOL #0
POOL INFO  group: ggsrep id: p35717358_BLOB
trans active =      0      trans concurrent (max) =      0
trans total  =      0      (0 )
flag         = 0x00000030
last error   = (0=<none>)

Allocation Request Distribution
< 128B:      0
 128B:      0      0      | 512B:      0      0
   2K:      0      0      |   8K:      0      0
  32K:      0      0      | 128K:      0      0
512K:      0      0      |   2M:      0      0
   8M:      0      0      |  32M:      0      0
128M:      0      0      | 512M:      0      0
   2G:      0      0      |   8G:      0

=====

CUMULATIVE STATS FOR CACHE POOL #0
POOL INFO  group: ggsrep id: p35717358_BLOB
trans active =      0      trans concurrent (max) =      0
trans total  =      0      (0 )
flag         = 0x00000030
```

target 端告警日志：

```
oracle@ZT1XPADRD1:/gg/ogg$ tail -f ggserr.log
2020-12-30 09:27:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39947, modtime is 212619862981000000 for /gg/ogg/dirdat/tt001891.
2020-12-30 09:27:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39951, modtime is 212619877906000000 for /gg/ogg/dirdat/tt001892.
2020-12-30 09:27:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -40038, modtime is 212620189201000000 for /gg/ogg/dirdat/tt001893.
2020-12-30 09:27:54 WARNING OGG-00950 Oracle GoldenGate Manager for Oracle, mgr.prm: Purge of old extract file /gg/ogg/dirdat/tt001894 failed because the prev seqno exists. Purge rule was applying UseCheckPoints
purge rule: Oldest Chkpt Seqno 2032 > 1894.
2020-12-30 09:34:14 INFO OGG-00987 Oracle GoldenGate Command Interpreter for Oracle: GGSCI command (oracle): start GGSREP.
2020-12-30 09:34:14 INFO OGG-00963 Oracle GoldenGate Manager for Oracle, mgr.prm: Command received from GGSCI on host 22.188.132.82 (START REPLICAT GGSREP ).
2020-12-30 09:34:14 INFO OGG-00975 Oracle GoldenGate Manager for Oracle, mgr.prm: REPLICAT GGSREP starting.
2020-12-30 09:34:14 INFO OGG-00995 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: REPLICAT GGSREP starting.
2020-12-30 09:34:14 INFO OGG-00996 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: REPLICAT GGSREP started.
2020-12-30 09:34:14 WARNING OGG-00869 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: No unique key is defined for table RICH_CUSTPAYAMOUNTHIS. All viable columns will be used to represent the key, but may
not guarantee uniqueness. KEYCOLS may be used to define the key.
2020-12-30 09:34:14 WARNING OGG-01004 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Aborted grouped transaction on 'XPADRPT.RICH_CUSTPAYAMOUNTHIS', Database error 1403 ().
2020-12-30 09:34:14 WARNING OGG-01003 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Repositioning to rba 47143866 in seqno 2032.
2020-12-30 09:34:14 WARNING OGG-01154 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: SQL error 1403 mapping XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS.
2020-12-30 09:34:14 WARNING OGG-01003 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Repositioning to rba 47143866 in seqno 2032.
```

```
2020-12-30 09:34:14 ERROR   OGG-01296 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Error mapping from XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS.
2020-12-30 09:34:14 ERROR   OGG-01668 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: PROCESS ABENDING.
2020-12-30 09:37:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39947, modtime is 212619862981000000 for /gg/ogg/dirdat/tt001891.
2020-12-30 09:37:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39951, modtime is 212619877906000000 for /gg/ogg/dirdat/tt001892.
2020-12-30 09:37:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -40038, modtime is 212620189201000000 for /gg/ogg/dirdat/tt001893.
2020-12-30 09:37:54 WARNING OGG-00950 Oracle GoldenGate Manager for Oracle, mgr.prm: Purge of old extract file /gg/ogg/dirdat/tt001894 failed because the prev seqno exists. Purge rule was applying UseCheckPoints
purge rule: Oldest Chkpt Seqno 2032 > 1894.
```

1. 4. 3 故障分析及解决过程

1. 4. 3. 1 确认归档文件是否存在

根据报错信息，可以知道 source 端的 thread 1 2598 归档日志不存在了，如果备份存在的话可以先把备份的归档还原回来就可以了，我们看看归档是否存在？

```
oracle@ZTHXPADB2:/oracle$ sqlplus / as sysdba

SQL*Plus: Release 10.2.0.5.0 - Production on Wed Dec 30 08:50:48 2020

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Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.5.0 - 64bit Production
With the Partitioning, Real Application Clusters, Data Mining and Real Application Testing options

SQL> set line 9999
SQL> select * from v$log;

   GROUP#    THREAD#  SEQUENCE#     BYTES  MEMBERS ARC STATUS           FIRST_CHANGE# FIRST_TIME
-----
         1         1        2907 1072693248         1 NO  CURRENT           1.2242E+13 30-DEC-20
         2         1        2905 1072693248         1 YES INACTIVE           1.2242E+13 28-DEC-20
         3         1        2906 1072693248         1 YES INACTIVE           1.2242E+13 29-DEC-20
         4         2        2718 1072693248         1 YES INACTIVE           1.2242E+13 29-DEC-20
         5         2        2719 1072693248         1 NO  CURRENT           1.2242E+13 29-DEC-20
         6         2        2717 1072693248         1 YES INACTIVE           1.2242E+13 28-DEC-20

6 rows selected.

SQL> archive log list;
Database log mode                Archive Mode
Automatic archival                Enabled
Archive destination              /gg/sarch2
Oldest online log sequence       2717
Next log sequence to archive     2719
Current log sequence             2719
SQL> exit
Disconnected from Oracle Database 10g Enterprise Edition Release 10.2.0.5.0 - 64bit Production
With the Partitioning, Real Application Clusters, Data Mining and Real Application Testing options
oracle@ZTHXPADB2:/oracle$ cd /gg/sarch2
oracle@ZTHXPADB2:/gg/sarch2$ ls
total 193332080
-rw-rw----  1 oracle  dba      1065581568 Mar 05 2020  2_2625_704996932.arc
-rw-rw----  1 oracle  dba      1065574400 Mar 06 2020  2_2626_704996932.arc
```

```
-rw-rw---- 1 oracle dba 1065574400 Mar 06 2020 2_2627_704996932.arc
-rw-rw---- 1 oracle dba 1065577472 Mar 07 2020 2_2628_704996932.arc
-rw-rw---- 1 oracle dba 1065568768 Mar 20 2020 2_2629_704996932.arc
-rw-rw---- 1 oracle dba 1065582592 Mar 21 2020 2_2630_704996932.arc
```

《《《《.....篇幅原因，有省略.....》》》》

```
-rw-rw---- 1 oracle dba 1065574400 Dec 23 13:06 2_2707_704996932.arc
-rw-rw---- 1 oracle dba 1065574400 Dec 24 00:26 2_2708_704996932.arc
-rw-rw---- 1 oracle dba 1065574912 Dec 24 13:15 2_2709_704996932.arc
-rw-rw---- 1 oracle dba 1065744384 Dec 25 02:23 2_2710_704996932.arc
-rw-rw---- 1 oracle dba 1065566208 Dec 25 19:23 2_2711_704996932.arc
-rw-rw---- 1 oracle dba 1065576960 Dec 26 09:08 2_2712_704996932.arc
-rw-rw---- 1 oracle dba 1065627648 Dec 26 23:21 2_2713_704996932.arc
-rw-rw---- 1 oracle dba 1065574400 Dec 27 12:25 2_2714_704996932.arc
-rw-rw---- 1 oracle dba 1065691648 Dec 28 04:32 2_2715_704996932.arc
-rw-rw---- 1 oracle dba 1065658368 Dec 28 21:02 2_2716_704996932.arc
-rw-rw---- 1 oracle dba 1065575936 Dec 29 10:37 2_2717_704996932.arc
-rw-rw---- 1 oracle dba 1067223552 Dec 29 23:22 2_2718_704996932.arc
-rw-r--r-- 1 oracle dba 79 Jun 27 2013 afiedt.buf
oracle@ZTHXPADB2:/gg/sarch2$ l *1_2598*
ls: 0653-341 The file *1_2598* does not exist.
```

```
oracle@ZTHXPADB2:/gg/sarch2$ cd /gg/sarch1
oracle@ZTHXPADB2:/gg/sarch1$ l
total 166951440
-rw-rw---- 1 oracle dba 1065574400 Mar 05 2020 1_2825_704996932.arc
-rw-rw---- 1 oracle dba 1065580032 Mar 06 2020 1_2826_704996932.arc
-rw-rw---- 1 oracle dba 1065574400 Mar 06 2020 1_2827_704996932.arc
-rw-rw---- 1 oracle dba 1065574400 Mar 07 2020 1_2828_704996932.arc
```

《《《《.....篇幅原因，有省略.....》》》》

```
-rw-rw---- 1 oracle dba 1065574400 Dec 27 10:52 1_2902_704996932.arc
-rw-rw---- 1 oracle dba 1065574400 Dec 28 00:59 1_2903_704996932.arc
-rw-rw---- 1 oracle dba 1065687040 Dec 28 15:16 1_2904_704996932.arc
-rw-rw---- 1 oracle dba 1065607680 Dec 29 08:40 1_2905_704996932.arc
-rw-rw---- 1 oracle dba 1065577984 Dec 30 01:32 1_2906_704996932.arc
-rw-rw---- 1 oracle dba 278522368 Aug 06 07:15 2_2689_704996932.arc
-rw-r--r-- 1 oracle dba 90 Dec 22 2013 afiedt.buf
oracle@ZTHXPADB2:/gg/sarch1$
RMAN> list archivelog all;
```

List of Archived Log Copies					
Key	Thrd	Seq	S	Low Time	Name
4651	1	2825	A	05-MAR-20	/gg/sarch1/1_2825_704996932.arc
4653	1	2826	A	05-MAR-20	/gg/sarch1/1_2826_704996932.arc
4655	1	2827	A	06-MAR-20	/gg/sarch1/1_2827_704996932.arc
4656	1	2828	A	06-MAR-20	/gg/sarch1/1_2828_704996932.arc
4658	1	2829	A	07-MAR-20	/gg/sarch1/1_2829_704996932.arc
4660	1	2830	A	20-MAR-20	/gg/sarch1/1_2830_704996932.arc
4662	1	2831	A	20-MAR-20	/gg/sarch1/1_2831_704996932.arc
4665	1	2832	A	21-MAR-20	/gg/sarch1/1_2832_704996932.arc
4667	1	2833	A	30-MAR-20	/gg/sarch1/1_2833_704996932.arc
4670	1	2834	A	30-MAR-20	/gg/sarch1/1_2834_704996932.arc

《《《《.....篇幅原因，有省略.....》》》》

4793	2	2702	A	02-OCT-20	/gg/sarch2/2_2702_704996932.arc
4795	2	2703	A	20-DEC-20	/gg/sarch2/2_2703_704996932.arc
4796	2	2704	A	21-DEC-20	/gg/sarch2/2_2704_704996932.arc
4798	2	2705	A	21-DEC-20	/gg/sarch2/2_2705_704996932.arc
4801	2	2706	A	22-DEC-20	/gg/sarch2/2_2706_704996932.arc
4803	2	2707	A	22-DEC-20	/gg/sarch2/2_2707_704996932.arc
4804	2	2708	A	23-DEC-20	/gg/sarch2/2_2708_704996932.arc
4806	2	2709	A	24-DEC-20	/gg/sarch2/2_2709_704996932.arc
4808	2	2710	A	24-DEC-20	/gg/sarch2/2_2710_704996932.arc
4811	2	2711	A	25-DEC-20	/gg/sarch2/2_2711_704996932.arc
4813	2	2712	A	25-DEC-20	/gg/sarch2/2_2712_704996932.arc
4815	2	2713	A	26-DEC-20	/gg/sarch2/2_2713_704996932.arc

4817	2	2714	A	26-DEC-20	/gg/sarch2/2_2714_704996932.arc
4819	2	2715	A	27-DEC-20	/gg/sarch2/2_2715_704996932.arc
4821	2	2716	A	28-DEC-20	/gg/sarch2/2_2716_704996932.arc
4823	2	2717	A	28-DEC-20	/gg/sarch2/2_2717_704996932.arc
4824	2	2718	A	29-DEC-20	/gg/sarch2/2_2718_704996932.arc

可以看到 2598 号的归档日志已经不存在了。

1. 4. 3. 2 第一种办法：改变抽取进程的时间

改变抽取进程的时间， 但是会导致数据不一致，若是测试库，可以执行：alter extract extl,begin now

```
GGSCI (ZTHXPADB2) 11> alter extract GGSEXT,begin now
EXTRACT altered.

GGSCI (ZTHXPADB2) 12> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
EXTRACT      STOPPED     GGSEXT      00:00:00     00:00:05
EXTRACT      RUNNING     GGSPUMP     00:00:00     00:00:00

GGSCI (ZTHXPADB2) 13> start  GGSEXT

Sending START request to MANAGER ...
EXTRACT GGSEXT starting

GGSCI (ZTHXPADB2) 14> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
EXTRACT      RUNNING     GGSEXT      00:00:00     00:00:28
EXTRACT      RUNNING     GGSPUMP     00:00:00     unknown

GGSCI (ZTHXPADB2) 17> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
EXTRACT      RUNNING     GGSEXT      00:00:00     unknown
EXTRACT      RUNNING     GGSPUMP     00:00:00     00:00:00

GGSCI (ZTHXPADB2) 18> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
EXTRACT      RUNNING     GGSEXT      00:00:00     unknown
EXTRACT      RUNNING     GGSPUMP     00:00:00     unknown

GGSCI (ZTHXPADB2) 19> info all

Program      Status      Group      Lag          Time Since Chkpt
```

MANAGER	RUNNING			
EXTRACT	RUNNING	GGSEXT	00:00:00	unknown
EXTRACT	RUNNING	GGSPUMP	00:00:00	00:00:01

可以看到虽然处于 RUNNING 的状态，但是 Time Since Chkpt 列是不对的，而这是 target 端也不能正常启动。

```
oracle@ZT1XPADRB1:/gg/ogg$ tail -f ggserr.log
2020-12-30 09:27:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39947, modtime is 212619862981000000 for /gg/ogg/dirdat/tt001891.
2020-12-30 09:27:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39951, modtime is 212619877906000000 for /gg/ogg/dirdat/tt001892.
2020-12-30 09:27:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -40038, modtime is 212620189201000000 for /gg/ogg/dirdat/tt001893.
2020-12-30 09:27:54 WARNING OGG-00950 Oracle GoldenGate Manager for Oracle, mgr.prm: Purge of old extract file /gg/ogg/dirdat/tt001894 failed because the prev seqno exists. Purge rule was applying UseCheckPoints
purge rule: Oldest Chkpt Seqno 2032 > 1894.
2020-12-30 09:34:14 INFO OGG-00987 Oracle GoldenGate Command Interpreter for Oracle: GGSCI command (oracle): start GGSREP.
2020-12-30 09:34:14 INFO OGG-00963 Oracle GoldenGate Manager for Oracle, mgr.prm: Command received from GGSCI on host 22.188.132.82 (START REPLICAT GGSREP ).
2020-12-30 09:34:14 INFO OGG-00975 Oracle GoldenGate Manager for Oracle, mgr.prm: REPLICAT GGSREP starting.
2020-12-30 09:34:14 INFO OGG-00995 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: REPLICAT GGSREP starting.
2020-12-30 09:34:14 INFO OGG-00996 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: REPLICAT GGSREP started.
2020-12-30 09:34:14 WARNING OGG-00869 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: No unique key is defined for table RICH_CUSTPAYAMOUNTHIS. All viable columns will be used to represent the key, but may
not guarantee uniqueness. KEYCOLS may be used to define the key.
2020-12-30 09:34:14 WARNING OGG-01004 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Aborted grouped transaction on 'XPADRPT.RICH_CUSTPAYAMOUNTHIS', Database error 1403 ().
2020-12-30 09:34:14 WARNING OGG-01003 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Repositioning to rba 47143866 in seqno 2032.
2020-12-30 09:34:14 WARNING OGG-01154 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: SQL error 1403 mapping XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS.
2020-12-30 09:34:14 WARNING OGG-01003 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Repositioning to rba 47143866 in seqno 2032.
2020-12-30 09:34:14 ERROR OGG-01296 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: Error mapping from XPADB.RICH_CUSTPAYAMOUNTHIS to XPADRPT.RICH_CUSTPAYAMOUNTHIS.
2020-12-30 09:34:14 ERROR OGG-01668 Oracle GoldenGate Delivery for Oracle, ggsrep.prm: PROCESS ABENDING.
2020-12-30 09:37:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39947, modtime is 212619862981000000 for /gg/ogg/dirdat/tt001891.
2020-12-30 09:37:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -39951, modtime is 212619877906000000 for /gg/ogg/dirdat/tt001892.
2020-12-30 09:37:54 WARNING OGG-00956 Oracle GoldenGate Manager for Oracle, mgr.prm: hours_since_modified calculated as -40038, modtime is 212620189201000000 for /gg/ogg/dirdat/tt001893.
2020-12-30 09:37:54 WARNING OGG-00950 Oracle GoldenGate Manager for Oracle, mgr.prm: Purge of old extract file /gg/ogg/dirdat/tt001894 failed because the prev seqno exists. Purge rule was applying UseCheckPoints
purge rule: Oldest Chkpt Seqno 2032 > 1894.
GGSCI (ZT1XPADRB1) 6> info all

Program      Status      Group      Lag          Time Since Chkpt

MANAGER      RUNNING
REPLICAT     ABENDED     GGSREP     33665:56:32  00:03:08
```

1. 4. 3. 3 第二种办法：数据初始化

一、 source 端准备

```
oracle@ZTGXPADDB1:/softtmp$ sqlplus / as sysdba

SQL*Plus: Release 10.2.0.5.0 - Production on Sat Jan 2 16:38:32 2021

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Connected to:
Oracle Database 10g Enterprise Edition Release 10.2.0.5.0 - 64bit Production
With the Partitioning, Real Application Clusters, Data Mining and Real Application Testing options

SQL> col current_scn format 999999999999999
SQL> Select current_scn from v$database;

CURRENT_SCN
-----
```


12242466771468

SQL>

由于是基于表级别的复制，并且全用户和表的大小差异很大，所以建议导出的时候基于表来导出，导入也基于表来导入。

```
SELECT SUM(d.bytes/1024/1024)
FROM DBA_segments d
where d.OWNER = 'XPADB'
```

```
SELECT SUM(d.bytes/1024/1024)
FROM DBA_segments d
where d.OWNER = 'XPADB'
and d.segment_name in ('BASE_ACTIONPOWER',
                        'BASE_BANK',
                        'BASE_BANKMERGE',
                        'BASE_BANKTREE',
                        'BASE_BRCHBANKCTRL')
```

	SUM(D.BYTES/1024/1024)
1	113498

	SUM(D.BYTES/1024/1024)
1	20087

source 库导出操作，flashback_scn 为 12242466771468：

```
oracle@ZTGXPADDB1:/softtmp$ expdp XPADB/XPADB directory=DMP dumpfile=xpadb_20160125_01.dmp LOGFILE=xpadb_20160125.log TABLES=BASE_ACTIONPOWER,BASE_BANK,BASE_BANKMERGE,BASE_BANKTREE
FLASHBACK_SCN=12242466771468
Export: Release 10.2.0.5.0 - 64bit Production on Saturday, 02 January, 2021 16:41:50

Copyright (c) 2003, 2007, Oracle. All rights reserved.

Connected to: Oracle Database 10g Enterprise Edition Release 10.2.0.5.0 - 64bit Production
With the Partitioning, Real Application Clusters, Data Mining and Real Application Testing options
Starting "XPADB"."SYS_EXPORT_TABLE_01": XPADB/***** directory=DMP dumpfile=xpadb_20160125_01.dmp LOGFILE=xpadb_20160125.log
TABLES=BASE_ACTIONPOWER,BASE_BANK,BASE_BANKMERGE,BASE_BANKTREE,BASE_BRCHBANKCTRL,BASE_CERTIFICATE,BASE_CESS,BASE_COREBANK,BASE_CURRENCY,BASE_DEPARTMENT,BASE_HOLIDAYCALENDAR,BASE_HOLIDAYDATE,BASE_INTEREST,BAS
E_INTERESTTHIS,BASE_MAINAREA,BASE_MENU,BASE_PRODTYPECODE,BASE_RATE,BASE_ROLE,BASE_SYSLOG,BASE_SYSPARAM,BASE_TERMINALTELLER,BASE_USER,FINANCIAL_BANKPROFITLOG,FINANCIAL_DIVIDENDPLAN,FINANCIAL_FUNDPRICE,FINANCIA
L_INTERESTRESET,FINANCIAL_ISSUE,FINANCIAL_ISSUEAUDIT,FINANCIAL_ISSUEAUDITHIS,FINANCIAL_ISSUEAUDITCFL,FINANCIAL_ISSUEAUDITCONTROL,FINANCIAL_ISSUEDIFFRATE,FINANCIAL_ISSUEDISCOUNT,FINANCIAL_ISSUEEXPD,
FINANCIAL_ISSUEEXT,FINANCIAL_ISSUEFEE,FINANCIAL_ISSUEFORCUSTRISKLV,FINANCIAL_ISSUEFUNDSTRANSFER,FINANCIAL_ISSUEOBSERV,FINANCIAL_ISSUEPAY,FINANCIAL_ISSUEPROFIT,FINANCIAL_ISSUEQTSPLIT,FINANCIAL_ISSUESELLCTRL,
FINANCIAL_ISSUESERIAL,FINANCIAL_ISSUEVARIABLE,FINANCIAL_ISSUEWORKTIME,FINANCIAL_LIQUIDATEACT,FINANCIAL_MESSAGEINFO,FINANCIAL_PERIOD,FINANCIAL_PRICE,FINANCIAL_PRICEHIS,FINANCIAL_REFERINDEX,FINANCIAL_POSITION,
RICH_AUTOTRADE,RICH_CUSTACCOUNT,RICH_CUSTAUTOTRADE,RICH_CUSTAUTOTRADEHIS,RICH_CUSTCAPITAL,RICH_CUSTFAVORABLE,RICH_CUSTFREEZEUNIT,RICH_CUSTFUNDPROFIT,RICH_CUSTIMPAWN,RICH_CUSTKEEPBAL,RICH_CUSTOMERINFO,RICH_CU
STOMERINFOHIS,RICH_CUSTORDERTRADE,RICH_CUSTPAYAMOUNTLOG,RICH_CUSTPRODUCTBAL,RICH_CUSTPRODUCTBALQTY,RICH_CUSTPROFITDCCY,RICH_CUSTPROFITLOG,RICH_CUSTPROFITNORMAL,RICH_CUSTPROFITPAYMODE,RICH_CUSTPROFITPAYMODEHI
S,RICH_CUSTRISKLV,RICH_FUNDTRADELOG,RICH_NOPAYAMOUNT,RICH_NORMALPAY,RICH_ORDERTRADE,RICH_SMSCMSIGN,RICH_SMSCMDTRADE,RICH_STARTBAL,RICH_STARTBALHIS,financial_positionhis,financial_positiontra,financial_posi
tioncst,financial_positionacc,corp_stattemptab,corp_stattemptabacc,corp_stattemptabcbst,FINANCIAL_ICCARDCODE,BASE_FINANCIALICCARD,FINANCIAL_ISSUESPECIFICATION,PA_RPT_PARAM,FINANCIAL_SALEBANK_HIS,RICH_TRA
Estimate in progress using BLOCKS method...
Processing object type TABLE_EXPORT/TABLE/TABLE_DATA
Total estimation using BLOCKS method: 6.913 GB
Processing object type TABLE_EXPORT/TABLE/TABLE
Processing object type TABLE_EXPORT/TABLE/INDEX/INDEX
Processing object type TABLE_EXPORT/TABLE/CONSTRAINT/CONSTRAINT
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/COMMENT
Processing object type TABLE_EXPORT/TABLE/TRIGGER
Processing object type TABLE_EXPORT/TABLE/INDEX/FUNCTIONAL_AND_BITMAP/INDEX
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/FUNCTIONAL_AND_BITMAP/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/STATISTICS/TABLE_STATISTICS
. . exported "XPADB"."RICH_CUSTPRODUCTBAL" 63.64 KB 582 rows
. . exported "XPADB"."RICH_CUSTOMERINFO" 616.9 KB 2596 rows
. . exported "XPADB"."RICH_CUSTACCOUNT" 11.33 MB 177757 rows
. . exported "XPADB"."FINANCIAL_MESSAGEINFO" 329.7 MB 3067896 rows
. . exported "XPADB"."RICH_AUTOTRADE" 36.53 KB 161 rows
. . exported "XPADB"."BASE_SYSLOG" 24.70 KB 131 rows

《《《《.....篇幅原因，有省略.....》》》》
```



```
. . exported "XPADB"."RICH_TRADELOG_HIS": "P_201411"      0 KB      0 rows
. . exported "XPADB"."RICH_TRADELOG_HIS": "P_201412"      0 KB      0 rows
. . exported "XPADB"."RICH_TRADELOG_HIS": "P_999999"      0 KB      0 rows
ORA-39166: Object RIC was not found.
Master table "XPADB"."SYS_EXPORT_TABLE_01" successfully loaded/unloaded
*****
Dump file set for XPADB.SYS_EXPORT_TABLE_01 is:
  /softtmp/dmp/xdadb_20160125_01.dmp
Job "XPADB"."SYS_EXPORT_TABLE_01" completed with 1 error(s) at 16:42:37
```

二、 target 准备

先做导出备份操作：

```
root@ZT1XPADRB1:/# su - oracle
oracle@ZT1XPADRB1:/oracle$ expdp xpadrpt/xpadrpt directory=OGGD dumpfile=xpadb_20160125_02.dmp LOGFILE=xpadb_20160125_2.log
TABLES=BASE_ACTIONPOWER,BASE_BANK,BASE_BANKMERGE,BASE_BANKTREE,BASE_BRCHBANKCTRL,BASE_CERTIFICATE,BASE_CESS,BASE_COREBANK,BASE_CURRENCY,BASE_DEPARTMENT,BASE_HOLIDAYCALENDAR,BASE_HOLIDAYDATE,BASE_INTEREST,BAS
E_INTERESTHIS,BASE_MAINAREA,BASE_MENU,BASE_PRODTYPECODE,BASE_RATE,BASE_ROLE,BASE_SYSLOG,BASE_SYSPARAM

Export: Release 11.2.0.3.0 - Production on Sat Jan 2 17:06:22 2021

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Connected to: Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production
With the Partitioning, Real Application Clusters, Automatic Storage Management, OLAP,
Data Mining and Real Application Testing options
Starting "XPADRPT"."SYS_EXPORT_TABLE_01":  xpadrpt/***** directory=OGGD dumpfile=xpadb_20160125_02.dmp LOGFILE=xpadb_20160125_2.log
TABLES=BASE_ACTIONPOWER,BASE_BANK,BASE_BANKMERGE,BASE_BANKTREE,BASE_BRCHBANKCTRL,BASE_CERTIFICATE,BASE_CESS,BASE_COREBANK,BASE_CURRENCY,BASE_DEPARTMENT,BASE_HOLIDAYCALENDAR,BASE_HOLIDAYDATE,BASE_INTEREST,BAS
E_INTERESTHIS,BASE_MAINAREA,BASE_MENU,BASE_PRODTYPECODE,BASE_RATE,BASE_ROLE,BASE_SYSLOG,BASE_SYSPARAM,BASE_TERMINALTELLER,BASE_USER,FINANCIAL_BANKPROFITLOG,FINANCIAL_DIVIDENDPLAN,FINANCIAL_FUNDPRICE,FINANCIA
L_INTERESTRESET,FINANCIAL_ISSUE,FINANCIAL_ISSUEAUDIT,FINANCIAL_ISSUEAUDITHIS,FINANCIAL_ISSUEBRAND,FINANCIAL_ISSUECFL,FINANCIAL_ISSUECONTROL,FINANCIAL_ISSUEDIFFRATE,FINANCIAL_ISSUEDISCOUNT,FINANCIAL_ISSUEEXPD,
FINANCIAL_ISSUEEXT,FINANCIAL_ISSUEFEE,FINANCIAL_ISSUEFORCUSTRISKVL,FINANCIAL_ISSUEFUNDSTRANSFER,FINANCIAL_ISSUEOBSERV,FINANCIAL_ISSUEPAY,FINANCIAL_ISSUEPROFIT,FINANCIAL_ISSUEQTSPLIT,FINANCIAL_ISSUESELLCTRL,
FINANCIAL_ISSUESERIAL,FINANCIAL_ISSUEVARIABLE,FINANCIAL_ISSUEWORKTIME,FINANCIAL_LIQUIDATEACT,FINANCIAL_MESSAGEINFO,FINANCIAL_PERIOD,FINANCIAL_PRICE,FINANCIAL_PRICEHIS,FINANCIAL_REFERINDEX,FINANCIAL_POSITION,
RICH_AUTOTRADE,RICH_CUSTACCOUNT,RICH_CUSTAUTOTRADE,RICH_CUSTAUTOTRADEHIS,RICH_CUSTCAPITAL,RICH_CUSTFAVORABLE,RICH_CUSTFREEZEUNIT,RICH_CUSTFUNDPROFIT,RICH_CUSTIMPAWN,RICH_CUSTKEEPBAL,RICH_CUSTOMERINFO,RICH_CU
STOMERINFOHIS,RICH_CUSTORDERTRADE,RICH_CUSTPAYAMOUNTLOG,RICH_CUSTPRODUCTBAL,RICH_CUSTPRODUCTBALQTY,RICH_CUSTPROFITDCCY,RICH_CUSTPROFITLOG,RICH_CUSTPROFITNORMAL,RICH_CUSTPROFITPAYMODE,RICH_CUSTPROFITPAYMODEHI
S,RICH_CUSTRISKVL,RICH_FUNDTRADELOG,RICH_NOPAYAMOUNT,RICH_NORMALPAY,RICH_ORDERTRADE,RICH_SMSCMDSIGN,RICH_SMSCMDTRADE,RICH_STARTBAL,RICH_STARTBALHIS,financial_positionhis,financial_positiontra,financial_posi
tioncst,financial_positionacc,corp_stattemptab,corp_stattemptabacc,corp_stattemptabcbst,FINANCIAL_ICCARDCODE,BASE_FINANCIALICCARD,FINANCIAL_ISSUESPECIFICATION,PA_RPT_PARAM,FINANCIAL_SALEBANK_HIS,R
Estimate in progress using BLOCKS method...
Processing object type TABLE_EXPORT/TABLE/TABLE_DATA
Total estimation using BLOCKS method: 7.606 GB
Processing object type TABLE_EXPORT/TABLE/TABLE
Processing object type TABLE_EXPORT/TABLE/COMMENT
Processing object type TABLE_EXPORT/TABLE/INDEX/INDEX
Processing object type TABLE_EXPORT/TABLE/INDEX/FUNCTIONAL_INDEX/INDEX
Processing object type TABLE_EXPORT/TABLE/CONSTRAINT/CONSTRAINT
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/FUNCTIONAL_INDEX/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/INDEX/BITMAP_INDEX/INDEX
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/BITMAP_INDEX/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/TRIGGER
Processing object type TABLE_EXPORT/TABLE/STATISTICS/TABLE_STATISTICS
. . exported "XPADRPT"."RICH_CUSTPRODUCTBAL"      45.04 KB      367 rows

《《《《.....篇幅原因，有省略.....》》》》

. . exported "XPADRPT"."RICH_TRADELOG_HIS": "P_201408"      0 KB      0 rows
. . exported "XPADRPT"."RICH_TRADELOG_HIS": "P_201409"      0 KB      0 rows
. . exported "XPADRPT"."RICH_TRADELOG_HIS": "P_201410"      0 KB      0 rows
. . exported "XPADRPT"."RICH_TRADELOG_HIS": "P_201411"      0 KB      0 rows
. . exported "XPADRPT"."RICH_TRADELOG_HIS": "P_201412"      0 KB      0 rows
. . exported "XPADRPT"."RICH_TRADELOG_HIS": "P_999999"      0 KB      0 rows
ORA-39166: Object XPADRPT.RICH_CUSTPRODUCTBALHIS_ was not found.
Master table "XPADRPT"."SYS_EXPORT_TABLE_01" successfully loaded/unloaded
```

```
*****
Dump file set for XPADRPT.SYS_EXPORT_TABLE_01 is:
/gg/bkup/xpadb_20160125_02.dmp
Job "XPADRPT"."SYS_EXPORT_TABLE_01" completed with 1 error(s) at 17:11:30
```

数据备份完成后可以进行导入操作，注意 schema、tablespace 的 remap 操作，以及表的操作，我这里根据业务需求应该是删除后重建，所以选择 replace：

```
oracle@ZT1XPADRB1:/oracle$ impdp XPADRPT/xpadrpt DIRECTORY=OGGD DUMPFILE=xpadb_20160125_01.dmp LOGFILE=impdp.xpadb_20160125_01.log REMAP_SCHEMA=xpadb:xpadrpt REMAP_TABLESPACE=xpaddat:xpaddata
table_exists_action=replace

Import: Release 11.2.0.3.0 - Production on Sat Jan 2 17:18:39 2021

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Connected to: Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production
With the Partitioning, Real Application Clusters, Automatic Storage Management, OLAP,
Data Mining and Real Application Testing options
Master table "XPADRPT"."SYS_IMPORT_FULL_01" successfully loaded/unloaded
Starting "XPADRPT"."SYS_IMPORT_FULL_01": XPADRPT/***** DIRECTORY=OGGD DUMPFILE=xpadb_20160125_01.dmp LOGFILE=impdp.xpadb_20160125_01.log REMAP_SCHEMA=xpadb:xpadrpt REMAP_TABLESPACE=xpaddat:xpaddata
table_exists_action=replace
Processing object type TABLE_EXPORT/TABLE/TABLE
Processing object type TABLE_EXPORT/TABLE/TABLE_DATA
. . imported "XPADRPT"."RICH_CUSTPRODUCTBAL" 63.64 KB 582 rows
. . imported "XPADRPT"."RICH_CUSTOMERINFO" 616.9 KB 2596 rows
. . imported "XPADRPT"."RICH_CUSTACCOUNT" 11.33 MB 177757 rows
. . imported "XPADRPT"."FINANCIAL_MESSAGEINFO" 329.7 MB 3067896 rows
《《《《.....篇幅原因，有省略.....》》》》
. . imported "XPADRPT"."RICH_TRADELOG_HIS": "P_201408" 0 KB 0 rows
. . imported "XPADRPT"."RICH_TRADELOG_HIS": "P_201409" 0 KB 0 rows
. . imported "XPADRPT"."RICH_TRADELOG_HIS": "P_201410" 0 KB 0 rows
. . imported "XPADRPT"."RICH_TRADELOG_HIS": "P_201411" 0 KB 0 rows
. . imported "XPADRPT"."RICH_TRADELOG_HIS": "P_201412" 0 KB 0 rows
. . imported "XPADRPT"."RICH_TRADELOG_HIS": "P_999999" 0 KB 0 rows
Processing object type TABLE_EXPORT/TABLE/INDEX/INDEX
Processing object type TABLE_EXPORT/TABLE/CONSTRAINT/CONSTRAINT
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/COMMENT
Processing object type TABLE_EXPORT/TABLE/TRIGGER
Processing object type TABLE_EXPORT/TABLE/INDEX/FUNCTIONAL_AND_BITMAP/INDEX
Processing object type TABLE_EXPORT/TABLE/INDEX/STATISTICS/FUNCTIONAL_AND_BITMAP/INDEX_STATISTICS
Processing object type TABLE_EXPORT/TABLE/STATISTICS/TABLE_STATISTICS
Job "XPADRPT"."SYS_IMPORT_FULL_01" successfully completed at 17:29:25
```

导入成功，接下来启动 target 端的 REPLICAT 进程：

```
GGSCI (ZT1XPADRB1) 16> stop ggsrep
REPLICAT GGSREP is already stopped.

GGSCI (ZT1XPADRB1) 17> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      STOPPED
REPLICAT     ABENDED    GGSREP     33743:45:19 01:56:55

GGSCI (ZT1XPADRB1) 18> info all

Program      Status      Group      Lag          Time Since Chkpt
```

```
MANAGER      STOPPED
REPLICAT     ABENDED      GGSREP      33743:45:19   02:07:52

GGSCI (ZT1XPADRDB1) 19> start mgr

Manager started.

GGSCI (ZT1XPADRDB1) 20> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      RUNNING
REPLICAT     ABENDED      GGSREP      33743:45:19   02:08:01

GGSCI (ZT1XPADRDB1) 21> start replicat ggsrep , aftercsn 12242466771468

Sending START request to MANAGER ...
REPLICAT GGSREP starting

GGSCI (ZT1XPADRDB1) 22> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      RUNNING
REPLICAT     RUNNING      GGSREP      33716:13:56   00:00:02

GGSCI (ZT1XPADRDB1) 23> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      RUNNING
REPLICAT     RUNNING      GGSREP      33216:43:48   00:00:04

GGSCI (ZT1XPADRDB1) 24> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      RUNNING
REPLICAT     RUNNING      GGSREP      30818:03:37   00:00:05

GGSCI (ZT1XPADRDB1) 25> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      RUNNING
REPLICAT     RUNNING      GGSREP      24194:29:09   00:00:02

GGSCI (ZT1XPADRDB1) 26> info all

Program      Status      Group      Lag          Time Since Chkpt
MANAGER      RUNNING
REPLICAT     RUNNING      GGSREP      00:00:00      00:00:06

GGSCI (ZT1XPADRDB1) 27> info all

Program      Status      Group      Lag          Time Since Chkpt
```

```
MANAGER RUNNING
REPLICAT RUNNING      GGSREP      00:00:00      00:00:08

GGSCI (ZT1XPADADB1) 28> info all

Program      Status      Group      Lag      Time Since Chkpt

MANAGER      RUNNING
REPLICAT      RUNNING      GGSREP      00:00:00      00:00:09

GGSCI (ZT1XPADADB1) 29> info all

Program      Status      Group      Lag      Time Since Chkpt

MANAGER      RUNNING
REPLICAT      RUNNING      GGSREP      00:00:00      00:00:06
```

可以看到 target 端的进程已经正常了。

1. 4. 4 验证是否可以正常同步数据

当时忘记记录日志，经测试已经可以正常同步数据了，省略验证过程。。。。。

1. 5 故障处理总结

1. 5. 1 OGG-00446 Could not find archived log for sequence 53586 thread 1 under alternative destinations.

错误信息：

```
OGG-00446  Could not find archived log for sequence 53586 thread 1 under alternative destinations. SQL <SELECT MAX(sequence#)  FROM v$log WHERE thread# = :ora_thread>.
Last alternative log tried /arch_cx/1_53586_776148274.arc., error retrieving redo file name for sequence 53586, archived = 1, use_alternate = 0Not able to establish initial position for sequence 53586, rba
44286992.
```

解决办法：

将缺失的归档日志从备份中恢复出来。如果依旧找不到所需归档日志，那么只能重新实施数据初始化。

第一种办法，会导致数据不一致，

改变抽取进程的时间，如下执行：

```
GGSCI (HP-HP) 8> alter extract extl,begin now
```

第二种办法：

重新初始化

重新初始化过程如下：

---- source 库

```
SQL> col current_scn format 999999999999999
SQL> Select current_scn from v$database;

CURRENT_SCN
-----
12242466771468

expdp XPADB/XPADB directory=DMP dumpfile=xpadb_20160125_01.dmp LOGFILE=xpadb_20160125.log TABLES=BASE_ACTIONPOWER,BASE_BANK FLASHBACK_SCN=12242466771468
```

--- target 库

```
impdp XPADRPT/xpadrpt DIRECTORY=OGGD DUMPFILE=xpadb_20160125_01.dmp LOGFILE=impdp.xpadb_20160125_01.log REMAP_SCHEMA=xpadb:xpadrpt REMAP_TABLESPACE=xpaddat:xpaddata table_exists_action=replace

start replicat ggsrep , aftercsn 12242466771468
```

到此所有的处理算是基本完毕，过程很简单，但是不同的场景处理方式有很多种，我们应该学会灵活变通。

1.6 About Me

.....

本文作者：小麦苗，只专注于数据库的技术，更注重技术的运用

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