

记录一次 ORA-00600 [kcrf_resilver_log_1]

恢复过程

运行环境

数据库版本: 11.2.0.1 运行平台: Linux 非归档无任何备份

数据库启动报错

```
Tue Mar 04 15:22:16 2014
ALTER DATABASE OPEN
Beginning crash recovery of 1 threads
  parallel recovery started with 32 processes
Started redo scan
Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_54101.trc (incident=16996):
ORA-00600: internal error code, arguments: [kcrf_resilver_log_1], [0x7C0E59B40], [2], [], [], [], [], [], [], [], []
Incident                               details                               in:
/opt/oracle/diag/rdbms/orcl/ORCL/incident/incdir_16996/ORCL_ora_54101_i16996.trc
Trace dumping is performing id=[cdmp_20140304152217]
Aborting crash recovery due to error 600
Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_54101.trc:
ORA-00600: internal error code, arguments: [kcrf_resilver_log_1], [0x7C0E59B40], [2], [], [], [], [], [], [], [], []
Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_54101.trc:
ORA-00600: internal error code, arguments: [kcrf_resilver_log_1], [0x7C0E59B40], [2], [], [], [], [], [], [], [], []
ORA-600 signalled during: ALTER DATABASE OPEN...
```

相关 scn 信息

数据库 scn 信息

DBID	NAME	OPEN_MODE	CREATED	OPEN_MODE	LOG_MODE	CHECKPOINT_CHANGE#	CTL_CHANGE#
1365059	OR	MOUNTED	2014-01	MOUNTED	NOARCHIVELOG	48503067	48510748

051	CL	D	-19 17:18:3 5	D	ELOG		
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数据文件 scn 信息

TS#	FILE#	FILE_SIZE_G	STATUS	ENABLED	SCN	STOP_SCN
0	1	10.576171875	SYSTEM	READ WRITE	48503067	
1	2	.751953125	ONLINE	READ WRITE	48503067	
2	3	1.025390625	ONLINE	READ WRITE	48503067	
4	4	.0048828125	ONLINE	READ WRITE	48503067	
6	5	15	ONLINE	READ WRITE	48503067	

数据文件头 scn 信息

TS#	FILE#	TABLESPACE_NAME	STATUS	ERROR	FORMAT	REC	FUZ	SCN
0	1	SYSTEM	ONLINE		10	NO	YES	48503067
1	2	SYSAUX	ONLINE		10	NO	YES	48503067
2	3	UNDOTBS1	ONLINE		10	NO	YES	48503067
4	4	USERS	ONLINE		10	NO	YES	48503067
6	5	ZNKK	ONLINE		10	NO	YES	48503067

这里的数据库 ORACLE 11.2.0.1 因为 Bug 9056657 导致数据库 redobuffer 未完整写入到 redo log, 从而导致数据库在启动过程中出现 ORA-00600[kcrf_resilver_log_1]错误, 而导致无法启动。

恢复过程

ORA-00600 [kcrf_resilver_log_1]处理

Tue Mar 04 15:22:16 2014

ALTER DATABASE OPEN

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parallel recovery started with 32 processes

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Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_54101.trc (incident=16996):

ORA-00600: internal error code, arguments: [kcrf_resilver_log_1], [0x7C0E59B40], [2], [], [], [], [], [], [], [], []

这里可以看出来，数据库在 open 过程中需要读取 redo log 进行实例恢复，但是由于 redo log 因为 bug 异常，导致实例恢复无法完整。也就是说数据库无法完成完成实例恢复，也就是说依靠数据库自身无法完成实例恢复，需要人工干预强制拉起数据库

尝试 allow_resetlogs_corruption= TRUE 在数据库 open 过程不验证一致性，强制拉起数据库，报错如下：

Thu Mar 06 16:41:02 2014

SMON: enabling cache recovery

Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_60342.trc (incident=18197):

ORA-00600: internal error code, arguments: [2662], [0], [48503075], [0], [48508238], [12583040], [], [], [], [], [], []

Incident details in:

/opt/oracle/diag/rdbms/orcl/ORCL/incident/incdir_18197/ORCL_ora_60342_i18197.trc

Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_60342.trc:

ORA-00600: internal error code, arguments: [2662], [0], [48503075], [0], [48508238], [12583040], [], [], [], [], [], []

Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_60342.trc:

ORA-00600: internal error code, arguments: [2662], [0], [48503075], [0], [48508238], [12583040], [], [], [], [], [], []

Error 600 happened during db open, shutting down database

USER (ospid: 60342): terminating the instance due to error 600

Instance terminated by USER, pid = 60342

ORA-1092 signalled during: alter database open resetlogs...

ORA-600[2662]恢复

很常见的 ORA-600[2662]错误，解决该问题的一般方法是推进 scn，使用 event 10015 推进 scn，尝试 open 数据库，出现如下错误

SMON: enabling tx recovery

Database Characterset is ZHS16GBK

No Resource Manager plan active

Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_smon_60678.trc (incident=19357):

ORA-00600: internal error code, arguments: [4194], [], [], [], [], [], [], [], [], [], []

Incident details in:

/opt/oracle/diag/rdbms/orcl/ORCL/incident/incdir_19357/ORCL_smon_60678_i19357.trc

Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_ora_60694.trc (incident=19405):

ORA-00600: internal error code, arguments: [4193], [], [], [], [], [], [], [], [], [], []

Incident details in:

/opt/oracle/diag/rdbms/orcl/ORCL/incident/incdir_19405/ORCL_ora_60694_i19405.trc

Doing block recovery for file 3 block 1443

Resuming block recovery (PMON) for file 3 block 1443

```
Block recovery from logseq 2, block 64 to scn 1073742051
Recovery of Online Redo Log: Thread 1 Group 2 Seq 2 Reading mem 0
  Mem# 0: /opt/oracle/oradata/orcl/redo02.log
Block recovery stopped at EOT rba 2.67.16
Block recovery completed at rba 2.67.16, scn 0.1073742050
Doing block recovery for file 3 block 128
Resuming block recovery (PMON) for file 3 block 128
Block recovery from logseq 2, block 64 to scn 1073742047
Recovery of Online Redo Log: Thread 1 Group 2 Seq 2 Reading mem 0
  Mem# 0: /opt/oracle/oradata/orcl/redo02.log
Block recovery completed at rba 2.65.16, scn 0.1073742049
Errors in file /opt/oracle/diag/rdbms/orcl/ORCL/trace/ORCL_smon_60678.trc:
ORA-01595: error freeing extent (3) of rollback segment (1))
ORA-00600: internal error code, arguments: [4194], [], [], [], [], [], [], [], [], [], []
```

ORA-600[4194]恢复

因为 11G 的 undo segment 名称后面有时间戳，而且通过 strings 也不太好定位到准确名称，因此直接使用 `du` 挖取数据文件获得名称，然后使用 `_corrupted_rollback_segments` 屏蔽，然后顺利打开数据库

在最后导出过程中还发现 `ORA-8013`，然后通过 `plsql` 抽取该表正常数据，完成这次恢复

该库恢复过程使用了不少隐含参数和 event，可能导致数据不一致，强烈建议通过逻辑方式重建库，保证数据安全稳定。

相关文章

[ORA-00600\[kcrf_resilver_log_1\]异常恢复](#)

[使用 bbed 解决 ORA-00600\[2662\]](#)

[异常断电导致 current redo 损坏处理](#)

[ORA-00600 \[2662\]](#)

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[ORA-607/ORA-600\[4194\]不一定是重大灾难](#)

[使用 bbed 解决 ORA-00607/ORA-00600\[4194\]故障](#)

[数据库报 ORA-00607/ORA-00600\[4194\]错误](#)

[记录一次 ORA-00600\[2252\]故障解决](#)

[rac redo log file 被意外覆盖数据库恢复](#)

[ORA-600\[4194\]/\[4193\]解决](#)

[使用 allow resetlogs corruption 打开无归档日志 rman 备份库](#)

[ORA-00600\[4194\]故障解决](#)

当你的数据库因为异常断电，强制关机，硬盘故障，误删除表，truncate 表，误删除表记录，dmp 文件异常，asm 无法正常 mount 等故障无法解决导致数据丢失，且无法自行解决，请联系惜分飞，提供专业 ORACLE 数据库恢复技术支持

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