Oracle 10g迁移到11g 多个数据库合并成一个

100.111 --> 100.77

100.130 --> 100.77

环境 ：

100.77 ：16核， oracle 11.2.0.4,

100.111 ：16核， oracle 10.2.0.1,归档

100.130 ：2核， oracle 10.2.0.1,非归档

100.130 ：

```
SYS@MYSTEEL> ;
  1* select file_name, tablespace_name from dba_data_files
SYS@MYSTEEL> /
```

FILE_NAME	TABLESPACE_NAME
/export/oradata/MYSTEEL/users01.dbf	USERS
/home/oracle/oradata/MYSTEEL/sysaux01.dbf	SYSAUX
/home/oracle/oradata/MYSTEEL/undotbs01.dbf	UNDOTBS1
/home/oracle/oradata/MYSTEEL/system01.dbf	SYSTEM
/export/oradata/MYSTEEL/example01.dbf	EXAMPLE
/export/oradata/MYSTEEL/users02.dbf	USERS
/export/oradata/MYSTEEL/users03.dbf	USERS
/export/oradata/MYSTEEL/users04.dbf	USERS
/export/oradata/MYSTEEL/users05.dbf	USERS
/export/oradata/MYSTEEL/users06.dbf	USERS
/export/oradata/MYSTEEL/nettest01.dbf	NETTEST

11 rows selected.

可以看出非系统表空间只有USERS和NETTEST

```
SYS@MYSTEEL> select username, account_status, default_tablespace from dba_users;
```

USERNAME	ACCOUNT_STATUS	DEFAULT_TABLESPACE
MGMT_VIEW	OPEN	SYSTEM
SYS	OPEN	SYSTEM
SYSTEM	OPEN	SYSTEM
DBSNMP	OPEN	SYSAUX
SYSMAN	OPEN	SYSAUX
MYSTEEL	OPEN	USERS
NETTEST	OPEN	NETTEST
OUTLN	EXPIRED & LOCKED	SYSTEM
MDSYS	EXPIRED & LOCKED	SYSAUX
ORDSYS	EXPIRED & LOCKED	SYSAUX
EXFSYS	EXPIRED & LOCKED	SYSAUX
DMSYS	EXPIRED & LOCKED	SYSAUX
WMSYS	EXPIRED & LOCKED	SYSAUX
CTXSYS	EXPIRED & LOCKED	SYSAUX
ANONYMOUS	EXPIRED & LOCKED	SYSAUX
XDB	EXPIRED & LOCKED	SYSAUX
ORDPLUGINS	EXPIRED & LOCKED	SYSAUX
SI_INFORMTN_SCHEMA	EXPIRED & LOCKED	SYSAUX
OLAPSYS	EXPIRED & LOCKED	SYSAUX
SCOTT	EXPIRED & LOCKED	USERS
TSMSYS	EXPIRED & LOCKED	USERS
BI	EXPIRED & LOCKED	USERS
PM	EXPIRED & LOCKED	USERS
MDDATA	EXPIRED & LOCKED	USERS

IX	EXPIRED & LOCKED	USERS
SH	EXPIRED & LOCKED	USERS
DIP	EXPIRED & LOCKED	USERS
OE	EXPIRED & LOCKED	USERS
HR	EXPIRED & LOCKED	USERS

29 rows selected.

可以看出非系统用户只有MYSTEEL，NETTEST

将表空间置为只读

alter tablespace users read only;

alter tablespace nettest read only;

设置undo_retention，避免快照过旧错误（undo_retention如果过小，则expdp时可能会报ORA-01555: snapshot too old错）

导出表空间

create directory expdp_dir as '/export/oradata/backup/';

expdp directory=expdp_dir schemas=mysteel logfile=expdp1.log ESTIMATE_ONLY=y

expdp directory=expdo_dir dumpfile=expdp_mysteel%U.dmp schemas=mysteel logfile=expdp1.log parallel=2

create tablespace mysteelnet datafile '/oradata/userbehavior/mysteelnet01.dbf' size 10G autoextend on maxsize 30G;

alter tablespace mysteelnet add datafile '/oradata/userbehavior/mysteelnet02.dbf' size 10G autoextend on maxsize 30G;

create user mysteelnet identified by asdefg default tablespace mysteelnet quota unlimited on mysteelnet;

grant connect, resource to mysteelnet;

grant dba to mysteelnet;

grant unlimited tablespace to mysteelnet;

impdp directory=imp_dir dumpfile=expdp_mysteel01.dmp,expdp_mysteel02.dmp logfile=impdp1.log REMAP_SCHEMA=mysteel:MYSTEEL_NET

SQLFILE=impdp1.sql

（只生成了sqlfile）

impdp directory=imp_dir dumpfile=expdp_mysteel01.dmp,expdp_mysteel02.dmp logfile=impdp2.log REMAP_SCHEMA=mysteel:MYSTEEL_NET

（导入数据，schema写错了）

SYS@userbehavior> drop user MYSTEEL_NET cascade;

drop user MYSTEEL_NET cascade

*

ERROR at line 1:

ORA-01940: cannot drop a user that is currently connected

SYS@userbehavior> host oerr ora 1940

01940, 00000, "cannot drop a user that is currently connected"

// *Cause: Attempt was made to drop a user that is currently logged in.

// *Action: Make sure user is logged off, then repeat command.

SYS@userbehavior>

SYS@userbehavior> select sid,serial# from v$session where username='MYSTEEL_NET';

```
     SID    SERIAL#
---------- ----------
     451       8915
```

SYS@userbehavior> alter system kill session '451,8915';

System altered.

SYS@userbehavior> drop user MYSTEEL_NET cascade;

User dropped.

SYS@userbehavior>

impdp directory=imp_dir dumpfile=expdp_mysteel01.dmp,expdp_mysteel02.dmp logfile=impdp2.log REMAP_SCHEMA=mysteel:MYSTEELNET

忘加parallel参数了

impdp directory=imp_dir dumpfile=expdp_mysteel01.dmp,expdp_mysteel02.dmp logfile=impdp2.log REMAP_SCHEMA=mysteel:MYSTEELNET

parallel=2

impdp directory=imp_dir dumpfile=expdp_mysteel01.dmp,expdp_mysteel02.dmp logfile=impdp2.log REMAP_SCHEMA=mysteel:MYSTEELNET

REMAP_TABLESPACE=USERS:MYSTEELNET parallel=16

报错：

ORA-31684: Object type USER:"MYSTEELNET" already exists

解决方法：

在导入语法中加入 exclude=user 忽略用户对象已经存在的错误，如下示：

impdp directory=imp_dir dumpfile=expdp_mystee101.dmp,expdp_mystee102.dmp logfile=impdp2.log REMAP_SCHEMA=mysteel:MYSTEELNET
REMAP_TABLESPACE=USERS:MYSTEELNET parallel=16 exclude=user

ESTIMATE_ONLY

在导出或导入过程中执行 Ctrl + C ：进入Export 或Import命令行

status

预估expdp将花费多少时间 ：

time expdp frank/frank directory=abc dumpfile=abc.dmp parallel=3

创建表空间报错 ：

SYS@userbehavior> create tablespace mysteelnet datafile '/oradata/userbehavior/mysteelnet01.dbf' size 10G autoextend on maxsize 32G;

create tablespace mysteelnet datafile '/oradata/userbehavior/mysteelnet01.dbf' size 10G autoextend on maxsize 32G

*

ERROR at line 1:

ORA-03206: maximum file size of (4194304) blocks in AUTOEXTEND clause is out of range

SYS@userbehavior>

[oracle@ibm-userbehavior-db01 userbehavior]$ oerr ora 03206

03206, 00000, "maximum file size of (%s) blocks in AUTOEXTEND clause is out of range"

// *Cause: The maximum file size for an autoextendable file has

//   exceeded the maximum number of blocks allowed.

// *Action: Reduce the size and retry.

解决方法 ：

将32G改为30G即可

expdp报错 ：

. . exported "MYSTEEL"."RES_SUPPLYMESSAGEREPLY"   0 KB   0 rows

ORA-31693: Table data object "MYSTEEL"."CMS_ARTICLE_TEXT" failed to load/unload and is being skipped due to error:

ORA-02354: error in exporting/importing data

ORA-01555: snapshot too old: rollback segment number 2 with name "_SYSSMU2$" too small

Master table "SYS"."SYS_EXPORT_SCHEMA_02" successfully loaded/unloaded

****

原因分析 ：该表含大对象列

SYS@MYSTEEL> desc mysteel.CMS_ARTICLE_TEXT

```
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 LTEXTSID                                  NOT NULL NUMBER(19)
 LARTICLEID                                         NUMBER(19)
 STEXT                                              CLOB
```

SYS@MYSTEEL>

查看表空间使用情况 ：

```
   select sum(bytes)/(1024*1024) as free_space,tablespace_name
   from dba_free_space
   group by tablespace_name;
```

desc v$rollstat

desc v$undostat

解决方法 ：

ALTER TABLE mysteel.CMS_ARTICLE_TEXT MODIFY LOB (STEXT) (PCTVERSION 10);

ALTER TABLE mysteel.CMS_ARTICLE_TEXT MODIFY LOB (STEXT) (retention);

select retention, pctversion from dba_lobs where table_name='CMS_ARTICLE_TEXT';

参考 ： https://gaganvirkz.blogspot.jp/2016/08/datapump-export-failed-with-ora-01555.html

```
RMAN> backup tablespace users format '/export/oradata/backup/users.%U';


Starting backup at 25-JUL-17
using channel ORA_DISK_1
using channel ORA_DISK_2
using channel ORA_DISK_3
channel ORA_DISK_1: starting full datafile backupset
channel ORA_DISK_1: specifying datafile(s) in backupset
RMAN-03009: failure of backup command on ORA_DISK_1 channel at 07/25/2017 17:19:23
ORA-19602: cannot backup or copy active file in NOARCHIVELOG mode
continuing other job steps, job failed will not be re-run
channel ORA_DISK_2: starting full datafile backupset
channel ORA_DISK_2: specifying datafile(s) in backupset
RMAN-03009: failure of backup command on ORA_DISK_2 channel at 07/25/2017 17:19:23
ORA-19602: cannot backup or copy active file in NOARCHIVELOG mode
continuing other job steps, job failed will not be re-run
channel ORA_DISK_3: starting full datafile backupset
channel ORA_DISK_3: specifying datafile(s) in backupset
RMAN-00571: ===========================================================
RMAN-00569: =============== ERROR MESSAGE STACK FOLLOWS ===============
RMAN-00571: ===========================================================
RMAN-03009: failure of backup command on ORA_DISK_3 channel at 07/25/2017 17:19:23
ORA-19602: cannot backup or copy active file in NOARCHIVELOG mode

RMAN>
```